

CONQUERING THE ANTARCTIC

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The Voyage of the Discovery. By Captain Robert F. Scott. New York: Dodd, Mead and Company. 1929.

The Worst Journey in the World. By Apsley Cherry-Garrard. 2 vols. London: Constable and Company. (Macmillans, Toronto). 1929.

The Last Continent of Adventure. By Walter B. Hayward. New York: Dodd, Mead and Company. 1930.

Heroes of the Farthest North and Farthest South. By Kennedy MacLean and Chelsea Fraser. New York: Thomas Y. Crowell Company. 1930.

THE history of Arctic exploration goes back many hundreds of years, and if the literature on the subject were to be brought together in one place, it would fill a large library. Antarctic discovery is a thing of comparatively recent growth, and may be said to date from that day in January, 1773, when the great English navigator James Cook sailed for the first time across the Antarctic Circle.

What we are concerned with here, however, is the discovery of the Antarctic Continent and the heroic attempts to reach the South Pole, and that stirring tale is comprised within the last thirty-five years. The heroes of the tale are Scott, Shackleton, Amundsen, Mawson, Byrd and Wilkins, or rather these were the leaders of expeditions nearly every member of which might without exaggeration be described as a hero. Lest we lose our sense of proportion, it should at the same time be remembered that the last two carried out their important discoveries under conditions very much more favourable than those which confronted their predecessors. Byrd, in particular, was so completely equipped with aeroplane, radio, and every possible item of up-to-date equipment that there can be very little basis of comparison between the conditions under which he worked and those of his predecessors. It must be remembered, too, that the explorers of to-day have the immense advantage of the hard-won experience of the pioneers in the novel and extreme circumstances of Antarctic exploration.

Superficially, Robert Falcon Scott lacked the qualities that are usually associated with a polar explorer. He had had no experience in snow and ice, or in living under conditions of extreme cold. He knew nothing about skiing or driving dogs. He had no particu-

lar scientific knowledge. But, as Fridtjof Nansen says in the Preface to the latest edition of *The Voyage of the Discovery*, Scott "was what was of more worth than all these things together, an excellent specimen of the human race, both physically and mentally", "and he was a born leader of men."

Scott, taking with him a notable group of scientific men, sailed in the *Discovery* and came within sight of the Antarctic continent early in January, 1902. From a mountain top he looked down upon the famous Ross Barrier, a stupendous field of ice, 170,000 square miles of it—considerably more than three times the area of the Maritime Provinces of Canada, and equal to that of Great Britain and Ireland, with Belgium, Holland and Denmark thrown in for good measure. And this vast sheet of ice has an average thickness of 400 feet! Along its sea wall are innumerable caverns, some large enough to float a ship; open grottoes "ablaze with turquoise, green and purple." At the western end of the Barrier stands like a sentinel the huge active volcano Erebus, its outer flanks covered with glaciers and its crater, 900 feet deep, an inferno of fire and steam and poisonous fumes.

The *Discovery* was put into winter quarters in McMurdo Sound, and before the end of April the long polar night had begun. The short summer of 1902-03—one must remember that the Antarctic summer, if it can be called a summer, corresponds in time to mid-winter in Canada—was used by Scott to explore the Barrier south toward the Pole. Again he wintered in McMurdo Sound, and spent the following season in a journey west to the mountains of Victoria Land. Throughout this period of short summers and very long winters, the expedition had been carrying on scientific work of various kinds and building up a fund of invaluable information. Two relief ships arrived early in January, 1904, but the *Discovery* was still fast in the ice, where she had been held for over two years. It was not, in fact, until the middle of February that she was at last afloat, and Scott and his men sailed for England.

Three years after the return of the first Scott expedition, Ernest Shackleton, who had been with Scott in the Antarctic and had accompanied him on the journey over the Barrier that had proved the effectiveness of sledges, sailed from England in the *Nimrod*, to carry on the exploration of the South Polar region. Sending the ship north, Shackleton and his men wintered in McMurdo Sound. In the spring careful preparations were made for an attempt to reach the Pole. The party set out about the end of October, with ponies and dogs as transport animals. Blizzards and crevasses made the going very difficult, but the explorers strug-

gled on day after day. They reached and passed Scott's Farthest South, and leaving the Barrier behind began the ascent of an immense glacier. Conditions got steadily worse, the ponies broke down or were lost in crevasses, and provisions were running very low. They came out on the Polar plateau. On and on they plodded stubbornly; each day found them weaker and less fit to withstand the intense cold, but they would not surrender. At last Shackleton decided that it would be fatal to go farther. They made one final rush to the south, and planted their flag less than one hundred miles from the Pole, on January 2nd, 1909. Meanwhile another of Shackleton's parties had succeeded in reaching the Magnetic Pole, and had accumulated scientific information of great value. Shackleton was knighted upon his return to England.

In 1910 two renowned explorers led expeditions to the conquest of the South Pole—Captain Scott and Roald Amundsen. Of the long and rather bitter controversy over the ethics of Amundsen's conduct, little need be said here. Mr. Hayward, in his *Last Continent of Adventure*, is inclined to defend the Norwegian. The fact, however, remains that Amundsen, knowing that Scott had equipped an expedition and was about to sail for the Antarctic, started apparently for the Arctic, and then made a dash for the south, with the evident intention of racing Scott for the South Pole. To say that Amundsen "argued quite reasonably that although Scott aimed to reach the Pole, the Englishman's chief purpose was scientific research while his (Amundsen's) purpose was merely a quick dash to the Pole", is surely a very lame defence, nor can one endorse Mr. Hayward's conclusion that "many of those who felt most keenly about the matter finally agreed that Amundsen had not actually violated the code of sportsmen."

Scientifically, the Amundsen expedition was almost barren of results, but as an example of efficiency in Polar exploration it stands probably without a peer. Men, dogs and equipment were the best available for their particular purpose, and with Amundsen's Polar experience and leadership success was almost a foregone conclusion. The journey was one of difficulty and danger, but its conditions were much easier than those faced by Shackleton, and not even remotely comparable with those which Scott and his companions were enduring about the same time. Amundsen reached the South Pole on December 14th, 1911, planted there the flag of his country, and named the frozen plain "King Haakon VII's Plateau". Two years previously Shackleton had taken possession of the same plateau in the name of George V. Amundsen then returned to the *Fram*, in the Bay of Whales, having been out

99 days and covered about 1860 miles. Men and dogs were all in fine condition.

The expedition of 1902-04 had left Scott with a determination to return and complete his work. It was not, however, until 1910 that he was in a position to carry out his purpose. His ship was the *Terra Nova*, a stout old Scottish whaler, and he took with him a strong staff of scientists, several of whom had served with him before or with Shackleton. Of the very important scientific results of this expedition nothing can be said here. Indeed they were overshadowed, at any rate for a time, by the grim but heroic tragedy in which Scott was the central figure. The story of that amazing journey to the South Pole, with its almost inconceivable hardships, and the disheartening discovery that the British party had been anticipated by Amundsen, is too well known to justify repetition. One is compelled to agree with the opinion of Nansen that "had Scott used more dogs and less man haulage, he might have made an easy and brilliant journey to the Pole and back again." But then, had he done so, the world would have lost one of the finest and most stirring examples of human heroism and unselfishness. "For all future generations," says Nansen, "he has set an inspiring example of how a man takes struggle and suffering for a cause he has chosen as his own. From the leaves of his diary, written under the impression of the moment, from day to day, rises the picture of a great man, a great leader, a character of the finest and noblest that ever lived, and who never failed, even under the heaviest test, ever the same unbribable spirit, with thoughts for the others but none for himself, just to the end,—upright and indomitable on the threshold of the long journey into the eternal stillness. A *man* he was—a *man* wholly and fully—a *man* to the last."

One of Scott's companions in the Antarctic, Apsley Cherry-Garrard, has written a most fascinating account of their experiences. Of the journey to the Pole, and of many other phases of the work of the expedition of 1910-12, there is not room to say anything here, but something must be said about the extraordinary adventure that gives title to the book, *The Worst Journey in the World*. Cherry-Garrard and two companions made the journey, and here is what Scott wrote of it:

"To me and to everyone who has remained here, the result of this effort is the appeal it makes to the imagination, as one of the most gallant stories in Polar History. That men should wander forth in the depth of a Polar night to face the most dismal cold and the fiercest gales in darkness is something new; that they should

have persisted in this effort in spite of every adversity for five full weeks is heroic. It makes a tale for our generation which I hope may not be lost in the telling."

What was this journey? And what urgency could justify it, in the middle of an Antarctic midwinter? The journey was to a little bay of the Barrier edge at Cape Crozier, and its sole purpose was to secure the embryo of an Emperor penguin. Five weeks of travel, in the dark, with temperatures that ranged down to more than 77 below zero, over country that was difficult enough in daylight—surely, as Cherry-Garrard admits, "the weirdest bird's-nesting expedition that has ever been or ever will be!"

The point was that this little bay contained the only known rookery of Emperor penguins, and the Emperors lay and hatch their eggs in midwinter. Also the Emperor is probably the most primitive bird in existence, and as the embryo reveals to science the development of an animal in former ages and former states, the Emperor embryo might prove the missing link between birds and the early reptiles from which the whole race of birds have sprung.

"It is mid-day, but pitchy dark." Three men are putting two sledges in tandem, loaded with equipment and provisions. It works out at 253 lbs. a man. On they go over the sea-ice, groping their way in the dark. It is desperately hard pulling, and in spite of the extreme cold, sweat pours off their bodies, but instead of drying off it freezes and accumulates. "It passed just away from our flesh and then became ice; we shook plenty of snow and ice down from inside our trousers every time we changed our foot-gear, and we could have shaken it from our vests and from between our vests and shirts, but of course, we could not strip to this extent." The few hours in each twenty-four spent in sleeping bags were times of unrelieved wretchedness. It was too cold to leave even a hole through which to breathe. Their breath froze to the skins, and respiration became quicker and quicker as the air got more and more foul. One long shivering fit followed close upon another. "Later we got frost-bitten even as we lay in our sleeping-bags."

At last, having endured about all that the human body can stand and survive, these three indomitable souls reached Cape Crozier. From the side of Mount Terror a casual moon gave them a glimpse of an unforgettable scene. "To the east a great field of pressure ridges—as if giants had been ploughing with ploughs which made furrows fifty or sixty feet deep. . . . Beyond was the frozen Ross Sea, lying flat, white and peaceful. . . . Over all the grey limitless Barrier seemed to cast a spell of cold immensity, vague, ponderous, a breeding-place of wind and drift and darkness."

For the rest of the story the reader must go to Cherry-Garrard's book—how they built a hut and were buried in it by a hurricane; how their tent was blown away, and miraculously recovered; how they were storm-bound in the tent for days, while the slender supply of food and fuel oil sank lower and lower; how the whole party was saved from instant destruction down a vast crevass by a momentary gleam of moonlight; how they found the Emperors and secured several of the precious eggs; and how, against all conceivable probability, they brought some of them safely back to winter quarters; and, finally, as an anti-climax, how Cherry-Garrard took the eggs one day to the South Kensington Museum, and was snubbed by an under-strapper!

It was about the beginning of December, 1911, that Dr. Douglas Mawson (he was knighted later) sailed with the Australasian Antarctic Expedition. It may be noted here that for geographical purposes the Antarctic Continent, which with its outlying Barriers makes a great circle about the Pole, is divided into four quadrants, known respectively as the Australian, American, African and Pacific. Mawson, like Scott and Shackleton, carried out his work in the Australian quadrant; Byrd and Wilkins, who were to follow, explored respectively in the Pacific and the American quadrants. The African quadrant is still almost entirely a blank. Mawson's work can be only very briefly mentioned here. He discovered the immense Shackleton Ice Shelf as well as the d'Urville Sea and the Davis Sea, and brought back invaluable collections of specimens and scientific data. It is a rather curious fact that MacLean and Fraser, in their very readable survey of exploration, *Heroes of the Farthest North and Farthest South*, which is brought down to the Byrd Expedition, omit Mawson altogether.

The achievements of the Byrd Antarctic Expedition and that of Sir Hubert Wilkins are so recent, and have been so thoroughly reported in the daily newspapers, thanks to their radio equipment, that it is not necessary to do more than sum up their results. The former included the discovery of Marie Byrd Land and the Rockefeller Mountains, an air flight to the Pole, and extensive charting by air camera of parts of the Antarctic coast-line and interior. Wilkins, among other things, succeeded in adding to the map a huge sector of the coast of West Antarctica, "making in two seasons an outstanding contribution to the geography of the polar continent." More will be heard of this intrepid explorer, who is already planning an expedition to the Arctic by submarine. Who can call this Machine Age prosaic—this age that witnesses polar exploration by aeroplane and submarine!