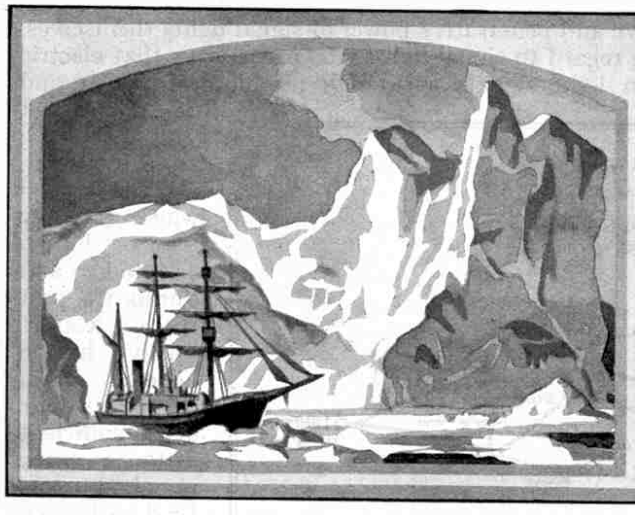


EXPLORING THE ANTARCTIC

Famous Attempts to reach the South Pole.

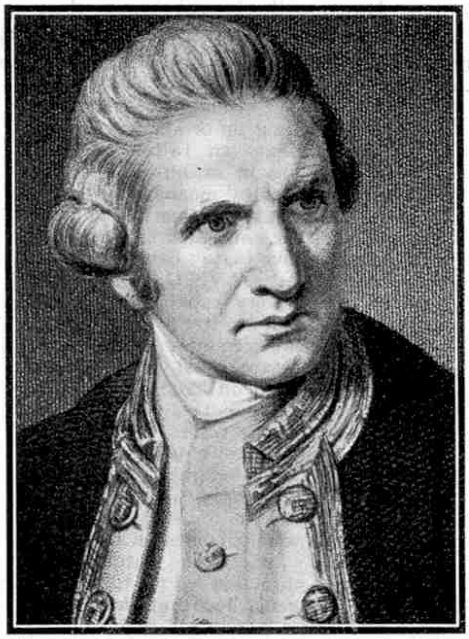
I.—THE SEARCH FOR A MYTHICAL CONTINENT

A SHORT time ago the story of exploration in the Arctic regions was told in the pages of the "*M.M.*" The North Pole was conquered only after many generations of heroic adventure. The daring and resource of the men who penetrated into the frozen North will never be surpassed, but it was equalled by that of the explorers who attempted to solve the mysteries of the Antarctic, the blizzard-swept region at the opposite end of the world. The South Pole was reached in December 1911, and as the result of wonderful heroism and dogged endurance many of the problems of the frozen land in which it is situated have been worked out.

It is more than a thousand years since man first began to push northward into Arctic regions, but no really determined efforts to enter the Antarctic were made until the later years of the 18th century. Then Captain Cook tried to penetrate the barrier of ice that surrounds it, and formed the conclusion that near the Pole there was a great tract of land from which came the immense icebergs that prevented his further progress southward.

After Cook's voyages interest in the far south died away for a time, and during the 19th century the Arctic claimed the chief attention of Polar explorers. One expedition after another pressed northward, solving the problem of the North-West Passage, and gradually approaching the North Pole. In the south a few whalers and sealers in search of new hunting grounds made interesting discoveries. Good work was done also by several expeditions, particularly by one led by James Clark Ross, a hero of the Arctic. Ross discovered in the south new land, now called Victoria Land, and was the first to see Mount Erebus, the famous active volcano, 13,000 ft. in height, that rises from an island covered with snow and ice.

The real revival of Antarctic exploration did not come until the end of the century, however, when de Gerlache, a Belgian, visited the land known to exist south of Cape Horn, and spent a winter in those inhospitable regions. It is interesting to note that one member of his crew was the Norwegian Roald Amundsen, who was destined to be the first to reach the South Pole itself.



Captain James Cook, the pioneer of Antarctic exploration, who proved finally that the mythical Antarctic Continent did not exist.

The example of de Gerlache was quickly followed by explorers of other nations, and in a wonderful series of voyages and sledge journeys more was learned of the Antarctic in a few years than had previously been revealed during several centuries. Among the men who took part in these great adventures were Captain Scott, Sir Ernest Shackleton, Roald Amundsen, and the Australian Sir Douglas Mawson. Both Scott and Shackleton made gallant attempts to reach the South Pole. Scott finally succeeded in doing so, only to find that Amundsen had forestalled him by a few days; and Scott and four companions perished on the way back to their winter quarters.

One reason why the Antarctic remained comparatively unknown for so long is that it is separated from the rest of the world by a belt of stormy waters, hundreds of miles in width. The only place where it was approached regularly by sailors was off Cape Horn at the tip of South America, for it was necessary either to round the Cape, or to make the perilous passage of the Straits of Magellan, in order to reach the Pacific from the Atlantic. The mountainous seas and icy winds so often encountered in sailing round Cape Horn were regarded with dread, and those who reached the Pacific Ocean without mishap were usually too thankful to have found safety to think of penetrating into the even wilder and colder regions farther south.

The Antarctic appears so inhospitable and unattractive that it is scarcely surprising to find that the first ship to make a discovery of importance only sailed southward by accident. This happened in 1599, when the "*Good News*," a yacht of 150 tons commanded by Dirk Gerritz, became separated from the rest of a Dutch squadron while passing through the Straits of Magellan, and was driven far to the south by tempestuous winds. She reached a latitude of 64°S., and there the involuntary explorers discovered a mountainous snow-covered land, which is now believed to be one of the group of islands known as the South Shetlands. Gerritz and his crew were unfortunate on making their way North again, for they were captured by the Spaniards, who then claimed the Pacific Ocean as their own.

Although the "*Good News*" was the first vessel to approach the Antarctic circle, explorations in southern waters had been made some years previously. In 1567 the Governor of Peru despatched an expedition, under the command of his nephew, with orders to look for a great continent which, for some mysterious reason, was then believed to exist round the South Pole. The search was unsuccessful, and it was resumed in 1605 by Pedro de Quiros. He discovered land in the following year, but this was one of the islands of what is now known as the New Hebrides group, which is nearer to the Equator than to the South Pole!

The story of the fabled Antarctic continent for which these early explorers searched so persistently is very curious. Belief in its existence was widespread for more than 200 years, and geographers were so sure about it that they went to the length of giving it names. It was variously called "Southern Ethiopia," the "Austral Continent," and "Terra Australis Incognita." One writer said that it was equal in area to a quarter of the whole globe, and added that it had the great advantage of not being near "Turks or Moors, or others of the nations which are accustomed to disquiet or disturb their neighbours." Others imagined that treasure of all kinds would be found on it. They were firmly convinced that the supposed continent was as wealthy as Mexico, Peru and other American countries from which gold had poured into Spain for many years; and they looked forward with great eagerness to the time when it would yield its riches. Continued failure to find it did not shake belief in the existence of the continent, and it was even asserted that one sailor had actually

landed on it and found it to be inhabited by a civilised and well-clothed white race!

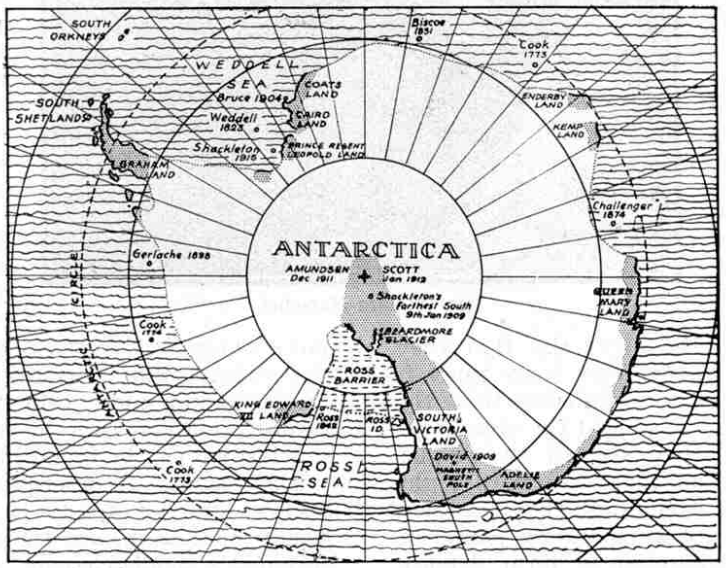
The idea of a southern El Dorado was not confined to credulous sailors, for it was widely believed that an immense southern continent was necessary in order to balance the masses of land in the Northern Hemisphere, and so prevent the world from toppling over! Every island discovered in the Pacific by early explorers was immediately claimed as part of the Antarctic continent, and old maps show New Zealand, and even Australia, as fragments of a great land that extended far northward into the Pacific Ocean.

In spite of repeated disappointments the belief was not finally exploded until the second half of the 18th century, when Captain Cook was sent out to settle the question. Cook had already established a great reputation as a navigator and explorer by his voyages in the Pacific Ocean. In his barque the "*Endeavour*" he had visited many islands in that Ocean and had passed along the entire eastern coast of the Australian continent, where he discovered Botany Bay. He had also sailed completely round the north and south islands of New Zealand, and had proved that they at least were not part of Antarctica.

In polar regions. Passing through loose pack ice when approaching land in high latitudes. In order to force a way through the ice, advantage is taken of every opening or "lane" that presents itself.

Cook took up the search in 1772, and in the early days of the following year he sailed southward from the Cape of Good Hope with the "*Resolution*" and the "*Adventurer*." In the stormy seas to the south of the Cape he and his men suffered severely. Many icebergs were encountered, and on one occasion the two vessels nearly collided with a mountainous mass of ice half-a-mile in circumference. Ice clogged the rigging of the ship, and snow and sleet, accompanied by fog, made navigation difficult and dangerous. Cook carried on until 17th January, 1773, when the way southward was closed by an immense icefield in latitude 67° 15′ S. After sailing along the edge of the pack he returned to warmer regions.

In December of the same year Cook left New Zealand in the "*Resolution*" on a second attempt to find the Antarctic continent. This time he looked for it in the southern waters of the Pacific Ocean, possibly thinking that, as most of the supposed fragments of it reported during the previous 200 years were really islands in that Ocean, he would have a better chance of reaching his objective there. He sailed almost directly southward, making his way through the "Roaring Forties" into the even stormier waters of higher latitudes. His men patiently endured hardships equal to those encountered on their previous voyage. Cook himself seemed inspired by the prospect of important discoveries, and he did not turn his vessel northward until he had reached the high latitude of 71° 10′ S. There the pack was so dense and so thickly strewn with enormous icebergs that he judged it dangerous to continue. The size of these icebergs appears to have impressed Cook very greatly. He was probably accustomed to those of the Arctic, for he had spent a considerable time in surveying the coast of Newfoundland; and the greater size of the flat-topped Antarctic bergs astonished him.



Map of the Antarctic continent, the explored portions of which are indicated by shading. It will be seen that by far the greater part of the continent has not yet been visited and awaits exploration.

"At four o'clock in the morning," Cook wrote in his diary on 30th January, 1774, "we perceived the clouds over the horizon to the south to be of an unusual snow-white brightness, which we knew announced our approach to field ice. Soon after it was seen from the topmasthead, and at eight o'clock we were close to its edge. It extended east and west far beyond the reach of our sight. In the situation we were in, just the southern half of our horizon was illuminated by rays of light reflected from the ice to a considerable height. Ninety-seven ice hills were distinctly seen within the fields, besides those on the outside—many of them very large, and looking like ridges of mountains rising one above another till they were lost in the clouds. The outer or northern edge of this immense field was composed of loose or broken ice close packed together, so that it was not possible for anything to enter it."

Cook made other determined efforts to penetrate through the ice in order to discover if the supposed Antarctic continent were really as large as had been previously imagined. He was not satisfied with merely sailing southward in two or three places, but he actually completed a circuit of the globe in very high latitudes. During his voyages he discovered several islands, including Georgia, which is now an important centre of the whaling industry; and he sailed for many miles over the supposed position of the Antarctic continent, thus proving that if any land did exist in the far South it was so near the Pole as to be frozen over.

Captain Cook is undoubtedly the great pioneer of Antarctic exploration. Previous voyagers in these unknown seas had been timid and easily deterred, but Cook pressed southward with astonishing skill and courage, and he only gave up when navigation became practically impossible on account of ice. He wrote in his account of his voyages that "within the Polar circle the sea was so pestered with ice that the land is thereby inaccessible. The risk that one runs in exploring a coast in these unknown and icy seas is so very great that I can be bold enough to say that no man will ever venture further than I have done."

In this prophecy Cook was wrong, for within 140 years of his own attempts to penetrate the ice that surrounds the Antarctic continent, this had been thoroughly explored in several quarters, and two parties of adventurers had actually reached the Pole itself. For many years after Cook's return to more genial climates practically no effort was made to penetrate further into the mysterious region whose boundaries he had touched, but rapid progress was made when the search of whalers and sealers for better hunting grounds revived interest in the Antarctic. The story of the heroic exploits of these men and of those who pioneered the way for them will be told in further articles in this series, and next month we shall deal with the voyages of the explorers who penetrated the heavy pack ice to find the real Antarctic continent.