

Dayaks in Sarawak. The author gives interesting notes on Dayaks and heads, and a gruesome story of a head-hunting exploit. Later he lived with Dayaks on the Sarekei River. The chapter in which he describes his life among them is one of the best in his book.

The final chapter is an account of a visit to the famous birds'-nest caves of Gomanton, in British North Borneo. Of these caves and their inhabitants—birds and bats—an interesting account is given. Incidentally also a good word-picture is given of Borneo river and jungle life.

Mr. Walker has told his story in a very natural and entertaining way. There are no dull pages. Some of his cannibal and head-hunting tales may be *horrendum dictu*, but even these are to be matched by facts culled from many an official report on these wild people of the South Seas.

The book is well illustrated by forty-eight illustrations from photographs, and has a useful index.

S. H. R.

THE FRENCH ANTARCTIC EXPEDITION.

THE French expedition under Dr. Jean Charcot, on board the *Pourquoi Pas?* returned to Punta Arenas at the end of last week. The early return of the expedition, some weeks before it was expected, is due to a series of misfortunes which limited the range of the expedition's operations.

It will be remembered that this is the second of Dr. Charcot's Antarctic voyages. In 1903-5, on board the *Français*, he carried out an expedition along the west coast of Graham Land, south of Cape Horn, wintering on Wandel Island, in about 65° S. lat., and continuing the voyage to a point off Alexander I. Land in about 68° S. lat. Apart from the additions made to cartographical knowledge of some of the islands off Graham Land, the expedition was notable for the scientific observations and collections secured in the departments of hydrography, terrestrial magnetism, biology, botany, and geology.

Dr. Charcot's latest expedition was designed to extend the work done in 1903-5. The programme contemplated another cruise among the islands off the west coast of Graham Land, whence it was hoped to continue the voyage westwards in the direction of King Edward VII. Land; it was also proposed to make excursions southwards to investigate the character of the supposed Antarctic continent, and for this purpose the *Pourquoi Pas?* carried a number of specially designed motor sledges. The expedition was liberally subsidised (24,000*l.*) by the French Government, and the ship, a barquentine with an auxiliary engine of 550 h.p., was specially built for the voyage. The French Naval Department, the Paris Museum, and the Prince of Monaco contributed to the scientific equipment, and the scientific staff included, besides Dr. Charcot, who belongs to the medical profession and is an experienced bacteriologist, specialists in hydrography, oceanography and meteorology, tidal and chemical observations, geology and glaciology, natural history, and terrestrial magnetism.

The expedition sailed from Havre in August, 1908, and from Punta Arenas in the following December. Supplies of coal were taken on board at Deception Island (lat. 63° S.), in the South Shetlands, which has become an important rendezvous for whalers. On resuming the voyage the *Pourquoi Pas?* ran aground, and after being re-floated lost her rudder in collision with icebergs. The voyage, however, was continued to Adelaide Island, south of the 67th parallel, and the adjacent coasts were explored for a distance of 120

miles to Alexander I. Land. Being unable to find a safe anchorage, the expedition then returned north and spent the Antarctic winter of last year off Petermann Island, south of the 65th parallel. Though attacked by scurvy and other diseases, the explorers carried out several excursions, and made a careful study of the glaciology of the region. On the return of summer they continued their explorations among the South Shetlands, again visiting Deception Island, and also Bridgman Island (62° S.). The course of the *Pourquoi Pas?* was then directed south and west, and the expedition succeeded in reaching Peter I. Island (lat. 69° S., long. 90° W.). Ultimately the voyage was extended, between the 69th and 71st parallels, to long. 126° W. King Edward VII. Land extends between the 150th and 160th meridians of west longitude.

Graham Land projects northwards from the Antarctic Circle towards Cape Horn as a great tongue of land with numerous adjacent islands. It has been visited by several expeditions, but its connection with the Antarctic continent is still a matter of speculation. Westwards, in the region south of the Pacific Ocean, Cook and Bellingshausen sighted stray patches of land or appearances of land, presumably part of the Antarctic continent, but the continuous coast has never been definitely traced. Geographically, the value of Dr. Charcot's expedition consists in the work he has been able to accomplish in linking up and defining more clearly the character of these stray patches of coast. Exactly what have been the results of the expedition in this connection can only be determined when his charts become available. As on the occasion of his former expedition, the most valuable feature of the results will probably be the scientific data collected respecting the magnetic, meteorological, hydrographical, and geological conditions in the regions south of Cape Horn. Dr. Charcot was unable to make use of his motor sledges for penetrating the Antarctic continent.

RADIUM IN DISEASE.

ATTENTION has again been directed to the possibilities of radium as a curative agent by Sir William Ramsay (at the Authors' Club on Monday), and by Sir Lauder Brunton (in the *Lancet*).

The supply of radium available for the treatment of disease is still so limited that the therapeutic usefulness of this agent has not yet been fully determined. No sooner were indications noted of a prospect of relieving cancer by the use of radium than all the radium obtainable was devoted to this purpose; consequently, its action in less serious ailments is still almost unknown.

In the treatment of cancer, radium has usually been employed in the form of crystals of the bromide. These crystals are contained either in a sealed glass tube or in a button with a covering of thin glass, aluminium or mica. Recently the crystals have been spread in a thin layer upon a flat surface and covered with a layer of varnish. Such buttons and spread preparations are suitable for application to the surface of the body. The glass tubes may be inserted into the interior of tumours, or into orifices of the body; thus, they may be placed in the mouth or nose, in the œsophagus (within a rubber tube), in the rectum, or in the cervix uteri.

Of the three types of radiation given off by radium (the alpha, beta, and gamma radiations), the view commonly accepted is that the gamma rays have a selective action, destroying cancer cells while leaving the normal cells of the part intact, while the alpha and