

FAUNA ANTARCTICA.¹

DR. BRUCE is to be congratulated on the publication of the fourth volume of the scientific results of the voyage of the *Scotia*. This stately publication contains no fewer than nineteen reports (all by British investigators) on the vertebrate animals collected by the expedition, and it seems to us well worthy of the generosity, notably on the part of Sir Thomas Glen Coats, which has made its publication possible. Many of the reports have appeared previously in the transactions of scientific societies; as is carefully noted in each case, but the utility of having all the papers together is obvious.

Beginning with the mammals, we find a report by Dr. Bruce on the dimensions and weights of the Antarctic seals captured by the *Scotia*, and the editor also contributes a series of fine photo-



FIG. 1.—*Leptonychotes weddelli* (Weddell Seal). From "Report on the Scientific Results of the Voyage of s.y. *Scotia*."

graphs of the Weddell seal, the sea-leopard, the crab-eater, the Ross seal, and the Patagonian sea-lion. Dr. R. N. Rudmose-Brown gives a very interesting account of the habits of four Antarctic seals (Weddell, crab-eater, sea-leopard, and Ross seal), and the value of his personal observations is increased by numerous beautiful photographs. Prof. David Hepburn deals with the brain, the abdominal viscera, the respiratory organs, and the urogenital system of a young male Weddell seal (*Leptonychotes weddelli*); Prof. Robert Thomson with the skeleton of the Ross seal (*Ommatophoca rossi*); and Dr. Harold Axel Haig with the structure (macroscopic and

microscopic) of a foetal sea-leopard, *Stenorhynchus leptonyx*) and with the minute structure of the central nervous system of the Weddell seal. Dr. Bruce gives data in regard to seven Antarctic whales, and also discusses an interesting piebald porpoise (probably *Lagenorhynchus cruciger*). Mr. Theodore E. Salvesen's graphic account of the southern whale fisheries has been recently reviewed in NATURE (vol. xciv., p. 678, February 18, 1915).

Turning to the birds, we find a masterly account of the birds of the South Orkney Islands, the Weddell and adjacent seas, and Gough Island, by Mr. Eagle Clarke, of the Royal Scottish Museum. The birds observed and collected by the *Scotia* at other places have been dealt with in a number of short papers by the late Lieut. Lewis N. G. Ramsay, a young zoologist of great promise, who was, alas! killed at Neuve Chapelle in March of

this year. Dr. R. N. Rudmose-Brown gives a vivid picture of the habits of penguins. Profs. D. Waterston and A. Campbell Gaddes deal with some anatomical features of the Emperor penguin and with the development of Gentoo and Adelie penguins. The extraordinary curvature of the cervical region of the penguin's vertebral column is carefully discussed, and an interesting contrast is made between the development of the duck's wing and that of the penguin's paddle.

An important report on the Antarctic fishes comes from the skilful hands of Mr. C. Tate Regan, who describes seven new genera and twenty-one new species. The first of the new genera, *Eugnathosaurus*, is based on a remarkable head taken off Coats Land at a depth of 1410 fathoms. A collection of over a hundred species of Atlantic fishes is briefly dealt with by Mr. R. S. Clark (now acting as zoologist on Sir

Ernest Shackleton's expedition), who also reports on half-a-dozen fresh-water fishes from Buenos Aires. Prof. W. A. Herdman describes the Tunicates, fifteen or sixteen species represented by about two hundred specimens. The only new species (*Fungulus antarcticus*) is a very remarkable form belonging to the deep-sea genus *Fungulus*, a single specimen of which was obtained by the *Challenger* in 1882, between the Cape of Good Hope and Kerguelen, from a depth of 1600 fathoms. Nearly 3000 miles away, but again in the far south and in very deep water (2485 fathoms), the *Scotia* species was obtained, and again but a single specimen. The limit of the Chordate sub-kingdom is found by many zoologists in the remarkable animals known as Pterobranchia, and the *Scotia* explorers were fortunate enough to secure numerous specimens of

¹ Scottish National Antarctic Expedition. Report on the Scientific Results of the Voyage of S.Y. *Scotia* during the Years 1902, 1903, and 1904, under the leadership of W. S. Bruce. Vol. iv., "Zoology." Parts II-XX. Vertebrates. Pp. xi+505+62 plates+2 maps. (Edinburgh: The Scottish Oceanographical Laboratory, 1915.) Price £2 10s. net.

a very interesting new species of *Cephalodiscus*, of which a fine account has been given by Drs. S. F. Harmer and W. G. Ridewood, whose previous studies of these strange types are well known. Thus we come, in the meantime, to the end of a valuable series of contributions to the marine zoology of the far south, contributions which do great credit to the investigators at home and to Dr. Bruce and his fellow-workers on the *Scotia*. We are told in the preface that there is material for six more volumes, and we hope that

the endowment of research, asks us to make it known that the article in the *Evening News* of August 2 dealing with this scheme was not written by him and that he does not identify himself with all the statements and opinions contained therein. A disclaimer was inserted in the same paper on August 5.

THE gold medal of the Company of Dyers has been awarded to Prof. A. G. Green, University of Leeds, and to Mr. W. Johnson, a research student of the University of Leeds, for research work in connection with the art of dyeing. The special research which

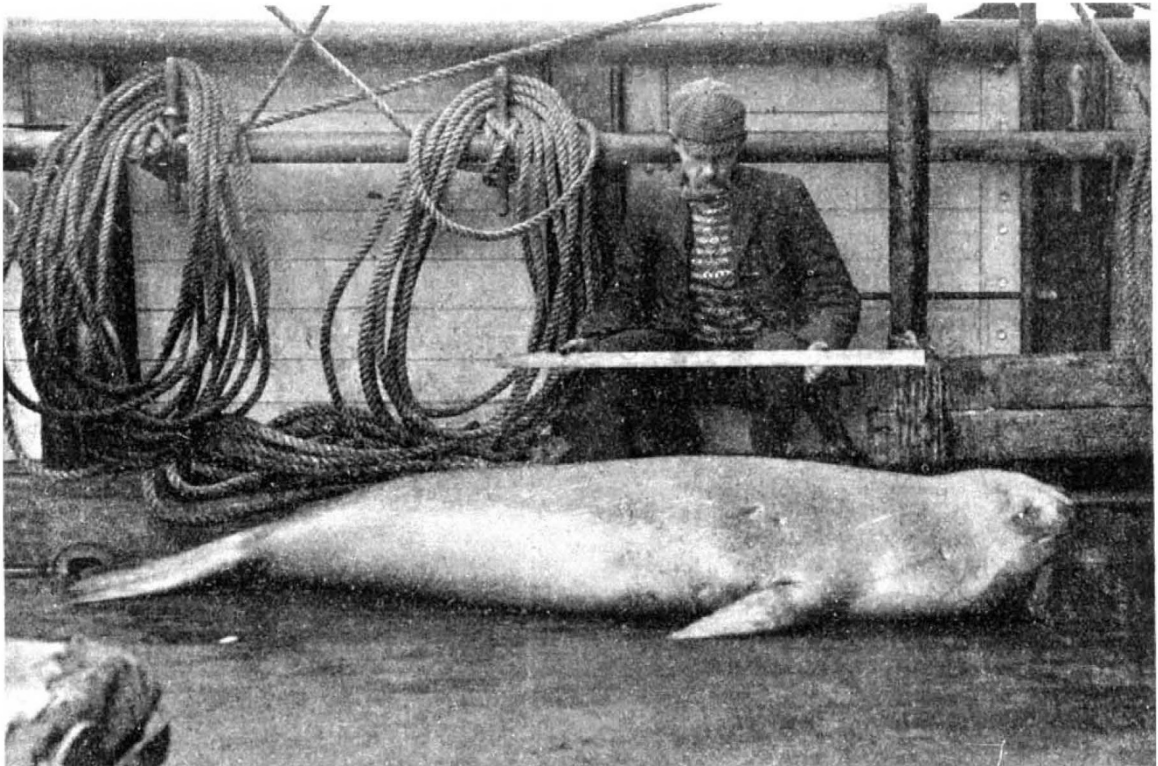


FIG. 2.—Ross Seal (*Onmatophoca rossi*) and Dr. Pirie on board the *Scotia*. From "Report on the Scientific Results of the Voyage of s.y. *Scotia*."

these will see the light in brighter days. If they sustain the standard of what has been already published they will do well.

NOTES.

It is stated in the *Pharmaceutical Journal* that, in consequence of the war, the meeting of the Australasian Association, which had been arranged to take place in Hobart in January next, has been postponed for a year, and that the Australasian Pharmaceutical Conference will not be held until January, 1917.

SIR A. SELBY-BIGGE (Permanent Secretary of the Board of Education since 1911) has been appointed special secretary to the committee of the Privy Council for the organisation and development of scientific and industrial research.

MR. F. W. HARBORD has been appointed honorary adviser in metallurgy to the Munitions Committee.

PROF. MELDOLA, writing as a member of the Advisory Council for the new Government scheme for

was the occasion of the award was an investigation into the constitution of aniline black.

THE Weber-Parkes prize of the Royal College of Physicians for 1915 has been awarded to Dr. Noel Dean Bardswell.

THE Paris Academy of Medicine has accepted the legacy of Dr. M. Sigaut of 8,000 francs, the interest of which will be used to establish a prize to be known as the Dr. Max Sigaut prize. The prize will be awarded every two years for the best memoir on early diagnosis and the best treatment in cancer of the digestive tract.

THE Secretary of State for the Colonies has appointed a committee to consider and report upon the present condition and the prospects of the West African trade in palm kernels and other edible and oil-producing nuts and seeds and to make recommendations for the promotion, in the United Kingdom, of the industries dependent thereon. The committee as at present constituted is composed of Mr. Steel