

## P R E F A C E.

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WHEN, in the years 1874, Her Majesty's Government determined to despatch several expeditions to observe the Transit of Venus, the Council of the Royal Society resolved to request the Treasury to attach naturalists to those destined for Kerguelen's Land and Rodriguez, two of the least explored and most inaccessible oceanic islands of the southern hemisphere; and a Committee, consisting of Sir J. D. Hooker, Professor Huxley, and Mr. P. L. Slater, was appointed to prepare the application, which was laid before Her Majesty's Government in the following terms:—

“It is an unexplained fact in the physical history of our globe, that all known oceanic archipelagos distant from the great continents, with the sole exceptions of the Seychelles and of a solitary islet of the Mascarene group (which islet is Rodriguez), are of volcanic origin. According to the meagre accounts hitherto published, Rodriguez consists of granite overlaid with limestone and other recent rocks, in the caves of which have been found the remains of recently extinct birds of a very singular structure. These facts, taken together with what is known of the Natural History of the volcanic islets of Mauritius and Bourbon to the west of Rodriguez and of the granitic archipelago of the Seychelles to the north of it, render an investigation of its natural products a matter of exceptional scientific interest, which, if properly carried out, cannot fail to be productive of most important results.

“As regards Kerguelen's Land, this large island (100 by 50 miles) was last visited in 1840 by the Antarctic Expedition under Sir James Ross, in midwinter only, when it was found to contain a scanty Flora of flowering plants, some of which belong to entirely new types, and an extraordinary profusion of marine animals and plants of the greatest interest, many of them being representatives of North-temperate and Arctic forms of life.

“H.M.S. ‘Challenger’ will no doubt visit Kerguelen's Land, and collect largely; but it is evident that many years would be required to obtain even a fair representation of its marine products; and though we are not prepared to say that the

scientific objects to be obtained by a naturalist's visit to Kerguelen's Land are of equal importance to those which Rodriguez will yield, we cannot but regard it as in every respect most desirable that the rare opportunity of sending a collector to Kerguelen's Land should not be lost."

Her Majesty's Government acceded to the request preferred by the President and Council; and subsequently, on their recommendation, the Treasury sanctioned the appointment of four naturalists, three to Rodriguez and one to Kerguelen's Land. Those selected for the work in Rodriguez were Dr. I. B. Balfour, who was charged with the duties of botanist and geologist; Mr. George Gulliver, who was directed to investigate the Fauna generally; and Mr. H. H. Slater, whose special duties consisted in the exploration of caves and in collecting the remains of extinct animals. The naturalist attached to the Kerguelen's Land expedition was the Rev. A. E. Eaton, who was well qualified to bring to bear his experience of the Arctic fauna and flora upon those existing in the southern hemisphere under parallel physical conditions.

The collections and observations made by these naturalists fulfilled the expectations of the Council. A Committee appointed to consider the best means of rendering the collections serviceable to science, recommended that they should be entrusted to competent persons for examination and description, and that their reports should be published as a separate volume of the Philosophical Transactions. This recommendation was adopted by the Council, who requested Sir J. D. Hooker and Dr. Günther to undertake the editing of the work.

With regard to the specimens, the Council directed that complete sets should be reserved for the National Collections, and that the remainder should be distributed to the Museum of the Royal College of Surgeons in London, the Government Museums of Natural History in Edinburgh and Dublin, the University Museums of Oxford and Cambridge, and other Institutions.

By Order of the President and Council.

Burlington House,  
March 1879.

G. G. STOKES, } *Secretaries,*  
T. H. HUXLEY, } *Royal Society.*