

MUSEUM AND LABORATORY REPORTS FOR 1871,

INCLUDING

A LIST OF DONATIONS AND DEPOSITS DURING 1870-71.

THE publication of the preliminary Catalogue during the past year has facilitated the selection of duplicate specimens, and large numbers have in consequence been distributed to other Museums in the Colony and elsewhere, as enumerated in the appended Schedule. Notwithstanding the reduction thus effected in the number of specimens, the space available in the present Museum is quite inadequate for the proper exhibition of the collections, and also renders inconvenient the acceptance of exchanges, which are freely offered to the Institute, and which it would be most desirable for the Colony to possess for educational purposes.

The additions to the Museum during the past year number 1,929, besides the articles which are deposited on loan for exhibition.

The greater number of the new collections were made by the officers of the Geological Survey, twenty minerals of interest having been collected by Mr. Skey during his investigations at the Thames Gold Field; 410 by the late Mr. E. H. Davis, for the purpose of illustrating his survey of the Nelson, Collingwood, and Wangapeka Districts. The most important of the mineral specimens in this collection have been analyzed, and are described in the section of this Report devoted to Laboratory work. 623 specimens of rocks and fossils collected by Dr. Haast, F.R.S., in the course of his survey of the Malvern Hills, Canterbury. The igneous rocks in this collection, which form a most interesting series, will be fully reported on hereafter; but the analyses of the specimens from the coal seams, which were the special object of the survey, will be found in the after part of this report. 89 specimens collected from the coal-bearing formations of the Grey River.

During the past year the Colonial Government made an arrangement with Mr. W. L. Buller, F.L.S., for the donation of his valuable collection of New Zealand birds to the Museum, in consideration of his receiving assistance towards the publication of an illustrated work on the Ornithology of New Zealand. This collection, numbering 265 species, will include the identical specimens of the birds that are figured, and will therefore be most valuable for future reference.

From this collection, and that in the Christchurch, Dunedin, and Auckland Museums—and assisted by an excellent critical notice of the New Zealand birds in the European collections, published in the German language by Professor Otto Finsch, of Bremen,—Captain Hutton has been enabled to draw up a complete catalogue, with a diagnosis of each species of bird in New Zealand. This work will shortly be published, and it is hoped will prove of great assistance towards stimulating the study of Natural History in the Colony.

Arrangements have been made for the publication of similar Catalogues of the Insects, Fishes, and other branches of Zoology that afford a field for practical observation in these Islands.

To Dr. O. Finsch, through the kind exertions of Dr. Haast, the Museum is indebted for a cast of the egg of the *Æpyornis*, the extinct giant bird of Madagascar. This suggested the preparation of models of the eggs of the Moa which have been obtained at various times in New Zealand, and which are now exhibited in the Museum.

Two magnificent specimens of the impression of the feet of a Moa, in a very recent sand deposit at Poverty Bay, have been presented by Mr Worgan. The position of the deposit and its relation to the present high watermark have been obtained and described by His Honor T. B. Gillies, in a communication to the Auckland Institute, from which it appears that the foot-prints were exposed to view by the washing away of a layer of alluvium and silt. The matrix is soft and imperfectly coherent sand; but plaster casts have been obtained for distribution.

A very interesting specimen has been temporarily deposited for exhibition in the Museum by Dr. Thomson, of Clyde, Otago, being the neck of a Moa with the muscles and skin attached, a few imperfect feathers still remaining adherent to the latter.

Plaster casts have been prepared of the Saurian remains found last year in the Amuri and Waipara districts by Mr. Travers and Dr. Haast, and copies have been forwarded to the principal Museums in the Colony, and also to England and America.

A fine set of polished specimens of the useful timbers that grow in Western Australia, presented by Governor Weld, forms a very useful addition to the collections in this department.

The necessity which arose for providing for the exhibition of the collections illustrative of the progress of the Flax Industry during the past year, has rendered necessary a temporary disarrangement of the contents of the Museum, so that a very large proportion of the specimens have been removed from view. It is, however, anticipated that by this concession to the pressing requirements of the public, a more thorough appreciation of the value of classified and arranged collections for conveying knowledge will be established.

About 10,000 names have been entered in the visitors' book since last report, but this is only about a third of the number of those who visit the Museum.

Wellington, 31st July, 1871.

JAMES HECTOR.

Note.—Enclosed Reports on Museum and Laboratory printed in pamphlet form.