

Department. The foreign collections have also received additions, the chief of which are sixty species of Tasmanian shells, presented by Mr. W. Legrand, a general collection of forty specimens from Mr. Damon, of Weymouth, and a fine series of the shells of Queensland, presented by Mr. Charles Coxen, of Brisbane, through the Hon. W. H. Reynolds.

In addition to the catalogue of the Marine Mollusca of New Zealand above referred to, a valuable list by Dr. von Martens, of Berlin, giving the synonyms and reference to all species described as having been received in Europe from New Zealand, and also a list and descriptions of all New Zealand shells, furnished by Dr. Cox, of Sydney, are in the printer's hands, and these catalogues will together form a most useful guide to the student of New Zealand conchology.

The New Zealand Echinodermata have been arranged and named, and the catalogue prepared by Captain Hutton has been published by the Department.

Captain Hutton has also published a list of the Sertularians in Vol. V. of the "Transactions of the New Zealand Institute;" and the attention of students should also be directed to the same author's recent valuable essay on the Geographical Relations of the New Zealand Fauna, which is also published in the same volume.

The first portion of the Rev. O. P. Cambridge's work on the Spiders of New Zealand has been received, and probably the whole of it will be published during the next year. Several new species have been described by Dr. Powell, of Christchurch; and the valuable papers of Mr. R. M. Fereday on the Lepidoptera, and Mr. C. M. Wakefield on the Coleoptera (Vol. V., Transactions of the New Zealand Institute), and of Mr. R. McLachlan in the "Annals and Magazine of Natural History," Vol. XII., No. 67, though not issued in connection with the Museum, may be mentioned as of interest and importance to New Zealand naturalists.

The foregoing is sufficient to show that material is rapidly accumulating which will enable a systematic handbook to the Fauna of this interesting country to be prepared as a companion to Dr. Hooker's valuable and convenient handbook of the Flora.

*Palæontological.*—Very important and extensive additions have been made to the collection of fossils, both of New Zealand and foreign countries. Chief among the former is a large series of upper mesozoic fossils found associated with the reptilian remains at the Amuri Bluff. It is proposed to place these in the hands of an experienced palæontologist in England for publication; and they will no doubt assist in determining the relative geological position of the most important formations that occur in New Zealand.

The fossils of the tertiary strata have been described in a catalogue by Captain Hutton, published as a companion to the catalogue of the recent Mollusca. This is a most important work, and will prove of great assistance in advancing the geological survey of the country on a more accurate basis of classification than has hitherto been possible.

The collections of foreign rocks and minerals have been added to by presentations from Professor Parlatore, of Florence, Professor B. Smyth, of Melbourne, and a collection from Norway by Mr. Friberg.

#### HERBARIUM.

The plant collections have received no important additions during the year, but gatherings in the south-west district of Otago and on the highest ranges in the North Island have added a few new species to the Flora. The Herbarium has been removed to a situation better adapted for its preservation, and is undergoing thorough rearrangement.

#### LABORATORY.

The number of analyses which have been made in the Laboratory for the public during the year is 272, making a total of 1,505 different entries in the Laboratory books. The schedule, which has been prepared for reference in the usual form, shows the nature and contributors of the various substances, which comprise 39 coals, 47 rocks and minerals, 39 metallic ores, 14 mineral and potable waters, 37 gold assays, 41 appeals from the Secretary of Customs, and 28 of miscellaneous articles. The attention of the analyst has been directed principally to the preparation of cements from the various materials available in the Colony, and to the classifying and careful valuation of the various kinds of iron ores found in the Colony, and the results obtained will be found in separate reports on the subject.

#### GEOLOGICAL SURVEY.

Certain parts of Canterbury Province, the Amuri and Marlborough districts, and the western part of the Province of Nelson, have been the chief districts geologically surveyed; but many special examinations relative to the development of coal mines have been made in other parts of the Colony, all of which will be found in reports now in the course of publication. A geological map of the Colony, on the scale of 12 miles to 1 inch, was prepared specially for the Vienna Exhibition, and sent to England in March last; it contains all the additional information obtained up to last year.

All the fossil plants found in New Zealand have been accurately drawn and printed by photolithography, 50 plates being now ready to illustrate a work on the Fossil Flora that is in progress. In addition, most of the other fossils, and especially those which are to be sent to England for description, have been figured, so that they may not be altogether lost in case of accident. Nearly 100 lithograph plates, plans, and drawings of natural history objects, have also been prepared during the year.

#### COLONIAL INDUSTRIES.

Various subjects referred to this Department in accordance with the recommendation of the Colonial Industries Committee have been dealt with, and will be found fully described in the special Parliamentary report. The arrangements for having the Colony represented at the Vienna Exhibition also devolved on this Department; and this opportunity must be taken of acknowledging the valuable assistance received from the following gentlemen, to whom the Colony is much indebted for their efforts, viz.,—Mr. W. M. Maskell, Mr. T. Kirk, Mr. H. S. Severn, and Mr. J. Ross.