

The collection of insects, both New Zealand and exotic forms, is steadily increasing, and arrangements are being made for the publication of catalogues which will embody recent researches on this subject, as at present several eminent naturalists in England are engaged in classifying the different orders of New Zealand insects, and publishing the results in scientific periodicals.

Ethnological.—Under this heading there are 187 specimens entered, being chiefly a collection of Celt and other stone implements and weapons presented by the Trustees of the British Museum, and by the Copenhagen Museum through Captain Rowan.

Minerals.—620 specimens have been added, which number include a large series obtained in exchange from the British Museum, and selected by direction of Professor J. Storey Maskelyne, F.R.S., in order to make as complete as possible the typical collection, which now contains representatives of every important mineral species. A valuable series, comprising 109 species of ores and associated minerals from the Californian mining region, was received from Mr. H. G. Hanks, which, with the large collection of specimens brought by Dr. Hector from the Colorado and Utah regions, affords a very complete illustration of the metalliferous deposits of the Western States.

Palæontology.—Among the foreign collections in this section is a valuable donation from Mr. James Brogden, of a series of the Saurians from Lyme Regis, and the associated Triassic fossils.

For the purpose of comparison, casts of 300 of the best fossil specimens in the European and American Museums was obtained through Professor H. A. Ward.

Geological Survey Collections.—During the present year a special examination has been made of the fossiliferous beds of the Waikato Heads, with a view of determining their age and tracing their extent. A considerable collection of fossils was made from the locality, but the number of distinct forms obtained is small.

An important collection was made from certain blue clay marls occurring at the mouth of the Waihou Creek, about fourteen miles south of the Waikato Heads, as an upper part of the grey marls not yet detected elsewhere, and which will be referred to as the “*Cardita Beds*,” from the abundant occurrence in them of *Cardita planicostata*, a well-marked Lower Eocene fossil in Europe.

These beds had formerly been classified as the equivalents of the Waitemata beds as developed at Mercer, but the collections now obtained from each of these localities, in addition to stratigraphical evidence, make the separation of these two necessary, the Mercer beds belonging to the chalk marls.

In the Oamaru District six very important collections have been made, in addition to several smaller ones, and the evidence gained renders it necessary to readjust the classification of the beds adopted by Captain Hutton in his “*Geology of Otago*,” his Trelissic group being in part the same as his Pareora group; while, on the other hand, many localities considered by him to belong to his Pareora formation, to his Trelissic formation, and the whole of his Orotara group, will, from the fossils, have to be distributed from the horizon of the greensands and saurian beds, immediately overlying the coal up to the grey marls, that closes the cretaceo-tertiary series in this district.

Collections have also been made from many localities in the interior of the Wellington Province, between the Manawatu Gorge and Napier, and much valuable information gained for the proper arrangement of the beds of tertiary age. The results obtained, which will be found in the Geological Survey Reports for the current year, show that the Scinde Island shell limestones and underlying fossiliferous sands and gravels belong to the horizon of the “*tufaceous clays and lignitiferous deposits*” of newer pliocene age (*see* Reference to Geological Map, 1873), while the Te Aute and Manawatu Gorge limestones represent the Wanganui series; the Taipos or Hawke's Bay series of the map being the equivalent of the Awamoa or Pareora beds, which form the base of the Kanieri series in the South Island. There is, therefore, no stratigraphical evidence of the existence of the Ahuriri formation proposed by Captain Hutton, so that his later views on the subject, as published in the Transactions New Zealand Institute (Vol. IX., page 590), are confirmed so far as to exclude this name from our future geological classifications.

From Whangarei, collections were also made from the beds overlying the coal, correlating these with the island sandstone horizon of the West Coast. The occurrence of a second or lower limestone was also traced here, replacing the coal in certain localities.

An examination of the country was made between Opotiki and the East Cape, but the impracticable character of the country precluded the forwarding of collections from there. The work has gone to connect the geological structure of this block of country with that previously surveyed between Poverty Bay and the East Cape.

At the present time all the collections of fossils have been worked out and the genera roughly determined, the further work of classifying these for comparison and description being now in progress.

The following general Reports have been printed during the past year, and will be shortly ready for issue:—

Progress Report 1873–74,	164 p.p.,	15 plates and maps (partly published and distributed in 1874).
“	1874–76,	191 p.p., 16 “
“	1876–77,	157 p.p., 38 “

Meteorology.

The stations at which observations are made are fourteen in number—viz., at Mongonui, Auckland, Taranaki, Napier, Wanganui, Wellington, Nelson, Cape Campbell, Christchurch, Bealey, Hokitika, Dunedin, Queenstown, and Wallacetown.

The monthly returns from these stations are forwarded to the Head Office, and an abstract of the whole prepared each month for publication in the *New Zealand Gazette*. The biennial Report for 1873–74 has been issued in the pamphlet form, and the same Report for 1875–76 is being prepared. The Results of Meteorological Observations taken at all the Stations in New Zealand, for 1876, has been printed, and incorporated with the Registrar's Statistics for that year.

A monthly report is also furnished of the climate at six of the principal stations, for publication with the monthly vital statistics. A return, giving the daily meteorological readings, with averages