

OTAGO UNIVERSITY MUSEUM: REPORT OF THE CURATOR (DR. W. BENHAM, D.Sc.).

The Hocken Wing.—In my last report I gave a history of the movement which will result in the addition of a north wing to the Museum. It has been found impossible, with the funds at the disposal of the Trustees, to build this wing to the height of the original design of Mr. Ross, so that it will now consist of a basement and two floors only. The building was commenced in March, 1908, and should be completed in October. The trustees will, of course, only provide the fittings for the Hocken Library and Picture-gallery on the upper floor; the cases required for the addition to the Museum itself, on the ground floor, will have to be provided from some other source.

The Art Gallery.—The erection of the Public Art Gallery, followed by the removal of the pictures from the room in the annexe, has released this room, which the Council has acquired for a small sum for Museum purposes. I propose to utilise this additional space for an extension of the Ethnological Department, but, unfortunately, though I have specimens, I have no cases in which to exhibit them, so that for the present the room is unoccupied. It would serve excellently as a gallery for Maori objects, and if the carved-house slabs, deposited by Dr. Hocken, at present surrounding the Ethnological Room, were removed from this position and fixed round the walls of the Art Room some resemblance to a Maori house would be given to it. But till funds allow, I fear this plan cannot be carried into effect.

The Collections.—During the summer I was able to avail myself of the services of Mr. David Miller, who kindly agreed to assist me in rearranging the collections of Lepidoptera and Coleoptera in the insect cabinet. The collection of named New Zealand insects was set up a good many years ago, and recently I have taken every opportunity of adding to this collection, originally made by the late Captain Hutton. But many changes in nomenclature have been made, as most of the orders have been revised by Captain Hutton, Mr. Hudson, and others in recent years, hence new labels had to be written, and Mr. Miller spent several weeks, under my supervision, in labelling and arranging the insects in the order adopted by the "*Index Faunæ Novæ-zealandiæ*," and in adding new ones received by the Museum at intervals during the last ten years. The Museum should have a good representative collection of insects of all orders readily available for reference by people interested, though only a few can be exhibited in the exposed cases; but our present cabinet is scarcely large enough for the moths and beetles—the rest of the insects are accommodated in store-boxes, and a great saving of time and labour would be effected if a second cabinet of the same size could be purchased, for I am constantly asked to name insects by people who naturally look to the curator of a museum for help in this and many other directions. A well-built cabinet could stand in the public room, available for visitors who wished to examine our insects or to compare their own specimens. It would be a great attraction to visitors, for insects well arranged in cabinet-drawers look much more attractive than in large cases, where, too, they soon get bleached.

Scientific Expedition.—At the end of November I joined, by invitation, a scientific expedition inaugurated by the Canterbury Philosophical Institute for the purpose of investigating, among other matters, the geology and natural history of the Auckland and Campbell Islands. The expedition was financed by the Government. Members were carried free on the G.s.s. "*Hinemoa*," and a report of the results will be published by the Government. During this trip I made a point of collecting examples of terrestrial invertebrates of all kinds, and I am at present engaged in working out certain groups. Earlier in the year I undertook to identify the echinoderms and annelids collected by Mr. E. Waite, of the Canterbury Museum, during the trawling expedition undertaken by the Fisheries Department. In both cases the Museum will benefit by the acquisition of new specimens.

Additions to the Collections.—Among the additions to the exhibits the most important is a restoration of the goose-shaped moa (*Pachyornis elephantopus*), founded on a complete skeleton and covered with emu-feathers. It attracts considerable attention.

Specimens of the mollusc *Chiton*, showing variation in colour and pattern, depending to some extent on locality, were added. A small octopus, mounted in a natural position, with arms extended; a pouched lamprey; several new echinoderms and molluscs; a few birds, and some less interesting objects were placed in the New Zealand department.

In the general collection I have placed in the mammal case a number of pictures, some of them coloured, of conspicuous and interesting larger animals not represented by specimens, such as hippopotamus, giraffe, camel, elephant, zebra, gorilla, &c. (these are found to interest children); photographs of the restored skulls of extinct ancestral proboscideans (moeritherium, palæomastodon, tetrabelodon), as well as photos of a series of molar teeth of extinct and living herbivora, showing the evolution of the pattern in cow, horse, &c.; also, casts of the skull and feet of the ancestral ungulate hyracotherium.

To the dentition series have been added several skulls from which the bone has been cut away, so as to exhibit the method of tooth-implantation (*e.g.*, *hyomoschus*, *trichosurus*, *viverra*); small plaster restorations of extinct beasts (*plesiosaurus*, *ichthyosaurus*, *anchitherium*, and others). I have mounted the models of the aquatic reptiles in such a manner as to indicate their habit: the bottom of the stand is covered with sand and gravel, to represent the sea bottom; the sides and top are of glass covered by methyl green, very faintly, to indicate sea-water; the top has a hole cut in it so as to fit against the body of the animal, which was more or less immersed. In the case of *ichthyosaurus*, which was more subaquatic in habit, only the head and neck of the creature protrudes beyond the top, while the *plesiosaurus* has the greater part of its body above the surface,