21 H.—22.

"Thermal Trout-fisheries Investigation.—For some time I have been occupied continuing the study of practical problems relative to the inland fisheries. During a period spent in the thermal district an analysis was made of ninety-nine stomachs of trout from various streams, lakes, and rivers. A report on the subject of food-supply, deterioration, disease, and hybridism has been submitted.

Economic Investigation of Marine Edible Fishes.—In September of last year a visit was made to Bay of Islands, and all fishes secured in the neighbourhood of Russell and vicinity were recorded and information collected regarding them. Through the courtesy of Mr. Deighton, manager of the municipal fisheries, I was enabled to accompany the trawler 'Cowan' on a short cruise in Hauraki Gulf, where much valuable information was gained in regard to the Auckland'fishes. Later I visited French Pass, D'Urville Island, Nelson, Greymouth, and Hokitika, in the South Island; and while accompanying launches, fishing-boats, and on short excursions was able to collect notes on the species of fish caught, their distribution, migrations, spawning seasons, and habits. Part of the data collected will appear in the coming number of the New Zealand Journal of Science and Technology, in a paper entitled 'Notes on the Edible Fishes of New Zealand.'"

## Mollusca.

Miss Mestayer reports as follows:—

"Work on the reference collection of New Zealand Mollusca has occupied a good deal of time during the year, and a number of additions have been made to it. Perhaps the most interesting were two specimens of a very rare *Chiton*; found among scrapings of oysters from Foveaux Strait. The larger specimen was rather badly damaged, but it was used to complete the technical description of the species, which, owing to the lack of material, the late Mr. Suter was obliged to leave incomplete in the 'Manual of New Zealand Mollusca, 1913.'

"A start is being made at the rearrangement of the show collection of New Zealand Mollusca, and I hope shortly to do the same with the foreign collection, at the same time increasing the exhibit. "St. Mark's Church Day School and Scots College each requested to have the habitat groups case

"St. Mark's Church Day School and Scots College each requested to have the habitat groups case explained to a class, and the children evidently enjoyed it, the Scots College boys being particularly keen and ready to ask for information.

"Dr. Thomson brought back an interesting collection of Mollusca from Hawaii and Samoa. Other specimens have been obtained, either as donations or as exchanges, from Messrs. Doello-Yurando, W. R. B. Oliver, A. W. B. Powell, H. Hamilton, H. H. Vertrees, New Zealand Trawling and Fish-supply Company, and myself. Also, Mr. Hazelwood, of Island Bay, has given some really valuable specimens of echinoderms obtained while he was fishing in Cook Strait, and a large piece of bored rock covered with Mollusca and Brachiopoda, with some small specimens of another rather rare starfish. The echinoderms which he got this year were two species of a very rare sea-urchin, Goniocidaris umbulacrum, and two of an almost equally rare starfish, Astrotoma waitei.

"Since the last report I have published 'Notes on the Habits and Uses of the Toheroa,' On the Occurrence of Cylichnella arachis (Q. & G.) in New Zealand,' and 'Notes on New Zealand Mollusca'

No. 1 and No. 2."

## Insects.

Miss A. Castle reports on the entomological collections as follows:—

"The work of the past year has been of a general nature—mounting the season's captures, relining cabinet-drawers, overhauling collections, and exhibiting exotic collections at stated times.

"Owing to the congested state of the entomological collections, due to lack of proper accommodation, the work of rearranging is considerably hampered, and additional cabinets would be very welcome. When classes from various schools make periodical visits the library must of necessity be utilized.

"The Department is indebted to Miss M. E. Fountame for valuable assistance in the identification of exotic Lepidoptera and presentation of Rhopalocera. Mrs. F. Walsh, of Fiji, also presented a fine series of Fijian Heterocera. Special thanks are due to Messrs. G. V. Hudson, H. W. Simmonds, C. O'Connor, C. Clarke, C. Harris, and J. M. Campbell for specimens in all orders."

## HERBARIUM.

Mr. W. R. B. Oliver reports as follows:-

"Besides several cases of specimens not unpacked, the Dominion Museum collection of plants consists mainly of the specimens gathered by Buchanan, Kirk, McKay, Hamilton, and Travers. For some years these collections have been housed in the Museum store, where they were contained in cardboard boxes, but not in any order. It was necessary, therefore, first to arrange them in systematic order, so that the work of classifying could be followed according to a definite plan. After thus rearranging the boxes the work of mounting and naming the specimens was begun, and has been continued to date, with the result that the following species have been classified and made available for reference: Fern and fern allies, 138; Coniferæ, 13; grasses, 40. Of some of the species, especially among the ferns, there is a good series of specimens. Sheets of cartridge-paper similar to those in use in the large herbaria at Kew and the British Museum are being used to mount the specimens, which can thus be readily examined without risk of mixing specimens from different localities. The sheets thus completed are arranged in dust-proof cardboard boxes, in which is placed powdered naphthalene.

"The following additions have been made to the herbarium during the past year. (1) A large and valuable collection, including representatives of most of the flowering-plants and ferns of New Zealand, has been presented to the Museum by Mr. B. C. Aston, F.I.C., F.N.Z.Inst. This is a most important addition to the herbarium, as it includes many large series with exact localities. The determination of the species has been made by Mr. Aston, Mr. Petrie, Mr. Cheeseman, and other botanists. This donation ensures the Museum possessing a large and representative reference