(2) the delimitation of great masses of argillaceous limestone and other cement-making materials, (3) the obtaining of data highly useful in connection with soil surveys, and (4) an increase in our geological knowledge of the very difficult North Auckland area.

Kaitangata Subdivision.

For many years past the coalfields of Otago, owing to the urgent nature of work elsewhere, have been somewhat neglected by the Geological Survey, but last season Mr. M. Ongley was deputed to make a detailed examination of the important coalfield which extends from Kaitangata to near Milton. The area originally marked out for investigation has been surveyed in considerable detail, but the examination of the older rocks of the district has brought the geologist into contact with the unsolved problem of the age of the Otago schists, and on this account alone further work is necessary before a detailed report can be written. Moreover, it has been found highly desirable to extend the surveyed area north to the Green Island Coalfield, near Dunedin. The results of the survey, so far as it has gone, are highly satisfactory. They show that in all probability the unworked portion of the Kaitangata Coalfield contains a very large amount of coal, much of which can be won without any great difficulty.

Palæontological Work.

During the year ended 31st May, 1924, Dr. J. Marwick, M.A., Palæontologist, has been engaged chiefly in examining the collections of Tertiary fossils belonging to the Geological Survey. Papers have been prepared and await publication dealing with the faunas of the Waiarekan and Wangaloan stages of the Tertiary sequence. These beds overlie the coal-bearing strata of North and South Otago respectively. In addition, papers describing the representatives in New Zealand of the important molluscan families of the Naticidæ and Veneridæ have been written. The efficient utilization of a great part of the mineral resources of New Zealand depends on the correct interpretation of the geology and structure of various regions, and this in turn is greatly aided by a precise determination of the fossil remains found in the various rock-series.

Publications and Reports.

The following publications have been issued during the year :—

Seventeenth Annual Report (New Series) of the Geological Survey (parliamentary paper C.–2c, 1923).

Palæontological Bulletin No. 10, "The Fossil Cirripedes of New Zealand," by Mr. T. H. Withers, of the Geological Department of the British Museum.

A detailed report dealing with the mines and geology of the Waihi district is now in the press, and is expected to appear before the publication of this report.

Five reports and papers by members of the staff have been published in the *New Zealand Journal of Science and Technology*. Dr. Henderson wrote the following: "Chrysotile-asbestos in the Upper Takaka District" (Vol. 6, No. 2, August, 1923); "Notes on the Geology of the Nevis Valley, Otago" (Vol. 6, No. 2); "Notes to accompany a Geological Sketch-map of the Mount Arthur District" (Vol. 6, No. 3, October, 1923); and "The Structure of the Taupo-Rotorua Region" (Vol. 6, Nos. 5 and 6, March, 1924): and Dr. Marwick wrote "Notes on a Molluscan Collection of supposed Waiarekan Age" (Vol. 6, Nos. 5 and 6). Other papers by Dr. Marwick dealing with New Zealand Palæontology read or issued during the year are "The Struthiolariidæ," "Recent and Tertiary Naticidæ and Naricidæ of New Zealand," "Palæontological Notes on some Pliocene Mollusca from Hawke's Bay" ("Transactions of the New Zealand Institute," Vol. 55); "An Examination of some of the Tertiary Mollusca claimed to be common to Australia and New Zealand" ("Report of the Australasian Association for the Advancement of Science," Vol. 16, 1923); and "*Zealeda* and *Barytellina*, New Molluscan Genera from New Zealand" ("Proceedings of the Malacological Society of London," Vol. 16). A paper entitled "The Post-Tertiary History of New Zealand," by Dr. Henderson, will appear in next year's volume of the "Transactions of the New Zealand Institute."

Owing to various circumstances, one being the cost of printing, publication of the detailed results of the Geological Survey has been much delayed during the past few years, but during the next twelve months it is hoped to publish much of the material now on hand.

Office-work, etc.

A large amount of correspondence has been attended to, numerous requests for information more or less connected with the work of the Survey have been answered, and samples of rock, minerals, &c., have been examined and identified. A considerable part of my time was taken up in editing and seeing through the press the palæontological reports of non-resident experts. I have partly prepared also a comprehensive list of New Zealand minerals, with notes on mode of occurrence, and full references to the literature.

Dr. Henderson wrote an account of the economic minerals of New Zealand, and Mr. Harris, Draughtsman, worked for over three months on a large-scale mineral map of New Zealand for the Empire Exhibition. Mr. Harris made also ten drawings of survey districts for photo-lithographic reproduction, ten drawings for blocks, forty-two field sheets, and numerous drawings and tracings for various purposes.

Mr. Fulton-Wood has attended to much miscellaneous office-work, and has acted as librarian. The library now contains over six thousand volumes, in addition to numerous pamphlets, duplicates, &c., and requires considerable attention.