H.—34.

MURCHISON SUBDIVISION.

Mr. Fyfe has nearly completed the field-work in the Murchison Subdivision, and will begin writing the report this winter.

KAITANGATA-MILTON SUBDIVISION.

Mr. Ongley wrote part of the report on the Kaitangata-Milton Subdivision last winter, and the draughtsman has the drawings for the maps well in hand.

St. Bathans Subdivision.

Mr. Ferrar's summary report on the St. Bathans Subdivision is printed on a later page. He took the opportunity during his field-work on the soil survey of Central Otago to complete the geological examination of Cluden and Tarras survey districts and these have now been added to the St. Bathans Subdivision. It is unlikely that Mr. Ferrar will have time to begin writing his report this winter.

SOIL SURVEY OF CENTRAL OTAGO.

Mr. Ferrar has now finished the soil survey of the lands in Central Otago that the irrigation works, projected or in being, are designed to benefit. Some further areas were also mapped. Half the lithographic drawings for the soil maps to embody the result of three seasons' work await revision and the addition of some details when the scheme of classification is decided upon. Mr. Ferrar will probably complete his report in a few months, by which time the drawings for the maps should be well forward.

PALÆONTOLOGICAL WORK.

Dr. Marwick has worked chiefly on the Tertiary fossils of Gisborne and north Hawke's Bay districts. He has prepared drawings and descriptions of many new species, and it is hoped to publish the results of his work before the end of next year as a Palæontological Bulletin. Dr. Marwick has been absent on leave acting as Professor Cotton's locum tenens at Victoria College, since the 5th March.

PUBLICATIONS.

The following official publications were issued in the year ending 31st May, 1928:—

"Twenty-first Annual Report (New Series) of the Geological Survey" (parliamentary paper H.-34, 1927).

Geological Bulletin No. 31: "The Geology of the Tongaporutu-Ohura Subdivision, Taranaki Division," by L. I. Grange.

Division, Bulletin No. 32: "Minerals and Mineral Substances of New Zealand," by

Geological Bulletin No. 32:

P. G. Morgan. Bulletin No. 30, "The Geology of the Waiapu Subdivision," is shortly to be issued; the maps accompanying this report have been available for some time. A map showing the known faults of New Zealand has been printed, and will be distributed as soon as the notes to accompany it are ready. A paper by Mr. Grange, "On the 'Rodingite' of Nelson," and one by Dr. Marwick, "The Tertiary Mollusca of the Chatham Islands, including the Generic Revision of the New Zealand Pectinidæ," were published in volume 58 of the "Transactions of the New Zealand Institute." The late Mr. Morgan contributed a short paper on the "Bituminous Coal of New Zealand," and Mr. Ferrar one entitled "Geological Notes on Kapiti Island" to the New Zealand Journal of Science and Technology. Mr. Morgan and Dr. Marwick reviewed several publications for the same journal.

Office-work, etc.

The office-work during the year was similar to that of other years. Throughout the winter and early spring the professional officers wrote detailed reports on the districts they had examined in the The literature on all branches of geology is so extensive that the labour of preparing these reports and the studies necessary before they are written is great and ever increasing. Numerous mineral samples have been identified for the public, many requests for information more or less connected with the work of the survey have been answered, and much other routine work attended to.

Eight large maps and several other plans and blocks for photo-lithographic reproduction, two fault maps, and numerous field sheets have been prepared.

Ten photo-lithographic drawings and seventeen field sheets in connection with the soil survey of Central Otago have also been completed.

The library now contains 6,400 volumes, and a great many pamphlets, duplicates, &c.

FIELD-WORK PROJECTED.

During the 1928-29 field season the exploration of four subdivisions will be begun. Each of these

will require two years or more to complete.

Mr. Ferrar will examine the area about Te Kuiti, extend the geological mapping to the west coast of the North Island, and connect the large area in Taranaki already surveyed in detail (Bulletins Nos. 14, 24, 29, and 31) with the still larger area in the Waikato and Hauraki districts described in Bulletins Nos. 4, 10, 15, 16, and 28. The subdivision contains large amounts of limestone and some coal, resources that in the future will no doubt be fully utilized, but the chief immediate reason for