1898. NEW ZEALAND.

GEOLOGICAL EXPLORATIONS

MADE DURING 1897-98.

Presented to both Houses of the General Assembly by command of His Excellency.

Mr. ALEXANDER McKay, Government Geologist, to the Under-Secretary for Mines. 2nd June, 1898. Sir,-During the year 1897-98 I made in the Middle and North Islands the various examinations specified as under :-

In the Middle Island.-1. An examination of Kirwan's Hill and the district east of the sources of Boatman's Creek,

between Larry's Creek and the source of the north branch of the Inangahua River. 2. The valley of Boatman's Creek and the adjacent hill slopes from the gorge above Capleston

to a mile below the township. In the North Island,-

1. An examination of the copper lodes occurring within the Pupuki watershed, Whangaroa

County.

2. An examination of the prospects of finding coal in the hills south of Scoria Flat, Kawakawa, Bay of Islands County.

3. An examination of part of the Mangakirikiri Valley, with reference to the occurrence of mercury-ore (cinnabar) in the Kauaeranga Valley, Thames County.

4. The continuation of the work of the past year with respect to the geology of the Cape 4. The continuation of the work of the past year with respect to the geology of the Cape Colville Peninsula: Firstly, by an examination of country from the plain west of Karangahake, east-north-east to the coast-line a little north of Waihi; and, secondly, an examination of the Thames Goldfield between Hape and Tararu Creeks. On the first five localities I have the honour to report as fully as the case in each instance seemed to require. With respect to the work done in Ohinemuri and Thames Counties, the necessity of the preparation of rock specimens and slices for microscopical determination, which work cannot be effected for some time, makes it advisable to give a preliminary report, which, in the meantime, will deal with general results, in anticipation of the more detailed descriptions that are to follow.

I have, &c., ALEXANDER MCKAY, Government Geologist. The Under-Secretary, Mines Department.

REPORT ON THE AURIFEROUS ROCKS OF THE WESTERN SLOPES OF THE VICTORIA MOUNTAINS, NELSON.

THE discovery on the northern slopes of Kirwan's Hill of a considerable area over which are strewed a covering of loose blocks of auriferous quartz has led during the past season, 1896-97, to a great amount of prospecting there, in the immediate vicinity and over the surrounding district. The result has been the discovery of numerous reefs of quartz within the area lying between the upper part of Larry's Creek and the upper part of the Waitahu, or north branch of the Inangahua River.

The district is mountainous, most of the reefs being exposed at and somewhat higher than 4,000 ft. above the sea, and forms a flanking range parallel to the Victoria Mountains, but separated therefrom by the deep valley of the Waitahu; while to the north this range is separated from the southern end of the Brunner Mountains by the deep gorge of Larry's Creek.

The auriferous rocks covering the greater part of the area belong to the Maitai series of the New Zealand Geological Survey classification, regarded as belonging to the Carboniferous period,

1—C. 9.