

WATER CONSERVATION.

The collection and storage of the rainfall, and of water resulting from the melting of snow on the mountains, has received attention during the year.

The officer appointed to examine the most favourable sites where dams and reservoirs for water storage could be constructed, has reported on a reservoir at Gimmerburn, both for irrigation and for the use of miners on the Garibaldi Diggings; two dam sites at Wedderburn for irrigation purposes only; a reservoir site in the North Ida Valley, and also the works in progress for the Eweburn Reservoir. The whole of the foundations of the dam at Eweburn are completed, and the construction of the embankment, which is to be 65 ft. in height at the byewash and 70 ft. at the crest is in progress; but in consequence of it being impossible to continue full working-time throughout the winter, the work may not be finished until towards the end of the year. This reservoir is intended to hold 500,000,000 gallons of water, and the cost of the work to the 30th of June last was £9,410. Further examination has also been made of the works for domestic water supply for the townships of Karangahake, Waitekauri, and Waihi, in the County of Ohinemuri; at the two first-named places the Government has undertaken to assist by contributing half the cost of the works.

GEOLOGICAL EXPLORATIONS.

The large collection of rock specimens collected during the previous year by Mr. Alexander McKay, the Government Geologist, and the mineral specimens in possession of the Mines Department, were prepared and shown at the Auckland Industrial and Mining Exhibition, where they elicited great attention from the mining men who visited the Exhibition. First-class awards were obtained for gold specimens, specimens of ore, and geological specimens.

A report was furnished by the Geologist, after an examination at Moturoa, on the prospects of finding petroleum at that place. The report was not, however, of a favourable character.

A report was also made on the occurrence of gold, silver, and copper, at Patua Range on the west flanks of Mount Egmont. The metals, however, were not found in payable quantities.

The presence of rhodochrosite at Paraparaumu was also reported on, but, although considerable quantities exist, the price obtained at the present time for carbonate of manganese does not admit of the ore being mined for export.

Special examinations for gold were made in the district east of Lake Taupo. Alluvial gold was found on the banks of the Hinemaiaia and some of its tributaries by Mr. McKay, but the prospects obtained by him were not payable.

Examination was also made of the cement deposit at Te Puke. The cement is gold-bearing, but the Geologist holds out very little hope of its being found payable. The same description of gravels, under similar conditions, are found over a large area between Rotorua and the shores of the Bay of Plenty.

Examination for gold was made at the Wade and Dairy Flat, but the formation was not of a promising character, and no gold was seen.

A special examination was made of the beds around Riverhead, Auckland, for gem stones, diamonds and other stones of value being reported found near Henderson and Riverhead. Despite persistent reports of their presence in the district, no stones of value were seen.

A report was also furnished on the carbonaceous deposits in the hills to the south-west of the Waihi Plain. The locality was examined, and two seams of workable lignite were noted. The material will yet prove a valuable fuel, and local tests show that its steam-raising power is as two to one compared with good rata firewood.

During the season an examination was made of the east shore of Pelorus Sound near the entrance from Cook Strait; also a survey of the Trooper Range and the district on the coast between the Whareama and Pahau Rivers, on the east coast of Wellington.