

HOUSING.

Thirty-five loans have been granted to miners and others, under the Department's housing-scheme, to enable the workmen to erect and own their own houses. The loans, which range from £250 to £300, are repayable, together with interest, by fortnightly instalments over a term of twenty years. No new loans were granted during the year under review. I am pleased to state that a sum of £4,000 is being provided on the current year's estimates of the State Coal-mines Account to enable further loans to be made.

GEOLOGICAL SURVEY.

During the 1936-37 field season geological mapping was carried out in three districts: Dannevirke, Reefton, and Wakaia. In the Dannevirke Subdivision inflammable gas has long been known, and unsuccessful bores for oil have been drilled. The present work will help to elucidate the structure and sequence of the thick and extensive younger rocks of the area. Other mineral resources in this geologically little known district are the abundant deposits of limestone and bentonite. The officers of the Geological Survey were the first to recognize the presence of the latter, a swelling clay, which has many uses in modern industry.

The Reefton vein-system is being mapped in greater detail that was done twenty years ago, at the time of the former systematic survey. This restudy of an important goldfield is undertaken in the hope that the application of modern theories of lode-formation aided by geophysical and other methods of prospecting may lead to the discovery of other payable veins and of the faulted portions of veins already worked. The geologist in charge of the Reefton work spent much time in interpreting the geophysical data obtained, in advising on surface prospecting controlled by the Labour Department, and in examining the cores and sludge from a bore being drilled in search of the Progress Lode.

The gold-bearing river and terrace gravels, the sluicing and dredging of which have maintained the miners of the Waikaia and Waikaka for more than seventy years, are nearly exhausted. The older deep leads have been worked to some extent; but the rather complex faulting makes difficult not only their actual exploitation, but also the finding of unworked areas. The survey of the district was undertaken to endeavour to explain the structure.

In addition to the systematic exploration of the subdivisions named, an officer was engaged throughout the season on mapping the coal-bearing area of the upper Blackburn, in the Westport district. Large reserves of coal are popularly believed to exist in this area, but the work undertaken shows the amount of coal available to be disappointingly small. Some preliminary work was carried out in the Greymouth Coalfield.

This work is the beginning of a much more detailed estimation of the coal resources of New Zealand than has been attempted up to the present.

Another officer spent several months in the Hastings-Napier District in collecting and collating data on the abundant underground water resources. This work is in connection with a land-utilization scheme for this region. Other geologists reported on mineral deposits in the Glenorchy and Bendigo Districts in Otago, at Kotuku in North Westland, at Ohura in Taranaki, and elsewhere.

SCHOOLS OF MINES.

Six scholarships are offered annually by the Department for competition by students attending the various Schools of Mines within the Dominion. Four candidates sat for the annual Scholarship Examinations held in November, 1936, and of these candidates, one from the Otago School was successful in gaining a scholarship, which is tenable for four years at the University of Otago.

The expenditure on Schools of Mines for the year ended 31st March, 1937, was £4,035, as compared with £3,536 for the previous year.

QUALIFICATIONS OF DREDGEMASTERS.

Under the Mining Act it is mandatory that the master of a dredge working on a deep or swift-flowing stream shall be the holder of a Class "A" Dredgemaster's Certificate.