

of harbour finance it has been necessary to temporarily stop work on the extension. Dredging has, however, been proceeded with whenever possible, and the regular services have been well maintained.

The position of Karamea is, I regret to say, very unsatisfactory. The aftermath of the severe earthquake experienced in 1929 is still apparent, and is, I am afraid, likely to be so for many years. Large quantities of shattered material from the back country have been deposited in the river, which is rising and generally making navigation difficult, and increasing the flood menace over a considerable area of the district.

The construction of the main training-wall has been proceeded with, a temporary wharf in a more suitable position is being erected, and endeavours are being made to so train the river as to improve the channel and make the best of the position as it exists.

The contract for the construction of a breakwater at Waikokopu has been proceeded with, and although work was held up for some little time it is anticipated that it should be finally completed within the next few months. The improvement in loading-conditions at the wharf is becoming increasingly apparent as the work goes on.

In addition to these main harbour-works, a considerable number of wharves and small harbour-improvements have been carried out in various parts of the Dominion with funds provided either in whole or part by the Government.

LIGHTHOUSES.

The policy of gradually improving and extending the various aids to navigation around the coast of New Zealand has been steadily proceeded with.

Arrangements have been made to provide a new flashing light at East Head, near Le Bon's Bay, on Akaroa Peninsula, and it is anticipated that this work will be completed by Christmas-time.

At Baring Head the necessary land has been acquired and provision made for the transfer of the existing lighthouse at Pencarrow to this locality. When the transfer has been effected an up-to-date flashing light will be provided in place of the old fixed light now in operation, and the necessary housing for fog-signal keepers, and possibly a radio direction-finder, will be provided. A contract has been let for the construction of the access road and bridge.

A new automatic flashing apparatus has been ordered for Godley Head Lighthouse, which will supplant the fixed light at present in use. Whenever possible, these old fixed lights are being converted to flashing operation, since the growth of population adjacent to many of these lights and the more general use of electric lights renders it sometimes difficult for a shipmaster to distinguish between a lighthouse and what may be purely a domestic installation or even a motor-car.

A new crane is being provided for the Brothers Lighthouse, and the station generally overhauled.

At Kahurangi a new lens has been installed to take the place of the old lens, which was seriously damaged by the earthquake of the 17th June, 1929, and the tower itself has been repaired.

A new and powerful diaphone fog-signal has been installed at Taiaroa Heads. It has been housed in a reinforced-concrete building, and is a thoroughly up-to-date and efficient installation.

A radio telephone has been established at Portland Island, and general maintenance and repair work has been carried out at the various stations.

IRRIGATION AND WATER-SUPPLY.

During the year the existing schemes were maintained in good order. All lands requiring water have been served, and the season has been fairly successful, as the water-supply has been good, and the distribution of water has been subject to very little interruption. The schemes in operation on a trading basis are Ardgour, Bengerburn, Earnsleugh, Galloway, Hawkdun, Ida Valley, Last Chance, Manuherikia, Tarras, and Teviot.