

A vigorous policy of dredging has been maintained, and, in addition, the training-walls are being extended into deeper water, the dredging of the berthages and swinging-area is being continued, and the dredge "Maui," which was found after extensive trial to be suitable for the port, has been purchased.

The position at Karamea is not as satisfactory as I would wish, the earthquake damaged the training-wall and the wharves very considerably and caused extensive slips in the upper reaches of the river. These slips provided enormous quantities of debris which was carried down the river during the heavy floods at the end of December, and, lodging in the lower four miles of the river, have raised the bed very considerably. This fact, combined with the sinking of the land immediately surrounding Karamea, has created a situation in which it is somewhat difficult to forecast the effect of a heavy flood. Suitable precautionary measures have been taken in this connection.

The repair and renewal in stone of the training-wall is now proceeding satisfactorily, but the re-erection of the wharf has been held over pending the result of the spring floods and the effect on the navigable channel.

The contractor for the Waikokopu Breakwater has made fair progress with his work, but has had difficulties to contend with which have considerably delayed the work; the portion already completed shows excellent results, and there is no doubt that the completion of the work will render the port much more attractive to coastal shipping.

Various other works in the form of wharves and other harbour-improvements have been carried out, and have assisted to improve transport conditions in many of the smaller communities.

LIGHTHOUSES.

The policy of gradually increasing and improving the aids to navigation round the New Zealand coasts, both with regard to efficiency and economy, has been steadily pursued.

The principal feature has been the installation during the year of a new high-powered automatic revolving light at Cape Egmont in place of the existing fixed light. The fixed light has in these days of electric light and motor headlights become obsolete, as it is somewhat difficult for a shipmaster approaching populous localities to be sure that he is not confusing the beam from the lighthouse with some other bright light in the near locality. By adopting a revolving lens, with its consequent flashing character, this difficulty is overcome.

The entrance to Tory Channel has been well marked by the provision of an automatic light on the West Head and the old oil-burning leading lights themselves have been replaced by automatic acetylene lights with a flashing characteristic.

At Jack's Point a new flashing acetylene light and lens have been provided in place of the original occulting light.

The Kahurangi Lighthouse was considerably damaged by the earthquake in June last, and a new lens has been ordered and additional cast-iron segments for the repair of the tower have been delivered. In the meantime a temporary light has been maintained.

IRRIGATION AND WATER-SUPPLY.

During the year the existing irrigation schemes were maintained in good order.

The following schemes are now on a trading basis: Ardgour, Bengerburn, Earnsclough, Galloway, Ida Valley, Last Chance, Manuherikia, Tarras, and Teviot. The profit for the year was £3,828, an increase of £1,201 on the previous year.

The total area irrigated under all Government schemes was 41,895 acres, the number of irrigators being 395.

The Arrow River scheme is nearing completion, and will be ready for operation next season.

The Poolburn Dam is being erected to supplement the water-supply to the Ida Valley scheme where it was necessary to temporarily reduce the settlers' supplies last season.

A small extension has been put in to serve the Teviot settlers.