

The suction dredge "Eileen Ward" removed a total quantity of 440,335 cubic yards from the bar, 81,365 cubic yards from the fairway and berthages in the river, and 9,350 cubic yards from the floating-basin. The average working-depth in the river was maintained at practically the same as last year. A considerable shoaling which had taken place in the berthages was removed, but average depths were slightly less throughout the year than during the previous year.

The "Eileen Ward" was laid up for about ten weeks during the year for overhaul. Only 50 per cent. of the working year was taken up with dredging operations owing to bad weather, repairs, and overhaul. The rainfall for the year was 66.99 in., as against 114.55 in. last year.

Work on the dredges and other plant kept the workshops staff fully employed. The overhaul of the dredge "Eileen Ward" was carried out at Westport instead of at Wellington.

The signal-stations, beacons, and harbour lights were all kept in good order.

Extensive willow-planting was carried out with unemployed labour along the river-banks during the year. Fencing was renewed and extended where necessary.

*Karamea Harbour.*—This harbour has not been worked by shipping since November, 1931. The Oparara Quarry and training-wall works were closed down at the beginning of the year, and the plant has been dismantled and overhauled. No works were carried out in connection with the port during the year.

The entrance to the harbour is now very bad, the river-mouth having worked so far to the northwards that the river has very little scouring effect on the entrance. Added to this drawback, is the fact that nearly 80 per cent. of the water of the river escapes into the Otumahana Lagoon, which again reduces the effect of scour, and results in the water on the bar being very shallow.

Large quantities of debris shaken down by the earthquake are still being carried down by the river and deposited in the tidal reaches. Until this action is very much reduced it is of very little use to attempt to improve the working-conditions of the harbour.

*Little Wanganui.*—Owing to the unsatisfactory condition of the Karamea Harbour, the port of Little Wanganui has become the only sea outlet for the produce of the district once served by the two harbours.

The earthquake has, however, had a deleterious effect on this harbour also, and a large sand-and-shingle bank formed at the entrance, making navigation very difficult. Recently the river has cut through the bank, and the entrance is now a most favourable one.

Surveys were made with a view to constructing works that would improve the harbour, but the flood of February last so improved the entrance, as above stated, that no work is at present necessary. It may be necessary at some time to try to fix the mouth in its present most favourable position, but expenditure in this direction at the present time is out of the question.

The Karamea Shipping Co.'s a.s. "Fairburn" called at this port thirty-one times during the year.

*Waikokopu.*—No further construction work was carried out at this harbour during the year, but several blocks of concrete were placed in the breakwater to strengthen it and prevent loss of stone. Maintenance work was attended to as required on the wharf and breakwater.

*Waitangi Wharf, Chatham Islands.*—A contract for the erection of this wharf and the approach road was let to the Rope Construction Co. Work was started just prior to the 31st March, 1933. Timber is on the way for the wharf from Australia. Thirty-nine holes have been bored for piles for the timber protection-work to the approach road.

*Pitt Island Wharf.*—The timber is on the site for this wharf, but no construction has yet been done on it.

*Tikinui Wharf.*—The approach road to this wharf was completed during the year.

*Whitianga Wharf.*—This wharf was completed early in the year, and is now in service. A shed 40 ft. by 30 ft. was erected, and an approach road with a cattle-race.

*Rotoroa Island.*—During the month of November the hull of the old s.s. "Rimu" was sunk near the jetty on Rotoroa Island to provide shelter from the prevailing rough weather.

#### LIGHTHOUSES.

Very little new work has been done on lighthouses during the year. Maintenance and improvements have been carried out where necessary.

*Baring Head.*—The reserve at this lighthouse was fenced in during the year, and a double scrub fence was constructed to enclose the plantation surrounding the reserve. A number of native trees were also planted.

*Puysegur Point.*—The outer boarding of the two bays in the tower of this lighthouse was completed. Other miscellaneous repairs were also effected.

*Cape Maria van Diemen.*—Repairs were made to the main tower and outbuildings, and rails, sleepers, &c., were sent forward for the renewal of the tram line.

*Godley Head.*—The apparatus for converting the light from a fixed to a flashing one was installed during the year.

*Akaroa.*—A new lightning-arrester was fixed on this lighthouse.

*Farewell Spit.*—Repairs to the bracing and stairways were effected, and the whole structure cleaned down and given three coats of paint.

A number of minor repairs have been effected at various stations, and all buildings have been properly maintained.