

Oparara Quarry.—At the beginning of the year a new quarry was being opened up. This has developed very satisfactorily and produced excellent stone. Various tunnels for quarrying the rock have been driven and fired with good results. During Christmas and New Year holidays the quarry plant and rolling-stock were thoroughly overhauled. At Rhinds erosion-protective works, adjacent to and associated with the quarry, 833 tons of box stone and spoil have been placed.

Survey.—A comprehensive survey has been made to definitely establish relative information concerning the harbour and adjacent areas for future reference, and for the consideration of various proposals at present under review.

Little Wanganui Harbour.—Since the closing of the Karamea Harbour the Little Wanganui Harbour has been worked on an average of once a week. The “Kotiti” can reach the wharf at high tide at all times, while the “Fairburn” arranges her itinerary so as to call at spring tides. Towards the end of the year a sandspit commenced to encroach on the upstream end of the wharf and threatened to interfere with the berthage. This was partly due to the influence of a huge earthquake slip a short distance up the river. Proposals have been approved for the erection of a piled permeable groyne to regulate the channel-flow so as to give the desired berthage improvement.

Waikokopu Harbour.—During the year work has been continued on the breakwater, except during the period when the contract was under revision. About 9,000 tons of stone were deposited in place, and even though the wall is yet unfinished the benefit to the wharf is very apparent, the shelter being very much improved. This locality is subject to very sudden storms, and as an indication of this it may be mentioned that the breakwater-staging was wrecked by storms twice during the year. It is anticipated that this work will be completed in about six months' time. A transmission-line has been put in, and the wharf-lighting connected up with the Power Board's electric mains. The wharf and wharf facilities have been well maintained, and the trade has been very constant throughout the year.

Taiaroa Wharf.—A new wharf was erected at the end of the existing jetty in place of the old wharf, which had collapsed. The new wharf has a kauri superstructure on turpentine piles.

Matiotitawa Wharf.—The approaches to this wharf were completed during the year.

Naumai Wharf.—The approach to this wharf was also completed during the year.

Tikimui Wharf.—Plans were prepared for the construction of a new wharf 118 ft. long with approaches, and the work has been put in hand.

Tinopai Wharf.—This wharf has been completed, together with approaches.

General.—A large number of applications have been received from Harbour Boards, local bodies, and private individuals for the approval of works involving Marine interests.

LIGHTHOUSES.

North Cape Lighthouse.—A new flashing apparatus has been installed in the original lens to take the place of the original flasher, which had not been wholly satisfactory.

Matakooa.—This light has been equipped with a new automatic acetylene flashing apparatus.

East Head.—A site has been selected for this light on East Head, Akaroa Peninsula, and the necessary flashing apparatus lens, and lantern, have been ordered. This light, being located on the main salient point of the peninsula, should be of great assistance to coastal traffic both from north and south. It is proposed to call this “Le Bon Light” after the Bay of the same name, which is adjacent. This will avoid any confusion with the existing East Cape Lighthouse in the North Island.

Portland Island.—A radio-telegraph set has been established at this station, which should considerably relieve the isolation, and enable the keepers to be in constant communication with the mainland in case of emergency.

Baring Head.—An area of land has been acquired for the new light in this locality, which will take the place of the existing high-level light at Pencarrow. A contract is being let for the construction of the access road, and it is expected that contracts for the erection of cottages, fog-signal house, tower, &c., will be proceeded with almost immediately. The apparatus will be of a powerful flashing type. The new light erected by the Harbour Board at the entrance will then take the place of the old Pencarrow Head Lighthouse which has been in operation for over seventy years. The advantage of the new location of the light and fog signal lies particularly in the fact that these navigation aids will be outside the danger instead of inside. Furthermore, Cape Palliser, Baring Head, the Harbour Board light at Pencarrow, and Karori Rock lights will be interlocked in sectoring in such a way as to make safe navigation in conditions of bad visibility very much more certain. It is probable that later on a radio-direction-finding beacon will also be established at Baring Head, but this depends on the extent to which ships fit the complementary equipment.

Godley Head.—The necessary apparatus for converting this light from a fixed oil-burner to a flashing type has been ordered, and the conversion should be completed early in the coming summer. Although this light is still thoroughly efficient, the universal use of powerful public and domestic electric lights render the fixed character unsuitable, and it is for this reason that the change is being made.

Taiaroa Heads.—A new powerful fog-signal constructed on the diaphone principle and similar to those already installed at Pencarrow and Godley Head was installed. It is housed in a reinforced concrete building, and is a great improvement on the old explosive signal.

Kahurangi.—A new 800 mm. lens has been installed in this lighthouse to take the place of the old lens, which was irretrievably damaged by the earthquake, and new cast-iron segments have been erected, some of the original segments having been badly cracked. The light itself is operated automatically, the illuminating apparatus consisting of a Dalen burner using acetylene gas.