3 H.—15.

As an indication of the falling-off in the shipping trade it may be mentioned that the Department's revenue from light dues in six months of this year as compared with last year has fallen by 12½ per cent. But the falling-off in shipping trade may quite readily be considerably greater than this, because the dues are based on the net tonnage of the ship and irrespective of whether the ship is

fully or only partially laden.

Some remarks of mine in the 1924 annual report (H.-15, pp. 3 and 4), urging that harbour construction and extension proposals should be subjected to critical investigation in order to ascertain whether the work proposed to be undertaken was (a) really necessary, (b) adequate and/or alternative transport facilities did not already exist, (c) the expenditure was justified as a self-supporting harbourwork proposition, were severely criticized in certain quarters to which the remarks were applicable, the generalized accusation being that the Department was working for centralization of overseas shipping on the main ports. The writer was then entirely unaware of the existence of any such policy, but was merely concerned in the competition which was even then developing between road, rail, and sea transport, and which has since become intensified to an extent not then realized. The following is an extract from the 1924 report:—

"Our transport ways for goods and passengers are threefold—by road, by railway, and To meet the cost of construction and maintenance of the first, and the cost of by sea. construction, maintenance, and operation of the second, the general public must of necessity pay, since they are publicly-owned utilities, and any loss must be made good by increased charges or indirect taxation. Internal communication by these means is an essential. Harbours are also essential, in the first degree, for export from New Zealand of our products and receipt of goods from overseas. They are equally necessary for dealing with transport between islands, and between places where no other adequate or sufficiently economical means of transport exists. But they cease to justify essential category when constructed to provide for traffic which can be adequately provided for otherwise by publicly-owned utilities (road or railway), and at a capital-plus-operating cost which cannot be met by charges on shipping and goods, but which requires the deficit to be made good by special taxation over the district. Interests particularly served by competitive transport ways quite naturally do not concern themselves with the loss accruing to the community, while the community, by reason of apathy or lack of understanding of the net result, or lack of opportunity to govern the matter, fails to assert itself; but it has to pay in any event."

It is suggested that the truth of this contention in 1924 has now become obvious.

HARBOUR-WORKS.

Westport Harbour Entrance and Bar.—In order to improve harbour conditions it was decided to undertake breakwater extension, and this has had a good effect so far as it has gone. The work which the Department can do is entirely dependent on revenues from the port and its endowments. Unfortunately, the serious falling-off in the coal trade and consequential fall in revenues necessitated stoppage of this work.

Karamea Harbour.—During the year the shoaling in the fairway has been accentuated. An enormous quantity of sand, silt, and general detritus has been brought down to the lower reaches by successive floods in the Karamea River, and a very considerable deposition has occurred in the slacker

waters through the coastal plain.

The last investigation of the upper reaches of the river in January confirmed the extensive rending and disturbance of the hills and mountains by the earthquake in nearly all parts of the watershed, and revealed the fact that only a comparatively small quantity of the disintegrated rock material had reached the tidal area.

The transportation of detritus, associated with deposition in the lower reaches and harbour area, can therefore be confidently assumed for many years to come, and, under these circumstances, any marked immediate improvement in the harbour entrance and fairway with works in hand or proposed can hardly be anticipated, though the influence of such works, in relation to the river-flow, is an important factor.

At the beginning of the period under review it was possible to work the port only at spring tides and with favourable sea conditions. A slight improvement to the channel at the wharf occurred in October, but further floods practically closed the port to shipping as from November, 1930.

The last serious floods which occurred at Easter (3rd April, 1931), caused further extensive deposition, and the formation of shoals between the Otumahana and the training-wall, and resulted in a considerably increased flow (approximately 70 per cent. of the river) down the Otumahana Channel. Steps were immediately taken with regard to a proposal for improving the flow over the Karamea bar by blocking the entrance to the Otumahana, with a half-tide pile-and-netting wall. This work, to influence and regulate the Karamea River flow, is now in hand.

Work carried out during the year to reduce the Otumahana overflow with a blockage of logs and

cable was effective up to the time of the Easter flood.

Training-wall.—During the year the work of replacing the old timber-pile wall by quarried stone has been expeditiously carried out—11,803 tons of stone having been placed during the year. Further temporary strengthening and retopping of the old wall was necessary for stone-tipping purposes. The whole length of the wall— $17\frac{1}{2}$ chains— has been completed to half-tide level, while at the extreme outer end a length of 5 chains has been built as a full-tide wall. At a point near the approach bank of the training-wall 300 tons of ballast was tipped for use in extending the stopbank round the adjacent length of Simpson's Island to prevent flooding of the tram-line during spring tides.