

*Contemplated Lighthouse Works.*

*Kaikoura*.—Having regard to the heavy passenger traffic nightly running between Lyttelton and Wellington, it is considered desirable that there should be a light somewhere half-way between Cape Campbell and Godley Head, so as to afford ships an intermediate opportunity to fix their position.

*Kahu Rocks*.—Shipmasters feel the need of a light between Cape Palliser and Castlepoint, on the east coast, to enable them to fix their position. This applies particularly to smaller ships which keep closer inshore, and is the more necessary because of the existence of much foul ground. The establishment of a light will enable vessels to fix their position.

*Cow Island*.—The Wigham light provided at Cow Island, near the entrance to Coromandel Harbour, has proved a failure: a small automatic acetone light has been ordered to take its place.

*North Cape*.—If funds are available it is proposed to establish an automatic light at North Cape to indicate an important turning-point.

*Manukau South Head; Egmont; Moeraki*.—If funds are available it is proposed to convert these three lights to automatic.

It is proposed to follow a policy of converting watched lights to automatic in certain places, for three considered reasons: Firstly, the reliability of automatic lights has now been so firmly established that there need be no apprehension as to their faithfully serving their purpose; secondly, what with the increased number of lights to be tendered and the calls upon the time of the lighthouse-tender for work other than the lighthouse service, it is becoming increasingly difficult to visit the various watched lights with a sufficient frequency; thirdly, the interest, sinking fund, depreciation, staffing, and operating costs of automatic lights are very materially less than in the case of watched lights. The reduction in all costs will result in a saving which will enable still further development of navigational aids without increasing the cost to the Dominion.

The conversion to automatic of the light at Kaipara (South Head) and Egmont will obviate the necessity for serving the east coast of the North Island except at Cape Maria and Hokianga Harbour. It will be possible to make arrangements locally for such service and attention as the two lights mentioned may require.

The conversion of the Cape Foulwind (Westport) light will largely obviate the necessity for service on the west coast of the South Island. A policy of conversion of certain lights on the east coast to automatic (the necessary service being arranged locally), and the working from Bluff of certain lights in Foveaux Strait which must remain watched lights (which can also be arranged from various centres), will practically obviate the necessity for the service of the "Tutanekai" on the east and south coasts of the South Island.

ADJUSTMENT AND SURVEY OF SHIPS' COMPASSES.

The compasses of ships in the foreign-going and in the home trade have been adjusted in accordance with the Compass Regulations by adjusters who are licensed by this Department for that purpose, and in most cases the adjustments have been very well performed. However, in the case of some of the older ships, or ships which have received much structural alteration since they have been built, some difficulty in obtaining a fine adjustment has been experienced by the adjusters; but such difficulties are not insurmountable, and a careful attention to existing conditions has in all cases enabled those compasses to be dealt with satisfactorily. The adjustments are investigated by this Department's Compass Inspectors at the various ports, and the result of this investigation shows that they are alive to the importance of this branch of their duty. The compasses of smaller ships plying within restricted limits, although not required to be adjusted, are required to be efficient for their purpose. These compasses also are inspected, and in some cases it has been found they required adjustment before they could be passed as efficient for their purpose.

During the year it has not been found necessary to detain any ship owing to her compasses being inefficient.

The gyroscopic compass, although met with occasionally in oversea ships, has not yet made its appearance on any of our coastal ships, and it would appear the time is far distant when it will oust the magnetic compass from the important position which the latter continues to hold.

MARINE CASUALTIES.

A normal number of marine casualties occurred during the year, the greater number being of minor importance involving slight damage to ships; whilst a few, beyond the slight delay to the ships concerned, involved no damage, and in a few cases, caused by stranding in harbours, &c., involved no risk of life or property. Preliminary inquiries into the causes of casualties have been held by the Superintendents of Mercantile Marine at the various ports when considered desirable, and in ten cases formal investigations before a Magistrate were found necessary.

In two cases of stranding of small vessels each vessel was run on shore in an endeavour to avoid loss of life. A total of twenty collisions occurred, some being those of ships colliding with a wharf or a similar structure, and a few being collisions between two vessels; all of these cases occurred within restricted limits. The collisions between vessels were mainly confined to vessels of the smaller class, and a few cases resulted in one of the vessels being sunk.

The most serious casualties of the year, involving total loss, were the "Cyrena," at Wanganui; the "Karu," at Cape Maria Van Diemen; and the "Manaia," at Slipper Island. Each of these cases was investigated before a Magistrate, who had the assistance of two nautical assessors, and in each case the Court exonerated the master and officers of the ship from blame.

The Department considered it necessary to reopen two cases for rehearing before a Judge with assessors. In both cases the decision of the lower Court was reversed.