

Enclosure in No. 1.

MARINE BOARD OF NEW ZEALAND, ANNUAL REPORT.

Lighthouses.

SINCE my last Report, dated 4th June, 1865, the lighthouse at Dog Island then in course of erection has been finished. The light was exhibited for the first time on the 5th of August, thus completing all the works of that character undertaken by the Marine Board, viz., Tiri Tiri, Mana, Godley Head, Tairoa's Head, and Dog Island, in a period of about fourteen months,

Shipmasters and other persons visiting our ports speak favourably of the benefit derived from these coastal guides, which enable those in charge to conduct vessels, even during the most gloomy weather, with comparative safety into our harbours.

Forming a judgment upon the residence of more than twenty-four years at the sea ports in this Colony, aided by nearly half a century of nautical experience, I can with confidence assert that the few lighthouses already placed on the coast of New Zealand have afforded advantages to the maritime interests which cannot be over estimated, not a single casualty having occurred to shipping within the limit of their range during the past year.

Considering the staff of lighthouse keepers are (with one exception) new to their duties, and have had but trifling instruction previous to entering upon their offices, it is a matter of congratulation to find that no accident has happened to prevent the lights being permanently exhibited from the date of first illuminating. The few repairs that are occasionally required to keep the optical apparatus in working order there has hitherto been no difficulty in getting executed in this Colony.

A first order lantern and dioptric apparatus ordered by the Provincial Government of Otago, and originally intended for Cape Saunders, has not yet, owing to the dearth of funds at the disposal of the Board, been made use of. Further information obtained from shipmasters has caused the Board to think that the "Nuggets," south of Cape Saunders, would for the purposes of navigation be a far better position, both for directing vessels on their course, going either north or south, as also pointing out a safe place of anchoring during the height of south-west gales which prevail with great violence on that part of the coast.

The increasing amount of traffic from Cook's Strait, and Nelson in particular, to the Ports of Hokitika and the Grey, renders it imperatively necessary to place a light near the extremity of Cape Farewell Spit, the low character of which, together with the shoal extending some miles to the south-east, presents more than ordinary dangers to navigation in that locality. The Marine Board on previous occasions have directed the attention of Government to this urgent want, and both merchants and master mariners, interested in the commerce carried on to the Gold Coast, have frequently indorsed the Board's opinion.

Should the apparatus intended for Cape Saunders not be required at the South, it might (if suitable) with great propriety be placed on such site as might be determined at Farewell Spit, thus saving an immediate outlay of about three thousand pounds (£3,000), and by bringing the apparatus into early use obviate that danger which may probably arise from the want of constant care and inspection. A light due, levied on vessels entering the Strait from the westward, or passing round Cape Farewell to the Gold Coast, would, I believe, more than defray the expense of maintaining a lighthouse establishment.

Mr. Aylmer, who was deputed by the Government to survey Farewell Spit, and report upon the most suitable site for the erection of a lighthouse, seemed to think some difficulty of an engineering nature might be experienced in forming a foundation for such a structure, owing to the continual moving of the sand. He therefore suggested a floating light. On this matter, for several reasons, I entertain a different opinion :

1. There is no secure place of anchorage for a vessel where the light would be of service.
2. The elevation of a floating light would be insufficient to be visible when approached from the south-west.
3. It would be liable to removal or entire loss, and might therefore lead vessels attempting to make it into danger.
4. The cost of maintenance of a floating light would be greater than a shore establishment.

For the foregoing reasons I am decidedly of opinion that a lighthouse on Bushend, Farewell Spit, has a preference.

At the southern entrance to Queen Charlotte Sound (Tory Channel), a light of the third or fourth order is also much needed, the navigable water being narrow, and dangerous after nightfall. The traffic through this passage is not so great as during the gold mania at Havelock ; but even now all the subsidized mail vessels calling at Picton, and many other steamers, invariably proceed by that route, it being a saving of many miles in distance. The value and usefulness of a light where proposed will be evident, both as affording facilities to commerce, and lessening the very great risk encountered in attempting the passage of Tory Channel when the dangers are not visible.

There are other headlands where lights would be of service, were the Government disposed to incur the expense of their erection. It has been suggested that, during the long winter nights, the Panama boats might have their passage expedited by lights being placed at Capes Egmont and Palliser, those two points forming the north-east and north-west extremity of Cook's Strait. Of the two, Palliser is of the most importance, as being near the terminus of a long ocean run, when the fuel on board the vessel will be short, and consequently every hour saved of moment.

The very exposed position of lighthouses and keepers' dwellings generally, has caused some of the latter to sustain damage during the severe storms of the past year. At Godley Head, the roof, although of a substantial character and slated, was so much shaken as to render repairs necessary. At Tairoa Head, the violence of the wind carried stones to a considerable height, breaking windows, and nearly blowing in the sashes. Precautionary measures have been taken to guard against such damage arising in future.

At Dog Island, during a severe gale which occurred in April last, the tide rose four feet higher