1882. NEW ZEALAND.

DEPARTMENT MARINE

(ANNUAL REPORT OF THE).

Presented to both Houses of the General Assembly by Command of His Excellency.

Marine Department, Wellington, 20th June, 1882. Sir,-I do myself the honor to submit the following report on the working of this department during the financial year ended on the 31st March last:

Lighthouses.—The lighthouses under the control of this department—now twenty-five in number

have been maintained in good order during the past year.

Cape Egmont.—As mentioned in last year's report, this light was exhibited on the 1st August last, and has, I understand, proved to be of great service to vessels trading on the west coast of the North

Tory Channel.—The leading lights at the entrance to Tory Channel were erected during the past year, and were first exhibited to mariners on the 1st January last. Arrangements were made before the lights were constructed whereby a settler living in the next bay to that in which they stand should attend to them. This he has done successfully up to the present time, but I cannot help feeling that it would be far more satisfactory to have a proper lightkeeper on the ground.

Godley Head.—Extensive repairs have been made to the lantern at Godley Head, and a top, of the pattern used in the Northern (Scotch) Board of Lighthouses, has been erected in lieu of the old

revolving cowl.

Napier Bluff Light.—This light has been altered so as to burn gas. This alteration has effected a saving at the rate of about £182 per annum; as, although the cost of gas is greater than that of oil, only the partial service of one man as lighthouse-keeper is now required, instead of the whole services of two men as formerly when oil was used.

New Lights.—On receiving your instructions in November last to commence the lighthouse works at Moko Hinou, an overseer and workmen were despatched there, and they are now actively at work. The tower is to be built of concrete, with an ashlar masonry lightroom and an iron balcony. The light will be white, of the first order, flashing every ten seconds. The houses, as at most other stations, will be built of timber.

The Marine Engineer and Captain Johnson were requested to report as to the proper position of the light it has been decided to erect in the vicinity of Waipapapa Point, and, after visiting the locality in December last, they recommended that the light should be erected on Waipapapa Point as being preferable to Slope Point. The lantern, apparatus, &c., have been ordered from England, and it is proposed to start the necessary buildings early next spring. The light will be white, of the second

order, flashing every ten minutes.

Fog-Signals.—Inquiries have been made through the Agent-General in London relative to the description of fog-signals recommended to be adopted by the Trinity Board, and his reply has been recently received, from which it appears that trials of a "Siren" apparatus of a new and distinctive character for combining high and low notes have proved perfectly successful. The patentee of this apparatus is Professor F. H. Holmes, of 15, Waltham Grove, West Brompton, S.W. The appliances for a first-class station consist of two Buckett's patent horizontal caloric engines, each of 12 indicated horse-power, arranged so that either may be used for working the "Siren," and a wrought-iron receiver, to which the automatic "Siren" is attached, the latter provided with a large copper horn so arranged that the hell-mouth can be turned to windward to enable the sound to be equalized as to distance that the bell-mouth can be turned to windward to enable the sound to be equalized as to distance reached in all directions seaward. The cost of this apparatus, f.o.b. in London, would be £1,536.

French Pass Beacon.—A concrete beacon has been erected on the extremity of the reef in the

French Pass. It is a truncated cone 20 feet high, 10 feet 6 inches in diameter at the base, and 6 feet at the top. The beacon is surmounted by an iron finial 8 feet 4 inches, and is 9 feet, or 17 feet 4 inches, including the iron finial, out of water at high-water spring tides. The erection of this beacon cost £668 15s. 8d., seventeen weeks being taken to build it. A great deal of time was necessarily lost at first owing to the fact that operations could only be carried on during the very short interval that the rock on which it stands was uncovered at low-water spring tides. This beacon replaces one erected some time ago by the Provincial Government of Nelson; it consisted of an iron perch surmounted by a

1—H. 12.