

## APPENDIX J.

ANNUAL REPORT ON LIGHTHOUSE WORKS, ETC., BY THE  
MARINE ENGINEER.

The MARINE ENGINEER to the SECRETARY, Marine Department.

SIR,—

Marine Office, Wellington, 31st March, 1882.

I have the honor to forward, for the information of the Hon. the Minister having charge of the Marine Department, the annual report on works executed for new lighthouses, &c., during the year, viz. :—

*Cape Egmont.*—In last annual report it was stated that the light would probably be ready for lighting by the 1st August. The works were completed, as expected, in a satisfactory manner, and the light exhibited on that date. The light will add much to the safety of the navigation of the Strait, and its establishment is highly prized by navigators.

*Removal of Rocks, Catlin's River.*—The progress made with this work has not been so satisfactory as expected, and some work still remains to be done.

*Removal of Buoy-Rock, Nelson Harbour.*—This contract has at last been satisfactorily completed, and there is now a minimum depth of 7 feet of water over the rock at low-water spring tides.

*Tory Channel Leading Lights.*—The work executed here consists of the erection of two wooden buildings of a pyramidal shape, in each of which is placed a light, so that the lights, when seen in line, mark the proper entrance into the channel from Cook Strait. Land has been acquired as a reserve for the purpose, and this has been securely fenced round. The lights were first exhibited on the 1st January, 1882, and are placed in care of a settler who lives near.

*French Pass Beacon.*—This was built in anticipation of a plan designed for lighting the Pass, and as part of it; which was to place a fixed light on the main land on the east side, and a reflecting light on the west side, that is, on the beacon now erected. It is still a question whether any light at all is needed in the Pass, as even in very dark nights the main land is visible on one side and the beacon on the other, the passage lying between. It is true that since the beacon was erected it has been damaged by a vessel running against it, but this accident was entirely due to a want of ordinary precaution as to the proper time to go through the Pass. The proper time is for vessels to go through *with* the tide, whereas the vessel in question, on her way to Nelson, attempted to pass through *against* the ebb-tide, and this resulted in the accident, which might have been attended with the most disastrous results to the vessel. The beacon is a structure of concrete, 10 feet in diameter at the base, 6 feet in diameter at the top, and about 21 feet high, surmounted by an iron rod and large iron framing: it was finished in September, 1881; damaged in February, 1882; and is now being repaired in a substantial manner.

*Collingwood Training-wall.*—This work has been let by contract. Its purpose is to restore a portion of the Aorere River to its proper channel, and to avert the destruction of the "Point" at the entrance to Collingwood Harbour. The work is of a tentative character, as it is to be feared that a much larger expenditure than is involved in the above will be necessary to produce satisfactory and permanent results.

*Waipapapa Point.*—A site for the proposed lighthouse was selected at this place in December, 1881, and an order has been sent Home for the light-apparatus and lantern, which will be of the same character as the Brothers light, in Cook Strait.

*Mokohinau, Hauraki Gulf.*—The necessary works for establishing a light at this place were commenced in February, 1882, under an experienced overseer and a party of workmen.

*Nelson Harbour.*—Considerable changes having taken place in the Waimea River, and consequent on them, such changes in the bar and channels through it as rendered the old charts not trustworthy, a new survey has been made by Captain R. Johnson of the bar and entrance to the harbour. This has been plotted, and is now being prepared in the form of a chart which will contain all the amended soundings and proper sailing directions for Nelson Harbour.

I have, &c.,  
JOHN BLACKETT,  
Marine Engineer.

The Secretary, Marine Department.