APPENDIX.

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

The Marine Engineer to the Secretary, Marine Department.

Marine Department, Marine Office, 31st March, 1884. Sir,-I have the honour 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, and

for other works during the year, viz.:—

Kaipara.—The lantern for this lighthouse has arrived in New Zealand, and the work of erecting the lighthouse, which was commenced in November, is now progressing in a satisfactory manner, but was for some time delayed by the illness of the first overseer sent there.

Castlepoint Jetty.—Plans and specifications were prepared for this, and tenders were called for; as, however, the lowest tender was so much higher than the amount voted for the work, all the tenders were declined.

Collingwood: Training-wall in River Agrere.—As proposed in last year's report, this work has

been lengthened, with good effect.

Havelock Wharf.—After the preparation of plans and specifications this work was advertised

for tender, and has since been satisfactorily completed.

Waipapapa Point.—All the works connected with the lighthouse at this place have been completed, and the light, as notified by advertisement, was first exhibited on the 1st January, 1884. The following is the description of the light: A second-order flashing white light, showing a flash every ten seconds.

French Pass.—After some trials and experiments made to determine the character of the light to be erected here, it was decided to erect a coloured light of moderate power on the mainland. As the site was not accessible by any road, a road was made to it from Elmslie's Bay, 55 chains long, and a site excavated for the keeper's dwelling on the cliff immediately above the site selected for the lighthouse. A short track has also been cut to a convenient landing on the Nelson side of the The house has been built, and the foundation for the lighthouse has been commenced. The foundation will be of concrete, and the lighthouse of wrought-iron; this is now being made under contract, and is well in hand. The concrete beacon erected on the reef in the "Pass" was damaged a second time by a vessel, but has been substantially repaired by Captain Fairchild, of the steamer "Hinemoa;" the repairs were effected by enclosing the damaged concrete work in a stout framing

of timber, held together by iron bolts and chains.

Jackson's Head.—The want of a mark or beacon at this place has long been felt, and an examination was made of the two reefs lying to the north. The reef nearest to the Head was chosen for the site of a beacon, and plans were prepared for a suitable structure, which has since been erected. The beacon consists of a timber screen about 14 feet wide and 12 feet high, bolted to a wrought-iron framing composed of three tubular wrought-iron pillars joined at the top, their lower ends being attached to heavy cast-iron foundation-plates, bolted down to the rock. The screen

is placed at an elevation of about 22 feet above high-water line.

I have, &c.,

JOHN BLACKETT,

The Secretary, Marine Department.

Marine Engineer.