FIFTH REPORT

OF

THE MARINE DEPARTMENT, FOR THE YEAR 1869.

Sir,— General Post Office, Wellington, 21st June, 1869.

I have the honor to lay before your Excellency the Annual Report of the Colonial Marine Engineer for the year 1868-9, on the conduct of the business of his Department, including the administration of the Marine and Steam Navigation Acts.

A considerable amount of extra labour has been thrown upon the Marine Department during the past year by the preparation of the plans and designs for the lighthouses at Cape Campbell, the Nuggets, and Cape Farewell. These works are now in progress, and your Excellency will be glad to learn that Mr. Balfour anticipates that these important aids to the navigation of the New Zealand

coast will be completed by the beginning of the year 1870.

The issue of an uniform set of Harbour and Quarantine Regulations for the whole Colony, and the introduction of one general code of danger signals for the whole of the New Zealand Coast, in lieu of the great variety of regulations and signals which were previously in use in different ports of the Colony, has been found a very great convenience to masters of vessels frequenting New Zealand

The Report of the Marine Surveyor, which is appended to that of Mr. Balfour, shows at once the necessity for the resurvey of a considerable portion of the coast line, and also that an important part of this resurvey has been accomplished by Mr. Woods in a satisfactory manner. The funds provided by Parliament for this work are now exhausted, and its further progress must therefore depend upon

the willingness of the Legislature to make further provision for the necessary outlay.

I have much pleasure in acknowledging the satisfactory manner in which the duties of Mr. Balfour's department have been conducted by him during the past year.

To His Excellency Sir G. F. Bowen, K.M.G., Governor of New Zealand. I have, &c.,
E. W. Stafford,
Postmaster-General.

Marine Department,
Wellington, 18th June, 1869.
I have the honor to forward herewith a Report on the working of the Marine Department

The Hon. the Postmaster-General, Wellington.

for the year 1868-9.

I have, &c.,

JAMES M. BALFOUR, M.I.C.E.,

Colonial Marine Engineer.

REPORT.

1. During the past year no change has been made in the organization of the Marine Department, and I am glad to be able to report that the present staff still continues to overtake the duties intrusted to it in a satisfactory manner; at the same time, it is only due to the officers under me to state that their time is, as a rule, most fully occupied, and that they are often required to work beyond the usual hours—and this is always most cheerfully done when any necessity for it arises. There being no draftsman attached to the Department, and my other duties leaving but little time for drawing, I have however required to employ a temporary draftsman on several occasions to make drawings to scale from my sketches and dimensions, as well as to make tracings of working drawings.

2. As the duties of the Department are all more or less directly connected with shipping, it would be convenient if the office were near the wharf, and I have consequently prepared a sketch plan, showing how suitable accommodation could be provided by building over the yard in which the telegraph material is stored. If some such design be carried out, the office will be in close proximity to the shipping, and it would include under the same roof a store for lighthouse supplies and similar goods; so that much time, now unavoidably lost in going to and fro between the office and the wharf for the purpose of surveying steamers and of superintending the landing and shipping of the oil,

&c., for the lighthouses, would be economized.

3. "The Steam Navigation Act, 1866," as amended in 1867, continues to work satisfactorily, and in the meantime it seems unnecessary to suggest any further alterations in its provisions. Perhaps one of the most important clauses of the Act is that which stipulates that "in the case of sea-going vessels the declaration of the Inspector shall contain a statement that he is satisfied the compasses have been properly examined and adjusted by some person holding a license from the Postmaster-General to examine and adjust such compasses" ("The Steam Navigation Act Amendment Act, 1867," section 3); and I have consequently devoted much time during the past year to the collection of information on the subject of compass adjustment, and to the preparation of a code of "Instructions to Licensed Adjusters of Ships' Compasses," a copy of which I append (Appendix B). In framing these Instructions, which do not touch on the theory of compass errors, but explain as simply as possible the practical methods usually adopted for ascertaining and tabulating them, I have consulted the Admiralty Compass Manual, the writings of Staff-Captain Evans (Superintendent of the