

1913.
NEW ZEALAND.

INSPECTION OF MACHINERY

(ANNUAL REPORT OF THE DEPARTMENT) FOR 1912-13.

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

The Hon. the MINISTER IN CHARGE OF THE INSPECTION OF MACHINERY DEPARTMENT to His Excellency the GOVERNOR.

MY LORD,— Inspection of Machinery Department, Wellington, 4th July, 1913.

I do myself the honour to transmit herewith, for Your Excellency's information, the report of the Inspection of Machinery Department of the Dominion for the financial year ended the 31st March last.

I have, &c.,

F. M. B. FISHER,

Minister in Charge of the Inspection of Machinery Department.

His Excellency the Hon. Lord Liverpool,

Governor of the Dominion of New Zealand.

The CHIEF INSPECTOR OF MACHINERY to the Hon. the MINISTER IN CHARGE OF THE INSPECTION OF MACHINERY DEPARTMENT.

SIR,— Inspection of Machinery Department,
Customhouse Buildings, Wellington, 7th May, 1913.

I have the honour to submit herewith the annual report on the operations of the Inspection of Machinery Department during the twelve months which ended on the 31st March, 1913.

BOILERS INSPECTED.

A good year's work has been done in this branch of the service, and, with one or two exceptions, the whole of the districts are up to date. Drawings of some unusual types of boilers were submitted to the Department as follows: (1) A water-tube locomotive boiler with vertical water-tubes; (2) a water-tube boiler similar to the well-known boiler of the Babcock and Wilcox pattern, except that each header receives two tubes only; (3) a water-tube portable boiler; (4) a vertical cross-tube boiler with shell-crown corrugated to give additional strength; (5) a motor-car vertical tubular boiler with thin shell-plate bound with steel wire of very high tensile strength (the pressure desired for this boiler was 500 lb. per square inch); (6) drawings of other vessels to carry steam-pressure of designs of unusual construction, which were to be used for sterilizers, vulcanizers, &c.

Several firms outside of New Zealand submitted for approval standard drawings of boilers which they propose to place on the New Zealand market. Inquiries were received from abroad with reference to the scantlings of boilers and the interpretation of the standard rules of the Department. Several new boilers were not granted the working-pressure for which they were built, owing to faulty workmanship in some cases and to insufficiency of scantlings in others. The United States Consul wrote making inquiries as to boiler-inspection in New Zealand.

Some large boilers have been built in the Dominion during the year. Several circulars have been issued to the Inspectors during the year giving rules for construction in connection with boilers and