

1910.
NEW ZEALAND.

INSPECTION OF MACHINERY:

ANNUAL REPORT OF THE DEPARTMENT FOR 1909-10.

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.

Inspection of Machinery Department, Wellington, 28th June, 1910.

MY LORD,—

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.,

J. A. MILLAR,

Minister in Charge of the Inspection of
Machinery Department.

His Excellency the 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.

Inspection of Machinery Department,

SIR,—

Customhouse Buildings, Wellington, 27th April, 1910.

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, 1910.

I have pleasure in recording probably the best year's work yet accomplished by the Department. The whole staff has worked most loyally with this object in view, and I have to bear testimony to the zeal displayed by the officers all through the year. All the shipping-survey and inspection of vessels is practically up to date. Each year shows an increase in the number of vessels to be dealt with, and the size of the modern intercolonial liners now demands a very much closer and more lengthened and careful survey.

All the candidates offering for the examinations for marine engineers and land engine-drivers were taken up, and this branch of the work of the Department has been attended to very closely.

The work thrown on the Department by the passing of the Inspection of Machinery Amendment Act, 1908, has resulted in a large increase in the number of the inspections of steam-jacketed pans, steam-receivers, and steam-vessels used in many and varied manufactures. The danger in the use of these appliances has been clearly shown by the pressures hitherto carried on some of them. This in some cases was much in excess of the pressure warranted by the materials and scantlings of which the steam-vessels were made. Hand-sketches giving full dimensions of all steam-vessels under pressure inspected for the first time were sent in by each Inspector, and the scantlings and strength of all parts of them were carefully gone into before a pressure was given. Special rules for copper dished ends and for cast-iron structures were sent out from the Head Office for the guidance of each Inspector, in order to insure uniform practice in dealing with such appliances throughout the Dominion.

Special rules for the calculation of the nominal horse-power of Pelton wheels were also issued to each Inspector. As the horse-power of each machinery prime mover decides the amount of the fee to be charged for inspection, definite rules are necessary to enable the horse-power to be assessed,