

GAS- AND WATER-DRIVEN MACHINERY, LIFTS, AND MACHINERY INSPECTIONS.

The total number of inspections of this class of machinery amount to 3,880, made up as follows : Gas-engines, 1,041 ; oil-engines, 897 ; motors and hoists, 1,500 ; machinery inspections, 442.

FENCING OF MACHINERY.

A great dealing of fencing has been ordered to make machinery in motion safe during the year. Return No. 4. gives full details of what has been done in this direction.

The guarding of saws in motion has received special consideration during the year, and steps are now being taken by the Department to render them less dangerous. A number of saw accidents have been reported during the year. The fencing of machinery generally in motion is always looked to by the Inspectors when going through factories and workshops.

EXAMINATION OF ENGINE-DRIVERS.

The examination of engine-drivers has been fully maintained throughout the year at the stated times and places fixed by regulation, also at other places suitable to candidates. As far as possible, requests by all applicants to be examined have been met.

This year 906 candidates came up for examination, of whom 602 were successful, while 304 failed to pass.

The examinations held were for extra first-class engineers, first-class engine-drivers, second-class engine-drivers, winding-engine drivers, and locomotive and traction-engine drivers.

Detailed lists of the candidates who passed these examinations, together with the grades and classes of examinations, are shown in Returns Nos. 7 to 13, inclusive.

The various examinations were held in the following places : namely, Ahaura, Alexandra South, Auckland,* Blenheim, Christchurch,* Collingwood, Cromwell, Dunedin,* Foxton, Gisborne,* Greymouth,* Hamilton,* Invercargill,* Levin, Masterton,* Napier,* Nelson,* Ohakune, Ongaonga, Opotiki, Pukekohe, Reefton,* Roxburgh, Stratford, Taihape,* Tauranga, Thames, Timaru,* Totara Flat, Waikanae, Waitapu, Wanganui,* Wellington,* Westport,* and Whitianga.

During the year eleven meetings of the Board of Examiners were held in Wellington, under "The Inspection of Machinery Act, 1902," to issue certificates to engine-drivers, and to deal with the issue of reciprocal certificates from other parts of the Empire, as well as with other matters.

I regret to have to record the death of a very valuable member of the Board of Examiners of engine-drivers during the year—Mr. Peter S. Hay, of the Public Works Department (late Engineer-in-Chief for the Dominion). He rendered valuable service to the Board while he was a member, and his opinions always carried great weight with the Board. During the year Mr. C. R. Vickerman, Inspecting Engineer of the Public Works Department, was appointed an additional member of the Board.

The correspondence alone for this one branch of our departmental work reached a total of 3,780 letters this year, and is ever on the increase.

ACCIDENTS.

No boiler explosion has taken place during the year. Every effort is made by the Inspectors to discover all weak places in the structure of the boiler on inspection-day, but sometimes they have to examine it under great difficulties in narrow and confined spaces. Sometimes, too, the boiler is not thoroughly clean, and some of the parts are hidden from view by brickwork, and often inspections are made in bad weather of portable and traction engines in open fields in the country.

I regret to have to chronicle several accidents, some of them fatal, in connection with machinery in motion. A number of these have been the result of carelessness of the employee. One case—that of a girl who lost part of her scalp through her hair being caught in shafting driving a sewing-machine—should, I think, be a warning to girls who have occasion to work near any machinery in motion without having their hair enclosed in a suitable net in some way. Employers should take the matter in hand, and not allow them to do so.

The particulars of the several reported accidents are set out fully in Returns Nos. 5 and 6.

POSTAL AND POLICE DEPARTMENTS.

The Postal Department, in the collection of fees, the issue of boiler certificates, and for advising the Department where certificates have not been taken up, has done good service, which is heartily appreciated by the Department.

The police authorities have assisted us materially in getting at the defaulters who have worked boilers and machinery without having taken up the certificates for same. This help has enabled the Department to get in a large amount of revenue, for each defaulter has to pay an extra fee over and above that first charged.

In the prosecutions which this Department had to make against machinery-owners for various offences, and against engine-drivers, the ungrudging assistance rendered by the Police Department has in many cases removed the difficulties which existed in taking the action necessary.

MARINE ENGINEERS' EXAMINATIONS.

A new book of regulations relating to the examination of marine engineers in the mercantile marine in New Zealand has been issued during the year. These regulations comprise all the recent Board of Trade additions appearing in the book last issued in Great Britain in 1906. A large number of new

* Places at which examinations have been held more than once during the year.