

DEFECTS OF BOILERS AND FITTINGS.

A large number of defects both in boilers and their fittings have been discovered during the annual inspections, some of them being of a very serious nature. The existence of such defects shows the great need of these periodical visits being made by the staff of this Department. The Inspectors of Machinery have all special training for their work, and they fully report to the Head Office at Wellington, setting out in detail in their reports the result of their investigations.

The total number of defects discovered in boilers and fittings is 1,350, and out of this number eighty-nine were considered dangerous. The descriptions of these defects are given in Return No. 2.

NEW BOILERS.

The total number of new boilers registered in the colony during the year is 355, and the total horse-power of these new boilers is 6,981. Of these new boilers there were made in the colony 194, of 3,703 total horse-power; and 161 were imported, of a total horse-power of 3,278.

The following table shows the numbers and horse-power of these boilers, and the districts to which they have gone:—

District.	Colonial.		Imported.		Total.	
	Number.	Horse-power.	Number.	Horse-power.	Number.	Horse-power.
Auckland	56	1,268	39	1,102	95	2,370
Hawke's Bay	17	294	13	237	30	531
Taranaki	9	92	8	24	17	116
Wellington	55	1,264	49	749	104	2,013
Marlborough	5	72	3	42	8	114
Nelson North	6	103	5	42	11	145
Nelson South	4	38	4	250	8	288
Westland	7	62	3	26	10	88
Canterbury	17	193	9	470	26	663
Timaru	2	15	9	71	11	86
Otago	9	220	9	108	18	328
Southland	7	82	10	157	17	239
	194	3,703	161	3,278	355	6,981

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

Gas-engines totalling 932 and 413 oil-engines were inspected, and 324 water-motors, 428 lifts, and 268 hoists and motors were examined. Special inspections were made of machinery, and 835 certificates were issued. The grand total number of machinery inspections made during the year is 3,200.

FENCING OF MACHINERY.

In Return No. 4 is set out the details of fencing that was found necessary to be erected, to make the machinery in motion safe, and to insure personal safety. Very high speeds are commonly run in a great many of our manufactories and the belting, pulleys, and other running-gear, unless properly protected, are a menace to persons who control the machines while at work.

EXAMINATION OF ENGINE-DRIVERS.

The examinations of engine-drivers have been duly carried out at the times and places set out in the regulations for these examinations. Special examinations have also been held at several other places throughout the colony during the year.

The number of candidates who successfully passed their examinations at such places is 799. A detailed list of such candidates, with the grades and classes of examination they have now passed, is shown by Returns Nos. 7 to 13, inclusive.

The various examinations were held at the following places—namely: Alexandra South, Auckland,* Blenheim,* Christchurch,* Clyde, Collingwood, Cromwell,* Dannevirke,* Denniston, Dunedin,* Foxton, Gisborne, Greymouth,* Hawera, Invercargill,* Kaitia, Maketu, Masterton, Miller's Flat, Napier,* Nelson,* Opotiki, Palmerston North, Rahotu, Reefton,* Roxburgh, Stratford, Timaru,* Waitapu, Waipiro Bay, Wanganui,* Wellington,* Westport.*

ACCIDENTS.

It is with satisfaction that I again report that no boiler explosion involving bodily injury to any one has occurred during the year, but I regret to have to report that several accidents have occurred to persons employed about machinery in motion, and that several of these accidents have resulted in loss of life. The particulars of the several accidents are given in Returns Nos. 5 and 6.

All machinery in motion is, as far as practicable, safely guarded and properly fenced, but custom and habit sometimes make employees careless, so that most of the accidents that happen in connection with machinery are the result of carelessness of the employee.

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