

The following table shows the number 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 ... ..	58	780	43	1,713	101	2,493
Auckland South ... ..	21	276½	14	79½	35	356
Hawke's Bay ... ..	18	203	20	283	38	486
Taranaki ... ..	22	264¼	5	34	27	298¼
Wellington North ... ..	7	75½	2	16	9	91½
Wellington .. ...	40	543½	23	185¼	63	728¾
Marlborough ... ..	2	32	6	72	8	104
Nelson North ... ..	5	53	1	24	6	77
Nelson South ... ..	7	76	5	376	12	452
Westland .. ...	11	173	9	132½	20	305½
Canterbury ... ..	17	128½	9	94	26	222½
Canterbury South ... ..	3	14	9	363	12	377
Otago ... ..	17	155½	17	87	34	242½
Southland ... ..	8	85	12	128	20	213
Totals ... ..	236	2,859¾	175	3,587¼	411	6,447

Amongst those made in the Dominion were two large boilers of the Lancashire type of the following dimensions: Length, 30 ft.; diameter, 8 ft.; and weighing about 30 tons. These boilers were made by two different firms in Wellington, and were subject to very close inspection during the time they were under construction. All the holes were drilled, and the riveting done by hydraulic pressure. The test of both proved highly satisfactory, and both boilers are quite a credit to the workmanship of the Dominion. They now form part of the boiler-installation at the Wellington Tramway power-station.

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

During the year the total number of inspections of machinery made was 5,233. 1,471 gas-engines were inspected, and 1,263 oil-engines. The number of lifts and motors examined, including water and electric motors, was 2,155; machinery-inspections, 344.

#### FENCING OF MACHINERY.

Great care has been exercised throughout the year with the fencing of machinery in motion. Return No. 4 gives full particulars of the guarding done.

#### EXAMINATION OF ENGINE-DRIVERS.

These examinations have been conducted at places where required by the Examiners of the Department. A greater percentage of failures of the candidates who sat took place this year than in former years. The oral portion of the examinations has been made more difficult, necessitated by the more complicated nature of engines and the higher pressure of boilers now in use.

The former issue of the book of regulations having nearly run out, the Department decided towards the end of the year to revise the former regulations and the syllabuses for the different examinations. The regulations since their first issue in 1901 have been little altered. The new regulations are now in the printer's hands, and will be issued shortly.

It is proposed to revise the examination-papers for the extra first-class engineer and the first-class engine-driver.

The Board of Examiners for Engine-drivers sat on ten occasions at Wellington to deal with the granting of certificates to the successful candidates, and to consider the proposed new regulations and the examination-papers.

Examinations have been conducted at the following places during the year: Alexandra South, Aratapu, Auckland,\* Blenheim, Carterton, Christchurch,\* Cromwell,\* Dunedin,\* Gisborne, Greymouth,\* Hamilton,\* Havelock, Invercargill,\* Mangorei, Maungaturoto, Napier,\* Nelson,\* Opotiki, Palmerston North,\* Reefton,\* Shannon, Timaru,\* Tokatoka, Waikawa, Wanganui,\* Wellington,\* Westport,\* Whangarei, and Whitianga.

This year 847 candidates came up for examination, of whom 535 passed, and 312 failed to pass the examination. The different classes for which examinations were held were—extra first-class engineer, first-class engine-driver, second-class engine-driver, winding-engine driver, and locomotive and traction engine driver. Detailed lists of those who passed for these examinations, together with the grades and classes of examinations, are shown in Returns Nos. 7 to 13.

#### ACCIDENTS.

It is gratifying to be able to report that there has been no boiler-explosion during the year. On looking over the latest return published by the Board of Trade *re* the boiler-explosions in Great Britain for the year ended 30th June, 1907, I find that there were seventy-seven explosions,

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