

NEW ZEALAND STANDARDS.

The Department was again represented on the Mechanical Engineering Divisional Committee, the Executive Committee, and Fire-extinguishing Sub-committee of the New Zealand Standards Institute, and numerous meetings of these Committees were attended throughout the year. In addition, a number of draft and standard specifications were examined and written comments furnished.

GENERAL HARBOUR REGULATIONS.

The number of accidents to persons engaged in loading or discharging or repairing ships, together with the failures of gear used in loading or unloading ships, notified under Regulation 103 of the General Harbour Regulations, was 305, of which 5 were fatal accidents. The corresponding figure last year was 270, of which 2 were fatal accidents.

The following is a classification of the accidents and failures :—

Handling goods	..	..	..	..	..	..	134
Persons falling or slipping	..	..	..	..	..	..	38
Persons struck by falling or swinging loads	..	..	..	..	..	..	72
Persons stepping on or striking fixed objects	..	..	..	..	..	..	6
Contact with power-driven machines	..	..	..	..	..	..	3
Failures of gear	..	..	..	..	..	..	34
Not otherwise classified	..	..	..	..	..	..	18
Total	..	..	..	..	..	..	305

STAFF.

The office and field staffs at Auckland and Wellington, and to a lesser extent at some other ports, have been engaged in additional duties connected with the fitting-out of transports and the hospital ship, conversion of merchant ships to naval requirements, construction of mine-sweepers and other naval craft, and purchase of ships requisitioned for defence purposes.

Mr. H. McGregor, Inspector of Machinery, Auckland, retired for medical reasons during the year.

Several members of the staff who have the opportunity to do so by the kind assistance given by electric-welding specialists are practising the art of electric welding in their own time. They propose to continue until they reach the standard of competency of that of a qualified welding operator. The practical knowledge thus gained will be very valuable to them in their inspection of welded work.

EXAMINATIONS OF LAND ENGINEERS, ENGINE-DRIVERS, AND ELECTRIC-TRAM DRIVERS.

These examinations were held during the year at the various offices of the Inspectors of Machinery throughout the Dominion at the regular intervals provided for in the regulations. In addition, a few special examinations were granted, but the holding of special examinations is not encouraged, as it is considered that the regular examinations are of sufficient frequency, and, except in very exceptional circumstances, candidates are expected to arrange that they may attend the scheduled examinations.

The full list of places where the examinations were held is shown in an appended return, as also is the number of candidates examined at each place. The classes of certificates for which examinations were held were—

- Extra First-class Stationary Engineer.
- Electric-winding-engine Driver.
- Steam-winding-engine Driver.
- First-class Engine-driver.
- Second-class Engine-driver.
- Locomotive-engine Driver.
- Traction-engine Driver.
- Locomotive- and Traction-engine Driver.
- Electric-tram Driver.
- Electric-tram Driver (One-man Car).

The total number of candidates examined was 379. Of this number, 293 were successful and 86 failed in their examinations. Three hundred and sixty-five certificates were issued, which includes 293 to successful candidates, the remainder being replacements and issues under the provisions of sections 53, 59, and 62 of the Inspection of Machinery Act, 1928.

EXAMINATION OF MARINE ENGINEERS.

Since October, 1939, candidates have been able to sit for Imperial validity certificates under one of two systems of examination as they so desired. For the purpose of this report, they will be called the old system and the new system.

During the year, 169 candidates were examined for Marine Engineer's Certificates of Competency at the various centres throughout the Dominion. Of these, 55 candidates were examined for First- and Second-class Certificates of Imperial validity and 57 candidates for Third-class and Coastal Motor Certificates of New Zealand validity.