

Barque "Rothesay Bay."—The hull of this vessel was thoroughly overhauled, chipped, and painted inside and out. On the hull outside four plates were renewed on each side of the bow; one plate on each side aft below the water-line was renewed, and a plate in the same locality but above the water-line was sheathed; and about 50 ft. of plating was renewed on other parts of the hull-plating. Inside the hull the first two 'tween-deck beams abaft the mainmast were partially renewed; five frames on both sides of the vessel were reinforced with new reverse angle-bars, 3 in. by 3 in. by $\frac{1}{2}$ in., approximately 8 ft. long each; four frames at floors amidships were reinforced with reverse angle-bars, 3 in. by 3 in. by $\frac{1}{2}$ in.—two were each 20 ft. long, one was 9 ft. long, and another 4 ft. 6 in. long; in the fore peak one frame on each side was renewed for 6 ft. from the floor, and three others on each side were reinforced; the keelson was strengthened for 6 ft. 6 in. from the bulkhead by 4 in. by 4 in. by $\frac{1}{2}$ in. angle-bars; four vertical stiffening-angles on the bulkhead were renewed; six hold-pillars were refastened. A new footstep and a new middle pintle for the rudder were fitted; the rudder-blade was repaired, and widened 4 in. with plates and wood filling. This was the first survey made of this vessel in the Dominion.

Schooner "Wanderer."—Fittings for the carrying of cattle were erected on the deck of this vessel. A ballast-tank was fitted and tested with water-pressure. The vessel has been newly re-rigged and new masts have been fitted, and in this respect she is practically a new vessel throughout.

Explosive Permits.

There were ninety-seven permits issued at the Port of Wellington for the carriage of explosives on ships.

Marine Engineers' Examinations.

Examinations for certificates of competency were held at the following places throughout the Dominion, viz.: Auckland,* Wellington,* Christchurch,* Dunedin,* Invercargill,* Hamilton,* Greymouth,* Timaru,* Napier,* Nelson,* Tauranga, Queenstown, Hokiangā,* Russell, Rawene, Whitianga, Whangaroa, Awanui,* Whangarei,* Waihi, Whakatane, Thames, Half-moon Bay, Raglan, Picton,* Te Kopuru,* Wanganui,* and Westport.

The total number of applicants who sat for examination amounted to 269; of this number 233 passed their examination successfully and 36 failed.

Examinations were held for the following grades during the year: First-class marine engineer, second-class marine engineer, third-class marine engineer, river engineer for steam-vessels, marine engine-driver, first-class marine engineer for auxiliary-powered vessels, second-class marine engineer for auxiliary-powered vessels, and river engineer for auxiliary-powered vessels.

During the year a great many new examination-papers were worked out at the Head Office and sent out to District Offices. These questions cover a lot of new ground, and are up-to-date and similar to those in use in Great Britain. A marine engineer must now have a wide range of knowledge in naval architecture, steam boiler and engine construction, freezing, electric lighting, hydraulics, pumping appliances, fire-extinguishing apparatus, steam steering, and other appliances too numerous to mention. In fact, quite 75 per cent. of the value of the ship comes under his supervision, and the successful and economical running of a ship depends more on the engineer every day. How well the marine engineer has risen to the occasion during the war, and numbers of New Zealand trained and educated engineers have risen to places of great trust both in the fleet and its numerous adjuncts.

Examinations of Land Engineers and Land Engine-drivers.

Examinations were held at all the principal centres throughout the Dominion. Special examinations were also held at many places to suit the convenience of various applicants. The full list of places where examinations were held is as follows: Auckland,* Bannockburn, Blenheim,* Carterton, Christchurch,* Cromwell, Dunedin,* Greymouth,* Hamilton,* Hawera,* Inglewood,* Invercargill,* Kaponga, Karamea, Kohukohu, Levin, Mangonui, Masterton, Napier,* Nelson,* New Plymouth,* Oamaru, Opatiki, Opouriao, Palmerston North,* Papatowai, Picton, Puponga, Stratford,* Thames,* Timaru,* Waihi, Waipukurau, Wairoa, Wanganui,* Wellington,* Westport, and Whangarei.*

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

Reciprocal certificates were issued to applicants from other States as follows: England, 1; New South Wales, 1; Transvaal, 1; Victoria, 5. The total who sat for these examinations were 399; of this number 72 failed.

Examinations of Electric-tram Drivers.

Examinations for this certificate were held at Auckland,* Christchurch,* Dunedin,* Invercargill,* Napier,* New Plymouth,* Wanganui,* and Wellington.* The number who sat for examination totalled 152; of this number 13 failed.

A great many new examination questions were completed for the first-class engine-driver's examination in the Head Office, and at each periodical examination throughout the year new papers were set. These papers are more difficult, and are practical questions and useful for such men in their daily duties.

Board of Examiners.

The Board of Examiners, consisting of the Chief Inspector of Machinery of the Marine and Inspection of Machinery Department, the Inspecting Engineer of the Mines Department, and the Electrical Engineer of the Public Works Department, with Mr. J. G. Macpherson as Secretary, sat in Wellington on eight days to issue certificates to candidates, and for other business with which the Board deals.

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