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1921.
NEW ZEALAND.

MARINE AND INSPECTION OF MACHINERY
DEPARTMENT.

ANNUAL REPORT FOR 1920-21.

Presented to both Houses of the General Assembly by Command of His Excellency.

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Marine and Inspection of Machinery Department,
Wellington, 13th August, 1921.

I do myself the honour to transmit herewith, for Your Excellency's information, the report of the Marine and Inspection of Machinery Department of the Dominion for the financial year ended the 31st March last.

I have, &c.,

F. H. D. BELL,
Minister of Marine.

His Excellency Viscount Jellicoe of Scapa, G.C.M., O.M., G.C.V.O.,
Governor-General of New Zealand.

REPORT.

The SECRETARY, MARINE AND INSPECTION OF MACHINERY DEPARTMENT, to the Hon. the MINISTER OF MARINE. *

Marine and Inspection of Machinery Department,
Wellington, 30th June, 1921.

SIR,—

I have the honour to make the following report on the work of this Department during the year ended the 31st March, 1921.

The different activities and services of the Department have been kept going during the year. I consider that the staff as a whole has endeavoured to maintain the high standard of efficiency gained by the Department. The work of the Department being largely of a technical nature, the staff has to keep abreast of the times with new improvements and scientific details so as to modernize the service from time to time. This applies more especially to shipping-surveys, lighthouse equipments and appliances, and to land machinery-construction work, with which the Department largely deals. Since the Great War finished, the Board of Trade in Great Britain has introduced many improvements, and that body has simplified conditions in many directions. The rules emanating from that body are adopted as our principal guide when dealing with the construction of ships and the installation of propelling-machinery to drive them.

Shipbuilding has not altogether been stagnant in New Zealand during the year, as there were several wooden vessels under construction, for which auxiliary power is to be installed of the oil-engine pattern. There are several very creditable oil-engines suitable for marine purposes now made in New Zealand, and I am hopeful that their manufacture will increase. For land purposes as a motive power many hundreds of oil-engines are made in New Zealand every year, and the oil-engine has become the farmers' and the small manufacturers' friend: it is such a useful engine for intermittent or for continuous use, and it can be made a portable motive power very readily. In this respect it has been a great labour-saver in remote districts where man-power has been scarce. The oil-engine has been almost universally used for propelling launches and other small craft in New Zealand waters.

Throughout the world there has been a remarkably rapid development of the heavy oil-engine. The design of these engines has been much improved, and the disadvantages of the oil-engine compared with the steam-engine have been correspondingly decreased. In Great Britain several large engineering firms, accustomed to the construction of marine steam-engines of first-class workmanship and of the highest power, have turned their attention to the construction of the large marine oil-engine. A vessel of 12,000 tons recently launched for the Bibby line of steamships, named the "Somersetshire," has two sets of six-cylinder oil-engines fitted, each set of 2,250 indicated horse-power. Nearly all the large shipping companies are following in the same direction, and the Union Steamship Company of New Zealand has also a large vessel being built and engined with oil machinery as a motive power.

In Wellington the first hulk in New Zealand fitted out to store oil for ship consumption has been placed in commission. The hulk carries 2,000 tons. Shore tanks to carry large quantities of oil fuel are now in course of erection and equipment. These are being built of steel, and are placed near wharves. The oil can be either pumped into the tanks for storage or from the tanks into the vessels using oil as a fuel. A keen competitor of the motor-ship is the steamship propelled by geared turbine machinery in which oil replaces coal as a fuel.

The Department requires that the engines of motor-vessels shall be in charge of properly qualified engineers. Three classes of certificates are issued—one for vessels plying in restricted limits, and two for seagoing vessels, the class of certificate in the latter case being governed by the vessel's horse-power.

Amendments have been made to the Deck-cargo Regulations as regards the carriage of coal and timber and other approved cargo under special conditions.

Amendments have been made to the General Harbour Regulations in respect to the carriage of petroleum on vessels. The carriage of petroleum has been rather a tough proposition to settle, and, as this substance is of a very inflammable nature, the greatest care had to be taken in the framing of these regulations. All interested parties were consulted, and a Minister of the Crown lent very helpful aid while the regulations were being framed and discussed. Great care has been also exercised by the Engineer-Surveyors to see that bulkheads in ships are tight and deck-spaces suitable before they issued to the owners of ships their permits for the carriage of petroleum. With slight alterations these regulations have worked admirably.

New rules have been adopted for the design and construction of marine boilers. In my last report I referred to the changes in the rules, but at that time it was only known approximately what the changes would be. The complete rules have now come to hand from the Board of Trade. The rules were framed at a conference attended by representatives of the Board of Trade, Lloyd's Register of Shipping, British Corporation for the Survey and Registry of Shipping, and the Bureau Veritas International Registry of Shipping. They follow closely on the lines recommended by the British Marine-engine Design and Construction Committee, and have been recommended by the conference for adoption by the various societies represented at the conference. The unification of rules for boiler-design and the adoption of the standard rules will do away with a great deal of the confusion and

anxiety which has existed in the past with respect to boiler-pressures. The Department, up to the year 1909, determined the safe working-pressure of all marine boilers from the Board of Trade Rules. The Board of Trade Rules, however, are only compulsory in Great Britain for the boilers of vessels carrying more than twelve passengers; consequently most of the cargo-boats coming here had boilers built to Lloyd's rules or the rules of some other private surveying body. The pressures granted by these societies were generally higher than would have been allowed by the Board of Trade Rules. Having regard, therefore, to the freedom from explosion of the boilers of cargo-ships, the Department agreed to accept special scantlings as sufficient for these boilers. With the standardization of the rules all boilers of equal pressures will have equal or heavier scantlings. It is surprising, when one thinks of the practical benefits of standardization, that it has taken so many years to frame standard rules. The rules which we now have are no doubt the result of the getting-together of specialists in engineering-design to assist the Empire in the late war. Uniformity of design was one of the means used for the speedy building of ships.

The rules for determining the diameters of shafts for internal-combustion engines for marine purposes will be applied to all engines constructed after the 1st July, 1921. In August last copies of the rules were forwarded to the District Inspectors of Machinery, who are also Surveyors of Ships, for distribution to engine-builders, &c., and to others to whom the rules are of special interest, to enable them to make timely arrangements to comply with the rules.

The question as to how often propeller-shafts of steamships should be withdrawn for examination has recently been under consideration. The practice heretofore has been to withdraw them every two years. In future only those shafts not having continuous liners fitted will require to be withdrawn every two years. Shafts with continuous liners are to be withdrawn every three years.

New regulations have been received from the Board of Trade dealing with the bilge-pumping arrangements in passenger-steamships. The new regulations are to be substituted for paragraphs 80 to 83 of the "Instructions as to the Survey of Passenger-steamships" issued in 1913, and are to be considered as forming part of these instructions. Every passenger-steamship whose keel is laid after the 1st January, 1921, is required to comply fully with these instructions. The rules apply to foreign-going ships, home-trade ships, motor-ships, and open launches. Detailed instructions are given respecting the following matters: Arrangement of bilge-pipes, diameter of bilge suction-pipes, valves, cocks, &c., mud-boxes and strum-boxes, sounding pipes and pumps. Main bilge suction-pipes are required to be not less than $2\frac{1}{2}$ in. bore, and no branch pipe is to be less than 2 in. in bore or need be more than 4 in. bore. For small vessels employed in the home trade a concession is allowed in the minimum size of pipes; the diameter of pipes is determined from a formula taking into consideration the length and breadth of the vessel, the moulded depth of the bulkhead deck, and the length of the compartment.

SURVEY OF STEAMSHIPS AND AUXILIARY-POWERED VESSELS.

Seven hundred and thirty-two steamships and auxiliary-powered vessels were surveyed. Only one vessel of over 25 tons gross was completed in the Dominion this year. This vessel is the ketch "Motu," a light-draught scow built to carry cargo below hatches. Her dimensions are 99.1 ft. in length by 24.9 ft. breadth and 7.6 ft. depth. Her gross tonnage is 197 and her register tonnage 169. The hull is diagonally lined. The lining and outer planking are of kauri sheathed with totara.

New propelling-engines were fitted into twenty-five vessels. Sixty-six vessels had new tail-shafts, six had new stern-tubes, fourteen had new propellers, four had new propeller-blades, and one had a new propeller-boss fitted. In six vessels new crank-shafts or parts of new crank-shafts had to be fitted. Two vessels had new donkey-boilers installed, and the donkey-boilers of three vessels had to be reduced in pressure. The working-pressure of the main boiler of one vessel was reduced on account of the propeller-shaft, which was found to be too small to carry the boiler-pressure. Three vessels were converted from sailing-vessels to oil-engine vessels, and one vessel from a steam-vessel to an oil-engine vessel.

The particulars of the repairs carried out to a few vessels are as follows:—

S.s. "Ahuriri."—This vessel's hull was repaired as follows: Sheathing-plates were riveted on the forefoot, starboard side, 3 ft. 6 in. by 2 ft. 6 in. by $\frac{3}{16}$ in., and on the starboard bilge amidships 8 ft. by 2 ft. 6 in. by $\frac{3}{16}$ in. Three hundred rivets were renewed in the port scupper-plate amidships. A new plate, 7 ft. by 3 ft. 6 in. by $\frac{1}{4}$ in., and a new frame were put in under the boiler. In the port bunker an angle-plate and covering-strip were renewed. The boiler-mountings were overhauled. A new blow-down cock was fitted. The main and auxiliary steam-pipes were tested by hydraulic pressure. The high-pressure cylinder was bored out, and a new piston and rings were fitted. The air-pump liner was also bored out, and a new bucket and valves were fitted. Ten holding-down bolts were renewed in the engine-bedplate. The steering-gear chains were renewed, also three guide-blocks for the chains. Repairs were carried out to the windlass and winch.

S.s. "Apanui."—This vessel was surveyed on the slipway, where No. 2 plate of C strake on the starboard side was sheathed with a $\frac{1}{4}$ in. plate, approximately 18 in. by 8 in. On the starboard bilge 36 ft. by 10 in. by $\frac{1}{4}$ in. of sheathing-plates were riveted on, and B strake under the after hold was sheathed with a plate 3 ft. 8 in. by 18 in. by $\frac{1}{4}$ in. On the port side No. 3 plate of C strake was sheathed with a plate 6 ft. by 3 ft. by $\frac{1}{4}$ in., and 12 ft. by 10 in. by $\frac{1}{4}$ in. of sheathing was renewed at the bilge. Several rivets were renewed in various parts of the hull. Two frames in the chain-locker and four in the after-peak tank were reinforced with angle-steel, and several slack rivets in the after-peak tank were renewed. The tank was tested by water-pressure. The boiler and machinery were thoroughly overhauled. The stern-bush was renewed. New cylinders were fitted to the windlass. The defective steering-chain was renewed, also the rudder-pintles. The rudder-gudgeons were rebushed. The buoyancy-tanks were removed and tested, and two that were found leaking were

repaired. All boat-falls were renewed, and also the life-lines outside. A new provision-tank was fitted in No. 2 boat. Six months after her annual survey this vessel ran ashore during a dense fog. She was again placed on the slipway, and it was found necessary to carry out the following repairs: One floor-plate in the forepeak tank was cut out, straightened, and riveted, and several loose rivets in the vicinity of the tank were renewed. In the port bunker and vicinity one plate, a portion of one floor-plate, and several loose rivets were renewed, and the frames were cut out, straightened, and riveted. In the starboard bunker two frames were reinforced with angle-pieces.

S.s. "Blenheim."—At the annual survey of this wooden vessel 16 ft. of the main keelson under the main boiler was renewed, and the scarfs were fastened with six 1 in. bolts. Approximately 16 ft. of the port sister-keelson were strengthened with 8 in. by 8 in. hardwood backing-pieces bolted through it and the floors. All butts and seams on the outside of the hull were hardened up where required. The boiler-chairs were renewed. A length of 20 ft. of steering-chain was renewed, and the chains were annealed. All the steering-chain fair-lead shears and pins on the after deck and bridge deck were renewed. The low-pressure cylinder was trued up. Four holding-down bolts in the main engine-bed were renewed. A new stern-post and after deadwood were fitted to No. 2 lifeboat, and the buoyancy-tanks were tested and repaired. The midship portion of the bridge deck around the fiddle and under the steering-engine was renewed. The margin-plank and the next plank to it on the port side, and three planks on the port side of the after end of the fore deck, were renewed.

Dredge No. 121.—This vessel has been surveyed twice during the year. Patches have been fitted on the forepart of the ladder-well and on the port bow. About 1,700 square feet of the deck was sheathed with $\frac{3}{4}$ in. plating, and about 300 ft. of angle-framing was renewed at various places. Three bunker hatch-coamings were renewed. Several frames under the engine were reinforced. The rudder-pintles were built up with the oxy-acetylene process, and new bushes were fitted to the gudgeons. The propeller-shafts were lined up. A new length of main steam-pipe on the starboard side, and a new expansion bend for the main steam-pipe, were fitted. All the pipes were tested by hydraulic pressure. Seven new planks were fitted to the vessel's D boat.

O.e.v. "Hairini."—This wooden vessel was placed on the slip for her annual survey, and the shaft-tunnel was removed and a new heel and deadwood fitted. 20 ft. of the keel, four planks on either side of the keel, and the stern-post were renewed. A new intermediate shaft of steel, a new propeller-shaft of tobin bronze, a new stern-tube with stuffing-box complete, new stern bearings, and a new exhaust-pipe were fitted.

O.e.v. "Hobsonville."—All the hull-sheathing was stripped off this vessel and all the worm-eaten planking was cut out of the bottom and deadwood, and about 600 ft. of new planking has been put in. The deadwood and rudder were repaired, and the deadwood was refastened with $\frac{3}{4}$ in., $\frac{7}{8}$ in., and 1 in. through bolts. The hull was caulked all over, payed, tarred, chunamed, felted, and sheathed up to the water-line with 6 in. by 1 in. totara sheathing. Several new deck-planks were fitted. Water-ballast tanks made of totara were built into the ship. The engines were thoroughly overhauled; all piston-rings and pins in the reversing-gear were renewed. The propeller-shaft was straightened, and a new liner and stem-bush were fitted. A new benzine-tank was made, and tested by hydraulic pressure. The rudder was repaired. Thirty fathoms of new stud-link chain cable was placed on board the vessel. New running-gear was rove forward, and all rigging lanyards were taken adrift, tarred, and set up again. A new boat was placed on board the vessel.

S.s. "Jean Gordon."—This wooden vessel, which was previously named "Traveller," has been thoroughly overhauled. The engines and boiler were removed to enable this to be done. All worm-eaten portions of the hull were cut out. A new keelson was fitted for nearly the whole length of the vessel; ten new floors were also fitted. The hull outside was stripped, and caulked, felted, and sheathed with totara from the keel to the water-line. The keel was coppered and then sheathed with totara. A new propeller-shaft was fitted.

S.s. "John Anderson."—This vessel received an extensive overhaul. Ten new hull-plates were put in on the port side and six on the starboard side. New tie-plates were fitted, 11 ft. 6 in. long, at the starboard side of the engine and boiler house. The bottom plating of the engine and boiler house was cut out and new plates were fitted. A new skylight, 2 ft. wider than the previous one, has been erected over the engine-space. Several gusset-plates and angle-bars in the bunkers were renewed. The bulkhead at the after end of the forehold has been repaired. A new house for the accommodation of passengers was erected abaft the after hatchway. The compartment over the stern-tube was made into a tank. A bilge injection-valve and pipes were fitted. The steering-chains were renewed. The vessel's hull, boiler, machinery, and equipment are now in good order.

S.s. "Mawhera" (Dredge).—A number of sheathing-patches were fitted to this vessel's hull, as follows: Two to A and B strakes on both bows; two to both sides of the bucket-well in way of the chafing-strips; two on the sides at the centre of the well; two to the bottom strake in the bucket-well; and one to the top strake in the starboard side of the well forward. The plates were from 5 ft. to 12 ft. in length by 3 ft. to 4 ft. in width and $\frac{3}{4}$ in. thick. Approximately 200 defective rivets were renewed in the forward end of the bucket-well. Both propeller-shafts were drawn, and both bushes were filled with Fenton's metal. The rudder-pintles in both rudders were renewed. A piece of the combustion-chamber of the starboard boiler was cut out, and a new piece was welded in by the acetone welding-process. All the wasted plates in the back ends of both boilers were built up by the same process. Two new stays were also fitted to the boilers, and all defective rivets were renewed.

T.s.s. "Moeraki."—The following repairs were made to the hull of this vessel: Fourteen reverse bars were riveted on each side to the hull-frames in way of No. 3 'tween-deck reverse bunker. Twelve sections of hull-framing on the starboard side were cut out and renewed, and eleven on the port side in way of the 'tween-deck side bunkers. Reverse angle-bars were fitted over the butts. Six reverse bars were fitted to the frames in way of the 'tween-deck side bunkers. Forty-eight test-

holes were bored in the hull-plating to test its thickness. Extensive repairs were carried out to the bunkers. The following portions of the bunkers were cut out and renewed: The two forward sections of the side-bunker casings from the bilge-framing to above the bunker-floor; six sections of angle-framing and bracket-plates in way of same carrying the bunker-floor; eight plates and eight stiffeners in the lower side-bunker casings in way of the stokehold and forward boilers; the two forward corners in the upper casings between the side and cross bunkers; four angle-stays on the starboard side between the casings and the ship's side; six plates and twelve stiffeners, and eight deck-brackets on the stiffeners, in the after-bunker trunkway, in way of the engine-room; two plates and four stiffeners in the forward-bunker trunkway; one plate and twelve stiffeners in the watertight bulkhead of the forward-bunker trunkway; and twelve stiffener bracket-plates in the 'tween-decks of the forward cross-bunker. The ladders in the side bunkers and forward cross-bunker were reversed, and those in the other bunkers were overhauled and repaired. No. 3 trunkway was sheathed with one plate, 8 ft. by 4 ft. by $\frac{5}{16}$ in. In the holds all ladders were altered to come in a direct line from top to bottom. Wider angle-rests were fitted to Nos. 3 and 4 hatch coamings, and all 'thwartship beam-shoes were straightened up. The 'tween-deck beams in Nos. 4 and 5 holds were also straightened. The whole of the funnel-casing top, and the section of light and air trunk at the after end of it, were cut out and renewed. On the main deck in way of the crew's galley three plates were renewed. In the upper 'tween-decks a section of the fore-and-aft plating at the after end of the firemen's quarters on the port side was cut out, and three plates were renewed in way of the main galley, scullery, and a section of plating in the recess of the galley and in the alleyway behind the galley-bunker. All ballast-tanks and peaks were inspected and tested by water-pressure. In the stokehold-bilges twelve sections of floor-plates and six intercostals were renewed in way of boiler-fronts, four floor-plates under boiler-seats were sheathed, several sections of reverse angles on the top of floors and keelsons were cut out and renewed.

The principal repairs to the main boilers include the renewal of part of the port and starboard sides of the combustion-chambers of the port and starboard centre furnaces of the forward starboard boiler. This boiler was tested by hydraulic pressure. Several stays were renewed in the boilers, and all leaky parts and patches received attention. The auxiliary steam-pipes were tested by hydraulic pressure. All piston-rods on both sets of the main engines were taken out and turned up. The glands were rebushed and new neck-bushes were fitted. New rings were fitted to the pistons and piston-valves. The tubes were drawn out of both condensers; the condensers were then cleaned, and tested after the tubes had been put back. The port propeller-shaft was drawn for examination. The vessel's cargo-gear was overhauled. The fore and main lower rigging, foretopmast-backstays, maintopmast-stay, and four after funnel-guys were renewed.

O.e.v. "Oban."—A new centre-board was fitted to this wooden vessel, and the bottom planks on the centre-board casing were renewed. New garboard planking alongside the centre-board was fitted. Several planks on the counter were renewed, and all planking was refastened and caulked throughout. The fracture in the keelson aft was strengthened by fitting two 9 ft. by 12 in. by 4 in. pieces alongside it. The ceiling in the hold was renewed, also all rigging and running gear. Two new sets of oil-engines for propelling purposes were installed in the vessel.

P.s. "Osprey."—The following are the more important repairs made to this vessel at the annual survey: 24 ft. of plate and angle bars were renewed round the fiddley. The deck-beams and gusset-plates above the forward end of the boiler were renewed, as well as 25 ft. of stringer-plate. The stringer-plate below the main deck across the forward bulkhead, and carrying the steering-gear blocks, was renewed on both sides. Similar plates across the bulkhead at the forward end of the boiler were also renewed. An angle-bar and a patch on the starboard side of this bulkhead were renewed. Two deck-angles, with gusset, were renewed in the fore peak. In the starboard bunker three sheathing-patches were fitted, and four angle-bars, 4 ft. 6 in. long, with gusset-plates at each end, and six additional gusset-plates and angle-bars were renewed to strengthen the deck above the bunker. 20 ft. of angle-bar stringers, with the necessary lugs, and 23 ft. of stringer-plate, were renewed. A new frame and half-frame, with reverse bars, were fitted. An 18 in. by 14 in. patch was fitted to the side of the bunker. In the port bunker a sheathing-patch 2 ft. square was fitted to the ship's side. Reverse bars were added to three weak frames. One frame and reverse bar were renewed entirely. Part of a stringer-bar was also renewed. At the after hold, stringers 4 ft. 6 in. long, across the engine-room bulkhead on each side, were renewed, and 4 ft. 6 in. of the stringer-plates across the after bulkhead, carrying the steering-gear blocks, were renewed. A new plate was riveted to the forward rudder-blade. A new steel sponson-beam 34 ft. long, three new brackets, and 44 ft. of the wooden sponson were fitted. The main boiler was thoroughly cleaned out, and the wasted plate, 14 in. by 12 in., in the starboard furnace was cut out and a new piece of plate was fitted. One stay in the starboard combustion-chamber was renewed. The main engines, pumps, &c., were thoroughly overhauled. Seven paddle-arms were renewed for half their length, and one arm was renewed entirely. One new tumbler and six new tumbler-pins for the eccentric rods, and eighty turned bolts in the paddle-arms, were fitted. Two pieces of paddle-wheel rim, with fish-plates, and two spider-arms, were renewed. Five paddle-arms were strengthened. Two top planks in the vessel's boat were repaired, and a new hull on the port side fitted. The buoyancy seat-tanks were thoroughly overhauled.

S.s. "Pupuke."—The hull of this wooden vessel was repaired as follows: Both sister-keelsons were scarfed with pieces approximately 16 ft. by 7½ in. by 12 in. Five angle-bar frames, 16 ft. long, were fitted to the hull amidships; 4 ft. of the ends of nine floors were renewed. Two shelf-pieces were fitted in the stokehold—one 17 ft. by 20 in. by 4 in., and one 20 ft. by 20 in. by 4 in. One plank, 7 ft. by 14 in. by 3 in., was renewed on the port side of the hull, and two new planks were fitted in the air-pockets. 300 ft. of sheathing on the ship's bottom was renewed. One piece of wood in the aperture,

2 ft. by 12 in. by 3 in., was renewed. The decking on the top deck amidships was renewed and sheathed across with 350 ft. of sheathing, with felt and chunam between. Both boilers were raised 12 in. above their original position, and new stools and collision-chocks were fitted. The low-pressure piston and rings, high-pressure piston-rod and rings, high-pressure and low-pressure valve-spindles, and two crosshead brasses were renewed. The holding-down bolts of the engine-bed, which were originally of iron, were replaced with muntz-metal bolts. A new door was fitted to the condenser, and new plungers to the feed and bilge pumps. A length of the main steam-pipe was renewed, and the pipes were tested by hydraulic pressure. The steering-chains were annealed and renewed where required.

S.s. "Rita."—The keel of this wooden vessel for 18 ft. was renewed in ironbark. New brass straps were fitted at the apertures, and a new gudgeon in the rudder. Several new planks were put in the deck. A new mast was stepped aft, and the deck was strengthened underneath. Housing was erected over the engine-room. The bunkers were renewed. A new stay-tube and one new ordinary tube were fitted to the boiler. A compound surface-condensing engine was installed in the vessel. Liners were fitted in the cylinders, and new pistons and rings were also fitted. A new high-pressure piston-valve, new main bearing-brasses, and new thrust-block were fitted. The stern-tube was renewed in bronze.

O.e.v. "Te Toa."—The two sets of steam-engines and the boiler of this vessel have been taken out and replaced by two sets of four-cycle oil-engines. New pieces 15 ft. long have been scarfed into the keelsons. Three new floors have been fitted, and 10 ft. of new ceiling. New hatch-coamings have been fitted, and two new engine-beds have been made. The engine-room bulkhead has been lined with two thicknesses of T. and G. timber with a layer of felt between, and covered with zinc sheeting on the engine-room side.

SURVEY OF SHIPS FOR SEAWORTHINESS.

There has been a considerable increase in the number of surveys for seaworthiness made during the year, the total being ninety-nine. Quite a number of the vessels were damaged through taking the ground, striking wharves, or colliding with other vessels; others were damaged by fire. One accident was due to the overheating of a propeller-shaft liner; small pieces of the liner peeled off and a new liner had to be fitted. In another case a piece of a propeller-shaft liner became detached. The *s.s. "Stella,"* which grounded on the Fish Reef, Moeraki, required extensive repairs. Seven plates were taken out of the hull, rerolled and straightened. One plate was renewed, and two were straightened in place. Five floors and twelve intercostals were renewed. The bulb-iron on top of the keelson was reinforced with heavy angle-bars extending from the forward cross-bunker to the after end of the boiler. One watertight bulkhead was refastened at the bottom. A doubling-plate, 2 ft. square by $\frac{3}{8}$ in. thick, was fitted over a thin plate on the starboard side amidships.

SURVEY OF GOVERNMENT VESSELS.

Sixteen Government vessels were surveyed during the year. Their names are as follows: *S.s. "Ben Lomond," s.s. "Earnslaw," s.s. "Hauraki," s.s. "Hinemoa," o.e.v. "Huia," o.e.v. "Iriini," s.s. "Janie Seddon," o.e.v. "Kohurangi," o.e.v. "Manurere," o.e.v. "Maroro," p.s. "Mountaineer," o.e.v. "Patiti," o.e.v. "P.W.D.," o.e.v. "Sybil," s.s. "Tawera," and s.s. "Tutanekai."*

The "*Hinemoa*" had an extensive overhaul during the year. Both high- and low-pressure pistons of the main engines were drawn; the rods were shimmed up, and new neck-bushes were fitted at both ends. The high-pressure guide-shoes were remetalled, and the bottom end brasses were run up. The engines were thoroughly overhauled. Both main boilers and mountings were overhauled. The bunkers were repaired and strengthened. The bulwark sides and railings forward and aft were renewed. The windlass was overhauled, and three new spur wheels were fitted. Some keel-shoeing was renewed. 30 ft. of wooden sheathing was fitted to the after deck, and the decks were caulked fore and aft. The officers' quarters were cleaned and painted out. New lavatories and bathrooms supplied with hot and cold water were fitted up for the crew. The vessel has been employed continuously during the year on the usual lighthouse work and the cleaning and painting of buoys in the various harbours.

ADDITIONAL STEAMERS AND AUXILIARY-POWERED VESSELS SURVEYED FOR THE FIRST TIME.

Fifty-three vessels were surveyed for the first time during the year. Some of these vessels are of fairly large tonnage and engaged in the overseas trade.

SURVEY OF SAILING-VESSELS.

The number of sailing-vessels surveyed this year is fifty-five. The more important repairs carried out to some of them are set out in the following notes:—

Schooner "Cathkit."—The hull of this wooden vessel was strengthened with thirty-six angle braces, forty struts 6 in. by 6 in. fitted under bearers, and with one piece of timber 29 ft. by 6 in. by 5 in. on the starboard side, and one piece 39 ft. by 6 in. by 5 in. on the port side and fitted on top of the beam-struts; 34 ft. of 12 in. by 3 in. timber was fitted on each side forward, and twelve pieces, averaging 25 ft. long, were fitted in the partitions aft. Five $1\frac{1}{2}$ in. tie-bolts were fitted through the hull from side to side, and fifty-six $\frac{3}{4}$ in. bolts were fitted through the covering-boards from the fore rigging to the break of the poop. Six deck-planks were renewed. The donkey-boiler was opened up and cleaned, and new bolts were fitted to all sludge-hole doors. New gauge-glass mountings were also fitted. The winch and windlass were overhauled, and also the equipment. The standard compass was repaired and adjusted.

Ketch "Comet."—This wooden vessel was placed on the slip and the following repairs were made: Both sister-keelsons were renewed, and also the false keel; fifteen strengthening-timbers were fitted where the old timbers were weak; 14 ft. of covering-board on the port side and the ceiling in the hold were renewed; thirty planks in the hull were renewed, and the hull below the water-line was sheathed throughout with $\frac{3}{4}$ in. planking. The vessel was recaulked throughout. A new rudder-head was fitted. All the vessel's running-gear was renewed. After an extensive overhaul the vessel is now in good condition.

Ketch "Huon Belle."—On the port side of this wooden vessel three timbers and 52 ft. of planking were renewed, and 6 ft. of planking on the starboard side. The hull-sheathing was removed and the seams of the hull caulked. Several deck-planks and the forward end of the hatch-coamings were renewed. A new rudder-stock was fitted, and defective steering-chain renewed.

Barquentine "Laura."—Several new fastenings were fitted in this vessel's hull, including the forward ends of the garboard planking. A stringer of jarrah, 78 ft. by 9 in. by 6 in., was fitted to both sides of the vessel and fastened through the deck-beams and ship's sides. About 21 in. of the end of the mizzenmast, which was rotten, was cut off, and a new step and heel-band were fitted. The donkey-boiler was taken ashore and the lum-leg was repaired. The wasted parts of the firebox-crown were built up. Two sludge-hole compensating-rings were riveted. A new steam-gauge and gauge-glass mountings were fitted. The boiler was tested by hydraulic pressure. A new capstan was fitted, and the steering-gear was thoroughly overhauled. The buoyancy-tank of the lifeboat was repaired.

Barquentine "Lindstol."—This wooden vessel was surveyed for the first time in New Zealand this year. The hull was bored in various places to ascertain the condition of the timbers. The bottom was stripped and caulked and chunamed, felted, and resheathed with 5 in. by $1\frac{1}{4}$ in. totara. A new mizzenmast and foretopmast were shipped. The hatchway fore-and-afters were iron-shod, and the hatch-rests increased in width to comply with the regulations. The pumps were tested and found efficient. The provision-tank in the lifeboat was replenished.

Schooner "Saucy Kate."—35 ft. of the sister-keelsons and 28 ft. of the bilge-stringers were renewed. New steps were fitted under both masts. Two beams were reinforced. Nearly all the hull-sheathing was renewed. The hull-planking was refastened and caulked. Six new chain-plates were fitted, and new bolts were put in all the chain-plates. The sails were sent ashore and were overhauled. A cargo-gin and wire runner were renewed.

REGISTRATION OF SHIPPING.

On the 31st December last there were on the register in the Dominion 163 sailing-vessels, of 23,334 tons register, and 384 steamers, of 64,837 tons register. At the end of the previous year there were 174 sailing-vessels, of 22,216 tons, and 382 steamers, of 64,943 tons. The number of seamen and boys employed on board was 3,270, as compared with 3,292 at the end of 1918.

CERTIFICATES OF SURVEY.

Certificates have been granted to 250 steamers, 412 oil-engined vessels, and 55 sailing-vessels. For the previous year 314 steamers, 464 oil-engined vessels, and 59 sailing-vessels were granted certificates of survey. Attached is a return of the vessels to which certificates have been issued.

BREACHES OF THE SHIPPING AND SEAMEN ACTS.

Seven convictions were recorded during the year in prosecutions for breaches of the Shipping and Seamen Acts.

EXAMINATION OF MARINE ENGINEERS.

Examinations for certificates of competency as marine engineers were held at the following places throughout the Dominion during the year: Auckland, Wellington, Christchurch, Dunedin, Invercargill, Hamilton, Greymouth, Timaru, Napier, Nelson, Queenstown, Hokianga, Russell, Te Kopuru, Wanganui, Whangarei, Thames, Gisborne, Tauranga, Takaka, Palmerston North, New Plymouth, Half-moon Bay, Rotorua, and Te Aroha.

The total number of applicants who sat for examination was 414. Of these, 380 passed their examinations and 34 failed.

Examinations were held in the following grades: First-class marine engineer, second-class marine engineer, third-class marine engineer, river engineer for steam-vessels, first-class marine engineer for auxiliary-powered vessels, second-class marine engineer for auxiliary-powered vessels, and restricted-limits engineer for auxiliary-powered vessels. A return giving names of successful candidates is appended.

EXAMINATION OF MASTERS AND MATES.

The number of candidates who sat totalled 107; of this number 46 failed. A return of successful candidates is appended.

The examinations for masters and mates are carried out in Auckland by Captain Whiteford, the Examiner who is stationed there; at Wellington by Captain Hooper; and at Lyttelton by Captain Hooper, who goes there for the purpose when required.

The following report on the work of examination of masters and mates is made by Captain G. S. Hooper, Principal Examiner:—

"The examinations of masters and mates have been carried out at Auckland, Wellington, and Lyttelton—at the former port by the Examiner stationed at that place, at Wellington generally by myself, and at Lyttelton by an Examiner visiting that place when necessary to do so.

"The total number of candidates examined during the year was ninety-three, of whom fifty-four were for foreign-going certificates and twenty-nine for home-trade certificates. There were also ten candidates for local limited certificates, and sixty-two candidates for sight-test examinations. The following percentages of failures occurred: Foreign-going, 49 per cent.; home trade, 52 per cent.; river limits, 50 per cent.; and sight-tests 12 per cent.

"During the year there have been six examinations held for the extra-masters' certificates. As this examination calls for extensive knowledge it is not surprising that only one candidate was successful in passing the examination.

"Five candidates failed in the colour-vision test, one of whom was subsequently allowed a special examination by the Department, the result of which confirmed the decision of the Examiner who conducted the first examination. The examinations appear to be conducted similarly to those carried out in Great Britain by the Board of Trade, with the exception of the signalling portion, which will be brought up to date as soon as the automatic-signalling lamps arrive from England."

DECEASED SEAMEN'S ESTATES.

The estates of sixty deceased seamen, amounting to £1,083 9s. 11d., have come into the hands of the Department during the year, and, including estates previously received, forty have been finally administered. A statement is appended showing the estates dealt with and those outstanding. The sum of £75 5s. has been paid into the consolidated revenue for estates unclaimed for over six years.

WRECKS AND CASUALTIES.

Seventy-eight inquiries, involving eighty-three vessels, have been held during the year, of which sixty-three were preliminary and fifteen Magisterial. Those on or near the coast of the Dominion were seventy-five, of 76,259 tons register, as compared with sixty-three, of 54,778 tons, for the previous year. The number of lives lost was thirty-one, as compared with nineteen in the previous year. Of these, seventeen were lost in the auxiliary schooner "Jubilee" and four in the auxiliary schooner "Kahu" (both vessels were supposed to have foundered), six in the capsizing of the auxiliary schooner "Omaka," one in the boiler-explosion on the p.s. "Clutha," and one in the stranding of the "Te Teko." The second officer of the s.s. "Rimu" was carried overboard by a heavy sea and drowned, and a passenger on the s.s. "Monowai" disappeared and is presumed to have been lost overboard. A return is appended showing the casualties and an analysis thereof.

MERCANTILE MARINE OFFICES.

The work of these offices has been carried out in a very satisfactory manner, and the Superintendents and their staff are deserving of commendation for the way in which they have carried out their duties.

The Department has had to withhold the discharges of a good many seamen who have deserted from or failed to join their ships.

Appended is a statement showing the number of seamen engaged and discharged at the various ports during the year, and the fees received for engagements and discharges. The number engaged was 23,125, and the number discharged 22,904. The fees received amounted to £3,473 15s. 9d. During the previous year the engagements were 21,094 and the discharges 20,553, the amount of fees being £2,809 15s.

The transactions at the principal ports were:—

			Engagements.		Discharges.		Fees.		
							£	s.	d.
Auckland	7,869	7,846	1,211	1	6
Wellington	8,114	8,068	1,201	9	0
Lyttelton	2,582	2,467	391	3	0
Dunedin and Port Chalmers	2,141	2,129	334	11	0
During the previous year they were:—									
Auckland	6,723	6,627	904	2	6
Wellington	7,790	7,481	1,054	9	6
Lyttelton	2,102	1,888	284	5	6
Dunedin and Port Chalmers	2,272	2,470	298	19	6

The amounts paid under the provisions of section 6 of the Shipping and Seamen Amendment Act, 1911, to sick and injured seamen totals £20,288 6s. 6d., as compared with £13,163 8s. 8d. for the previous year.

HARBOURS.

This Department has the control of harbours for which Harbour Boards have not been constituted, and the buoys and beacons at these places have been overhauled, cleaned, and painted under the direction of Captain Bollons, of the s.s. "Hinemoa." He has also attended to the coastal buoys and beacons during the vessel's periodical lighthouse trips.

A large number of plans of harbour-works, including wharves proposed to be constructed, has been submitted to and dealt with by the Department. Those which met the Department's requirements were approved by the Governor-General in Council in accordance with the provisions of the Harbours Act, 1908. A return of the Orders in Council giving the necessary approval is appended.

The sum of £1,009 16s. 4d. was collected for pilotage and port charges in respect of harbours under the control of the Department, as compared with £783 3s. 3d. in the previous year.

A return of the amounts collected at the various ports, including the amounts collected at ports under the control of Harbour Boards, is appended.

Appended is a report by the Marine Engineer on the works dealt with by him during the year.

LIGHTHOUSES.

The duties connected with the maintenance of the various lighthouses have been satisfactorily carried out during the year. The permanent staff has been restored to its pre-war strength.

A new crane has been erected at Stephen Island. New winches have been installed at Cape Maria van Diemen to work the overhead conveyer between the island and the mainland, and new dwellings are now in course of erection.

Captain Bollons, master of the s.s. "Hinemoa," has inspected and reported on the various stations. I desire to place on record the great assistance which I have at all times received from him in lighthouse matters.

During the year one keeper retired on superannuation, three were transferred to another Department, four resigned, and eight new keepers were appointed to fill vacancies.

ISSUE OF EXPLOSIVES.

During the year 118 permits were issued at the Port of Wellington for the carriage of explosives on ships.

METEOROLOGICAL AND WEATHER OFFICE.

The work of this division has been well maintained during the past year. The following is the report of the Director on the work:—

"The work of the Weather Bureau has been carried on as usual during the past year. Every morning reports and forecasts are telegraphed to all the chief towns and ports of the Dominion, and in the evening reports and forecasts are issued to the Press Association for the morning papers."

"Weather-reporting is chiefly in the hands of telegraphic officers, who send in their reports at 9 a.m. and 4 p.m. These are forwarded with unfailing regularity and promptitude, and serve as a basis for the forecast. The keen interest and willing co-operation taken in the work by the Telegraph Department secures efficiency; and therefore, although this system of weather-reporting has long been abandoned in many parts of the world, there is, I am pleased to say, no need to advocate a change in this Dominion.

"The postponement of the scheme of district weather-reporting until better times is a disappointment; but partial equipment of reporting-stations at Awanui and Awarua would be of assistance, especially as we have to send out estimated barometric readings with the usual radio weather-forecasts. The full equipment of the wireless stations at Awanui and Awarua, mentioned in last year's report, will, when accomplished, prove of great service in general forecast, particularly if wireless telephony is made available for weather-reporting.

"The work of the Meteorological Office rests mainly upon the voluntary labours of a small army of observers scattered throughout the Dominion. Upon their records, of the rainfall especially, depend great enterprises which are of immense importance to the Dominion, and it is impossible to over-estimate their responsibilities with regard to engineering, hydro-electricity, agriculture, &c., to say nothing of future possibilities with regard to what may be based upon reliable records of the past. This speaks well for the patriotic and scientific spirit of the observers, who in the majority of cases have done so much to promote the knowledge of our climate—one of the chief assets of this Dominion. A few of the records have ceased through unavoidable removal of observers and other causes; but various new stations have been added during the year, and we have further utilized the supply of rain-gauges from the electrical branch of the Public Works Department in this direction. A large increase in stations is, however, necessary in order that more thorough rainfall-survey of New Zealand may be made.

"We have now thirty climatological stations at work over the Dominion, and their work has been on the whole satisfactorily carried on, in spite of difficulties chiefly brought about by lack of necessary instruments to replace those out of order and to more fully equip stations requiring them. There has not yet been any sign of a decrease in the price of meteorological instruments.

"There have been no changes in the staff during the past year."

FISHERIES.

A very complete and instructive report made by Mr. L. F. Ayson, Chief Inspector of Fisheries, is attached, giving full information on the work of his division for the last twelve months. Attached also is an interesting report made by Mr. G. M. Thomson, chairman of the Portobello Fish-hatchery.

Fifteen convictions were recorded during the year in prosecutions for breaches of the Fisheries Act.

WORK DONE UNDER THE INSPECTION OF MACHINERY ACT.

The Engineer-Surveyors of Ships and the Examiners of Marine Engineers appointed under the Shipping and Seamen Act also act as Inspectors of Machinery, examiners of extra first-class engineers, examiners of engine-drivers (both stationary and locomotive engines), examiners of winding-engine drivers for collieries and mines—all under the Inspection of Machinery Act. They also act as examiners of electric-tramway motormen under the Tramways Act.

NEW BOILERS INSPECTED.

I have again to report a large increase this year in the number of new boilers inspected. There are signs of a revival in the overseas trade in boilers. Many inquiries have been received from overseas firms concerning designs of boilers they propose making for New Zealand. The imported boiler generally forms part of a machine or plant not manufactured in New Zealand, such as traction-engines, road-rollers, steam-shovels, steam-wagons, steam motor-cars, &c. A few of the imported

boilers are, however, of a special design suitable for installing with any steam plant. Progress in the matter of design is evident in the locomotive and traction types of boiler. One firm is making a corrugated or grooved form of flat plate which is self-supporting and does not require staying. Another firm is dispensing with the stayed construction by forming such plates as were usually flat in the form of cylinders or portions of cylinders. Every stay or other hole in a boiler is a potential source of leakage and consequent corrosion. Such construction should prolong the life of the boiler and facilitate the cleaning of the internal surfaces. Local firms continue to make numbers of boilers for dairy factories, freezing-works, &c. Some of these boilers of the multitubular underfired type are of large size, 70 and 85 nominal horse-power. During the year replies have been received from some twenty-six firms in Great Britain and America in answer to requests for particulars of the ship and boiler material manufactured by them. This information has now been printed on a sheet in a handy form for reference; the sheet shows the class of material manufactured by the different firms, the brands used to distinguish the various classes of plates, &c., the position of the brands, and any other information of interest which was received. The number of new boilers inspected during the year was 347; 162 of these were made in the Dominion and 185 were imported. The following table gives the districts in which the new boilers were installed, their horse-power, and also states whether they were made in the Dominion or imported:—

District.	Made in Dominion.		Imported.		Total.	
	Number.	Horse-power.	Number.	Horse-power.	Number.	Horse-power.
Auckland	14	130	22	239	36	369
Auckland North	6	52	4	82	10	134
Auckland South	7	62	18	980	25	1,042
Canterbury North	20	201	12	34	32	235
Canterbury South	3	29½	..	..	3	29½
Gisborne	6	15	5	23	11	38
Hawke's Bay	14	27	23	152	37	179
Marlborough	4	12	2	5	6	17
Otago	10	68	20	205	30	273
Southland	10	146	20	50	30	196
Taranaki	5	44½	15	35	20	79½
Taranaki North	8	43½	5	209	13	252½
Wellington	29	126	30	1,068	59	1,194
Wellington North	20	156½	5	37	25	193½
Westland	6	80½	4	39	10	119½
Totals	162	1,193½	185	3,158	347	4,351½

INSPECTION OF BOILERS.

The number of boilers inspected this year totals 7,746. This shows an increase of 473 on the number inspected last year.

The total number of defects in boilers was 1,592, and of this number 334 were very dangerous. No boiler-explosion occurred during the year, which shows the efficiency of close inspection made by reliable and competent practical men.

In October last year it was reported that a fly-wheel of an engine had exploded. The fly-wheel was attached and formed part of a steam-engine plant driven by steam generated by a steam-boiler. The damage was estimated at £13,000. It is not generally realized how dangerous fly-wheels are, and a few remarks concerning them may be useful to steam-users having no technical knowledge of them. The most common cause of fly-wheels bursting is from an increase of speed due to defective governors or valve-gears. The main stresses in a fly-wheel are the result of the centrifugal force of the rim due to the speed at which the fly-wheel revolves. There is no possible way of overcoming these stresses. If the sectional area of the rim is increased to make a stronger rim the centrifugal force is increased likewise, because of the added weight of the rim, and the wheel is no stronger than before. There is a definite speed at which any wheel will explode, however sound, and regardless of the amount of material it contains. This theory is a mathematical truth, and has often been verified by practice. Cast-iron wheels cast in one piece should not be run at a greater peripheral speed than a mile a minute. For built-up wheels the speed should be much less, and according to the design of the rim-joints; some rim-joints have a strength equal to 25 per cent. only of the solid rim. The stresses in a revolving fly-wheel increase as the square of the speed—that is to say, if the speed attains double the normal speed the stresses will be four times the normal stresses. This rapid increase of stress due to speed is the reason why wheels amply safe at ordinary running-speeds go to pieces without warning and cause such destruction. Fly-wheels are ordinarily made of cast iron, and require to be thoroughly examined periodically for flaws and defects. Steam-users should see that all governor and valve gear is kept in first-class condition, so that the danger of the engine running away is minimized. A fly-wheel merely averages the speed of an engine during one revolution, and prevents violent changes in the rate of motion in that time. The number of revolutions per minute can only

be controlled by the governor; it prevents any permanent change in the speed. A fly-wheel cannot prevent an engine running away, but a governor can, and it is necessary that it and all the gear and the belting should be maintained in first-class order and condition.

At the end of the year all boilers had not been inspected that were due.

INSPECTION OF GAS-, OIL-, WATER-, AND ELECTRIC-DRIVEN MACHINERY, INCLUDING LIFTS.

In this branch of the Department's work a large increase has to be recorded. During the year 20,807 inspections were made, which is an increase of 2,256 compared with last year's figures. At the end of the year there were still a number uninspected.

FENCING AND GUARDING OF MACHINERY.

The whole of the machinery driven by prime movers has been thoroughly examined to see that sufficient protection was afforded those working in and around such plants. The great point aimed at always has been to fence and guard all the dangerous parts, so as not to destroy the efficiency of the machinery. There were issued 1,759 notices to fence and to guard machinery, and of this number 352 were considered very dangerous cases. Action was taken to eliminate the danger in the use of square-head buzz planers by converting them into round heads. This alteration will have a marked effect in the safety of those working with this machinery.

EXAMINATION OF LAND ENGINEERS AND ENGINE-DRIVERS.

These examinations were held at the principal centres throughout the Dominion, and special examinations were also held at other places to suit the convenience of applicants. The full list of places where examinations were held is as follows: Auckland,* Bleinheim,* Carterton, Christchurch,* Dannevirke, Dunedin,* Gisborne,* Greymouth,* Greytown,* Hamilton,* Hokitika, Invercargill,* Kaingaroa, Karamea, Martinborough, Masterton, Napier,* Nelson,* New Plymouth,* Ngatapa, Norsewood, Opunake, Otaki, Pahiatua, Palmerston North,* Puponga, Reefton, Takapau, Tauramunui, Tauranga,* Te Kopuru, Timaru,* Waiuku, Wanganui,* Wellington,* Westport,* and Whangaruru.*

The examinations held were for extra first-class engineers, first-class engine-drivers, second-class engine-drivers, winding-engine drivers (steam and electric), 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; United States of America, 3: total, 5.

The number who sat for the examinations total 488; of this number ninety-six failed to pass their examinations.

New examination-papers for all first-class engine-drivers' examinations were prepared in Head Office, and at each quarterly examination throughout the year new papers were forwarded to all district offices. The questions set were a good practical test of the candidates' knowledge, and contain the information necessary for the applicants to become competent in their daily duties. The appended return gives the names, &c., of successful candidates.

EXAMINATION OF ELECTRICAL-TRAMWAY DRIVERS.

All those who applied for examination and who had the necessary qualifications were examined. This examination includes a practical test on the car itself under ordinary and emergency conditions. Examinations were held at Auckland, Christchurch, Dunedin, Invercargill, Napier, Wanganui, and Wellington. The number who sat for examination totalled 165. Nine out of this number failed. More than one examination was held at the places named, excepting Napier. Special examinations were also held to suit the convenience of the tramway service, as requested, throughout the Dominion. The appended return gives the names of those who passed.

BOARD OF EXAMINERS APPOINTED UNDER THE INSPECTION OF MACHINERY ACT.

The Board of Examiners, consisting of the Chief Inspector of Machinery of the Marine and Inspection Department, the Engineer-in-Chief and the Resident Engineer of the Public Works Department, the Inspecting Engineer of the Mines Department, and the Chief Electrical Engineer of the Public Works Department, with Mr. J. G. Macpherson as secretary, sat at Wellington on eight days during the year. Mr. R. W. Holmes, late Engineer-in-Chief and Secretary of the Public Works Department, retired from the Public Service last year and from this Board. Mr. Holmes sat as a member of this Board on many occasions, and his discussions and decisions at all times were very helpful and of great service in deciding on any points in dispute. Mr. F. W. Furkert, who succeeded Mr. Holmes as Engineer-in-Chief and Secretary of the Public Works Department, was appointed a member of the Board, and also Mr. C. I. McKenzie, the Assistant Engineer of the Public Works Department. The Board dealt with all matters that came before it, and issued all the necessary certificates to successful applicants.

During the year a district office was opened at Gisborne. This district is growing rapidly, and the stationing of an Inspector there has saved many trips that used to be made from Napier by the Inspector stationed at Napier. The change has been much appreciated by land-machinery owners and the shipping people in the Gisborne district.

I have, &c.,

The Hon. the Minister of Marine, Wellington.

ROBERT DUNCAN,
Secretary, Chief Surveyor of Ships, and
Chief Inspector of Machinery.

* Places where more than one examination was held.

The CHIEF INSPECTOR OF FISHERIES to the SECRETARY, MARINE DEPARTMENT.

SIR,—

Marine Department, Wellington, 29th July, 1921.

I have the honour to present the following report on the fisheries of the Dominion for the year ended 31st March, 1921:—

The following fishing-ports and fishing-grounds were visited by me during the year, viz.: Whangaroa, Bay of Islands, Whangarei, Kaipara, Hauraki Gulf, Great Barrier, Bay of Plenty, Hawke's Bay, Cook Strait, Marlborough Sounds, Picton, Kaikoura, Kaiapoi, Lyttelton, Timaru, Oamaru, Moeraki, Port Chalmers, Invercargill, and Bluff.

I inspected the oyster-beds at Whangaroa and Kaipara once, and the oyster-beds at Bay of Islands, Whangarei, Great Barrier, and Hauraki Gulf twice during the year, and supervised the oyster-cultivation work at the commencement of the work on the Coromandel coast. I also made three visits to the salmon-hatchery at Hakataramea, and supervised and assisted in repairs to the Department's temporary hatchery at Pembroke.

The reports received from the Collectors of Customs and Inspectors of Fisheries show that, in comparison to the previous year, there has been a substantial increase in the quantity and value of fish landed during the year. The weather conditions have been favourable, particularly during the summer months, for fishing, and on most of the fishing-grounds fish have been plentiful. In the Auckland District large catches of snapper, mullet, tarakihi, and flounder have been made. In Hawke's Bay very good catches were made by trawlers throughout the year, flat fish being particularly plentiful from October to March; and the reports with regard to the fishing-grounds in the Wellington, Marlborough Sounds, Kaikoura, Canterbury, and Otago Districts are equally favourable. The high price of benzine, nets, and all other fishing-gear comes hard on fishermen, for, although they are now getting a somewhat higher price for their fish, yet this increase, they claim, is not in proportion to the increase in their working-expenses. This in turn influences the quantity of fish marketed, as fishermen will go out only when the conditions are favourable for making payable catches.

Fishermen report that the largest shoals of pilchard which have been seen on the east coast for a good many years made their appearance in February last. They were reported as having been seen at different parts along the coast from Cook Strait to Oamaru.

The total quantity of fish brought in from the fishing-grounds during the year was about 241,072 cwt.; its wholesale value, including crayfish and whitebait, was about £344,333 11s. The total quantity of oysters taken off the beds, including Foveaux Strait and the northern rock-oysters, last season was 33,218 sacks, the wholesale value of which was £22,657. The quantity and value of whale-oil and other products from the whaling-stations was 478 tons oil, 80 tons bonedust, and 100 gallons spermaceti, valued at £19,307: the total value for the year being about £386,297 11s.

ROCK-OYSTERS.

Owing to the difficulty in getting oyster-pickers for the Hauraki Gulf beds the sale of oysters did not commence until the 1st June, 1920, and on account of a shortage of pickers later on the season closed on the 14th October. The total quantity picked during this short season was 6,797 sacks, representing a value of £5,968 9s. The beds picked were those at Bay of Islands, Kaipara, Port Fitzroy, and part of the beds in the Hauraki Gulf.

The demand for oysters throughout the season was very great, and the supply coming forward was never equal to market requirements.

For the purpose of extending the beds oyster-cultivation work on a more extensive scale than in any previous season was carried out during the months of January, February, and March. The method which I have recommended the Department to adopt is the building of hollow rock walls in well-sheltered and otherwise suitable bays. These walls are built principally of clean rock obtained at and above high-water mark, and they extend from near the top of the oyster-line down to low water. This method is the most economical, besides being permanent. Last summer six men were employed on this work at Bay of Islands and Whangarei, four at Tekumu Bay, Coromandel coast, and four at Port Fitzroy. At Bay of Islands 3,606 yards of walls were built, 394 at Whangarei, 733 at Coromandel, and 566 at Port Fitzroy—making a total of 5,299 yards, or rather more than three miles.

There is a yearly shrinkage, from several causes, in the extent of our natural rock-oyster beds, and the continual increase in the number of people who frequent the shores of the Hauraki Gulf and Bay of Islands causes a considerable yearly shrinkage in the quantity of oysters which can be taken from the beds for market. At no time during the last twenty years has the supply of oysters been sufficient for market requirements, and on account of the increase in population of late years it is safe to say that the market at the present time could absorb three times the quantity which can be obtained from the present beds. The necessity for extending the beds by artificial methods is thus apparent. Inspectors Bennett and Flinn and assistants have carried out their duties, both with regard to the protection of the beds and supervising the oyster-cultivation work, in a most satisfactory manner.

FOVEAUX STRAIT OYSTER-BEDS.

The Inspector at Bluff reports that during the past season the oysters were plentiful on the beds and in excellent condition. The quantity dredged from the beds last season was 26,703 sacks, valued at £16,689. The quantity sold in the Dominion was 24,848 sacks, valued at £15,470, and the quantity exported to Melbourne was 1,855 sacks, valued at £1,219. I have not been able to get out on to these beds for a considerable time, but will endeavour to make an inspection of several of the beds before this dredging season closes.

QUINNAT SALMON.

The run of salmon last season (1920) showed a considerable increase on the two previous seasons. In the early part of the spawning season the prospects of a good run were not at all encouraging, and on that account it was not considered advisable to incur the expense of sending a gang of men to the up-country rivers to collect eggs. The Hakataramea River was unusually low all through the season, and practically no salmon entered that river, but a lot of large fish spawned in branches of the Waitaki, below where the Hakataramea joins that river. Fifty thousand eggs were taken from fish netted in these branches. Reports were received late in the season that large numbers of fish were spawning in the Ahuriri and rivers beyond the head of Lake Ohau. The manager from Hakataramea and an assistant made an inspection of these rivers and found them full of salmon, most of them spent fish, but it was then too late to collect eggs.

A number of salmon went up the Clutha River last season, and spawned in the Clutha above Cromwell and in tributaries of Wanaka Lake. This season (1921) there has been a very large run of salmon in the Waitaki and Rangitata Rivers, and a good many went up the Clutha again this season.

The first salmon were seen in the Waitaki River on the 23rd December, 1920, but it was not until the 19th January that the first was caught by anglers. From that date on to the 6th April they were taken in considerable numbers.

The work of collecting salmon-eggs was commenced on the 1st April. The rivers netted were the Dobson, Ahuriri, Hakataramea, and a branch of the Waitaki. The Hakataramea, which in ordinary seasons has been by far the best river for getting eggs from, was again unusually low all through the season, and on that account very few salmon attempted to come in.

Partly for the purpose of collecting eggs, and also to prove how salmon were running in the Clutha and its tributaries this season, I netted two tributaries of Lake Wanaka—viz., the Matatapu River and Pembroke Creek. Very few salmon came into the creek, but there was a fair run in the Matatapu. We had the nets washed out a good many times, and on that account we were able to get very few fish. Altogether fifty-one salmon of a small average size (about 10 lb. to 12 lb.) were taken, and about 75,000 eggs collected.

The manager at Hakataramea says in his report, "The run of salmon this spawning season is the largest we have experienced in New Zealand. The salmon are also larger in size, many of the fish, both at the Dobson and Ahuriri Rivers, being from 4 ft. to 4 ft. 4 in. in length."

The number of eggs collected is as follows: Hakataramea, 293,000; Ahuriri, 389,000; Dobson, 451,000; and Pembroke, 75,000: total, 1,208,000.

Further evidence of the spread and increase of these salmon along the coast has lately come to hand. Besides the large run in the Waitaki and Rangitata, and also in the Clutha, large numbers of small salmon were caught off the Timaru wharf and breakwater by residents when fishing for sea-fish. It is reported that as many as forty were taken by one man in a day. Schools of salmon-smolts were off Banks Peninsula in October. Fishermen netting in the bays there caught numbers in their nets. The specimens sent for identification were salmon-smolts, from 1 lb. to 2 lb. in weight. The quinnat salmon is now so solidly established that fishermen should be allowed to take them for sale, and I think it is reasonable to expect that in a very few years large quantities will be on the market, and the country will begin to reap a rich return for the money expended in introducing them.

I strongly urge that the work of stocking rivers in different parts of the Dominion be vigorously pushed on. I attach copy of a report from Constable Berry for publication with this report.

ACCLIMATIZATION OF ATLANTIC SALMON AND OTHER FISHES.

The splendid success which has attended the systematic effort made by the Government to establish the quinnat salmon should be sufficient encouragement to persevere with the Atlantic salmon on the same lines. Past experience has shown that, with anadromous migratory fish like the Atlantic salmon, small shipments of eggs brought out at intervals of several years are useless. If the work is carried out systematically—that is, by making importations of from half a million to a million eggs each year for five or six years in succession, and planting the young fish in one of our best rivers—I have no doubt that this splendid fish would be established. I would recommend that the Department approach the acclimatization societies with a view of getting them to provide part of the money required for importing the eggs.

As I have stated in a previous report, apart from what has already been accomplished there is an immense amount of profitable acclimatization work yet to be done, and I would recommend that as soon as money is available attention should be given to the introduction of several of the fishes which I recommended in my report for the year 1919.

GOVERNMENT SALMON-HATCHERIES.

The buildings, ponds, fences, &c., at the Hakataramea Hatchery have been kept in good order during the year. The manager and his assistant painted all the buildings. They also did a large amount of willow-planting on the river-banks, to prevent erosion at a point near the hatchery. The manager in his report says: "The Public Works completed the river-protection works in April, and the groins and stop-banks are in good order. So far there has not been a flood high enough to test them. The erection of the new hatching-house was completed on time by the contractors, Messrs. James Craig and Co. It is a substantially built, roomy, and well-lighted building. A new concrete intake race for the hatchery water-supply was also put in. The concrete walls of the four ponds which were broken down by the flood of August, 1919, were rebuilt during the year, and all the ponds are now in good order again."

The water-supply flumes at the Pembroke and Maori Creek Hatcheries were repaired, and the hatching-sheds put in order for the coming hatching season.

REPORT OF CONSTABLE E. T. BERRY *re* SALMON SEASON, 1921.

"I respectfully report that the past salmon season has been an extra-good one. These fish have gone up the Waitaki in enormous numbers, and a large number of them were big fish, up to 60 lb. in weight. Fishermen have been here from all over New Zealand, but the catch by anglers has been very poor. The salmon, for some reason, would not bite at the spinning baits like they have done other years, and they all seemed to be travelling up river and not waiting about like other seasons. Another thing I noticed was that all the fish caught were in splendid condition, but the sizes varied from 4½ lb. up to 35½ lb. I first noticed salmon in the river on the 23rd December, 1920, but it was not until the 19th January, 1921, that I caught the first salmon, a 19 lb. female. From then on to the 6th April they were caught, about 130 fish being taken out by different fishermen. The river rose and got discoloured, but the run of salmon still went on—you could see them nearly every day. A large run passed the bridge about the 16th May, and odd ones have been seen since. I took one out near the bridge this morning [5th June]. It was just alive—fins and tail were gone—about 22 lb. in weight. I heard that numbers of these fish were spawning below the stone wall. The following is a list (as near as I can get it) of the fish caught between the 19th January and the 6th April, 1921 :—

Name.	Number caught.	Weight of Largest, in Pounds.	Name.	Number caught.	Weight of Largest, in Pounds.
Berry, E. T.	18	27	Fleming	2	14
Wall	12	22	Fleming	2	16
Elliott, M. J.	8	34	Stead	5	24
Hooper	3	35½	Moorhouse	4	14
Studholme	6	25½	Adams	2	14
Butterworth	4	25½	Berry, jun.	1	9
Ward	6	18	Gibbs, A.	1	12
Slodden	8	22	Swinard	1	10
Jackson	9	29	Presland	1	7
Siye	3	21	Dennison	1	12
Dickson	3	22	Corbett	2	22
Jones	2	17½	Belcher	2	15
Nicholas	6	20	Wall, J.	1	11
Michael	6	21			

"There were about fifteen other fish landed by other fishermen, but I have no particulars of these."

SUMMARY OF REPORTS OF COLLECTORS OF CUSTOMS AND INSPECTORS OF FISHERIES.

The following is a summary of the information contained in the annual reports supplied by the Collectors of Customs and Inspectors of Fisheries at the various fishing-ports :—

Whangaroa.—The greatest drawback to the fishing industry at this port is that the fishermen are unable to get a market for their fish. There is only a very limited demand locally, and it is only in winter that small quantities can be sent to the Auckland market. Snapper, mullet, flounder, hapuka, kingfish, and crayfish can be caught in very large quantities on the local fishing-grounds.

Hokianga.—The usual market fish caught on the local fishing-grounds were plentiful during the year. The number of boats licensed and fishing was 14, and the number of men engaged in fishing and connected with the industry was 23.

Russell.—Most of the market fish obtainable in these waters were plentiful throughout the year, especially snapper and mullet. Excepting during heavy weather, a good supply of fish was always available for market. The principal markets for fish are Whangarei, Hukerenui, Kawakawa, Kaikohe, and other inland townships and settlements. On account of no cool-storage facilities, and only one steamer a week to Auckland, the quantity of fish sent to that market is limited. The price obtained by fishermen for their catches is as follows: Mullet, 2s. 6d. to 3s. 6d. a dozen; snapper, 4s. to 5s., according to their size; hapuku, 2½d. per pound.

The number of fishing-boats licensed for the year was 51, employing about 120 fishermen.

The number of whales killed at the Whangamumu whaling-station was 44, yielding about 200 tons of oil and 40 tons of bonedust; total value, about £9,600.

For the last season (1920) a total of 3,058 sacks of oysters were picked from the Bay of Islands beds; of these, 282 sacks were sold locally, and the balance, 2,776, were shipped to the Auckland oyster-depot.

The rock walls built last year for the purpose of extending the beds have proved very satisfactory indeed in catching spat, and these young oysters are growing splendidly, especially in the Rawhiti section. Oyster-cultivation work was continued on the same lines this year: 3,212 yards were built in the most suitable localities in the Bay of Islands, and 394 yards at Whangarei, at a total cost of £302 2s. This work will in a few years greatly increase the quantity of oysters required to meet the increasing demand.

The fishing, oystering, and whaling industry in this district gives employment to about 180 men, all of whom earn good wages. The total quantity of fish taken during the year was approximately 18,000 cwt.; value, about £8,500.

Whangarei.—The number of fishing-boats licensed and fishing during the year was 12, and the number of fishermen employed was 17. The quantity of fish marketed was 4,467 cwt.; approximate value, £4,020.

Kaipara.—The figures for the year show a steady growth in the industry generally. The number of boats licensed has increased from 27 to 36, and reports show that fish are plentiful. At

one period catches of mullet were so great that no market could be found for the fish. The demand locally is limited, and difficulties of transport to Auckland and other markets prevents the expansion of the industry. The number of boats licensed was 36, employing 57 fishermen, with 10 men employed in other ways in connection with the industry. The total quantity of all kinds of fish marketed was 9,140 cwt., valued at £11,095.

Auckland.—The Inspector reports that the number of boats registered at Auckland during the year was 165, and he gives the number actually engaged in fishing as 46, including 6 steam-trawlers. The number of persons employed in fishing and otherwise in connection with the industry is given as 204. The total quantity of fish brought into Auckland during the year was about 68,560 cwt., valued at £84,763. Fish of all kinds have been fairly plentiful. Several trawlers have worked in the Bay of Plenty when the weather was favourable, and got good catches, while the smaller trawlers working in the Hauraki Gulf have been getting moderate catches. The Auckland line fishermen have mostly worked outside the Great Barrier, Little Barrier, Mokohinau, Mercury, and Alderman Islands, where in fine weather they get good catches of snapper, hapuku, blue cod, and kingfish. The Inspector recommends the erection of cool-storage plant on Mercury Island.

The oyster-beds in the Hauraki Gulf are showing a fair quantity of young oysters, the best fixing being on Ponui; on Waiheke Island (on the outside), and in the Waiheke Passage; Rakino Island; on the western side of Motutapu Island; on Rangitoto; and on the Coromandel coast. The total quantity picked from the Hauraki Gulf, Great Barrier, and Kaipara beds last season was 3,739 sacks. During the year 733 yards of rock walls for oyster-cultivation were built in Tekumu Bay, Coromandel coast, and 566 at Port Fitzroy, Great Barrier.

Thames.—The report from the Inspector of Fisheries states that 8,200 cwt. of fish was landed from the local fishing-grounds during the year, principally flounder and snapper, and the value of the fish is given as £28,719. The number of boats employed in fishing was 32, and the number of men engaged in fishing was 70, and 25 persons were employed in other ways connected with the industry.

Tauranga.—There were 24 fishing-boats licensed and about 30 men engaged in fishing. The quantity of fish caught is given as 1,000 cwt., valued at £2,800.

Gisborne.—There were 24 hook-and-line boats and 3 trawlers engaged in fishing, and 50 fishermen and 9 other persons were employed in connection with the industry. The principal fish caught are tarakihi and snapper. The total weight of fish brought in was 1,948 cwt., valued at £5,103.

Napier.—The Inspector states in his report that during the whole of the past year the trawlers have had very good catches throughout—undoubtedly the best results for many years. From October to March large catches of soles were obtained, but of a smaller average size than usually taken. The weather conditions during the past year were most favourable, and very little lost time was experienced. About the beginning of October large quantities of sardines made their appearance in the bay and remained until the end of March. The shoals were often 5 to 10 acres in extent. There are now 10 steam-trawlers located at this port, but only 9 were operating all the year. The largest trawler was in commission only three months, owing to coal-shortage and the difficulty in getting suitable fishermen. The total quantity and value of fish landed was: 7,550 cwt. flounder and sole at £2 10s. per hundredweight, £18,875; 8,780 cwt. round fish at £1 5s. per hundredweight, £10,975; 500 sacks crayfish at £1 10s. per sack, £750; 8,000 lb. whitebait at 2s. per pound, £800; total, £31,625. Number of fish-curing places, 3, employing 4 men; number of trawlers, 10, employing 41 men; number of oil-launches, 22, employing 44 men; number of rowing-boats, 40, employing 56 men.

New Plymouth.—The number of boats engaged in fishing during the year was 34, employing about 60 men, a number of whom fish part of the year only. Apart from actual fishing there were about 10 persons employed in connection with the industry. The quantity of fish taken by the local boats is given as 900 cwt.; value, £1,200.

Wanganui.—The quantity of all kinds of fish caught on the local grounds during the year is given as 190 cwt.; value, £458. Ten rowing-boats were engaged in fishing, employing 9 fishermen and 2 curers.

Foxton.—Twenty-five boats were licensed for fishing, and 40 men were engaged in fishing. Most of these men only fish occasionally. The quantity of fish caught, including whitebait, was about 300 cwt., valued at about £1,200.

Wellington.—The Inspector reports that during the year he inspected the boats and nets at all the fishing-stations in the Wellington District. He states that the quantity and value of the fish taken compares favourably with that of the previous year. The returns show a decrease in the number of boats licensed and men employed. The Cook Strait fishermen lost a considerable amount of time on account of stormy weather. When conditions were favourable splendid catches of hapuku were made on the new grounds located off Cape Palliser, and farther north to White Rock Station. Flounder were very plentiful on the west coast between Waikanae and Foxton. The quantity of fish taken from the fishing-grounds near Kapiti Island has been well maintained. The supply of fish for the Wellington market has been well maintained during the year. Sixty-two fishing-boats were licensed, employing 123 fishermen. The total quantity of fish caught was 17,250 cwt., valued at £24,230.

Picton.—The local Inspector reports that the quantities of the various kinds of fish caught have been equal to previous years. After supplying local requirements the balance of the fish is sent to the Wellington market. During the year 26 oil-launches and 1 steam-trawler have been engaged in fishing, employing 35 fishermen. Three high-powered oil-driven launches are also employed in connection with the whaling industry. Forty-three humpback whales were taken last season at the Tory Channel whaling-station. The product from these was 218 tons of oil, valued at £7,242, and 40 tons bonedust, valued at about £200.

Blenheim.—The number of fishing-boats licensed for the year was 12, employing 18 fishermen. The total quantity of fish caught was 800 cwt., valued at £2,240. Notwithstanding several long periods of bad weather, the local fishermen state that they have had a very fair year.

Nelson.—Sixty-two boats were licensed for fishing during the year. These include the boats engaged in fishing in Pelorus Sound and about the French Pass. The greater number of the boats licensed are owned by settlers in the outlying districts, who fish only in their spare time. The number of men exclusively engaged in fishing was 15. Approximately the quantity of fish caught on the local grounds and brought in to Nelson was 1,095 cwt., the value of which is given as £1,271. These figures do not include the French Pass catches, which are sent to Wellington. The fishing industry does not show any signs of expansion, although extensive fishing-grounds exist in the bay.

Westport.—The Collector reports a very poor whitebait season. The number of boats licensed and engaged part of the time in fishing was 9. There was 1 steam-trawler and 5 launches engaged in trawling, employing 10 fishermen. The quantity of fish landed (including 43 cwt. whitebait) was 1,199½ cwt.; total value, £2,002.

Greymouth.—The past year has been a very poor one for the local fishermen. Most of the fish sold in the shops are obtained from the trawler working from Westport. Eleven boats were licensed for fishing, and 16 men engaged (casually) in fishing and 6 others otherwise employed. Only 5 cwt. of fish was caught locally; value, £119.

Hokitika.—The Inspector reports that only 1 boat was licensed during the year. Two men were engaged in fishing, and the quantity of fish caught locally is given as 77½ cwt., and 980 lb. of whitebait; total value, about £147. The past season was an exceptionally poor one for whitebait.

Kaikoura.—The number of oil-launches licensed and engaged during the year was 23, employing 47 fishermen and 3 others in connection with the fish-freezing works. Fish have been very plentiful, good catches of groper, trumpeter, kingfish, butterfish, and blue cod being made during the greater part of the year. The quantity landed was approximately 6,265 cwt., representing a value to the fishermen of £12,308. Three powerful oil-launches were engaged in whaling last season and were successful in killing twenty humpback and one sperm whale. These yielded 63 tons of oil, the total value of which was £2,220. The sperm whale also yielded 100 gallons of spermaceti, valued at about 9s. a gallon. A safe boat-harbour is urgently required, as the present anchorage is highly dangerous in heavy weather.

Rangiora.—The past season has been a particularly poor one for whitebait, and also for the other kinds of fish usually caught in the Ashley estuary. The total catch, including 18 cwt. whitebait, was only 34 cwt.; value, about £295. The number of boats licensed was 18, employing 21 men.

Kaiapoi.—The season has been a poor one both for whitebait and flounder. The total quantity brought in is given as 240 cwt., principally whitebait; value, about £2,000. Twenty-four boats (mostly rowing-boats) were licensed for fishing, employing 24 men.

New Brighton.—The only fishing done is whitebaiting. The quantity taken last season was 7 cwt.; value, £75.

Southbridge (Lake Ellesmere).—The catch of flounder for the year was very satisfactory, although the quantity taken did not come up to the previous year. Twenty-three boats were engaged in fishing, employing 35 men. The total quantity taken for the year was 2,220 cwt., valued at £4,979.

Lyttelton and Sumner.—The varieties of fish taken on the local fishing-grounds were the same as in previous years. The quantity brought in for the year was 6,643 cwt., representing a total value of about £13,942. The actual number of men engaged in fishing was 30, employing 20 boats. One steam-trawler and 6 oil-launches were engaged in trawling.

Akaroa.—Good catches of groper, flounder, sole, tarakihi, blue cod, red cod, ling, barracouta, butterfish, moki, and crayfish were made. The total quantity brought in of all kinds of market fish caught was about 4,740 cwt.; value, about £6,370. This quantity shows a substantial increase on the previous year's catch. The number of boats licensed was 14, employing 28 fishermen.

Christchurch.—The number of boats licensed for fishing for the year was 184, and the number actually engaged in fishing at the different fishing-stations in the district was 122, as follows: Kaikoura, 23 boats, employing 47 fishermen; Rangiora, 18 boats, employing 21 men; Kaiapoi, 24 boats, employing 24 men; Southbridge, 23 boats, employing 35 men; Lyttelton, 20 boats, employing 30 men; Akaroa, 14 boats, employing 28 men.

Timaru.—The report states the past season has been a very poor one on the local fishing-grounds. Fish have been scarce, and the majority of the fishing-boats have been out of commission most of the time. The number of boats licensed for the year is 20, including 1 steam-trawler and 8 oil-engined trawlers, and the number of men engaged in fishing is about 30, with 8 persons employed in other ways connected with the industry. The weight of fish brought in during the year is given as 1,600 cwt.; value, £4,000.

Oamaru.—Compared with last year this one shows an increase in the total quantity of fish brought in. Nine boats have been engaged in fishing, employing 18 men. The quantity of fish brought in was 3,367 cwt.; value, £3,687.

Moeraki.—There were 24 boats engaged in fishing, employing 36 men. The quantity of fish caught on the local grounds during the year was 3,560 cwt.; value, £4,765.

Otago District.—The Inspector reports a very successful year for all fishermen as regards the supply of the usual market fish obtained on the local grounds. The weather conditions have been more favourable during the greater part of the year than for several seasons, and, on the whole, fishermen have had a good year. Several of the fishermen have purchased larger boats, which enables them to go to sea and fish with much less loss of time than previously. On account of the low price obtained at the Dunedin wholesale market several of the Port Chalmers fishermen are taking their fish direct to Dunedin and selling them to the public at the wharf-landing, and one other boat sells to the public

in the same way at Port Chalmers. The number of boats licensed and engaged in fishing was 86, including 2 steam-trawlers and 7 oil-engined launches engaged in trawling, employing 146 fishermen. There are, besides, 90 other persons employed otherwise in connection with the fishing industry. The estimated total weight of fish brought in during the year is 45,220 cwt.; value, about £49,942.

Invercargill.—The total weight of the usual market fish brought in from the local fishing-grounds for the year was 1,320 cwt.; wholesale value, £2,866; and the number of boats engaged in fishing was 9, employing 20 fishermen.

Bluff.—The report supplied by the local Inspector states that oysters on the Foveaux Strait beds are plentiful and in excellent condition. Fifty-four fishing-vessels, comprising steam-trawlers, auxiliary cutters, and launches, were engaged in the industry during the year, employing about 115 men. The quantity of all kinds of fish brought in was 5,941 cwt., wholesale value £12,820; and the oyster-catch for the season amounted to 26,703 sacks, wholesale value £16,689.

Stewart Island.—The report from Stewart Island shows that during the year 28 boats were engaged in fishing, employing 65 fishermen, and 8 others employed otherwise in connection with the industry. Blue cod, groper, trumpeter, butterfish, and moki were, as usual, the principal fish caught. The catch for the year was 4,645 cwt., valued at £6,988.

Chatham Islands.—There were 9 boats licensed and fishing during the year, employing 18 fishermen, and 8 others employed in connection with the fish-freezers, cleaning-sheds, &c. The quantity of fish caught was—blue cod, 1,531½ cwt.; and groper, 206½ cwt.: value, £1,549 15s.

RETURNS.

The following returns are appended herewith, viz. :—

- (1.) The quantity of oysters taken from the various beds, the quantity disposed of in the Dominion, the quantity exported, and total value.
- (2.) The total quantity and value of fish imported into and exported from New Zealand during the year ended 31st December, 1920.
- (3.) The number of whales taken at each whaling-station, the species taken, and the quantity and value of oil, bonedust, or fertilizer produced.
- (4.) The number of steam-trawlers, oil-engine trawlers, and other vessels employed in net and line fishing, with the number of fishermen employed, and approximately the total number of persons engaged in the fishing industry at each port, for the year ended 31st March, 1921.
- (5.) The various kinds of fish caught, and approximately the total quantities and value of fish landed at the different fishing-ports, for the year ended 31st March, 1921.

I have, &c.,

L. F. AYSON,

The Secretary, Marine Department, Wellington.

Chief Inspector of Fisheries.

OYSTERS.

Locality.	Disposed of in Dominion.	Exported.	Total Number.	Total Value.
	Sacks.	Sacks.	Sacks.	£ s. d.
Foveaux Strait	24,848	1,855	26,703	16,689 0 0
<i>Rock-oysters.</i>				
Bay of Islands	3,058	...	6,797	5,968 9 0
Hauraki Gulf	2,948			
Great Barrier	300			
Kaipara	491			
Total ... ..	...	...	...	22,657 9 0

WHALING.

Whaling-station.	Number of Whales taken.	Species.	Yield of Oil.	Quantity of Bone-dust or Fertilizer produced.	Total Value.
			Tons.		£
Whangamumu... ..	44	Humpback ...	200	40 tons bonedust ...	9,600
Marlborough Sounds and Cook Strait	43	" ...	218	"	7,442
Kaikoura	20	" ...	60	100 gals. spermaceti	2,265
	1	Sperm ...	3		
Totals	108	....	481	...	19,307

RETURN SHOWING THE TOTAL QUANTITY AND VALUE OF FISH IMPORTED INTO AND EXPORTED FROM
NEW ZEALAND DURING THE YEAR ENDED 31ST DECEMBER, 1920.

Fish imported.

	Quantity.	Value.
Anchovies, salted (in bulk)	5 cwt.	£57
Oysters, fresh	Nil	Nil.
Other fish, fresh or frozen	Nil	Nil.
Fish, preserved in tins	4,755,137 lb.	£251,398
Fish, smoked, dried, pickled, and salted	2,176 cwt.	£8,227

Fish exported.

	New Zealand Produce.		Not New Zealand Produce.	
	Quantity.	Value.	Quantity.	Value.
Anchovies, salted (in bulk)	Nil	Nil	Nil	Nil.
Oysters, fresh	121,234 doz.	£1,323	Nil	Nil.
Other fish, fresh or frozen	6,375 cwt.	£14,032	Nil	Nil.
Fish, preserved in tins	133,472 lb.	£12,891	313,611 lb.	£11,785
Fish, smoked, dried, pickled, and salted	282 cwt.	£599	78 cwt.	£253

TABLE SHOWING THE NUMBER OF STEAM-TRAWLERS, OIL-ENGINE TRAWLERS, AND OTHER VESSELS
EMPLOYED IN LINE AND NET FISHING, WITH THE NUMBER OF FISHERMEN EMPLOYED, AND
APPROXIMATELY THE TOTAL NUMBER OF PERSONS ENGAGED IN THE FISHING INDUSTRY AT EACH
PORT FOR THE YEAR ENDED 31ST MARCH, 1921.

(Compiled from the returns given in the district Inspectors' reports.)

Name of Port.	Steam-trawlers.	Oil-engine Trawlers.	Line- and Net-fishing Vessels.	Number of Fishermen employed.	Persons other than Fishermen employed.	Total Number of Persons employed.
Whangaroa .. ..	..	..	12	7	..	7
Hokianga .. ..	..	..	14	23	..	23
Russell .. ..	..	..	51	120	60	180
Whangarei .. ..	..	..	12	17	..	17
Kaipara .. ..	..	..	36	57	10	67
Auckland	6	..	165	134	70	204
Thames .. ..	..	..	32	70	25	95
Tauranga .. ..	..	..	24	30	..	30
Gisborne	3	..	24	50	9	59
Napier	10	..	60	141	4	145
New Plymouth .. ..	..	..	34	60	10	70
Wanganui .. ..	..	..	10	9	2	11
Foxton .. ..	..	1	25	40	1	41
Wellington	1	..	62	143	135	278
Picton	1	..	26	35	6	41
Blenheim .. ..	..	..	12	18	4	22
Nelson .. ..	..	..	62	15	..	15
Westport	1	..	9	10	..	10
Greymouth .. ..	..	..	11	16	6	22
Hokitika .. ..	..	..	1	2	..	2
Kaikoura .. ..	..	..	23	47	3	50
Rangiora .. ..	..	..	18	21	..	21
Kaiapoi .. ..	..	..	24	24	..	24
Southbridge .. ..	..	..	23	35	..	35
Lyttelton and Sumner	1	6	20	30	4	34
Akaroa .. ..	..	..	14	28	..	28
Timaru	1	8	11	30	8	38
Oamaru .. ..	..	..	19	18	..	18
Moeraki .. ..	..	..	24	36	..	36
Otago District	2	7	77	146	90	236
Invercargill .. ..	..	..	19	20	..	20
Bluff .. ..	..	..	54	..	..	115
Stewart Island .. ..	..	..	28	65	8	73
Chatham Islands .. ..	..	..	9	18	8	26
Totals	26	22	1,025	1,515	463	2,093

TABLE SHOWING THE VARIOUS KINDS OF FISH CAUGHT AND APPROXIMATELY THE TOTAL QUANTITIES AND VALUE OF FISH LANDED AT THE DIFFERENT FISHING-PORTS FOR THE YEAR ENDED 31ST MARCH, 1921.

(Compiled from the figures given in the district Inspectors' reports for the year.)

Name of Port.	Kinds of Fish caught.	Quantity.	Total Value.	
			£	s. d.
Whangaroa ..	Hapuku, kahawai, snapper, kingfish, mullet, flounder, and crayfish	300 cwt.	750	0 0
Hokianga ..	Snapper, mullet, flounder, and kahawai	No return supplied.		
Russell ..	Mullet, snapper, tarakihi, trevally, kahawai, flounder, hapuku, kingfish, and crayfish	18,000 cwt.	8,500	0 0
	Whale-oil	200 tons	} 9,600	0 0
	Bonedust	40 tons		
	Oysters	3,058 sacks	*3,029	16 0
Kaipara ..	Snapper, mullet, flounder, gurnard, and kahawai	9,140 cwt.	11,095	0 0
Whangarei ..	Hapuku, flounder, snapper, mullet, and trevally	4,767 cwt.	8,040	0 0
Auckland ..	Snapper, flounder, sole, mullet, hapuku, tarakihi, kahawai, kingfish, and crayfish	68,560 cwt.	84,763	0 0
	Oysters	3,739 sacks	*3,739	0 0
Thames ..	Flounder, snapper, trevally, tarakihi, hapuku, gurnard ..	8,200 cwt.	28,719	0 0
Tauranga ..	Snapper, hapuku, flounder, herring, mullet, garfish, trevally, barracouta, kahawai, and gurnard	1,000 cwt.	2,800	0 0
Gisborne ..	Flounder, sole, gurnard, snapper, tarakihi, hapuku, moki, and red cod	1,949 cwt.	5,103	0 0
Napier ..	Snapper, gurnard, flounder, sole, butterfish, moki, ling, barracouta, warehou, kingfish, crayfish, and whitebait	24,830 cwt.	29,850	0 0
	Crayfish	500 sacks	750	0 0
	Whitebait	8,000 lb.	800	0 0
New Plymouth ..	Snapper, blue cod, flounder, hapuku, ling, gurnard, herring, kahawai, and crayfish	900 cwt.	1,200	0 0
Wanganui ..	Blue cod, hapuku, flounder, snapper, kahawai, mullet, barracouta, and gurnard	190 cwt.	458	0 0
Foxton ..	Flounder, snapper, kahawai, hapuku, mullet, and whitebait ..	300 cwt.	1,200	0 0
Wellington ..	Flounder, sole, snapper, hapuku, hake, warehou, moki, tarakihi, gurnard, butterfish, blue cod, red cod, kahawai, and crayfish	17,250 cwt.	24,230	0 0
Picton ..	Blue cod, red cod, hapuku, butterfish, moki, flounder, sole, herring, garfish, mackerel, and crayfish	2,000 cwt.	2,750	0 0
	Whale-oil	218 tons	7,242	0 0
	Bonedust	40 tons	200	0 0
Blenheim ..	Blue cod, flounder, sole, snapper, tarakihi, red cod, hapuku, hake, butterfish, kahawai, and whitebait	800 cwt.	2,240	0 0
Nelson ..	Flounder, sole, hake, hapuku, snapper, butterfish, blue cod, red cod, gurnard, moki, kahawai, and whitebait	1,095 cwt.	1,271	0 0
Westport ..	Whitebait, flounder, sole, hapuku, snapper, kahawai, herring, gurnard, red cod, and crayfish	1,199½ cwt.	2,002	0 0
Greymouth ..	Whitebait, snapper, red cod, hapuku, and flounder	5 cwt.	119	0 0
Hokitika ..	Whitebait, herring, red cod, flounder, and snapper	77½ cwt.	147	0 0
	Whitebait	980 lb.	49	0 0
Kaikoura ..	Trumpeter, groper, ling, kingfish, blue cod, red cod, butterfish, and crayfish	6,265 cwt.	12,308	0 0
	Whale-oil	63 tons	2,220	0 0
	Spermaceti	100 gal.	45	0 0
Rangiora ..	Whitebait, flounder, and herring	34 cwt.	295	0 0
Kaipoi ..	Whitebait, flounder, herring, and red cod	240 cwt.	†2,000	0 0
New Brighton ..	Whitebait and flounder	7 cwt.	75	0 0
Southbridge ..	Flounder, herring, and red cod	2,220 cwt.	4,979	0 0
Lyttelton and Sumner	Flounder, sole, groper, tarakihi, kingfish, moki, butterfish, ling, gurnard	6,643 cwt.	13,942	0 0
Akaroa ..	Blue cod, red cod, moki, trevally, groper, butterfish, flounder, sole, ling, tarakihi, barracouta, and crayfish	4,740 cwt.	6,370	0 0
Timaru ..	Groper, flounder, sole, moki, tarakihi, ling, gurnard, red cod, kingfish, and barracouta	1,600 cwt.	4,000	0 0
Oamaru ..	Groper, blue cod, red cod, moki, barracouta, ling, tarakihi, warehou, and gurnard	3,367 cwt.	3,687	0 0
Moeraki ..	Groper, red cod, blue cod, moki, barracouta, ling, warehou, and gurnard	3,560 cwt.	4,765	0 0
Dunedin and Port Chalmers	Sole, flounder, brill, skate, groper, kingfish, ling, tarakihi, moki, blue cod, red cod, barracouta, trumpeter, trevally, garfish, gurnard, and kahawai	45,220 cwt.	49,942	0 0
Invercargill ..	Groper, blue cod, red cod, flounder, sole, ling, barracouta, moki, trevally, and crayfish	1,320 cwt.	2,866	0 0
Bluff ..	Blue cod, red cod, flounder, sole, groper, trumpeter, trevally, and moki	5,941 cwt.	12,820	0 0
	Oysters	26,703 sacks	16,689	0 0
Stewart Island ..	Blue cod, groper, butterfish, trumpeter, and moki	4,645 cwt.	6,988	0 0
Chatham Islands..	Blue cod and hapuku	1,738 cwt.	1,549	15 0

* Wholesale value.

† Mostly whitebait.

The MARINE ENGINEER to the SECRETARY, MARINE DEPARTMENT.

SIR,—

Wellington, 23rd August, 1921.

I have the honour to report as follows upon the various works dealt with during the year ended 31st March, 1921 :—

Cape Maria van Diemen.—The erection of two new dwellings is in hand, and satisfactory progress is being made despite the isolation and the great difficulties to be surmounted in landing materials and supplies.

Kaipara Heads.—Two lightkeepers' dwellings are in course of erection.

East Cape Lighthouse.—It is proposed to transfer the present lighthouse to the mainland, owing to threatened danger by erosion to the present site. Two cottages, oil-stores, workshops, &c., will be erected as usual, and two landings provided, and roads from same to the foot of hill on which light will be established. A tramway with hauling-engine will give access to the site of the tower. Material is being purchased and assembled in readiness for transport to the site, and a commencement with the work will be made at an early date.

Cape Campbell.—Two new dwellings are to be erected at this station, and the necessary material is now being obtained.

Jackson's Head.—The tower for this lighthouse has been manufactured, and will be placed in position as soon as possible.

Kaikoura Boat-harbour Improvement.—Plans submitted by the local body for improvement of this boat-harbour have been approved, and authority for £1,000 is being issued. The erection of a boat-slip is in hand.

General.

The proposals submitted for approval have been dealt with as below :—

Wharves and Jetties.—Little Wanganui—minor repairs effected; New Brighton—wharf plans approved; Lake Rotorua—erection of jetties approved; Jackson's Bay—jetty plans approved; Turua—erection of wharf and shed approved; Queenstown—construction of wharf approved; Lake Wakatipu—jetty authorized; Tauranga—erection of two jetties approved; Whananaki—replacement old bridge approved; Takapuna—repairs to wharf approved.

Foreshore Leases.—Golden Bay—boat-shed site; Balena Bay (Wellington)—extension of boat-shed; Harold Bay—boat-slip site; Omanaia River—lease approved; Rawene—lease approved; Sumner—landing-stage approved; Cambridge—landing-stage authorized; Thule Bay (Stewart Island)—boat-shed site approved; Momorangi Bay—lease approved.

Reclamations.—Tamaki River—boat-shed site approved; Tauranga—Harbour Board authorized to reclaim 113 acres.

Harbour-works.—Waikokopu—proposals for construction of inner harbour approved; Whakatane—proposals to combat erosion approved; Opunake—construction of mole conditionally approved; Tauranga—dredging of channel approved; Takaka training-walls—so far financial considerations have prevented the Takaka County Council from proceeding with this work, which the Government is subsidizing; Bulwer Wharf—plans of this proposed structure have been prepared.

F. W. FURKERT, M.Inst.C.E., A.M.I.Mech.E.,
Marine Engineer.

RETURN SHOWING THE TOTAL EXPENDITURE OF THE MARINE AND INSPECTION OF MACHINERY
DEPARTMENT DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921—*continued.*

	Details.			Totals.		
	£	s.	d.	£	s.	d.
Inspection of machinery and survey of ships:—						
Salaries	19,110	5	7			
Advertising, books, periodicals, &c.	63	7	7			
Collection of inspection fees	150	0	0			
Rent, cleaning offices, &c.	108	11	0			
Office fittings and requisites	254	8	10			
Telephones	212	10	7			
Travelling allowances and expenses	6,348	8	2			
Expenses of Chief Inspector in Australia	25	0	0			
Fuel, light, power, and water	1	14	9			
Contingencies	30	4	3			
				26,304	10	9
Protection of fish and oysters:—						
Salaries	2,573	4	2			
Benzine, oil, stores, &c.	559	13	5			
Casual labour	205	14	11			
Hakataramea Salmon-station Hatchery	95	8	0			
Erection of stop-banks and groynes	141	11	3			
Grant for maintenance, Portobello	500	0	0			
Picking and sale of oysters	5,494	18	2			
Planting of oysters	870	11	6			
Re-erection of salmon-hatchery shed	456	8	2			
Stocking rivers with salmon	120	2	0			
Travelling allowances and expenses	478	9	0			
Collection and distribution of trout ova	25	15	4			
Launch for Bay of Islands	6	4	6			
Purchase of nets and gear for sale	3,006	10	11			
Reward to Inspector J. P. Bennett	30	0	0			
Contingencies	79	5	7			
				14,643	16	11
Government steamers:—						
Salaries	1,987	0	5			
Training-ship "Amokura"	8,737	12	8			
S.s. "Hinemoa"	16,412	16	4			
S.s. "Tutanekai"	21,446	8	9			
New training-ship: Cost of bringing from England	531	10	7			
				49,115	8	9
Miscellaneous:—						
Administration, Shipping and Seamen Act	357	16	9			
Checking overcrowding on steamers	543	11	7			
Contribution towards New Zealand Sailors' room, Auckland	17	17	0			
Expenses connected with examinations	80	14	1			
Extra clerical assistance	1,322	8	8			
Extra clerical assistance: Cost-of-living rises	62	8	10			
Fog-signals, cartridges, &c.	604	1	11			
Fuel, light, power, and water	43	6	6			
Audit fees	75	0	0			
Office fittings and requisites	2,013	1	3			
Postage, telegrams, &c.	1,223	10	6			
Preparation of tide-tables	550	0	0			
Relief of distressed seamen	116	16	4			
Relief of distressed seamen in United Kingdom	99	6	4			
Charts, &c., and advertising	94	18	4			
Superannuation of R. C. Hunter	90	0	0			
Survey of unseaworthy ships	9	9	0			
Telephones	175	10	1			
Travelling allowances and expenses	274	9	8			
Contingencies	47	12	9			
Prosecutions	15	5	1			
Contribution to Mokau Harbour Board (salary)	6	13	4			
Grant to Mokau Harbour Board	75	0	0			
Rent of High Commissioner's Office, London	100	0	0			
Carriage and freight	249	6	3			
Piako River leading lights	81	16	0			
Allowances to officers performing higher duties	102	3	7			
Government advance in hands of officer committed to mental hospital	20	17	10			
Compensation to A. Peterson	39	18	0			
Cost of trip of "Tutanekai" to McQuarrie Island	14	17	10			
Cost-of-living bonus	1,378	3	5			
Expenses of Inland Waterways Commission	9	8	11			
Clearing willows from Mongonui and Wairau Rivers, Kaipara	87	4	2			
Repairing wharf, Okuru	16	2	10			
Nautical tables	300	0	0			
"New Zealand Nautical Almanac"	1,162	13	0			
Relief of crew, schooner "Awanui"	629	12	9			
Removal of snags, Karamea River	52	1	5			
Removal of willows, Waiotu Stream	49	10	0			
Renewal of wharves	341	18	7			
Rent, examination-room, Wellington	386	2	7			
Repairs to beacon, Jackson's Head	152	13	0			
Repairing Kenepuru Canal	11	7	11			
Motueka Harbour	23	18	6			
Repairs to Ti Point wharf	142	2	7			
Repairing and extending wharf, French Pass	917	0	0			
Repairs to Clutha River Board's dredge	1,070	0	0			
Typewriters, purchase and repairs	3	7	0			
War medals and ribands	10	6	2			
				15,241	10	4
Grand total				167,937	0	9

RETURN SHOWING TOTAL COST OF MAINTENANCE OF THE NEW ZEALAND COASTAL LIGHTHOUSES
DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Name of Lighthouse.	Salaries.	Oil consumed.		Stores and Contingencies.	Totals.
		Gallons.	Value.		
	£ s. d.		£ s. d.	£ s. d.	£ s. d.
Cape Maria van Diemen	419 2 8	834	104 5 0	(a)2,226 5 1	2,749 12 9
Cape Brett	652 11 0	701	87 12 6	(b)502 8 7	1,242 12 1
Mokohinou	649 7 0	739	92 7 6	113 7 2	855 1 8
Tiritiri	437 3 10	629	78 12 6	33 0 2	548 16 6
Cuvier Island	608 19 8	588	73 10 0	68 8 7	750 18 3
East Cape	632 7 8	771	96 7 6	(c)205 16 8	934 11 10
Portland Island	646 16 1	789	98 12 6	(d)194 2 6	939 11 1
Castle Point	665 14 4	677	84 12 6	62 15 2	813 2 0
Cape Palliser	487 15 9	707	88 7 6	64 2 7	640 5 10
Pencarrow Head	453 4 4	707	88 7 6	245 7 1	786 18 11
Cape Egmont	457 10 0	877	109 12 6	147 19 8	715 2 2
Manukau Head	487 10 0	686	85 15 0	(e)88 19 4	662 4 4
Kaipara Head	472 0 0	973	121 12 6	(f)422 15 8	1,016 8 2
Brothers	753 2 0	646	80 15 0	(g)329 8 11	1,163 5 11
French Pass	271 5 0	188	27 5 10	(g)110 6 10	408 17 8
Stephen Island	501 6 6	876	109 10 0	(h)848 15 6	1,459 12 0
Tory Channel	58 6 8	187	31 3 4	..	89 10 0
Cape Campbell	528 18 8	617	77 2 6	(i)147 17 0	753 18 2
Godley Head	471 8 6	714	89 5 0	160 10 4	721 3 10
Akaroa Head	464 3 4	628	78 10 0	38 4 10	580 18 2
Jack's Point	268 15 0	322	40 5 0	96 9 3	405 9 3
Moeraki	462 18 4	658	82 5 0	77 2 9	622 6 1
Taiaroa Head	508 15 0	619	77 7 6	113 5 10	699 8 4
Cape Saunders	452 10 0	652	81 10 0	(g)150 12 6	684 12 6
Nugget Point	660 14 4	828	103 10 0	(j)159 15 3	923 19 7
Waipapa Point	473 10 7	784	96 15 0	(g)190 16 11	761 2 6
Dog Island	632 11 4	515	85 16 8	121 18 4	840 6 4
Centre Island	625 3 8	751	93 17 6	(k,g)184 0 9	903 1 11
Puysegur Point	630 5 4	704	88 0 0	(l)152 19 6	871 4 10
Cape Foulwind	422 9 5	728	91 0 0	(g)179 12 8	693 2 1
Kahurangi Point	679 15 7	739	92 7 6	(m)228 4 11	1,000 8 0
Farewell Spit	668 2 0	672	84 0 0	(n)264 12 8	1,016 14 8
Somes Island	349 5 10	819	136 10 0	230 9 11	716 5 9
Hokitika	25 0 0	Gas	13 16 0	0 16 0	39 12 0
Totals	16,978 9 5	..	2,870 6 10	8,161 8 11	28,010 5 2

(a) Includes £1,672 17s. 4d., cost of erection of new dwellings. (b) Includes £306 for new oil-engine. (c) Includes £52 6s. 7d. for goods damaged. (d) Includes £28, carriage of mails. (e) Includes £49 5s., sledging stores, &c. (f) Includes £36, signalling allowance. (g) Includes wages of temporary keepers. (h) Includes £144 2s. 5d., for board for workmen and cement. (i) Includes £26 5s., refund hospital expenses. (j) Includes £30 for new horse. (k) Includes £41 10s., carriage of mails. (l) Includes £58 5s. for new boathouse and £25 for carriage of stores. (m) Includes £163 9s. 6d. for cartage and carriage of mails. (n) Includes £94 16s. 3d. for fodder.

RETURN SHOWING NUMBER OF FISHING-BOATS REGISTERED AND LICENSED AT EACH PORT DURING
THE YEAR ENDED 31ST DECEMBER, 1920.

Port.	Number registered.	Number licensed.	Port.	Number registered.	Number licensed.
Auckland	216	216	Brought forward	1,234	1,234
Bluff and Invercargill	81	81	Oamaru	32	32
Chatham Islands	7	7	Patea	4	4
Dunedin	86	86	Pictou	35	35
Gisborne	17	17	Russell	52	52
Greymouth	18	18	Tauranga	27	27
Hokianga	16	16	Thames	45	45
Hokitika .. ..	..	..	Timaru	17	17
Kaipara	91	91	Wairau	13	13
Lyttelton	509	509	Wanganui	24	24
Napier	79	79	Wellington	103	103
Nelson	81	81	Westport	10	10
New Plymouth	33	33			
Carried forward	1,234	1,234	Totals	1,566	1,566

RETURN SHOWING THE AMOUNT OF LIGHT DUES COLLECTED DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Port.	Amount collected.
	£ s. d.
Auckland	19,821 6 4
Onehunga	88 9 7
Thames	65 13 7
Coromandel	6 3 2
Whitianga	9 9 5
Whangarei	410 0 5
Russell	37 13 5
Whangaroa	10 9 2
Hokianga	18 14 8
Whakatane	126 3 2
Whangape	1 2 6
Mangonui	0 1 0
Dunedin	1,724 10 7
Lyttelton	4,606 14 5
Wellington	12,046 2 1
Greymouth	866 12 4
Gisborne	215 2 5
Hokitika	0 14 7
Invercargill and Bluff	1,095 1 4
Kaipara	27 0 4
Napier	1,000 19 9
Nelson	221 14 11
New Plymouth	662 19 4
Waitara	96 17 9
Oamaru	80 15 6
Patea	18 17 6
Tauranga	73 0 3
Timaru	656 13 7
Wairau	7 10 1
Picton	307 14 9
Wanganui	446 1 11
Westport	230 11 1
Riverton	1 1 0
Total	44,982 1 11

RETURN SHOWING THE FEES, ETC., RECEIVED UNDER THE SHIPPING AND SEAMEN ACTS, THE MERCHANT SHIPPING ACT, THE HARBOURS ACTS, THE FISHERIES ACTS, THE INSPECTION OF MACHINERY ACTS, AND THE TRAMWAYS ACTS DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Nature of Receipts.	Amount.
	£ s. d.
Shipping and Seamen Acts :—	
Fees for engagement and discharge of seamen, and sale of forms	4,500 6 8
Fees for survey of steamers and sailing-vessels	2,949 18 0
Fees for measurement of ships	41 1 0
Fees for examination of masters, mates, and engineers	490 9 6
Light dues	44,982 1 11
Sundry receipts	1,247 3 11
Merchant Shipping Act	121 8 10
Harbours Acts :—	
Pilotage, port charges, &c.	1,002 16 3
Foreshore-rents and sundry receipts	1,204 11 8
Fisheries Acts :—	
Sale of oysters	6,923 7 0
Sundry receipts	482 15 0
Inspection of Machinery Acts :—	
Fees for inspection of boilers and machinery	14,056 17 6
Fees for examination of engine-drivers	605 10 0
Tramways Acts :—	
Fees for examination of electric-tram drivers	167 0 0
Total	78,775 7 3

RETURN SHOWING THE COST OF ERECTION OF THE NEW ZEALAND COASTAL LIGHTHOUSES.

Name of Lighthouse.	Cost of Erection.	Name of Lighthouse.	Cost of Erection.
	£ s. d.		£ s. d.
Pencarrow Head	6,422 0 4	Mokohinou	8,186 5 0
Nelson	2,824 8 9	Waipapapa Point	5,969 18 11
Tiritiri	5,747 7 2	Ponui Passage† .. .. .	.. .. .
Mana Island*	5,513 0 1	Kaipara Head	5,660 8 0
Taiaroa Head	4,923 14 11	French Pass	1,427 17 5
Godley Head	4,705 16 4	Cuvier Island	7,406 16 11
Dog Island	10,480 12 8	Stephen Island	9,349 9 11
Farewell Spit	6,139 11 8	Cape Palliser	6,243 16 1
Nugget Point	6,597 3 7	East Cape	7,594 8 8
Cape Campbell	5,619 2 6	Kahurangi Point	9,528 1 1
Manukau Head	4,975 2 4	Jack's Point	1,204 10 9
Cape Foulwind	6,955 9 1	Cape Brett	11,237 3 5
Brothers	6,241 0 0	Castle Point	9,703 16 10
Portland Island	6,554 14 5	Chicken Island	1,149 3 4
Moeraki	4,288 13 2	Channel Islet	1,227 7 8
Centre Island	5,785 19 0	Karori Rock	4,570 6 1
Puysegur Point	9,958 19 5	Okuri Point	448 18 0
Cape Maria van Diemen	7,028 14 8	Cost of telegraph-cable to Tiritiri	1,085 19 6
Akaroa Head	7,150 6 5	Miscellaneous and unallocated	1,322 2 2
Cape Saunders	6,066 6 3		
Cape Egmont†	3,353 17 11	Total	£220,648 10 5

* Light discontinued; moved to Cape Egmont. † Cost of iron tower, lantern, and apparatus, which were removed from Mana Island, is not included in this. ‡ Built by Provincial Government of Auckland; cost not known in Marine Department.

RETURN SHOWING THE NUMBER OF SEAMEN ENGAGED AND DISCHARGED IN THE FOREIGN AND INTERCOLONIAL TRADE, THE HOME TRADE, AND WITHIN RESTRICTED LIMITS
RESPECTIVELY, TOGETHER WITH THE AMOUNT OF FEES RECEIVED FOR THE SAME, FOR THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Port.	Engagements and Discharges in Foreign and Intercolonial Trade.			Engagements and Discharges in Home Trade.			Engagements and Discharges in Restricted Limits.			Total Engagements.		Total Discharges.		Grand Totals.	
	Number of Seamen engaged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Number of Seamen engaged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Number of Seamen.	Fees received. £ s. d.	Number of Seamen.	Fees received. £ s. d.	Number of Seamen.
Auckland	3,543	293 15 6	3,667	295 16 6	3,568	264 7 6	615	42 3 0	611	42 8 0	7,869	608 9 6	7,846	602 12 0	15,715
Dunedin and Port Chalmers	1,565	125 0 6	1,545	125 11 0	584	44 4 6	..	..	..	..	2,141	164 15 6	2,129	169 15 6	4,270
Greymouth	74	6 0 6	81	6 7 6	85	6 3 6	..	..	..	..	198	15 8 0	166	12 11 0	364
Hokitika	5	0 8 6	3	0 5 0	7	0 7 0	..	..	..	..	24	1 10 6	10	0 12 0	34
Hokitika	..	..	..	..	17	0 11 0	..	..	..	..	59	0 7 0	17	0 11 0	27
Invercargill	57	4 4 6	49	3 10 6	1	0 1 6	..	..	..	..	4	7 6 6	50	3 12 0	109
Kaipara	25	1 17 6	25	1 19 6	42	3 13 6	..	..	..	..	63	5 1 0	67	5 13 0	130
Lyttelton	683	57 7 6	703	59 0 6	1,764	133 16 0	..	..	..	..	2,582	198 6 6	2,467	192 16 6	5,049
Mangonui	..	..	..	..	2	0 3 0	..	..	..	..	..	..	2	0 3 0	2
Napier	14	1 4 0	13	1 2 0	346	21 7 6	53	4 4 0	53	4 4 0	378	25 0 0	412	26 13 6	790
Nelson	..	..	..	..	501	31 12 6	..	..	..	..	519	32 17 6	501	31 12 6	1,020
New Plymouth	53	4 0 6	55	4 4 6	35	2 15 0	..	..	..	..	82	6 6 6	90	6 19 6	172
Oamaru	52	5 1 6	51	4 19 6	11	0 19 0	..	..	..	..	62	5 18 6	62	5 18 6	124
Onehunga	8	0 12 0	41	2 18 6	493	34 16 6	..	..	..	..	575	40 15 0	534	37 15 0	1,109
Patea	..	..	..	..	16	0 17 0	..	..	..	..	9	0 13 6	16	0 17 0	25
Pictou	7	0 10 6	4	0 6 0	17	1 8 0	..	..	..	..	19	1 9 6	21	1 14 0	40
Poverty Bay	10	0 15 6	51	3 16 6	52	4 1 0	..	..	..	..	53	4 3 6	103	7 17 6	156
Russell	11	1 0 0	6	0 11 6	1	0 1 6	..	..	..	..	11	1 0 0	7	0 13 0	18
Tauranga	..	..	..	..	12	0 18 0	..	..	..	..	12	0 18 0	12	0 18 0	24
Thames	..	..	..	..	1	0 1 6	..	..	..	..	..	..	1	0 1 6	1
Timaru	27	2 4 0	26	2 3 6	47	4 1 6	..	..	..	..	81	6 15 0	73	6 5 0	154
Wairau	..	..	..	..	17	1 0 6	..	..	..	..	30	2 4 6	17	1 0 6	47
Wanganui	12	1 1 0	19	1 14 3	115	6 1 0	..	..	..	..	110	6 16 6	134	7 15 3	244
Wellington	3,968	296 13 0	3,823	281 5 0	4,245	315 18 6	..	..	..	..	8,114	604 5 6	8,068	597 3 6	16,182
Westport	41	3 2 6	43	2 17 6	48	2 10 6	..	..	..	..	120	8 7 0	91	5 8 0	211
Whangape	..	..	..	..	4	0 7 0	..	..	..	..	1	0 2 0	4	0 7 0	5
Whangarei	2	0 4 0	3	0 5 0	1	0 1 6	..	..	..	..	3	0 6 0	4	0 6 6	7
Totals	10,157	805 3 0	10,208	798 14 3	12,032	882 5 6	668	46 7 0	664	46 12 0	23,125	1,746 4 0	22,904	1,727 11 9	46,019
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15

LIST OF BOYS WHO HAVE SERVED ON THE TRAINING-SHIP "AMOKURA" DURING THE YEAR ENDED
31ST MARCH, 1921.

Name.	Date of Joining.	Date of Discharge.	Occupation taken up on Discharge.
Hughes, H. M.	26/9/18	4/4/20	Joined s.s. "Hinemoa" as O.S.
Hemp, H. J. McL.	26/9/18	19/4/20	" s.s. "Kennedy" as O.S.
McKenzie, J. D.	26/9/18	31/3/20	" s.s. "Mapourika" as O.S.
Morris, S. O.	26/9/18	1/4/20	" s.s. Kokiri" as O.S.
Lever, H.	8/10/18	22/4/20	" s.s. "Kowhai" as O.S.
Barclay, A.	29/1/19	17/8/20	" s.s. "Kahu" as O.S.
Benseman, R. C.	29/1/19	3/9/20	" schooner "Isabel" as boy.
Chenery, H. M.	29/1/19	17/8/20	" s.s. "Kennedy" as O.S.
Hamlin, St. G. S.	29/1/19	17/8/20	" s.s. "Kittawa" as O.S.
Herbert, A. V.	29/1/19	16/8/20	" brigantine "Aratapu" as O.S.
Holmes, H. M.	29/1/19	6/8/20	" s.s. "Marama" as O.S.
Perano, C. L.	29/1/19	17/8/20	" s.s. "Mapourika" as O.S.
Poole, K. N.	29/1/19	19/4/20	Discharged as unsuitable.
Sole, O. P.	29/1/19	3/9/20	Joined schooner "Isabel" as boy.
White, F. C.	29/1/19	18/8/20	" schooner "Lily" as O.S.
Williams, R. W. H.	29/1/19	25/8/20	" s.s. "Karamu" as O.S.
Wright, A. G.	31/3/19	25/9/20	" s.s. "Rosamond" as O.S.
Anderson, J. R.	2/4/19	28/9/20	" s.s. "Kamo" as O.S.
Doorey, H. S.	1/4/19	12/10/20	" s.s. "Moana" as O.S.
Harrison, R. T.	3/4/19	7/10/20	" s.s. "Kamona" as O.S.
Jenkins, A. E.	2/4/19	23/10/20	" s.s. "Karamu" as boy.
Long, T. J.	1/4/19	12/10/20	" s.s. "Kokiri" as O.S.
White, R. T.	2/4/19	25/9/20	" s.s. "Rosamond" as O.S.
Mangin, W. H. J.	13/5/19	1/7/20	Discharged (sickness).
Gould, W. P.	13/5/19	—/1/21	Joined s.s. "Te Anau" as O.S.
Helling, T. R.	13/5/19	13/1/21	" s.s. "Te Anau" as O.S.
Callaghan, E. R.	13/5/19	17/1/21	" s.s. "Te Anau" as O.S.
Bloomfield, F. A. M.	13/5/19	10/1/21	" s.s. "Rosamond" as O.S.
Fergusson, A. S.	27/8/19	..	Still on board.
Hagenson, C. E.	28/8/19	..	"
McNab, N. T.	28/8/19	..	"
Scott, A.	30/8/19	..	"
Henderson, W. W.	27/8/19	..	"
Langdon, H. F.	30/8/19	..	"
Stanley, B. L.	30/8/19	..	"
King, W. R.	28/8/19	23/2/21	Joined s.s. "Kittawa" as O.S.
Bell, A. G.	1/10/19	..	Still on board.
Miller, I. M.	1/10/19	..	"
McArthur, S. R.	1/10/19	..	"
Smithson, J. E.	1/10/19	..	"
Walker, E.	7/10/19	..	"
Amor, E. J.	22/1/20	..	"
Beddie, M. F.	22/1/20	16/9/20	Dismissed for misconduct.
Brough, F. A.	22/1/20	..	Still on board.
Hawkins, K. T.	22/1/20	..	"
Healy, C. O.	22/1/20	..	"
Murray, K. M.	22/1/20	21/8/20	Returned home (unfit).
Hills, L. C.	22/1/20	..	Still on board.
McGillivray, D. H.	22/1/20	..	"
Scott, D. M.	22/1/20	..	"
Searby, C. B.	22/1/20	..	"
Smith, J. R.	22/1/20	..	"
Wright, H. C.	22/1/20	..	"
Boyce, E. R.	5/5/20	..	"
Burgess, J. A.	5/5/20	..	"
Bushwell, G.	5/5/20	..	"
Catley, N. P.	5/5/20	..	"
Collins, H. N.	5/5/20	..	"
Dix, W. E.	5/5/20	..	"
Howie, S. D.	5/5/20	..	"
Martinson, L. C.	5/5/20	..	"
Smith, K. M.	5/5/20	..	"
Sommerville, J. N.	5/5/20	..	"
Steffenson, M. W.	5/5/20	..	"
Graham, A. E.	5/5/20	..	"
Wolf, D. F.	9/6/20	..	"
Frost, A. G.	15/9/20	..	"
Kirkland, J. I.	15/9/20	..	"
Weir, E. E.	15/9/20	..	"
Maher, J. L.	15/9/20	..	"
Jollie, E. A. B.	15/9/20	..	"
Subritzky, F. H.	15/9/20	..	"
Wright, W. J. D.	15/9/20	..	"
Messervy, P. G.	15/9/20	..	"
Subritzky, C. E.	20/9/20	..	"
Gaby, C. F.	20/9/20	..	"
Bauman, A.	13/10/20	..	"
Carter, W. G.	13/10/20	..	"
Harrison, D. M.	13/10/20	..	"
Hartley, F.	13/10/20	..	"
Hesketh, F. R. F.	13/10/20	..	"
Hogg, A. W.	13/10/20	..	"
McRae, J. H.	13/10/20	..	"
Pearson, A. W.	27/10/20	..	"
Spraggon, D. N.	13/10/20	..	"
Stewart, R. G.	13/10/20	..	"

TABLE SHOWING THE NUMBER AND TONNAGE OF SAILING AND STEAM VESSELS WHICH REMAINED UPON THE REGISTER OF THE DOMINION OF NEW ZEALAND ON THE 31ST DECEMBER, 1919, OF THOSE ADDED TO AND DEDUCTED FROM THE REGISTER DURING THE YEAR 1920, AND OF THOSE REMAINING ON THE REGISTER ON THE 31ST DECEMBER, 1920.

	Sailing-vessels.			Steam-vessels.			Totals.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Upon the register on the 31st December, 1919	174	24,354	22,216	382	116,261	64,943	556	140,615	87,159
Added to the register,—									
Vessels registered for the first time—									
Built at ports in United Kingdom	1	197	169	7	694	280	8	891	449
Built at ports in British possessions abroad	..	..	..	1	6	5	1	6	5
Purchased from foreigners	..	..	..	..	..	..	..	..	..
Vessels transferred from ports in the United Kingdom	..	..	..	..	..	..	..	..	..
Vessels transferred from ports in British possessions abroad	1	123	107	3	155	44	4	278	151
Vessels registered <i>de novo</i> ..	1	42	18	6	341	199	7	383	217
Other vessels	..	..	..	..	..	..	..	..	..
Tonnage added without re-registration	..	8	..	..	111	20	..	119	20
Error in previous return	..	1	..	..	..	..	..	1	..
Total added	3	371	294	17	1,307	548	20	1,678	842
Deducted from the register,—									
Vessels wrecked or otherwise lost	3	908	822	7	533	252	10	1,441	1,074
Vessels broken up, decayed, &c.	..	..	..	1	31	20	1	31	20
Vessels converted into hulks, &c.	3	110	102	..	..	..	3	110	102
Vessels sold to foreigners	1	24	20	1	107	93	2	131	113
Vessels transferred to ports in British possessions	3	185	151	5	262	86	8	447	237
Vessels registered <i>de novo</i> ..	3	148	129	..	..	..	3	148	129
Tonnage deducted without re-registration	..	2	39	..	11	197	..	13	236
Errors in Registrar's returns	..	..	10	..	..	..	..	..	10
Other vessels	1	14	14	1	13	6	2	27	20
Total deducted	14	1,391	1,287	15	957	654	29	2,348	1,941
Remaining on the register on the 31st December, 1920	163	23,334	21,223	384	116,611	64,837	547	139,945	86,060

TABLE SHOWING THE NUMBER AND TONNAGE OF THE REGISTERED VESSELS (DISTINGUISHING SAILING FROM STEAM) WHICH BELONGED TO EACH OF THE PORTS OF NEW ZEALAND ON THE 31ST DECEMBER, 1920.

Ports.	Sailing-vessels.			Steam-vessels.			Totals.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland..	105	7,379	6,094	208	23,060	11,804	313	30,439	17,898
Napier ..	4	266	253	29	3,842	2,223	33	4,108	2,476
Wellington ..	14	3,179	2,892	38	12,243	6,040	52	15,422	8,932
Nelson ..	6	169	126	17	2,963	1,396	23	3,132	1,522
Lyttelton..	11	3,628	3,489	17	6,167	2,992	28	9,795	6,481
Timaru ..	1	733	690	1	942	488	2	1,675	1,178
Dunedin ..	20	7,608	7,335	64	66,239	39,349	84	73,847	46,684
Invercargill ..	2	372	344	10	1,155	545	12	1,527	889
Totals ..	163	23,334	21,223	384	116,611	64,837	547	139,945	86,060

RETURN OF ESTATES OF DECEASED SEAMEN RECEIVED AND ADMINISTERED IN PURSUANCE OF
THE PROVISIONS OF THE SHIPPING AND SEAMEN ACT, 1908, DURING THE YEAR ENDED
31ST MARCH, 1921.

Name of Seaman.	Balance to Credit of the Estate on 31st March, 1920.	Amount received.	Amount paid.	Balance to Credit of the Estate on 31st March, 1921.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
A. S. Hill .. .. .	..	14 2 1	14 2 1	..
T. R. Carter .. .. .	..	4 18 0	4 18 0	..
R. H. Owen	32 14 3	11 16 6	44 10 9	..
Robert O'Brien .. .. .	..	1 15 11	..	1 15 11
Guy Tripps .. .. .	..	5 8 2	5 8 2	..
Joseph Gobie .. .. .	..	2 18 1	2 18 1	..
William Harper .. .. .	..	13 3 11	13 3 11	..
Johan Nylander .. .. .	..	12 16 0	12 16 0	..
Frederick John Beach .. .. .	..	45 13 7	..	45 13 7
K. L. Freeman .. .. .	..	8 12 1	..	8 12 1
J. S. Mills .. .. .	..	4 16 10	4 16 10	..
H. T. Wynyard .. .. .	..	6 11 7	6 11 7	..
John West	1 17 4	..	1 17 4	..
Robert Wassell	0 7 6	..	0 7 6	..
A. E. Connolly	23 1 8	..	23 1 8	..
William Henry Mugridge .. .. .	..	25 13 2	..	25 13 2
Thomas Rutter	8 4 2	..	8 4 2	..
P. M. Kerfontaine	9 0 4	3 17 6	8 5 0	4 12 10
William Hall	9 7 8	..	9 7 8	..
A. W. Apes .. .. .	..	21 8 0	21 8 0	..
A. Smith	7 17 11	..	7 17 11	..
E. Hedges	43 4 5	..	43 4 5	..
W. Hollis	1 5 4	..	1 5 4	..
John Wall	15 16 2	1 15 0	17 11 2	..
Gerald Oldfield .. .. .	..	7 14 10	7 14 10	..
R. Powell	16 8 8	..	16 8 8	..
F. Z. Ruddy .. .. .	..	36 8 0	36 8 0	..
D. McRoberts	6 11 6	..	6 11 6	..
James Monaghan .. .. .	..	4 6 7	4 6 7	..
David Carroll	4 14 0	..	..	4 14 0
Joe Iro	4 6 0	..	4 6 0	..
T. Savig .. .. .	..	58 19 1	58 19 1	..
W. Marlow .. .. .	..	17 8 4	17 8 4	..
Robert McNab	49 2 9	9 1 6	58 4 3	..
W. F. Mulgan .. .. .	..	109 10 0	..	109 10 0
A. McIntyre	39 0 4	3 10 0	..	42 10 4
Michael Stone .. .. .	..	5 9 9	5 9 9	..
George Murdoch .. .. .	..	40 11 5	..	40 11 5
M. Hudson .. .. .	..	4 3 1	..	4 3 1
E. Greenwood	13 17 4	25 7 6	39 4 10	..
Alexander Knowles .. .. .	..	4 2 11	4 2 11	..
William H. Hopkins .. .. .	..	1 9 6	..	1 9 6
Percy Brandon .. .. .	..	59 12 9	..	59 12 9
L. Messer .. .. .	..	11 18 3	11 18 3	..
F. Howard .. .. .	..	8 16 9	8 16 9	..
E. Espada	4 3 10	..	4 3 10	..
C. W. Thompson .. .. .	..	8 2 7	..	8 2 7
John Riley .. .. .	..	8 9 0	..	8 9 0
James Burns .. .. .	..	4 19 9	..	4 19 9
C. McIlaney .. .. .	..	87 7 3	87 7 3	..
B. Cossar .. .. .	..	10 18 5	7 10 0	3 8 5
W. G. Totman .. .. .	..	10 14 3	..	10 14 3
W. Jalfon .. .. .	..	22 10 0	22 10 0	..
W. Hogg .. .. .	..	19 18 7	..	19 18 7
F. H. Saintsbury .. .. .	..	1 1 3	..	1 1 3
S. J. Haskins .. .. .	..	22 5 4	22 5 4	..
D. Millett .. .. .	..	17 17 2	..	17 17 2
M. Fisher .. .. .	..	28 6 8	..	28 6 8
L. J. Redshaw .. .. .	..	12 19 0	12 19 0	..
V. Lundgren .. .. .	..	13 16 10	..	13 16 10
A. Engdahl .. .. .	..	13 16 10	..	13 16 10
C. Ahlblad .. .. .	..	13 7 10	..	13 7 10
H. Wold .. .. .	..	10 5 4	..	10 5 4
A. McIntyre .. .. .	..	11 8 7	..	11 8 7
C. Rooke .. .. .	..	6 3 3	6 3 3	..
W. L. Watson .. .. .	..	8 14 2	..	8 14 2
A. Dudfield .. .. .	..	14 11 10	..	14 11 10
R. L. Fowler .. .. .	..	14 5 7	14 5 7	..
Tohata .. .. .	..	15 17 4	..	15 17 4
Dick .. .. .	..	15 17 4	..	15 17 4
Pake .. .. .	..	15 17 4	..	15 17 4
Tohatata .. .. .	..	15 17 4	..	15 17 4
Alick .. .. .	..	17 0 0	..	17 0 0
Lupo .. .. .	..	15 17 4	..	15 17 4
J. Weeks .. .. .	..	23 4 6	23 4 6	..
H. Stapleton .. .. .	..	8 2 7	..	8 2 7
	291 1 2	1,083 9 11	732 4 1	642 7 0

RETURN SHOWING AMOUNTS RECEIVED PRIOR TO 1ST APRIL, 1920, STANDING TO CREDIT OF
ESTATES OF DECEASED SEAMEN, AND FOR WHICH CLAIMS HAVE NOT BEEN PROVED.

	£	s.	d.		£	s.	d.
Devere, A., late boatswain, "Flora" ..	15	16	5	McEvoy, J., late trimmer, "Koromiko" ..	0	6	10
Doran, G., late trimmer, "Waihora" ..	18	8	7	McKendrick, J., late trimmer, "Maitai" ..	0	12	4
Flynn, William, late trimmer, "Kamo" ..	11	13	6	McLauchlan, J., late fireman, "Flora" ..	3	14	8
Fowler, Charles, late A.B., "Kokiri" ..	5	18	9	McLeod, M., late steward, "Kittawa" ..	7	4	0
Gourlay, John, late fireman, "Kaiapoi" ..	3	16	9	O'Connor, Michael, late A.B., "Koutunui" ..	19	10	10
Geige, Charles, late A.B., "Alexander" ..	20	16	3	O'Flaherty, B., late fireman, "Whangape" ..	1	17	8
Harvey, C., late steward, "Mapourika" ..	4	14	8	Pope, Thomas, late steward, "Ngahere" ..	6	8	0
Healey, Patrick, late fireman, "Monowai" ..	8	14	7	Puleiki (Niue Islander), late boy, "Awanui" ..	1	7	8
Hilditch, H. C., late fireman, "Ngahere" ..	6	3	5	Rawlins, A. W., late boy, "Storm" ..	5	12	5
Hunter, J., late fireman, "Stormbird" ..	1	6	11	Rindedal, H. M., late A.B., "Ilma" ..	9	6	7
Karautu, James, late deck hand, "Pono" ..	2	14	0	Staw, Charles, late A.B., "Waihora" ..	7	1	4
Kyle, R., late fireman, "Stormbird" ..	1	6	1	Stead, F. R., late fireman, "Maori" ..	13	16	3
Larsen, A., late A.B., "Queen of the South" ..	7	16	0	Suskoner, W., late fireman, "Whangape" ..	5	7	7
Larsen, Jacob, late A.B., "Houto" ..	5	2	8	Tautonga, late cook, "Mahurangi" ..	4	8	0
Larseni, Carl, late fireman, "Manuka" ..	21	16	7	Vasseau, C. R., late lamps, "Tongariro" ..	8	17	0
Linddahl, J., late A.B., "Kapuni" ..	5	2	5	Victor, Charles, late cook, "Kiritona" ..	17	8	4
Lockyer, Edward, late A.B., "Wanaka" ..	71	18	6	Wallace, Robert, late cook, "Tarawera" ..	7	8	1
Logan, John, late scullion, "Monowai" ..	5	11	10	Warelin, F., late A.B., "Koromiko" ..	4	0	4
Make-atu, A., late cook, "Ngatiawa" ..	2	3	0	Williams, John, late cook, "Regulus" ..	5	17	6
Martini, Santiago, late A.B., "Antiope" ..	9	1	10	Wright, Edward, late A.B., "Simplon" ..	18	16	1
Mitchelson, F., late A.B., "Te Teko" ..	4	14	11				

RETURN OF MASTERS AND MATES TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING
THE YEAR ENDED 31ST MARCH, 1921.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
William Robert Percy	Master	Foreign trade	20/4/20	1244
William Russell Woebling	"	"	20/4/20	1336
Walter Geoffrey Kelsey	"	"	21/6/20	1273
William John Keane	"	"	21/6/20	1259
Arthur Lovat Fraser	"	"	9/8/20	1118
Charles James Townsend Hatfield	"	"	20/12/20	1117
Edwin Havelock Willson	"	"	4/2/21	1288
John Ritchie	(steamship)	"	20/4/20	1266
Henry Leslie Hay	"	"	27/1/21	1279
Alexander Hutchinson Howie	"	"	23/3/21	1272
James Winfred Knox	First mate	"	28/8/20	1292A
John McDonald Etheridge	"	"	23/9/20	1345
Benjamin Frank Fisher	"	"	30/9/20	1320
Ernest Gilling	"	"	2/11/20	1347
Alexander Mercer	"	"	27/1/21	1305
Guy Miller Simpson	"	"	21/3/21	1328
Charles Burgess	(steamship)	"	11/5/20	1300
Stanley Ernest Martin	"	"	31/5/20	1315
Ernest Sutherland	"	"	13/10/20	1346
Frank Harrison Retter	"	"	20/12/20	1296
Henry Theeman	"	"	27/1/21	1352
Robert Cyril Ingram	"	"	4/2/21	1353
William James Freeman	"	"	21/3/21	1293A
John Lewin Adams	Second mate	"	20/4/20	1335
Leslie Goyder Peek	"	"	20/4/20	1334
George Henry Peters	"	"	9/8/20	1340
Alec Dudfield	"	"	28/8/20	1343
Robert Griffiths	"	"	26/11/20	1349
Lester David Clark	(steamship)	"	28/4/20	1337
Philip Earl Ryan	"	"	10/5/20	1338
William Rimell Scantlebury	"	"	31/5/20	1339
George Albert Conway	"	"	9/8/20	1341
John Warcup	"	"	20/9/20	1344
Victor Reginald Bowling	"	"	18/11/20	1348
Stanley Upham Johnson	"	"	20/12/20	1350
Michael William Monaghan	"	"	20/12/20	1351
George Henry Martin	"	"	4/2/21	1354
William Robert Williams	Master	Home trade	20/4/20	5853
William John Jennings	"	"	20/4/20	5875
Frederick Savage	"	"	20/4/20	5859
Arthur William Humphreys	"	"	11/5/20	5787
George Carey	"	"	13/9/20	5879
William Herbert Stephens	"	"	20/9/20	5880
Ernest Gilling	"	"	20/9/20	5881
Edward William Norton	"	"	22/9/20	5882
John McDonald Etheridge	"	"	23/9/20	5883
Harold Birkland	"	"	23/11/20	5782
Alfred Nelson	"	"	20/12/20	5831
William Watts Raynes	"	"	27/1/21	5834
Peter Eva Trevethick	"	"	21/4/21	5841
Leslie Peter Granville Fox	Mate	"	20/7/20	5876
Fergus Mackenzie	"	"	9/8/20	5877
Frank Doreen	"	"	27/1/21	5884
Gilbert Vivian Glazbrook	Master (sailing-vessel under 25 tons)	Restricted limits	27/1/21	3
Ernest Edmond Goodall	Master (sailing-vessel)	Harbours and rivers	31/5/20	6
David Frederick Scott	Master	River steamer	9/8/20	3751
William James Barrie	"	"	13/9/20	3752
Graham William Thomas Webb	"	"	30/9/20	3753
Charles William Smith	"	"	13/10/20	3754
Ernest Colin Nelson	"	"	20/12/20	3755
Leslie Alexander Murrell	"	"	27/1/21	3756

RETURN OF ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR
ENDED 31ST MARCH, 1921.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
William Wallace Macgregor	1st-class engineer ..	Foreign trade ..	20/4/20	2179
John Manson	" ..	" ..	20/6/20	612
William Ellis Wiggins	" ..	" ..	24/7/20	2198
Bruce McLeod Grant	" ..	" ..	24/7/20	2199
Duncan Barclay McLaren	" ..	" ..	28/8/20	2216
Donald Kerr Young	" ..	" ..	13/9/20	1617
James William Irvine	" ..	" ..	30/9/20	2228
Victor Tainui Standing	" ..	" ..	2/11/20	2244
Alfred Nicholas Blackwell Smith	" ..	" ..	2/11/20	1846
Henry Alexander McGregor	" ..	" ..	20/12/20	1819
James Patrick Neville	" ..	" ..	20/12/20	1788
Arthur John Drew	" ..	" ..	20/12/20	2275
William Charles Falconer	" ..	" ..	27/1/21	1842
Robert James Herbert Sheppard	" ..	" ..	28/2/21	1287
John Edward Bish	" ..	" ..	28/2/21	1693
Andrew Langmuir Smith	" ..	" ..	28/2/21	1826
William Evan Jesse Steer	" ..	" ..	28/2/21	2296
Robert Gardner	" ..	" ..	28/2/21	2297
James Gordon Macdonald	" ..	" ..	24/3/21	1806
Maurice Hamor Mayo	2nd-class engineer ..	" ..	20/4/20	1878
Norman Campbell Byrne	" ..	" ..	20/4/20	1921
Joseph Boot	" ..	" ..	18/5/20	1188
William Scott	" ..	" ..	31/5/20	1332
Frederick Hongi Rewi Stidolph	" ..	" ..	21/6/20	1657
William Henry Lucas	" ..	" ..	21/6/20	1904
Walter Scott	" ..	" ..	20/7/20	1936
William Wilson Elder	" ..	" ..	16/8/20	1626
William Looney	" ..	" ..	20/8/20	1600
David Stevens McLaren	" ..	" ..	28/8/20	1722
Leslie Robert McCaskey	" ..	" ..	28/8/20	1927
Andrew Kenneth Liddell	" ..	" ..	28/8/20	1993
Thomas Albert Carr	" ..	" ..	11/10/20	2236
William Ullrich	" ..	" ..	2/11/20	1758
Frederick Morton Ashby Palmer	" ..	" ..	23/11/20	1983
Wesley Johnston	" ..	" ..	20/12/20	2020
Wilfred Prior Bryant	" ..	" ..	20/12/20	2023
Alexander Neil	" ..	" ..	20/12/20	672
Samuel Alexander Steven	" ..	" ..	28/2/21	2050
James Edward Carr	" ..	" ..	24/3/21	2310
William Michael Hannafin	3rd-class engineer ..	" ..	20/4/20	2161
Wilhelm Kraus	" ..	" ..	20/4/20	2162
Cyril Herbert Preston	" ..	" ..	20/4/20	2163
Hector James Hoare	" ..	" ..	20/4/20	2164
John Leslie Pickford	" ..	" ..	20/4/20	2165
Harold Bright	" ..	" ..	20/4/20	2166
Cedric Colborne Mosley	" ..	" ..	20/4/20	2167
John William Evers	" ..	" ..	20/4/20	2168
Frank Charles Ogg	" ..	" ..	20/4/20	2169
Edward Blechynden	" ..	" ..	20/4/20	2170
Rodion Pairman	" ..	" ..	20/4/20	2171
John Harold Stalker	" ..	" ..	20/4/20	2172
Robert Muirhead Couper	" ..	" ..	20/4/20	2173
Harry Baggott	" ..	" ..	20/4/20	2174
Frank Vause	" ..	" ..	20/4/20	2175
James Thomas Keary	" ..	" ..	20/4/20	2176
Wilfred Alexander Atkinson	" ..	" ..	20/4/20	2177
Leonard George Walker	" ..	" ..	20/4/20	2178
Arthur Coupland Harding	" ..	" ..	10/5/20	2181
Michael Neville	" ..	" ..	10/5/20	2182
Arthur John Huston Yemm	" ..	" ..	18/5/20	2183
William James Rugg	" ..	" ..	18/5/20	2184
Victor Roy McGregor	" ..	" ..	31/5/20	2185
William Orr Matthews	" ..	" ..	31/5/20	2186
Percival Hunt	" ..	" ..	31/5/20	2187
Claude Adolphus Duthie Atherton	" ..	" ..	31/5/20	2188
Wilfred Martin Gibbs	" ..	" ..	21/6/20	2189
George Thomas Fraser	" ..	" ..	21/6/20	2190
Thomas Davidson	" ..	" ..	21/6/20	2191
John Hiorns Mander	" ..	" ..	20/7/20	2192
John Fairhurst Dickie	" ..	" ..	20/7/20	2193
John Turnbull Young	" ..	" ..	20/7/20	2194
Duncan Harvey Cameron	" ..	" ..	20/7/20	2195
Leslie Harder	" ..	" ..	20/7/20	2196
Lorimer Sunley	" ..	" ..	20/7/20	2197
Reginald Francis Houghton	" ..	" ..	24/7/20	2200
Robert Alexander Brown	" ..	" ..	24/7/20	2201
Erwin Robert Ramage	" ..	" ..	24/7/20	2202
Harry Alexander Inglis	" ..	" ..	16/8/20	2203
Henry Ferguson Miller	" ..	" ..	16/8/20	2204
David Abercrombie	" ..	" ..	16/8/20	2205
John James Miller	" ..	" ..	16/8/20	2206
Richard Francis Clough	" ..	" ..	16/8/20	2207
Athol Vere Prince	" ..	" ..	16/8/20	2208
Charles Mouat Jeromson	" ..	" ..	16/8/20	2209

RETURN OF ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR
ENDED 31ST MARCH, 1921—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Alexander Victor Evans	3rd-class engineer ..	Foreign trade ..	16/8/20	2210
David Robertson Newson	" ..	" ..	16/8/20	2211
Norman Leslie Thompson	" ..	" ..	16/8/20	2212
Robert Hugh McKenzie Tizard	" ..	" ..	20/8/20	2213
Eric Milton Denby	" ..	" ..	20/8/20	2214
Sydney Thomas King	" ..	" ..	20/8/20	2215
Cornelius Francis Murphy	" ..	" ..	13/9/20	2216A
William Erskine Boyd	" ..	" ..	13/9/20	2217
Victor Charles Webb	" ..	" ..	13/9/20	2218
Thomas Richard Randle	" ..	" ..	20/9/20	2219
William John Meban	" ..	" ..	20/9/20	2220
Joel Collingwood Taylor	" ..	" ..	20/9/20	2221
Andrew Gordon Jerrat	" ..	" ..	30/9/20	2222
Albert Alfred Courtenay	" ..	" ..	30/9/20	2223
Gordon Claus Cordes	" ..	" ..	30/9/20	2224
Colin Richard Mackay Massey	" ..	" ..	30/9/20	2225
Frank Colebourne	" ..	" ..	30/9/20	2226
Arthur William Hickman	" ..	" ..	30/9/20	2227
William Patrick Walshe	" ..	" ..	11/10/20	2229
George Ernest Broadbent	" ..	" ..	11/10/20	2230
Walter Gordon Soper	" ..	" ..	11/10/20	2231
William Robert Butcher	" ..	" ..	11/10/20	2232
William George Milne Colquhoun	" ..	" ..	11/10/20	2233
James Cameron	" ..	" ..	11/10/20	2234
Albert Harry Gordon Kendrick	" ..	" ..	11/10/20	2235
Harold McCrorie	" ..	" ..	2/11/20	2237
Adam Cruickshank	" ..	" ..	2/11/20	2238
Charles George Suters	" ..	" ..	2/11/20	2239
Alexander Ritchie	" ..	" ..	2/11/20	2240
Charles La Roche	" ..	" ..	2/11/20	2241
Owen Joseph Syron	" ..	" ..	2/11/20	2242
George Rowland Chipp	" ..	" ..	2/11/20	2243
James Small Stewart	" ..	" ..	23/11/20	2245
Eric Worthington McLean	" ..	" ..	23/11/20	2246
John Williamson	" ..	" ..	23/11/20	2247
Gordon Marshall Wilson	" ..	" ..	23/11/20	2248
Henry Maxwell	" ..	" ..	23/11/20	2249
Arthur George Brown	" ..	" ..	23/11/20	2250
Martin O'Brien	" ..	" ..	23/11/20	2251
Harry Tounsley	" ..	" ..	23/11/20	2252
Thomas James Barclay	" ..	" ..	23/11/20	2253
Gerald Cahill	" ..	" ..	23/11/20	2254
William Charles Rankin	" ..	" ..	23/11/20	2255
Leslie John Phillips	" ..	" ..	23/11/20	2256
William Ephraim Lowe	" ..	" ..	23/11/20	2257
Jaffray McDonald Christian	" ..	" ..	23/11/20	2258
Raymond Richard Taylor Harnett	" ..	" ..	23/11/20	2259
Athol Hazelden Crawley	" ..	" ..	23/11/20	2260
Percy Lawrence	" ..	" ..	20/12/20	2261
Frederick Thomas Frye	" ..	" ..	20/12/20	2262
Hans Peter Julius Jensen	" ..	" ..	20/12/20	2263
Harold Thomas Ridler	" ..	" ..	20/12/20	2264
Raymond John Hastings	" ..	" ..	20/12/20	2265
Rogerson Henry Clouston	" ..	" ..	20/12/20	2266
Alexander James Ross	" ..	" ..	20/12/20	2267
Frederick Julian Norman Schultze	" ..	" ..	20/12/20	2268
Alan Diehl	" ..	" ..	20/12/20	2269
William Merriless Millar	" ..	" ..	20/12/20	2270
Norman Pearce Livingstone	" ..	" ..	20/12/20	2271
Leo Paul O'Connell	" ..	" ..	20/12/20	2272
James Holden	" ..	" ..	20/12/20	2273
Edward Neville Green	" ..	" ..	20/12/20	2274
Thomas Wallace Sim	" ..	" ..	27/1/21	2276
Tracy Sceats Knight	" ..	" ..	28/2/21	2280
Norman Dewey Brown	" ..	" ..	28/2/21	2281
Reuben Hjalmar Magnusson	" ..	" ..	28/2/21	2282
John Keller	" ..	" ..	28/2/21	2283
George Watson	" ..	" ..	28/2/21	2284
Albert James Storer	" ..	" ..	28/2/21	2285
Alexander George Park	" ..	" ..	28/2/21	2286
Ernest John Burt	" ..	" ..	28/2/21	2287
John Albert Henry Longley	" ..	" ..	28/2/21	2288
Horace Oriel Kovaleske	" ..	" ..	28/2/21	2289
Ernest Albert McBurney	" ..	" ..	28/2/21	2290
Murray Auty	" ..	" ..	28/2/21	2291
John Thomas Weir	" ..	" ..	28/2/21	2292
James Marshall Dalziel	" ..	" ..	28/2/21	2293
George Wilson	" ..	" ..	28/2/21	2294
Albert Thomas Crumpton	" ..	" ..	28/2/21	2295
John Ommond Meiklejohn	" ..	" ..	24/3/21	2298
Frank Methven	" ..	" ..	24/3/21	2299
Walter Henry Dennis	" ..	" ..	24/3/21	2300
John Baden Berryman	" ..	" ..	24/3/21	2301
Ernest Cracroft Kelsey	" ..	" ..	24/3/21	2302

RETURN OF ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR
ENDED 31ST MARCH, 1921—*continued*.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Alexander Jesse Humphries	3rd-class engineer ..	Foreign trade ..	24/3/21	2303
Andrew Bruce Fordyce	" ..	" ..	24/3/21	2304
Frederick Charles Gleeson	" ..	" ..	24/3/21	2305
Percy Kitchener Sandlant	" ..	" ..	24/3/21	2306
Rowland Hudson	" ..	" ..	24/3/21	2307
John Eric Rogers	" ..	" ..	24/3/21	2308
Douglas James Hay?	" ..	" ..	24/3/21	2309
Peter Rudolph Derriksen	Engineer ..	River trade ..	16/4/20	2280
Joseph William Byrne	" ..	" ..	20/4/20	2317
Reginald Autheman	" ..	" ..	31/5/20	2318
Edward Bradley	" ..	" ..	21/6/20	2319
William Cowan Guildford	" ..	" ..	28/7/20	2320
Francis Robert Bramley	" ..	" ..	28/7/20	2321
Charles Eli James Salter	" ..	" ..	16/8/20	2322
Joseph Oliver	" ..	" ..	16/8/20	2323
Frank Catterall	" ..	" ..	16/8/20	2324
Albert Edward Norman	" ..	" ..	13/9/20	2325
Reginald Herbert Jones	" ..	" ..	30/9/20	2326
Cecil Osborne Lucas	" ..	" ..	30/9/20	2327
George Hunt	" ..	" ..	30/9/20	2328
Horace Henry Harold Whittington	" ..	" ..	30/9/20	2329
Ronald Peter Binns	" ..	" ..	30/9/20	2330
John Ronskley Trickett	" ..	" ..	11/10/20	2331
Edwin Alfred Howe	" ..	" ..	11/10/20	2332
John Frederick Beachamp Todd	" ..	" ..	2/11/20	2333
Anaru Temihi	" ..	" ..	23/11/20	2334
William David Bell	" ..	" ..	23/11/20	2335
Arthur Percy George Plimley	" ..	" ..	23/11/20	2336
Ernest Matthew Roiall	" ..	" ..	23/11/20	2337
John Wickstone	" ..	" ..	20/12/20	2338
George Colligan	" ..	" ..	28/2/21	2339
Reginald Herbert Clarke	" ..	" ..	28/2/21	2340
George William Wallace	" ..	" ..	28/2/21	2341
Albert Beswick	" ..	" ..	28/2/21	2342
Edward McGuinness	" ..	" ..	24/3/21	2343
Henry Herbert Marshall	" ..	" ..	24/3/21	2344
John Speed Webster	1st-class oil engineer	Seagoing ..	20/4/20	366
Walter Polglaze James	" ..	" ..	10/5/20	367
Charles Seigmond Jacobsen	" ..	" ..	10/5/20	174
Arnold Symes Wilson	" ..	" ..	18/5/20	343
Edwin William Carr	" ..	" ..	31/5/20	327
Kenneth Hubert Brown	" ..	" ..	31/5/20	313
Charles Robert Hyde	" ..	" ..	31/5/20	93
William Ephraim Lowe	" ..	" ..	31/5/20	369
William Orr Matthews	" ..	" ..	31/5/20	370
Oswald Albert Dryland	" ..	" ..	31/5/20	371
Norman Dewey Brown	" ..	" ..	24/7/20	374
Bernard Robert Jack	" ..	" ..	28/7/20	376
Herbert Crawford	" ..	" ..	28/7/20	377
Leonard Ernest McQueen	" ..	" ..	28/7/20	378
George Henry Davis	" ..	" ..	28/8/20	381
Walter David Smith	" ..	" ..	28/8/20	382
Ernest William Lamberg	" ..	" ..	28/8/20	383
William Henry Lucas	" ..	" ..	13/9/20	384
William John Meban	" ..	" ..	20/9/20	387
Joel Collingwood Taylor	" ..	" ..	20/9/20	388
Zala Cromer Tatton	" ..	" ..	11/10/20	337
William Stanley Hill	" ..	" ..	2/11/20	391
Roland Ernest Napier	" ..	" ..	23/11/20	392
Harold Sinclair Muschamp	" ..	" ..	23/11/20	393
William Frederick Haigh	" ..	" ..	20/12/20	396
William Gordon Hollis	" ..	" ..	20/12/20	397
Percival Hunt	" ..	" ..	27/1/21	402
Morton Alfred Seafeld Manhire	" ..	" ..	27/1/21	403
Leslie Robert McCaskey	" ..	" ..	28/2/21	404
Clive Erwin Helliwell	" ..	" ..	28/2/21	405
Leslie Horton Busby	" ..	" ..	28/2/21	406
Henry Maxwell	" ..	" ..	28/2/21	407
Eric Malcolm Phillips	" ..	" ..	24/3/21	411
James Philip Taylor	" ..	" ..	24/3/21	412
John William Alfred Cooper	" ..	" ..	24/3/21	413
William Henry Beckman	" ..	" ..	24/3/21	414
Walter Raymond Messenger	" ..	" ..	24/3/21	415
Eric Neal Kirtlan	" ..	" ..	24/3/21	416
Thomas Edgar Jensen	2nd-class oil engineer	" ..	20/4/20	363
Albert Charles Pulman	" ..	" ..	20/4/20	365
Victor Joseph Sayer	" ..	" ..	31/5/20	368
Leo Paul O'Connell	" ..	" ..	21/6/20	372
Arthur Brown	" ..	" ..	21/6/20	373
Henry Herbert Marshall	" ..	" ..	24/7/20	373A
Lewis Graham	" ..	" ..	28/7/20	375
Thomas Norman Tremewan	" ..	" ..	16/8/20	379
John Terrell Weekes	" ..	" ..	16/8/20	380
Albert Cedarman	" ..	" ..	13/9/20	385

RETURN OF ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR
ENDED 31ST MARCH, 1921—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Robert William McKenzie	2nd-class oil engineer	Seagoing	13/9/20	386
James Sutherland	"	"	30/9/20	389
James Thomas Levings	"	"	11/10/20	390
Harry Williams	"	"	23/11/20	394
Joseph John Multrus	"	"	23/11/20	395
Walter Wesby McKelvey	"	"	20/12/20	398
Henry Lyall Sinclair	"	"	20/12/20	399
Daniel Tyson Satterthwaite	"	"	27/1/21	400
William Cotter	"	"	27/1/21	401
Finnim Ashburnham Dugdale	"	"	28/2/21	408
James Maraku	"	"	24/3/21	409
Henry James Capper	"	"	24/3/21	410
Albert Victor McNabb	River oil engineer ..	Restricted limits ..	20/4/20	1013
Robert Coulson	"	"	20/4/20	1014
John Naysmith Paton	"	"	20/4/20	1015
Leo Arthur Curtis	"	"	20/4/20	1016
Frederick Louis Pierce Friedman ..	"	"	20/4/20	1017
Paki Wilson Withers	"	"	20/4/20	1018
Alan Hamilton Thomson	"	"	20/4/20	1019
William Henry Strude	"	"	20/4/20	1020
Norman Freeman Porter	"	"	20/4/20	1021
Archy Alfred Scott	"	"	20/4/20	1022
John Wiley	"	"	20/4/20	1023
Ernest John Niccol	"	"	28/4/20	1024
Joseph Vuletich	"	"	10/5/20	1025
Roy Harold Sanders	"	"	18/5/20	1026
Leslie Charles Sanders	"	"	18/5/20	1027
Thomas Edward Blenkin	"	"	18/5/20	1028
Edwin Stanley Brookes	"	"	18/5/20	1029
Lawerance Joseph Multrus	"	"	31/5/20	1030
Richard Freeman Raine	"	"	31/5/20	1031
Frank Howlett	"	"	31/5/20	1032
Hugh Somerville	"	"	31/5/20	1033
Taranaki Tarau	"	"	31/5/20	1034
James Edward Wilkins	"	"	21/6/20	1035
John David Dicker	"	"	21/6/20	1036
Harold George Leslie Adams	"	"	20/7/20	1037
Oswald Millea Caldwell	"	"	20/7/20	1038
Eric Cartman	"	"	24/7/20	1039
William John Rowe	"	"	24/7/20	1040
Richard Dudley Thompson	"	"	24/7/20	1041
John Charles Simpson	"	"	28/7/20	1042
Levi Alfred Wintour	"	"	28/7/20	1043
William Mason	"	"	28/7/20	1044
George Ehrke	"	"	28/7/20	1045
Gordon Hector Phillips	"	"	28/7/20	1046
Charles Woodward	"	"	13/9/20	1047
Alfred Matthew Green	"	"	13/9/20	1048
William Henry Chetham	"	"	13/9/20	1049
Tuhea Haupokia	"	"	13/9/20	1050
Alexander Grant	"	"	30/9/20	1051
Ernest Cecil Farr	"	"	30/9/20	1052
George Walter Thomas Daniels	"	"	30/9/20	1053
Cyril Samuel Wheeler	"	"	30/9/20	1054
Edward William Fordham	"	"	30/9/20	1055
William Bush	"	"	30/9/20	1056
Angus James Denize	"	"	30/9/20	1057
Alfred Armour	"	"	30/9/20	1058
Philip Henry O'Mara	"	"	30/9/20	1059
John Davies	"	"	30/9/20	1060
Donald Grant	"	"	30/9/20	1061
Roland Herbert Bell	"	"	30/9/20	1062
John Thompson	"	"	11/10/20	1063
Duncan Macneill Gillies	"	"	11/10/20	1064
George Stuart Clark	"	"	11/10/20	1065
John Thompson	"	"	2/11/20	1066
William Nepia	"	"	2/11/20	1067
Bertram James Bell	"	"	2/11/20	1068
Frederick Colville Shaw	"	"	23/11/20	1069
Jack Walker	"	"	23/11/20	1070
Hugh Talbot Burgoyne Walker	"	"	23/11/20	1071
Harold William Lee	"	"	23/11/20	1072
Albert William Walker	"	"	23/11/20	1073
Oscar John Smith Anderson	"	"	23/11/20	1074
Richard Ivanhoe Maney	"	"	23/11/20	1075
Jack Craig Wilson	"	"	23/11/20	1076
Francis Leslie MacRae	"	"	23/11/20	1077
Charles Valentine Renen	"	"	23/11/20	1078
Richard George Wilkinson	"	"	23/11/20	1079
George David Foster	"	"	23/11/20	1080
Fitzroy Erskine McFarlane	"	"	23/11/20	1081
Frederick Strongman	"	"	23/11/20	1082
James Hines	"	"	23/11/20	1083
Wilfred Brian Fitchett	"	"	23/11/20	1084

RETURN OF ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR
ENDED 31ST MARCH, 1921—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
George Edward Jarvis	River oil engineer ..	Restricted limits ..	20/12/20	1085
Horatio Murdoch Mackay	" ..	" ..	20/12/20	1086
Sidney Ensor	" ..	" ..	20/12/20	1087
Thomas Herbert Moss	" ..	" ..	20/12/20	1088
Herbert Isaacs	" ..	" ..	27/1/21	1089
Frederick Ernest Kirby	" ..	" ..	27/1/21	1090
Harold William Stanaway	" ..	" ..	27/1/21	1091
James Nelson Lorimer	" ..	" ..	27/1/21	1092
Maurice Topi Patuki	" ..	" ..	27/1/21	1093
Thomas Joseph Anthony Reardon	" ..	" ..	27/1/21	1094
William Alfred Davidson	" ..	" ..	27/1/21	1095
Jack Charles Stubbs	" ..	" ..	27/1/21	1096
Arthur Thomas Latchmore	" ..	" ..	27/1/21	1097
John Edwin Casey	" ..	" ..	27/1/21	1098
Edward Donovan	" ..	" ..	27/1/21	1099
James Silich	" ..	" ..	27/1/21	1100
William John Alder	" ..	" ..	28/2/21	1101
William Cowper Tennent	" ..	" ..	28/2/21	1102
Albert Samson	" ..	" ..	28/2/21	1103
Percy James Anderson	" ..	" ..	28/2/21	1104
Eric Lewes	" ..	" ..	28/2/21	1105
Frank Gordon Seccombe	" ..	" ..	28/2/21	1106
John Alexander King	" ..	" ..	28/2/21	1107
George Bromley Hill	" ..	" ..	28/2/21	1108
Barney Williams	" ..	" ..	28/2/21	1109
John Wallace Orchard	" ..	" ..	28/2/21	1110
Neville Douglas Braithwaite	" ..	" ..	28/2/21	1111
Leslie Frederick Dawson	" ..	" ..	28/2/21	1112
Herbert Nelson Hawker	" ..	" ..	8/3/21	1113
Jerry Palmer	" ..	" ..	24/3/21	1114
Hayward Charles Lees	" ..	" ..	24/3/21	1115
Samuel Walker	" ..	" ..	22/3/21	1116
Charles Kem	" ..	" ..	24/3/21	1117
Daniel Cyril Lane	" ..	" ..	24/3/21	1118
William Makis Cochrane	" ..	" ..	24/3/21	1119
Francis William Lees	" ..	" ..	24/3/21	1120
Charles Edward Brown	" ..	" ..	24/3/21	1121
David Chapman	" ..	" ..	24/3/21	1122
Joseph Kerby	" ..	" ..	24/3/21	1123
Victor Eadie Sommerville	" ..	" ..	24/3/21	1124
Henry Sedgwick Harrod	" ..	" ..	24/3/21	1125
Walter Brown	" ..	" ..	24/3/21	1126
Charles James Harrod	" ..	" ..	24/3/21	1127
Charles Henry Pirika Hovell	" ..	" ..	24/3/21	1128

RETURN SHOWING THE NUMBER OF MASTERS', MATES', AND ENGINEERS' EXAMINATIONS IN
NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1921, SHOWING THE NUMBER OF
SUCCESSFUL AND UNSUCCESSFUL CANDIDATES.

Class of Certificate.	Auckland.			Wellington.			Lyttelton.			Dunedin.			Other Places.			Totals.		
	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign-going masters and mates	17	14	31	11	9	20	9	9	18	..	..	..	..	..	..	37	32	69
Home-trade masters and mates	10	9	19	5	2	7	1	..	1	..	..	..	..	..	..	16	11	27
River-steamer masters ..	4	2	6	..	1	1	..	..	..	2	..	2	..	..	..	6	3	9
Master, restricted limits (sailing-vessel under 25 tons register)	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1
Master, sailing-vessel plying in harbours and rivers	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1
Seagoing engineers (steam)	54	7	61	55	5	60	13	..	13	35	2	37	18	4	22	175	18	193
River-steamer engineers ..	16	1	17	6	..	6	1	..	1	..	1	1	6	2	8	29	4	33
Seagoing engineers (mechanical power other than steam)	28	1	29	10	1	11	6	1	7	2	..	2	14	2	16	60	5	65
River engineers (mechanical power other than steam)	53	5	58	2	1	3	8	..	8	5	..	5	48	1	49	116	7	123
Totals ..	182	39	221	89	19	108	38	10	48	44	3	47	88	9	97	441	80	521

RETURN OF CERTIFICATES OF EXEMPTION FROM EXAMINATION AS THIRD-CLASS ENGINEERS
ISSUED DURING THE YEAR ENDED 31ST MARCH, 1921.

Date of Issue.	Name.
August 21, 1920 ..	Horace John Albert Barlow.
February 16, 1921 ..	Edward Arthur Rutter.
„ 25, 1921 ..	William Johnston.

RETURN OF LICENSES AS COLONIAL PILOTS ISSUED IN PURSUANCE OF SECTION 190 OF THE
SHIPPING AND SEAMEN ACT, 1908, DURING THE YEAR ENDED 31ST MARCH, 1921.

No. of License.	Date of Issue.	Name of Licensee.	Port of Residence.	Date of Expiry of License.
47	26 Oct., 1920 ..	Richard Edward Smith	Auckland ..	Oct. 30, 1921.
49	19 Jan., 1921 ..	Wm. Andrew Smith	Wellington ..	Jan. 19, 1922.
44	28 „ 1921 ..	Charles McArthur	„ ..	„ 29, 1922.

RETURN OF LICENSED ADJUSTERS OF COMPASSES IN NEW ZEALAND.

Date of Issue.	Name of Licensee.	Address.
April 9, 1896 ..	Frederick Macbeth	Dunedin.
May 15, 1896 ..	Robert Strang	„
„ 5, 1896 ..	George Urquhart Thomson	„
April 27, 1897 ..	Frederick William Cox	Nelson.
July 27, 1897 ..	Robert Hatchwell	Lyttelton.
Sept. 1, 1897 ..	Arthur G. Gifford	Wellington.
Aug. 13, 1898 ..	Herbert John Richardson	„
April 26, 1899 ..	Robert Heddelston Neville	„
June 26, 1900 ..	Charles Frederick Sundstrum	Dunedin.
July 27, 1900 ..	John Adamson	Auckland.
Nov. 27, 1900 ..	Thomas Basire	Port Chalmers.
Mar. 27, 1903 ..	George Samuel Hooper	Wellington.
Oct. 19, 1903 ..	John McLennon McKenzie	„
Nov. 1, 1906 ..	Frederick Pryce Evans	Dunedin.
Feb. 6, 1907 ..	David Todd	„
„ 22, 1909 ..	Norman Macdonald	Bluff.
May 28, 1909 ..	Charles Cornelius Plunket	Auckland.
Oct. 23, 1909 ..	Robert Crawford	Wellington.
June 19, 1911 ..	Frederic George Cooper	„
Nov. 16, 1911 ..	Major William Solloway Lane	Totara North.
„ 3, 1913 ..	Cesar Anthony Colonna	Christchurch.
„ 27, 1914 ..	John Jonathan Elven	„
Feb. 10, 1915 ..	Richard Chamberlain Harbord	Bluff.
Sept. 27, 1918 ..	William Robert Allen	Port Ahuriri.
July 5, 1919 ..	Mathew Lapham Singleton	Auckland.
Mar. 3, 1920 ..	Walter William Hender	Wellington.
Sept. 23, 1920 ..	Mariner Tucker Holm	„

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE ISSUED
IN NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1921.

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Admiral ..	82	50	..	Compound ..	Screw ..	River limits ..	..	..	..	..
Advance ..	12	8	..	Non-condensing ..	" ..	" ..	..	..	..	..
A.H.B. ..	5	15	..	Oil-engine ..	" ..	" ..	..	..	..	..
Ahiki ..	6	30	..	" ..	" ..	" ..	..	..	..	..
Ahuriri ..	33	17	..	Compound ..	" ..	" ..	..	..	..	..
*Aio ..	4	20	..	Oil-engine ..	" ..	" ..	..	..	..	..
Akaroa ..	29	28	81	Compound ..	" ..	Home trade ..	1	1	..	..
Albatross ..	111	37	..	" ..	" ..	River limits ..	..	..	..	..
Alert (Wanganui) ..	5	15	..	Oil-engine ..	" ..	" ..	..	..	..	..
Alert (Paeroa) ..	†20	6	..	Compound ..	" ..	" ..	..	..	..	..
Alexander (Nelson) ..	185	72	394	" ..	Twin-screw ..	Home trade ..	4	3	..	..
Alexander (Rotorua) ..	4	20	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Alice (Te Kopuru) ..	4	12	..	" ..	" ..	" ..	..	..	..	..
All Black No. 2 ..	4	24	..	" ..	" ..	" ..	..	..	..	..
Alma ..	5	16	..	" ..	" ..	" ..	..	..	..	..
Almora ..	4	24	..	" ..	" ..	" ..	..	..	..	..
Amy (Tauranga) ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Anzac ..	4	6	..	" ..	" ..	" ..	..	..	..	..
Aotea ..	157	33	..	Compound ..	" ..	River limits ..	..	..	..	..
Apanui ..	135	28	217	Triple-expansion ..	" ..	Home trade ..	4	2	..	..
Arahura ..	772	145	1,659	" ..	Twin-screw ..	" ..	7	6	3	3	
Aranui ..	4	10	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Arapawa ..	128	47	257	Triple-expansion ..	" ..	Home trade ..	4	3	..	..
Arawa (Rotorua) ..	2	5	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Arita ..	2	4	..	" ..	" ..	" ..	..	..	..	..
Ark (Pukenui) ..	3	2	..	" ..	" ..	" ..	..	..	..	..
Aroha (Russell) ..	6	16	..	" ..	" ..	" ..	..	..	..	..
Arohanui ..	4	16	..	" ..	" ..	" ..	..	..	..	..
Arrino ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Arumai ..	6	10	..	" ..	" ..	" ..	..	..	..	..
Atua ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Audric ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Aupouri ..	220	55	391	Triple-expansion ..	Twin-screw ..	Home trade ..	5	3	..	..
Aurere ..	3	8	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Aurora ..	4	35	..	" ..	" ..	" ..	..	..	..	..
Awahou ..	151	74	297	Compound ..	Twin-screw ..	Home trade ..	4	3	..	..
Baden Powell ..	72	30	181	" ..	Screw ..	" ..	2	2	..	..
Baroona ..	55	24	149	" ..	" ..	" ..	2	2	..	..
Beldame ..	4	20	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Bell Bird (A'kland) ..	52	15	..	Triple-expansion ..	" ..	" ..	..	..	..	..
Bell Bird (M'nukau) ..	2	10	..	Oil-engine ..	" ..	" ..	..	..	..	..
Belle ..	5	10	..	" ..	" ..	" ..	..	..	..	..
Benares ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Ben Lomond ..	33	15	..	Compound ..	" ..	" ..	..	..	..	..
Billy ..	5	9	..	Oil-engine ..	" ..	" ..	..	..	..	..
Blenheim ..	87	50	204	Compound ..	" ..	Home trade ..	2	2	..	..
Breeze ..	286	84	436	Triple-expansion ..	" ..	" ..	5	3	..	..
Brit ..	6	16	..	Oil-engine ..	Twin-screw ..	River limits ..	..	..	..	..
Britannia (A'kland) ..	108	40	..	Non-condensing ..	Paddle ..	" ..	..	..	..	..
Britannia (Oneh'ga) ..	3	13	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Brittania (Bluff) ..	10	3	..	" ..	" ..	Fishing-vessel ..	..	..	..	..
Bruce ..	1	5	..	" ..	" ..	River limits ..	..	..	..	..
Bulli ..	29	24	..	Compound ..	" ..	" ..	..	..	..	..
Callie ..	5	35	..	Oil-engine ..	" ..	" ..	..	..	..	..
Calm ..	523	550	551	Surface cond'ing, triple-expansion ..	" ..	Home trade ..	5	3	2	3	
Canopus ..	835	250	1,155	Triple-expansion ..	" ..	River limits ..	6	3	2	3	
Centaur ..	6	32	..	Oil-engine ..	Twin-screw ..	" ..	..	..	..	..
Chelmsford ..	79	25	62	Compound ..	Screw ..	Home trade ..	2	1	..	..
Christina ..	6	16	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Clan Dougal ..	4	5	..	" ..	" ..	" ..	..	..	..	..
Clansman ..	379	99	579	Compound ..	" ..	Home trade ..	5	3	..	..
Claymore ..	119	54	347	Triple-expansion ..	" ..	" ..	4	3	..	..
Clematis (M'nukau) ..	3	8	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Clematis (A'kland) ..	6	24	..	" ..	" ..	" ..	..	..	..	..
Clematis (Kaipara) ..	4	12	..	" ..	" ..	" ..	..	..	..	..
Clyde ..	†20	40	..	Compound ..	Stern-wheel paddle ..	" ..	..	..	..	..
Cobar (Wellington) ..	69	40	..	" ..	Screw ..	" ..	..	..	..	..
Colleen ..	2	4	..	Oil-engine ..	" ..	" ..	..	..	..	..
Comet ..	6	5	..	" ..	" ..	" ..	..	..	..	..
Condor ..	188	24	..	Compound ..	Screw each end ..	" ..	..	..	..	..
Conella ..	1	4	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Coquette ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Corinna ..	791	141	1,039	Compound ..	" ..	Home trade ..	6	3	2	3	
Coronation ..	59	50	..	Oil-engine ..	" ..	" ..	2	..	..	..

* Surveyed twice. † Under 20 tons.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law re- quires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Countess (Hokitika)	3	20	..	Oil-engine	Screw	River limits	..	..	..	..
Countess (Well'gtn)	57	28	180	Compound	"	Home trade	2	2	..	..
Cowan ..	30	24	140	"	"	"	1	2	..	..
Curlew ..	5	16	..	Oil-engine	"	River limits	..	..	..	..
Cygnat (Te Kopuru)	3	8	..	"	"	"	..	..	..	..
Cygnat (Mokau) ..	4	16	..	"	"	"	..	..	..	..
Daisy (Thames) ..	6	20	..	"	"	"	..	..	..	..
Daphne (Auckland)	100	55	267	Compound	"	Home trade	2	2	..	..
Dawn (New Ply'th)	4	7	..	Oil-engine	"	River limits	..	..	..	..
Defender (Thames)	4	18	..	"	"	"	..	..	..	..
Defender (Inver'gil)	15	10	..	"	"	"	..	..	..	..
Despatch ..	10	20	..	Compound	"	Home trade	1	1	..	..
Digger ..	5	15	..	Oil-engine	"	River limits	..	..	..	..
D'Jinn ..	6	23	..	"	"	"	..	..	..	..
Dominion ..	5	24	..	"	"	"	..	..	..	..
Doris (Napier) ..	4	20	..	"	"	"	..	..	..	..
Doris (Russell) ..	3	20	..	"	"	"	..	..	..	..
Doris (Picton) ..	2	4	..	"	"	"	..	..	..	..
Dreadnought ..	6	16	..	"	"	"	..	..	..	..
Dredge 121 ..	394	100	..	Compound	Twin-screw	"	..	..	..	..
Dredge 222 ..	502	140	927	"	"	Home trade	5	3	2	3	
Duchess ..	137	81	..	Triple-expansion	Screw	River limits	..	..	..	..
Duco ..	2	5	..	Oil-engine	"	"	..	..	..	..
Eagle (Auckland) ..	138	70	..	Compound	Paddle	"	..	..	..	..
Eagle (Dargaville)	2	6	..	Oil-engine	Screw	"	..	..	..	..
Earnslaw ..	155	80	..	Triple-expansion	Twin-screw	"	..	..	..	..
Echo ..	98	103	..	Oil-engine	"	Home trade	2	..	..	..
Elly ..	1	4	..	"	Screw	River limits	..	..	..	..
Elsie (French Pass)	3	5	..	"	"	"	..	..	..	..
Elsie (Thames) ..	4	15	..	"	"	"	..	..	..	..
Elsie (Auckland) ..	24	30	..	"	Twin-screw	"	..	..	..	..
Elsie Evans ..	6	20	..	"	Screw	"	..	..	..	..
Elsma ..	3	10	..	"	"	"	..	..	..	..
Elspe ..	2	5	..	"	"	"	..	..	..	..
Emerald ..	4	12	..	"	"	"	..	..	..	..
Emily ..	5	25	..	"	"	"	..	..	..	..
Emma ..	4	8	..	"	"	"	..	..	..	..
Endeavour ..	54	30	..	"	"	Home trade	2	..	..	..
Erin ..	*20	4	..	Non-condensing	"	River limits	..	..	..	..
Ethel W. ..	4	20	..	Oil-engine	"	"	..	..	..	..
Eva ..	5	20	..	"	"	"	..	..	..	..
Eveline ..	*20	8	..	Non-condensing	"	"	..	..	..	..
Excelsior ..	6	24	..	Oil-engine	Twin-screw	Home trade	1	..	..	..
Express ..	1	5	..	"	Screw	River limits	..	..	..	..
Fairburn ..	60	60	..	"	Twin-screw	Home trade	2	..	..	..
Fanny (Napier) ..	55	30	135	Compound	Screw	"	2	2	..	..
Ferro (Queenstown)	3	7	..	Oil-engine	"	River limits	..	..	..	..
† Ferro (Auckland)	6	30	..	"	"	"	..	..	..	..
Fire Float ..	*20	13	..	Compound	"	"	..	..	..	..
Flirt ..	4	12	..	Oil-engine	"	"	..	..	..	..
Flora (Dunedin) ..	838	180	978	Compound	"	Home trade	6	3	2	3	
Flora (Totara N.)	2	3	..	Oil-engine	"	River limits	..	..	..	..
Foam (Kawhia) ..	4	12	..	"	"	"	..	..	..	..
Freetrader ..	94	50	..	Non-condensing	Stern-wheel	"	..	..	..	..
Gannet ..	10	12	..	Compound	Screw	"	..	..	..	..
Geisha ..	4	12	..	Oil-engine	"	"	..	..	..	..
Gilda ..	5	12	..	"	"	"	..	..	..	..
Gisborne Pilot-launch	5	12	..	"	Twin-screw	"	..	..	..	..
Glenelg ..	156	75	253	Compound	Screw	Home trade	4	3	..	..
Glyn Bird ..	6	40	..	Oil-engine	"	River limits	..	..	..	..
Gosford ..	23	30	..	Compound	"	"	..	..	..	..
Goshawk ..	122	28	..	"	"	"	..	..	..	..
Haku ..	4	41	..	Oil-engine	"	"	..	..	..	..
Hananui II ..	44	58	266	Triple-expansion	"	Home trade	2	3	..	..
Hapai (dredge) ..	364	155	..	"	Twin-screw	River limits	..	..	..	..
Harmony ..	2	6	..	Oil-engine	Screw	"	..	..	..	..
Hauiti (Tolaga Bay)	12	20	..	"	"	"	..	..	..	..
Hauiti (Auckland)	82	32	120	Compound	"	"	..	..	..	..
Hauraki ..	9	4	..	"	"	"	..	..	..	..
Hawera ..	92	31	193	"	"	Home trade	2	2	..	..
Hazel ..	3	8	..	Oil-engine	"	River limits	..	..	..	..
Hilda ..	5	20	..	"	"	"	..	..	..	..
Hina ..	47	20	89	Compound	"	Home trade	2	1	..	..
Hinemoa (On'hnga)	4	12	..	Oil-engine	"	River limits	..	..	..	..
Hinemoa (Hok'nga)	2	6	..	"	"	"	..	..	..	..
Hinemoa (Rotorua)	4	15	..	"	"	"	..	..	..	..

* Under 20 tons.

† Surveyed twice.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law re- quires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trim- mers.	Greasers.	
Hinemoa (W'gtn)	282	150	680	Compound ..	Screw ..	Foreign trade	..	..	..	..	Govt. steamer.
Hipi ..	16	11	..	Triple-expansion	Twin-screw	River limits ..	..	..	..	..
Hirere ..	20	16	..	Compound ..	" ..	" ..	..	..	..	..
*Hobsonville ..	23	15	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Houto ..	84	45	..	" ..	" ..	Home trade ..	2	..	..	..
Huia (Wellington)	†20	2	..	Compound ..	" ..	River limits ..	..	..	..	..
Huia (L. Roto'hana)	2	4	..	Oil-engine ..	" ..	" ..	..	..	..	..
Ida ..	3	7	..	" ..	" ..	" ..	..	..	..	..
Ika ..	6	20	..	" ..	" ..	" ..	..	..	..	..
Imp ..	3	4	..	" ..	" ..	" ..	..	..	..	..
Indarra ..	1	20	..	" ..	" ..	" ..	..	..	..	..
*Invercargill ..	123	41	234	Compound ..	" ..	Home trade ..	4	2	..	..
Iona ..	4	25	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Iranui ..	8	10	..	" ..	" ..	" ..	..	..	..	..
Irini ..	4	15	..	" ..	" ..	" ..	..	..	..	..
Iris ..	3	8	..	" ..	" ..	" ..	..	..	..	..
Isa ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Isabel ..	5	5	..	" ..	" ..	" ..	..	..	..	..
Isabella de Fraine	70	60	..	" ..	Twin-screw	Home trade ..	2	..	..	..
Ivy ..	9	30	..	" ..	Screw ..	River limits ..	..	..	..	..
*James Cosgrove ..	114	61	480	Triple-expansion	" ..	Home trade ..	4	3	..	..
Janie Seddon ..	43	48	..	Compound ..	Twin-screw	River limits ..	..	..	..	..
J.D.O. ..	98	28	..	" ..	Screw ..	" ..	..	..	..	..
Jean Gordon ..	7	8	..	" ..	" ..	" ..	..	..	..	..
Jersey Lily ..	4	12	..	Oil-engine ..	" ..	" ..	..	..	..	..
John ..	134	90	212	Compound ..	" ..	Home trade ..	4	2	..	..
John Anderson ..	34	20	..	" ..	" ..	" ..	2	..	..	..
*John Townley (dredge)	85	39	..	" ..	Twin-screw	River limits ..	..	..	..	..
*Joyce ..	2	6	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
J. T. Stewart ..	5	47	..	" ..	" ..	" ..	..	..	..	..
Jubilee ..	105	35	..	" ..	Twin-screw	Foreign trade	4	..	..	..
*Kahika ..	528	103	618	Triple-expansion	Screw ..	Home trade ..	5	3	..	..
Kahiwai ..	3	10	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
*Kahu (Napier) ..	96	40	213	Compound ..	" ..	Home trade ..	2	2	..	..
Kaiaia ..	24	46	..	Oil-engine ..	Twin-screw	" ..	1	..	..	..
Kaimaka ..	11	24	..	" ..	" ..	River limits ..	..	..	..	..
Kaipara ..	†20	4	..	Compound ..	Screw ..	" ..	..	..	..	..
Kaipatiki ..	23	10	..	" ..	" ..	" ..	..	..	..	..
Kaitangata ..	1,195	200	1,025	Triple-expansion	" ..	Foreign trade	7	3	2	3	
Kaitoa ..	118	65	321	Compound ..	Twin-screw	Home trade ..	4	3	..	..
Kaituna ..	1,208	200	1,049	Triple-expansion	Screw ..	Foreign trade	7	3	2	3	
*Kaiwarra ..	1,847	2,000	1,779	" ..	" ..	" ..	8	6	3	3	
Kakapo ..	949	90	732	" ..	" ..	" ..	6	3	..	..
Kamo ..	725	159	742	" ..	" ..	" ..	6	3	2	3	
Kamona ..	903	117	739	" ..	" ..	" ..	6	3	2	3	
Kanieri (L. Kanieri)	2	4	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Kanieri (Auckland)	115	20	152	Compound ..	" ..	Home trade ..	4	2	..	..
Kanna ..	1,049	158	1,084	Triple-expansion	" ..	Foreign trade	7	3	2	3	
Kapiti ..	114	35	218	Compound ..	" ..	Home trade ..	4	2	..	..
Kapousa ..	6	10	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Kapuni ..	97	30	165	Compound ..	" ..	Home trade ..	2	2	..	..
Karaka ..	10	22	..	Triple-expansion	" ..	River limits ..	..	..	..	..
Karamu ..	452	102	747	" ..	" ..	Home trade ..	5	3	..	..
Karma ..	3	28	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Karora ..	6	30	..	" ..	" ..	" ..	..	..	..	..
Karoro ..	52	17	..	Compound ..	" ..	" ..	..	..	..	..
Kate (Foxton) ..	†20	5	..	Non-condensing	" ..	" ..	..	..	..	..
Katie S. ..	6	12	..	Oil-engine ..	" ..	Home trade ..	1	..	..	..
Kawatiri ..	1,856	429	1,386	Triple-expansion	" ..	Foreign trade	8	6	3	3	
Kawau (Auckland)	53	20	92	Compound ..	" ..	Home trade ..	2	1	..	..
Kawau (Auckland)	37	15	..	" ..	" ..	River limits ..	..	..	..	..
Kekerangu ..	1,866	430	1,682	Triple-expansion	" ..	Foreign trade	8	6	3	3	
Kelvin ..	2	7	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Kennedy ..	131	38	156	Compound ..	Twin-screw	Home trade ..	4	2	..	..
Kerepehi ..	55	27	137	" ..	" ..	River limits ..	..	..	..	..
Kestrel ..	159	43	..	" ..	Screw each end	" ..	..	..	..	..
Kina ..	5	25	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Kini ..	702	135	686	Triple-expansion	" ..	Home trade ..	6	3	..	..
Kirita ..	6	30	..	Oil-engine ..	Twin-screw	River limits ..	..	..	..	..
Kiritona ..	75	150	..	" ..	" ..	Home trade ..	2	..	..	..
Kittawa ..	708	120	726	Triple-expansion	Screw ..	" ..	6	3	..	..
Kiwi (Dunedin) ..	6	14	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Kiwi (Whangarei)	4	28	..	" ..	" ..	" ..	..	..	..	..
Knoxie ..	5	12	..	" ..	" ..	" ..	..	..	..	..

* Surveyed twice.

† Under 20 tons.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Crossers.	
Koau ..	77	170	..	Oil-engine ..	Twin-screw	River limits ..	..	..	..	..
Kohatu ..	2	8	..	" ..	Screw ..	" ..	..	..	..	..
Koheroa ..	4	12	..	" ..	" ..	" ..	..	..	..	..
Kohi ..	20	60	..	" ..	Twin-screw	Home trade ..	1	..	..	..
Koi ..	55	32	..	Compound ..	" ..	River limits ..	..	..	..	..
Kokiri (Russell) ..	4	10	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Kokiri (Wellington) ..	713	135	770	Triple-expansion	" ..	Foreign trade ..	6	3	2	3	
Komata ..	1,294	260	1,250	" ..	" ..	Home trade ..	8	3	2	3	
Kopu ..	18	13	..	Non-condensing	Paddle ..	River limits ..	..	..	..	..
Koroi (Auckland)	*20	10	..	Quadruple-expansion	Screw ..	" ..	..	..	..	..
Kotare ..	83	20	138	Compound ..	" ..	Home trade ..	2	2	..	..
Kotiti ..	42	14	61	" ..	" ..	" ..	2	1	..	..
Koutunui ..	98	26	154	" ..	Twin-screw	" ..	2	2	..	..
Kowhai ..	404	128	..	Triple-expansion	Screw ..	Foreign trade ..	5	3	..	..
Kumea Kaba ..	4	40	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Kumi ..	5	28	..	" ..	" ..	" ..	..	..	..	..
Lady Eva ..	3	120	..	" ..	" ..	Home trade ..	1	..	..	..
Lady Moira ..	2	5	..	" ..	" ..	River limits ..	..	..	..	..
La Mascotte ..	4	10	..	" ..	" ..	" ..	..	..	..	..
La Reine ..	6	20	..	" ..	" ..	" ..	..	..	..	..
Laurel ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Lena Gladys ..	31	27	..	" ..	Twin-screw	Home trade ..	1	..	..	..
Lighter ..	5	10	..	" ..	Screw ..	River limits ..	..	..	..	..
Lillian ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Lily ..	59	30	..	" ..	" ..	Home trade ..	1	..	..	..
Linda ..	3	9	..	" ..	" ..	River limits ..	..	..	..	..
Lion ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Lizette ..	21	16	..	" ..	" ..	" ..	..	..	..	..
Lomen ..	*20	6	..	Compound ..	" ..	" ..	..	..	..	..
Lone Star ..	4	20	..	Oil-engine ..	" ..	" ..	..	..	..	..
Lorna ..	4	10	..	" ..	" ..	" ..	..	..	..	..
Loyalty ..	24	35	78	Compound ..	" ..	Home trade ..	1	1	..	..
Lupe ..	3	10	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Lyttelton ..	1	133	..	Compound ..	Twin-screw	" ..	..	..	..	..
Lyttelton ..	24	108	230	" ..	Paddle ..	Home trade ..	1	3	..	..
Mac ..	2	6	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Magic ..	58	60	..	" ..	Twin-screw	Home trade ..	2	..	..	..
Mahanga ..	4	17	..	" ..	" ..	River limits ..	..	..	..	..
Mabau ..	3	5	..	" ..	Screw ..	" ..	..	..	..	..
Mahino ..	6	5	..	" ..	" ..	" ..	..	..	..	..
† Mahoe ..	14	45	..	" ..	" ..	Home trade ..	1	..	..	..
Mahua ..	353	28	..	Compound ..	Twin-screw	River limits ..	..	..	..	..
Mahurangi ..	95	80	191	" ..	Screw ..	Home trade ..	2	2	..	..
Maidi ..	12	11	..	" ..	" ..	River limits ..	..	..	..	..
Maid of Italy ..	6	10	..	Oil-engine ..	" ..	" ..	..	..	..	..
Mako (Napier) ..	247	65	413	Triple-expansion	" ..	Home trade ..	5	3	..	..
Mana ..	51	90	..	Compound ..	Paddle ..	River limits ..	..	..	..	..
† Manaia ..	630	104	1,015	Triple-expansion	Twin-screw	Home trade ..	7	3	2	3	
Manaroa ..	75	24	147	Compound ..	Screw ..	" ..	..	..	..	..
Manu (Auckland) ..	5	45	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Manu (Mangonui) ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Manuka ..	2,813	357	3,637	Triple-expansion	Twin-screw	Foreign trade ..	11	9	6	3	
Manuka (Ly'tton) ..	3	3	..	Compound ..	Screw ..	River limits ..	..	..	..	..
Manukau ..	4	30	..	Oil-engine ..	" ..	" ..	..	..	..	..
Manurere ..	*20	4	..	Quadruple-expansion	" ..	" ..	..	..	..	..
Manuwai ..	94	30	..	Non-condensing	Stern-wheel	" ..	..	..	..	..
Maori (London) ..	1,567	5,600	..	Turbine ..	Triple-screw	Home trade ..	9	15	9	3	
Maori (Stewart Is.) ..	3	5	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Maori (Taupo) ..	2	5	..	" ..	" ..	" ..	..	..	..	..
† Mapourika ..	718	130	1,071	Triple-expansion	" ..	Home trade ..	7	3	2	3	
Marama ..	3	4	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Marama (London) ..	3,992	1,500	4,277	Triple-expansion	Twin-screw	Foreign trade ..	13	12	6	3	
Mararoa ..	1,329	530	3,027	" ..	Screw ..	Home trade ..	8	9	6	3	
Mareno ..	4	5	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Maribel ..	6	16	..	" ..	" ..	" ..	..	..	..	..
Maritana ..	6	14	..	" ..	" ..	" ..	..	..	..	..
Marne ..	4	10	..	" ..	" ..	" ..	..	..	..	..
Mary ..	5	7	..	" ..	" ..	" ..	..	..	..	..
Mascotte ..	20	6	..	Compound ..	" ..	" ..	..	..	..	..
Matakakiri ..	3	9	..	Oil-engine ..	" ..	" ..	..	..	..	..
Matariki ..	5	16	..	" ..	" ..	" ..	..	..	..	..
Matatua ..	4	16	..	" ..	" ..	" ..	..	..	..	..
Matea ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Maud T. ..	3	35	..	" ..	" ..	" ..	..	..	..	..

* Under 20 tons.

† Surveyed twice.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Num- ber of follow- ing Classes of Crew Law re- quires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Crewsers.	
Maui ..	6	11	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Mavis (Stewart Is.)	4	5	..	" ..	" ..	" ..	..	..	..	..
Mavis (Whakapirau)	3	14	..	" ..	" ..	" ..	..	..	..	..
Mavis (Picton) ..	6	12	..	" ..	" ..	" ..	..	..	..	..
Mavis (Onshunga)	2	6	..	" ..	" ..	" ..	..	..	..	..
Mavora ..	4	10	..	" ..	" ..	" ..	..	..	..	..
May (Wanganui) ..	1	4	..	" ..	" ..	" ..	..	..	..	..
May (Tryphena) ..	2	5	..	" ..	" ..	" ..	..	..	..	..
M.C. ..	3	6	..	" ..	" ..	" ..	..	..	..	..
Merita ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Merlin (Picton) ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Merlin (Foxton) ..	4	4	..	Compound ..	" ..	" ..	..	..	..	..
Mermaid (Wairoa)	3	..	..	Oil-engine ..	" ..	" ..	..	..	..	..
Minoru ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Miro ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Miss Thyra ..	3	15	..	" ..	" ..	" ..	..	..	..	..
Mizpah ..	5	20	..	" ..	" ..	" ..	..	..	..	..
Moa (Taieri M'uth)	5	4	..	" ..	" ..	" ..	..	..	..	..
Moana (Tryphena)	2	9	..	" ..	" ..	" ..	..	..	..	..
Moana (Picton) ..	4	8	..	" ..	" ..	" ..	..	..	..	..
Moana (London) ..	2,415	372	3,041	Triple-expansion Oil-engine ..	" ..	Foreign trade River limits ..	10	9	6	3	
Moata ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Moeraki ..	2,715	357	3,825	Triple-expansion Oil-engine ..	Twin-screw Screw ..	Foreign trade River limits ..	11	9	6	3	
Moerangi ..	5	16	..	" ..	" ..	" ..	..	..	..	..
Mokoia (Rotorua)	3	14	..	" ..	" ..	" ..	..	..	..	..
Mokoia (London) ..	2,112	255	1,892	Triple-expansion Oil-engine ..	" ..	Foreign trade River limits ..	10	6	3	3	
Molly ..	3	15	..	" ..	" ..	" ..	..	..	..	..
Monica ..	3	12	..	" ..	" ..	" ..	..	..	..	..
Monica II ..	23	20	..	Compound ..	" ..	" ..	..	..	..	..
Moonlight ..	4	6	..	Oil-engine ..	" ..	" ..	..	..	..	..
Morning Light ..	59	100	..	" ..	" ..	" ..	..	..	..	..
Mororo ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Moturata ..	18	25	..	" ..	" ..	" ..	..	..	..	..
Mountaineer ..	66	50	..	Compound Oil-engine ..	Paddle Screw ..	" ..	..	..	..	..
Muratai ..	4	12	..	" ..	" ..	" ..	..	..	..	..
Muriel ..	22	18	116	Compound ..	" ..	Home trade ..	1	2	..	..
Murihiku (dredge)	369	70	521	Triple-expansion Oil-engine ..	Twin-screw Screw ..	" .. River limits ..	4	3	..	..
Muritai ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Muriwai ..	6	55	..	" ..	" ..	" ..	..	..	..	..
Nada ..	1	6	..	" ..	" ..	" ..	..	..	..	..
Namu ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Nancibel ..	5	25	..	" ..	" ..	" ..	..	..	..	..
Nancy ..	2	10	..	" ..	" ..	" ..	..	..	..	..
Natone ..	50	24	..	Compound Oil-engine ..	" ..	" ..	..	..	..	..
Naumai (Kawhia)	5	9	..	" ..	" ..	" ..	..	..	..	..
Naumai (A'kland)	29	12	..	Compound ..	" ..	" ..	..	..	..	..
Nautilus (New Brighton)	4	18	..	Oil-engine ..	" ..	" ..	..	..	..	..
Nautilus (Hoki'nga)	3	7	..	" ..	" ..	" ..	..	..	..	..
Nautilus (Stewart Island)	4	5	..	" ..	" ..	" ..	..	..	..	..
Navua ..	1,773	220	1,867	Triple-expansion Oil-engine ..	Twin-screw Screw ..	Foreign trade River limits ..	9	6	3	3	
Nellie Mason ..	14	15	..	" ..	" ..	" ..	..	..	..	..
Neptune ..	4	14	..	" ..	" ..	" ..	..	..	..	..
Ngahere ..	556	118	745	Triple-expansion Oil-engine ..	" ..	Home trade .. River limits ..	5	3	..	..
Ngairi ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Ngapuhi ..	299	160	850	Triple-expansion Oil-engine ..	Twin-screw Screw ..	Home trade .. River limits ..	5	3	..	..
Ngarita ..	4	18	..	" ..	" ..	" ..	..	..	..	..
Ngatea ..	6	14	..	Non-condensing ..	" ..	" ..	..	..	..	..
Ngatiawa ..	220	55	394	Triple-expansion Oil-engine ..	Twin-screw Screw ..	Home trade .. River limits ..	5	3	..	..
Ngatimaru ..	4	10	..	" ..	" ..	" ..	..	..	..	..
Ngoiro ..	139	52	..	Triple-expansion ..	Screw each end ..	River limits ..	..	..	..	..
Nick ..	6	25	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Nicola ..	4	10	..	" ..	" ..	" ..	..	..	..	..
Nikau ..	98	55	269	Compound ..	Twin-screw Screw ..	Home trade ..	2	3	..	..
Nile ..	18	12	..	" ..	" ..	" ..	1	1	..	..
Nimrod ..	4	32	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Nita ..	6	10	..	" ..	" ..	" ..	..	..	..	..
Nora Niven ..	66	35	187	Triple-expansion Oil-engine ..	" ..	Home trade .. River limits ..	2	2	..	..
Norval ..	50	20	..	" ..	" ..	" ..	..	..	..	..
*Nor-west ..	6	15	..	" ..	" ..	Home trade ..	1	..	..	..
*Oban ..	24	20	..	" ..	Twin-screw ..	Home trade ..	1	..	..	..
Ocean Queen ..	4	8	..	" ..	Screw ..	River limits ..	..	..	..	..
Odin ..	3	40	..	" ..	" ..	" ..	..	..	..	..
Oel ..	5	7	..	" ..	" ..	" ..	..	..	..	..
Ohia ..	7	20	..	" ..	" ..	" ..	..	..	..	..
Ohura ..	34	25	..	Condensing ..	Twin-screw ..	River limits ..	..	..	..	..

* Surveyed twice.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Num- ber of follow- ing Classes of Crew Law re- quires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Oleo	5	20	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Olga	4	10	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Oline	2	10	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Olive	6	32	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Olive Jean ..	6	25	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Olivene	4	18	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Omana	49	14	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Omati	6	35	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Omawi	14	20	..	"	Stern-wheel	" .. ..	..	..	..	..
Onawe	5	25	..	"	Screw .. ..	" .. ..	..	..	..	..
Oneroa	29	15	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Onewa	31	15	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Ongarue	9	53	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Opala	5	23	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Oparau	5	5	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Opawa	59	18	74	Compound ..	"	Home trade ..	2	1	..	..
Opihi	638	86	542	Triple-expansion	"	Foreign trade	6	3	..	..
Opoutia	*20	5	..	Compound ..	"	River limits ..	..	..	..	..
Oranga	4	16	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Orepuki	226	78	426	Compound ..	"	Home trade ..	4	3	..	..
Orewa	37	17	..	"	"	River limits ..	..	..	..	..
Orini	19	120	..	Oil-engine ..	Twin-screw	Home trade ..	1	..	..	..
Orion	4	8	..	"	Screw	River limits ..	..	..	..	..
Osprey (Raglan) ..	1	4	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Osprey (Auckland) ..	138	70	..	Compound ..	Paddle ..	" .. ..	..	..	..	..
Otakou	24	13	..	"	Screw .. ..	" .. ..	..	..	..	..
Otunui	12	75	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Ozone	4	10	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Pacific	4	15	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Paihia	4	15	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Palatine	4	5	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Palooa	1,725	443	2,413	Triple-expansion	"	Foreign trade	9	9	3	3	
Pania	35	11	..	Compound ..	"	River limits ..	..	..	..	..
Parenga	4	10	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Parera	6	4	..	Non-condensing	" .. ..	" .. ..	..	..	..	..
Paritutu (dredge)	233	90	648	Triple-expansion	Twin-screw	" .. ..	..	..	..	..
Paroto	48	120	..	Oil-engine ..	"	Home trade ..	1	..	..	..
Patiti	*20	15	..	"	Screw	River limits ..	..	..	..	..
Pearl	9	7	..	Non-condensing	" .. ..	" .. ..	..	..	..	..
Pearl Kasper	16	22	..	Oil-engine ..	"	Home trade ..	1	..	..	..
Peerless	4	15	..	"	"	River limits ..	..	..	..	..
Pelican	62	57	256	Triple-expansion	Twin-screw	" .. ..	..	..	..	..
Pelorus	3	12	..	Oil-engine ..	Screw .. ..	" .. ..	..	..	..	..
Peregrine	162	52	..	Triple-expansion	Screw each end ..	" .. ..	..	..	..	..
Pet	6	10	..	Oil-engine ..	Twin-screw	" .. ..	..	..	..	..
Petrel (Picton) ..	2	20	..	"	Screw .. ..	" .. ..	..	..	..	..
Petrel (Onehunga) ..	6	15	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Phantom	20	11	140	Compound ..	"	Home trade ..	1	2	..	..
Phyllis (Hokitika) ..	1	3	..	Oil-engine ..	"	River limits ..	..	..	..	..
Phyllis (Russell) ..	4	15	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Phyllis (Te Kopuru)	5	2	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Pihinga	3	5	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Pilot	6	30	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Pioneer	3	5	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Pitoitoti	34	20	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Pleiades	3	12	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Plucky	29	40	270	Compound ..	"	Home trade ..	1	3	..	..
Poherua	716	128	648	Triple-expansion	"	"	6	3	..	..
Pono	30	52	..	Oil-engine ..	Twin-screw	River limits ..	..	..	..	..
Ponui	3	62	..	"	Screw .. ..	" .. ..	..	..	..	..
Portare	6	24	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Presto	*20	3	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Princess	5	5	..	Oil-engine ..	" .. ..	" .. ..	..	..	..	..
Pukeore	4	7	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Pupuke	68	50	..	Compound ..	Screw each end ..	" .. ..	..	..	..	..
Purau	9	30	..	"	Twin-screw	" .. ..	..	..	..	..
Putiki	168	60	320	"	Screw	Home trade ..	4	3	..	..
Queen	2	6	..	Oil-engine ..	"	River limits ..	..	..	..	..
Queen of Beauty ..	4	16	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Rainbow	4	12	..	" .. ..	" .. ..	" .. ..	..	..	..	..
Rakino	3	8	..	Compound ..	" .. ..	" .. ..	..	..	..	..
Rakiura	13	10	..	Oil-engine ..	"	Home trade ..	1	..	..	..
Rama	244	97	..	Triple-expansion	"	Foreign trade	4	..	..	..
Rangi II	2	10	..	Oil-engine ..	"	River limits ..	..	..	..	..
Rarawa	460	140	1,108	Triple-expansion	Twin-screw	Home trade ..	6	3	2	3	

* Under 20 tons.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Rawhiti ..	2	5	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Regulus ..	232	150	606	Triple-expansion	Twin-screw	Home trade ..	4	3	..	..
Reliance ..	5	12	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Reo (Hamilton) ..	1	5	..	" ..	" ..	" ..	..	..	..	..
Reo (Whangarei) ..	6	45	..	" ..	" ..	" ..	..	..	..	..
Reomoana ..	14	50	..	" ..	" ..	" ..	..	..	..	..
Result ..	19	10	..	Compound ..	" ..	" ..	..	..	..	..
Revenge ..	6	14	..	Oil-engine ..	" ..	" ..	..	..	..	..
Rhodesia ..	4	7	..	" ..	" ..	" ..	..	..	..	..
Rimu (Thames) ..	6	16	..	" ..	" ..	" ..	..	..	..	..
Rimu (Invercargill)	28	18	..	" ..	Twin-screw	" ..	..	..	..	..
Ripple (Onehunga)	8	5	..	" ..	Screw ..	" ..	..	..	..	..
Ripple (Napier) ..	187	80	285	Triple-expansion	" ..	Home trade ..	4	3	..	..
Riverton ..	5	8	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Riwaka ..	19	11	..	Compound ..	" ..	" ..	..	..	..	..
Roko ..	3	12	..	Oil-engine ..	" ..	" ..	..	..	..	..
Rona ..	4	25	..	" ..	" ..	" ..	..	..	..	..
Rona II ..	6	15	..	" ..	" ..	" ..	..	..	..	..
Ronaki ..	4	5	..	" ..	" ..	" ..	..	..	..	..
Rosamond ..	462	90	445	Compound ..	" ..	Home trade ..	5	3	..	..
Rose (Whangarei)	4	10	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Rose (Kaiapoi) ..	4	15	..	" ..	" ..	" ..	..	..	..	..
Rotoiti ..	5	30	..	" ..	" ..	" ..	..	..	..	..
Rotokohu ..	11	8	..	Compound ..	" ..	" ..	..	..	..	..
Ruahine ..	5	12	..	Oil-engine ..	" ..	" ..	..	..	..	..
Ruawai ..	177	52	..	Compound ..	" ..	" ..	..	..	..	..
Rubi Seddon (dr'ge)	349	80	..	" ..	Twin-screw	" ..	..	..	..	..
Ruby ..	3	8	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Ruru ..	62	50	188	Compound ..	" ..	Home trade ..	2	2	..	..
Sambo ..	5	40	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Samson ..	4	16	..	" ..	" ..	" ..	..	..	..	..
Savaii ..	9	16	64	Condensing	" ..	Home trade ..	1	1	..	..
Scarboro ..	5	10	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Scout ..	4	20	..	" ..	" ..	" ..	..	..	..	..
Sea Bird II ..	6	16	..	" ..	" ..	" ..	..	..	..	..
Sea Queen I ..	6	25	..	" ..	" ..	" ..	..	..	..	..
Settler ..	6	20	..	" ..	" ..	" ..	..	..	..	..
Shamrock (Ruru)	2	4	..	" ..	" ..	" ..	..	..	..	..
Shamrock (A'kland)	2	6	..	" ..	" ..	" ..	..	..	..	..
Shamrock Leaf ..	6	55	..	" ..	" ..	" ..	..	..	..	..
Silver Bell ..	2	7	..	" ..	" ..	" ..	..	..	..	..
Silver Cloud ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Silver Fern ..	2	12	..	" ..	" ..	" ..	..	..	..	..
Simplon ..	69	75	..	Compound ..	" ..	Home trade ..	2	1	..	..
Sir Wm. Wallace	30	20	..	" ..	" ..	River limits ..	..	..	..	..
Sneaker ..	6	5	..	Oil-engine ..	" ..	" ..	..	..	..	..
Sokol ..	7	10	..	" ..	" ..	" ..	..	..	..	..
Southern Cross ..	403	117	347	Triple-expansion	Twin-screw	Foreign trade	6	3	..	..
Sparrowhawk ..	99	32	..	Compound ..	Screw each end	River limits ..	..	..	..	..
Speedwell ..	4	24	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Speedy ..	3	5	..	" ..	" ..	" ..	..	..	..	..
Standard ..	9	10	..	" ..	" ..	" ..	..	..	..	..
Stanley ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Stella ..	122	90	270	Compound ..	" ..	Foreign trade	4	2	..	..
Sterling ..	4	28	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
St. George ..	2	8	..	" ..	" ..	" ..	..	..	..	..
Storm ..	186	70	251	Compound ..	" ..	Home trade ..	4	3	..	..
Sunbeam ..	5	8	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Sylvia ..	4	9	..	" ..	" ..	" ..	..	..	..	..
Symbol ..	3	6	..	" ..	" ..	" ..	..	..	..	..
Tahawai ..	9	14	..	" ..	" ..	" ..	..	..	..	..
Taiho ..	2	4	..	" ..	" ..	" ..	..	..	..	..
Taihoa ..	3	20	..	" ..	" ..	" ..	..	..	..	..
Tainui ..	5	30	..	" ..	" ..	" ..	..	..	..	..
Taiipo ..	18	12	..	" ..	" ..	" ..	..	..	..	..
Takitumo ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Talune ..	1,370	255	1,554	Triple-expansion	" ..	River limits ..	..	..	..	..
Tamure ..	6	10	..	Oil-engine ..	Twin-screw	Foreign trade	8	6	3	3	
Tanfield Lea ..	3	12	..	" ..	Screw ..	River limits ..	..	..	..	..
Tangaroa ..	109	70	..	Compound ..	Twin-screw	" ..	..	..	..	..
Taniwha (dredge)	16	16	..	Non-condensing	Screw ..	" ..	..	..	..	..
Taniwha ..	191	40	..	Compound ..	Twin-screw	" ..	..	..	..	..
Tararawa ..	21	45	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Tarawera ..	1,240	250	1,404	Compound ..	" ..	Foreign trade	8	6	3	3	
Tarawai ..	11	11	..	Condensing	" ..	River limits ..	..	..	..	..
Tasman ..	87	45	215	Compound ..	Twin-screw	Home trade ..	2	2	..	..

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE ISSUED, ETC.—*continued.*

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Crossers.	
Taupiri ..	3	7	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Tauri ..	6	16	..	" ..	" ..	" ..	..	..	..	..
Tawera (Auckland)	44	40	..	" ..	" ..	" ..	..	..	..	..
Tawera (Ham'lton)	11	11	..	Non-condensing ..	" ..	" ..	..	..	..	..
Tawera (Lake Te Anau)	*20	25	..	Compound ..	" ..	" ..	..	..	..	..
Tawera (Taupo) ..	2	8	..	Oil-engine ..	" ..	" ..	..	..	..	..
Te Anau ..	957	250	1,209	Compound ..	" ..	Foreign trade ..	6	3	2	3	
Te Aroha ..	57	85	..	Oil-engine ..	Twin-screw	Home trade ..	2	..	..	..
Te Awhina ..	87	99	462	Triple-expansion	" ..	" ..	2	3	..	..
Te Hauraki ..	5	40	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Tempest ..	3	10	..	" ..	" ..	" ..	..	..	..	..
Te Pioneer ..	25	13	..	Compound ..	" ..	" ..	..	..	..	..
Terawhiti ..	102	99	846	Triple-expansion	" ..	Home trade ..	4	3	2	3	
Teriruka ..	4	6	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Te Toa ..	9	60	..	" ..	Twin-screw	" ..	..	..	..	..
Te Tui ..	31	32	..	" ..	" ..	" ..	..	..	..	..
Te Whaka (dredge)	141	45	..	Compound ..	Screw ..	" ..	..	..	..	..
Te Wharu ..	3	8	..	Oil-engine ..	" ..	" ..	..	..	..	..
Te Wiremu ..	4	14	..	" ..	" ..	" ..	..	..	..	..
Thelma ..	3	5	..	" ..	" ..	" ..	..	..	..	..
The Pines ..	1	2	..	" ..	" ..	" ..	..	..	..	..
Theresa Ward ..	9	95	488	Triple-expansion	" ..	Home trade ..	1	3	..	..
Thetis ..	2	5	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Thistle (Thames)	4	7	..	" ..	" ..	" ..	..	..	..	..
Thistle (Kaiapoi)	4	5	..	" ..	" ..	" ..	..	..	..	..
Thomas King ..	70	16	..	Compound ..	" ..	" ..	..	..	..	..
Thor ..	6	12	..	Oil-engine ..	" ..	" ..	..	..	..	..
Tiki ..	10	..	70	Compound ..	" ..	" ..	..	..	..	..
Tinopai ..	3	8	..	Oil-engine ..	" ..	" ..	..	..	..	..
Tio ..	4	12	..	" ..	" ..	" ..	..	..	..	..
Tiri ..	6	20	..	" ..	" ..	" ..	..	..	..	..
Tiroa ..	93	31	180	Compound ..	" ..	" ..	..	..	..	..
Tofua ..	2,634	354	3,233	Triple-expansion	Twin-screw	Foreign trade ..	11	9	6	3	
Togo ..	*20	14	..	Compound ..	" ..	River limits ..	..	..	..	..
Toiler ..	22	13	..	" ..	Screw ..	Home trade ..	1	1	..	..
Toitoti ..	5	18	..	Oil-engine ..	" ..	River limits ..	..	..	..	..
Tongariro ..	9	8	..	Compound ..	" ..	" ..	..	..	..	..
Tot ..	6	30	..	Oil-engine ..	" ..	" ..	..	..	..	..
Tuahine ..	20	14	..	" ..	" ..	" ..	..	..	..	..
Tuatea (Raglan) ..	4	8	..	" ..	" ..	" ..	..	..	..	..
Tuatea (Dunedin)	53	28	204	Compound ..	" ..	Home trade ..	2	2	..	..
Tuatu ..	20	60	..	Oil-engine ..	Twin-screw	River limits ..	..	..	..	..
Tuhoe ..	98	120	..	" ..	" ..	Home trade ..	2	..	..	..
Tui (Akaroa) ..	6	22	..	" ..	Screw ..	River limits ..	..	..	..	..
Tuirangi ..	72	22	..	Triple-expansion	" ..	" ..	..	..	..	..
Turanga ..	19	25	..	Oil-engine ..	" ..	" ..	..	..	..	..
Tutanekai (R'torua)	2	10	..	" ..	" ..	" ..	..	..	..	..
Tutanekai (Russell)	2	8	..	" ..	" ..	" ..	..	..	..	..
Uira ..	4	3	..	Non-condensing	" ..	" ..	..	..	..	..
Undine ..	5	10	..	Oil-engine ..	" ..	" ..	..	..	..	..
Uta ..	23	50	..	" ..	" ..	" ..	..	..	..	..
Ventura ..	3	7	..	" ..	" ..	" ..	..	..	..	..
Venture ..	6	14	..	" ..	" ..	" ..	..	..	..	..
Vera ..	4	16	..	" ..	" ..	" ..	..	..	..	..
Vesper (Te Kopuru)	3	16	..	" ..	" ..	" ..	..	..	..	..
Vesper (Auckland)	5	32	..	" ..	Twin-screw	Home trade ..	1	..	..	..
Victory (Helensv'le)	4	14	..	" ..	Screw ..	River limits ..	..	..	..	..
Victory (Auckland)	17	30	..	" ..	Twin-screw	" ..	..	..	..	..
Viking ..	5	14	..	" ..	Screw ..	" ..	..	..	..	..
Vindex ..	16	32	..	" ..	Twin-screw	Home trade ..	1	..	..	..
Viola ..	3	15	..	" ..	Screw ..	River limits ..	..	..	..	..
Waiapu ..	57	35	..	" ..	" ..	" ..	..	..	..	..
Waihau ..	6	40	..	" ..	" ..	" ..	..	..	..	..
Wai-iti ..	5	47	..	" ..	" ..	" ..	..	..	..	..
Waikana ..	67	200	..	Compound ..	Twin-screw	" ..	..	..	..	..
Waikato ..	6	10	..	Oil-engine ..	Screw ..	" ..	..	..	..	..
Waikuku ..	2	5	..	" ..	" ..	" ..	..	..	..	..
Waima (Darg'ville)	3	10	..	" ..	" ..	" ..	..	..	..	..
Waima (Auckland)	6	20	..	" ..	" ..	" ..	..	..	..	..
Waimarama ..	4	8	..	" ..	" ..	" ..	..	..	..	..
Waimarie (A'kland)	159	48	..	Compound ..	Twin-screw	" ..	..	..	..	..
† Waimarie (W'gton)	53	20	..	Non-condensing	Paddle ..	" ..	..	..	..	..
Wainea ..	207	100	510	Triple-expansion	Twin-screw	Home trade ..	4	3	..	..
Wainui (Picton) ..	2	5	..	Oil-engine ..	Screw ..	River limits ..	..	..	..	..
Wainui (Akaroa) ..	5	10	..	" ..	" ..	" ..	..	..	..	..
Waioma ..	5	20	..	" ..	" ..	" ..	..	..	..	..

* Under 20 tons.

† Surveyed twice.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE
ISSUED, ETC.—*continued.*

Name of Vessel	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of follow- ing Classes of Crew Law re- quires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Waione ..	48	80	..	Compound	Twin-screw	River limits ..	..	..	..	..
Waiora ..	20	75	..	Oil-engine	Screw ..	" ..	..	..	..	..
Wai-ora ..	3	15	..	" ..	" ..	" ..	..	..	..	..
Waitotahi ..	167	56	349	Compound	Twin-screw	Home trade ..	4	3	..	..
Waipu ..	76	50	204	" ..	" ..	" ..	2	2	..	..
Wairau ..	56	20	127	" ..	Screw ..	" ..	2	2	..	..
Waireka (Dunedin)	72	49	..	Triple-expansion	Twin-screw	River limits ..	..	..	..	..
Waireka (W'ng'nui)	5	45	..	Oil-engine	Screw ..	" ..	..	..	..	..
Wairere ..	41	25	..	Non-condensing	Paddle ..	" ..	..	..	..	..
Wairoa ..	48	16	70	Compound	Screw ..	Home trade ..	2	1	..	..
Wairua (Auckland)	220	44	..	" ..	Twin-screw	River limits ..	..	..	..	..
Wairua (Wang'nui)	*20	70	..	Oil-engine	Screw ..	" ..	..	..	..	..
Waitangi (A'kland)	74	66	285	Compound	Twin-screw	Home trade ..	2	3	..	..
Waitangi (Dunedin)	32	60	..	" ..	Screw ..	" ..	2	1	..	..
Waitemata (A'land)	18	75	..	Oil-engine	Twin-screw	River limits ..	..	..	..	..
Waitomo ..	2,719	372	1,604	Triple-expansion	Screw ..	Foreign trade	10	6	3	3	
Waiuku ..	49	200	..	Oil-engine	Twin-screw	River limits ..	..	..	..	..
Wakaiti ..	15	43	..	" ..	" ..	Home trade ..	1	..	..	..
Wakapai ..	*20	10	..	Compound	Screw ..	River limits ..	..	..	..	..
Wakatere (Raglan)	4	5	..	Oil-engine	" ..	" ..	..	..	..	..
Wakare (A'kland)	176	140	..	Compound	Paddle ..	" ..	..	..	..	..
Wakatu ..	95	30	131	" ..	Screw ..	Home trade ..	2	2	..	..
Wallace ..	60	50	..	Non-condensing	" ..	River limits ..	..	..	..	..
Wanderer (A'kland)	23	30	..	Oil-engine	" ..	Home trade ..	1	..	..	..
Wanderer (A'kland)	4	12	..	" ..	" ..	River limits ..	..	..	..	..
† Waterlily ..	29	20	..	" ..	" ..	Home trade ..	1	..	..	..
Waverley ..	93	25	123	Compound	Twin-screw	" ..	2	1	..	..
Weka ..	20	80	..	" ..	Screw ..	" ..	2	1	..	..
Westella ..	3	14	..	Oil-engine	" ..	River limits ..	..	..	..	..
Westland ..	8	86	445	Compound	Paddle ..	Home trade ..	1	3	..	..
Wetere ..	41	22	..	" ..	Screw ..	River limits ..	..	..	..	..
† Whakarire (dr'dge)	449	120	642	" ..	Twin-screw	Home trade ..	5	3	..	..
Whakarongatai ..	2	10	..	Oil engine	Screw ..	River limits ..	..	..	..	..
Whangape ..	1,900	280	1,160	Triple-expansion	" ..	Foreign trade	8	3	2	3	
Wharekawa ..	4	18	..	Oil-engine	" ..	River limits ..	..	..	..	..
Wharepapa ..	5	18	..	" ..	" ..	" ..	..	..	..	..
W.H.B. ..	3	15	..	" ..	" ..	" ..	..	..	..	..
Will Watch ..	48	45	..	" ..	" ..	Home trade ..	2	..	..	..
Winnie May ..	3	8	..	" ..	" ..	River limits ..	..	..	..	..
Wootton ..	90	33	131	Compound	" ..	Home trade ..	2	2	..	..
Worker ..	2	12	..	Oil-engine	" ..	River limits ..	..	..	..	..
† Young Bungaree ..	2	35	156	Compound	" ..	" ..	..	..	..	..
Zephyr II ..	3	10	..	Oil-engine	" ..	" ..	..	..	..	..
Zita ..	73	60	..	" ..	" ..	Home trade ..	2	..	..	..
Zoe ..	1	4	..	" ..	" ..	River limits ..	..	..	..	..

* Under 20 tons.

† Surveyed twice.

RETURN OF SAILING-VESSELS SURVEYED DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921,
WITH PARTICULARS OF TONNAGE, ETC.

Name of Vessel.	Tons Register.	Class of Certificate.	Minimum Number of Seamen required by Law to be carried.		
			Able Seamen.	Ordinary Seamen.	Appren- tices or Boys.
Agnes Martin (Lighter)	41	River limits ..	2	..	..
Alert	98	Home trade ..	2	1	..
Alma	23	" ..	1	..	..
*Altair	57	" ..	2	..	..
Cathkit	139	Foreign trade ..	4	..	1
Clifton	18	Home trade ..	1	..	..
Combine	24	" ..	1	..	..
Comet	20	" ..	1	..	..
Dartford	1,196	Foreign trade ..	10	2	3
Deveron	26	Home trade ..	1	..	..
Edna	22	" ..	1	..	..
Elsie Mary	99	" ..	2	1	..
Esme	20	River limits ..	1	..	..
Ethel Wells	19	Home trade ..	1	..	..
Haere	99	" ..	2	1	..
Hazel Repton	100	" ..	4	..	..
Herald	73	" ..	2	1	..
Hero	25	" ..	1	..	..
Huanui	99	" ..	2	1	..
Huon Belle	42	River limits ..	1	..	..
Irene	24	" ..	1	..	..
Jane Gifford	20	Home trade ..	1	..	..
Kiatia	20	River limits ..	1	..	..
Kitty Fraser	25	Home trade ..	1	..	..
*Laura	326	Foreign trade ..	6	1	1
Lindstol	354	" ..	6	1	1
Maggie	20	River limits ..	1	..	..
Moa (Auckland)	99	Home trade ..	2	1	..
Moa (Napier)	66	River limits ..	2	1	..
Moonah	97	Foreign trade ..	2	1	..
Motu	169	Home trade ..	4	..	1
Ngaru	66	" ..	2	1	..
Northern Chief	263	Foreign trade ..	5	1	1
Onerahi	25	Home trade ..	1	..	..
Pahiki	20	" ..	1	..	..
Rangi	86	" ..	2	1	..
*Raupo	683	Foreign trade ..	8	1	2
Rewa	7	River limits ..	1	..	..
Rira	105	Foreign trade ..	2	1	..
Rona	610	" ..	8	1	2
Saucy Kate	25	Home trade ..	1	..	..
Scot	18	" ..	1	..	..
Sea Gull	25	" ..	1	..	..
Senorita	324	Foreign trade ..	6	1	1
Talisman	70	River limits ..	2	1	..
The Portland	59	Home trade ..	2	..	..
Waikonini	23	" ..	1	..	..
Waiti	17	River limits ..	1	..	..
Wanganui	309	Foreign trade ..	6	1	1
*Ysabel	148	" ..	4	..	1
Zingara	90	Home trade ..	2	1	..

* Surveyed twice.

RETURN OF WRECKS AND CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

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H.—15.

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew	Passen- gers.	Cargo.	Casualty.			Dirac- tion.	Force.		
1919. Nov. 8	Clutha, p.s., 9 years	..	173	7	..	General	Collapse of boiler; damage, £1,500 to £2,000	1	Clutha River	..	W.	Shortage of water in the boiler caused the crown of the furnace to collapse and allow the steam to escape. The Court found that the accident was due to the negligence of the fireman in allowing the water in the boiler to become so reduced as to cause the collapse of the furnace. The fireman succumbed to the injuries he received	K. Tsukigawa.
1920. Feb. 25	Kittawa, s.s. ..	Schooner	708	25	..	Chaff	Stranded; trifling damage	..	Manukau bar	..	W.	When crossing the bar a heavy rain squall obscured all land-marks. The Court exonerated the master and crew from any blame	E. R. Nicholas.
About Mar. 26	Kahu, aux., 31 years	Schooner	25	4	..	Maize ..	Foundered; total loss	4	Not known	..	S.E.	The ship was lost at sea with all hands on or about 26th March, 1920, whilst on a voyage from Motiti Island to Auckland. The Court was of opinion that she foundered in exceptionally bad weather	John Leafberg.
" 31	Sampson No. 2, o.e.v., 6 years	Cutter ..	3	1	3	General	Collision; damage, £50	}	Near Turua, Thames River, Auckland	..	..	The launches were in each case being steered by passengers, and the collision was probably due to their inexperience	A. M. McMahon.
" 31	Nancibel, o.e.v., new	Cutter ..	5	1	30	..	Collision; damage, £70						..
April 5	Fannie, 48 years	Hulk ..	9	..	..	..	Fire; total loss..	..	Galveston, U.S.A. ..	..	N.	Vessel was loading sulphur when it took fire in No. 2 lower hold. The fire was put out by water, and no more sulphur shipped. Damage to ship (if any) not ascertained	F. Kearney.
" 9	Port Melbourne, s.s., 8 years	Schooner	5,852	93	12	General	Fire ..	..	Wharf, Auckland ..	..	..	Fire was caused by heat from donkey-boiler	A. Nelson.
" 14	The Portland, 10 years	Schooner	59	4	..	..	Fire; damage, £30	..	South Taranaki Bight	..	E.S.E.	The Court was of opinion that the casualty was contributed to by the default of the master in failing to use the patent log and by the neglect of the chief officer in failing to call the master, as instructed, when she was passing Otomotua Point, as this would have given the master an opportunity of discovering that the vessel had run off her course through apparently being affected by a set inshore. The Court considered that the conduct of the second officer called for severe censure and that of the master for some censure, and ordered them to pay the cost of the inquiry (£11 11s.) in equal shares	J. H. Bull.
" 30	Inga, s.s., 16 years	Schooner	570	20	..	Coal and timber	Stranded; considerable damage	..					

RETURN OF WRECKS AND CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT, ETC.—continued.

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
			Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1920. May 12	Waiohahi, s.s., 29 years	Schooner	18	..	General	Stranded; damaged, £50	..	Mercury Bay	S.E.	Fresh breeze	Touched bottom when in Wigmore Passage and damaged some plates	J. Wilson.
"	Akaroa, s.s., 44 years	Schooner	7	..	..	Stranded; damaged, £200	..	Elizabeth Reef, Auckland	W.	Light ..	The vessel struck the reef, broke several frames and dented three plates. The Court found that the steersman, F. S. Gosset, failed to steer the course set by the master and thus caused the accident	H. Subritzky.
"	Aorere, s.s., 34 years	Schooner	8	..	Produce	Stranded; total loss	..	Rangitikei Beach	W.	Gale ..	The Court was of opinion that the master committed an error of judgment in not seeking shelter, which he could have done, when he found that the ship was leaking badly, and that the pumps could not cope with the inflow of water. Except for this there was no neglect on his part or on that of the crew, and he took a proper course in beaching the vessel	J. W. Crotty.
May 26	Goshawk, s.s., 11 years	Ferry-boat	4	..	..	Collision; trifling damage	..	Auckland Harbour	W.S.W.	Mode-rate	The "Goshawk" was making for her berth and the "Tauranga" leaving hers when a slight collision, caused by the strong wind and tide, occurred	H. Bruck.
"	Turanga, o.e.v., 10 years	Launch	3	..	..	Collision; trifling damage	..	..	..	..	..	G. G. Sang.
"	Westmeath, s.s., 17 years	Schooner	75	..	..	Fire; damage, £38	..	Lat. 11° 6' S., long. 104° 5' W.	E.S.E.	Light ..	Fire occurred in No. 4 hold amongst straw packing. Cause not known	A. Cain.
"	Waitomo, s.s., 9 years	Schooner	42	..	Wheat	Trifling accident to machinery	..	Lat. 42° 58' S., long. 157° 52' E.	S.W.	Gale ..	Wheel-chain on engine-barrel carried away owing to faulty link	E. Harris.
"	Ophi, s.s., 35 years	Schooner	24	..	..	Fractured plate; damage, £20	..	Auckland Harbour	..	..	A leak was found in the forepeak tank caused by the plating being fractured, probably by the anchor	R. Pearson.
June 5	Schwarzenfels, s.s., 6 years	Schooner	61	..	Phosphate	Collapse of furnace crown; damage, £360	..	..	..	..	Crowns of furnace were found to have come down, probably owing to high density and dirty water	D. P. James.
"	Invercargill, s.s., 35 years	Schooner	12	..	General	Stranded; no damage	..	Wanganui River	..	Calm ..	River was in flood, and there was a dense fog which obscured the lights, and the vessel ran on top of the training-wall	E. A. Eden.
"	Karaka, s.s., 9 years	Tug ..	3	..	..	Fire; considerable damage	..	Wellington Harbour	..	Calm ..	Part of main deck, deckhouse, upper deck, wheel-house, and steering-gear burnt. Cause of fire unknown	J. Smyth.
"	Wairua, s.s., 5 years	Cutter ..	12	50	General	Fire; damage, £1,000	..	Helensville ..	..	Calm ..	Fire occurred in starboard bunker. Cause not known	H. G. Menzies.
"	Manaroa, s.s., 23 years	Schooner	11	..	General	Fire; slight damage	..	40 miles east of Timaru	E.	Light ..	Fire occurred amongst cargo in hold. Cause not known. Considerable damage to cargo	R. Johnson.
"	Wairua, s.s., 5 years	Cutter ..	12	..	..	Damaged rudder	..	Dargaville ..	N.E.	Fresh breeze	A floating tree fouled the rudder, breaking off a blade	H. G. Menzies.
"	Tararawa, s.s., 34 years	Ketch ..	6	..	General	Broken rudder-stock	..	Lat. 34° 50' S., long. 174° 40' E.	W.S.W.	Gale ..	Vessel was struck by heavy sea which broke the rudder-stock short off in the rudder-trunk, and she returned to Auckland for repairs.	A. E. Stenback.

NEW ZEALAND WRECK CHART.

1st APRIL, 1920, to 31st MARCH, 1921.

Compiled from Official Records in
the MARINE DEPARTMENT.

SYMBOLS.

STRANDINGS.

- X-----Signifies a total loss.
X-----Signifies a partial loss.

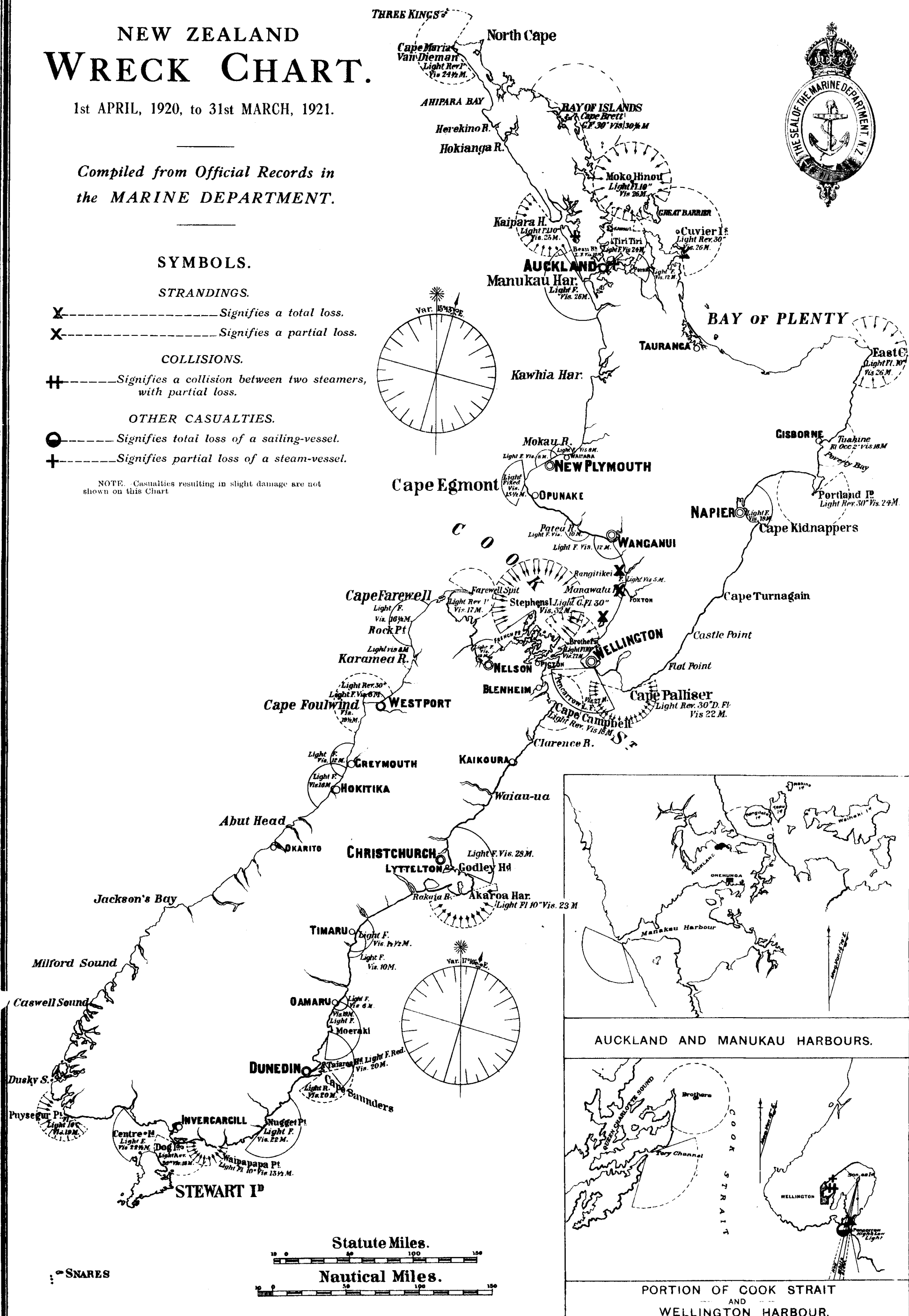
COLLISIONS.

- ++-----Signifies a collision between two steamers,
with partial loss.

OTHER CASUALTIES.

- Signifies total loss of a sailing-vessel.
+-----Signifies partial loss of a steam-vessel.

NOTE. Casualties resulting in slight damage are not
shown on this Chart



June 23	Durham, s.s., 16 years	Schooner	5,299	66	..	General	Fractured tank; damage, £1,000	..	Between Sydney and Auckland	..	..	Top of No. 2 tank was found to be fractured, probably caused by heavy weather	J. Watkins.
" 23	Rira, 15 years	Ketch ..	106	7	..	General	Collision; slight damage	N.W.	Albert Wharf, Auckland	Gale	..	Vessel was lying at the wharf when the schooner "Endeavour" in tow of s.s. "Mahurangi" bumped into her. Accident caused by the gale	R. W. Anderson.
" 30	Waitangi, s.s., 31 years	Schooner	74	11	..	General	Broken propeller-blades; damage, £20	..	Patea River	Calm	..	Propeller struck anchor of dredge and broke tips of two blades	A. H. Fisk.
July —	Canastota, s.s., 13 years	Schooner	3,139	44	..	General	Defective shaft-liner; damage, £2,100	..	Off Pitcairn Island	..	..	Pieces of the shaft-liner were found to be peeling off. On arrival at Auckland section of shaft was taken out and new liner fitted.	A. Williams.
" 4	Monowai, s.s., 29 years	Schooner	2,137	..	..	..	Loss of life	1	Between Gisborne and Auckland	..	..	Accident due to overheating	A. T. Norton.
" 8	Karamea, s.s., 21 years	Schooner	3,466	62	..	General	Accident to machinery; damage, £300	..	Lat. 9° 53' S., long. 101° 9' W.	S.E.	Light	A passenger named S. J. Thacker was found to be missing at 5 a.m. in the morning, and is presumed to have been lost overboard	..
" 12	Rimu, s.s., 22 years	Schooner	169	21	..	..	Loss of life	1	7 miles south of Manukau Bar	W.	Gale	High-pressure piston-valve broke. Temporarily repaired at sea and finally at Auckland	M. Pierotti.
" 22	Raranga, s.s., 4 years	Schooner	5,073	81	..	General	Fire; slight damage	..	Glasgow Wharf, Wellington	S.	Light	The ship encountered two heavy squalls in succession which caused her to lurch heavily to port. The second officer, A. S. Hill, was on the bridge, and the lurch of the vessel threw him heavily against the rail, and he overbalanced and fell overboard. All possible steps were taken for his rescue, but he was not seen again	A. M. Andrews.
" 23	Paeoa, s.s., 29 years	Schooner	45	8	2	Timber	Stranded; total loss	..	Bar, Hokitika River..	N.	Moderate	Fire broke out in No. 1 shelter deck. Cause not known, probably short-circuiting of electric wire	W. Earl.
" 27	Ruahine, s.s., 10 years	Schooner	6,823	162	..	General	Collision; damage, £16,000	..	Queen's Wharf, Wellington	..	Calm	The vessel struck the bar when leaving the Hokitika River, ran ashore on the beach, and became a total wreck. The Court exonerated the master and officers from blame	E. G. Smith.
" 27	Duchess, s.s., 23 years	Ferry steamer	137	5	104	..	Collision; damage, £200	..	Manawatu River	..	Calm	During a dense fog the "Duchess" ran into the "Ruahine," lying at the wharf, striking her on the starboard side, abreast of the forepart of No. 4 hold, causing indentation of plates from 9 ft. above to 4 ft. below water-mark, loosening plates and rivets and bending three frames. The Court found that the casualty was due to error of judgment on the part of the master of the "Duchess" in running at full speed for three minutes after he entered the bank of fog and in underestimating the speed of his vessel, and he was ordered to pay half the costs of the inquiry	John Lowry.
" 30	Kennedy, s.s., 40 years	Schooner	131	12	..	General	Stranded; slight damage	..	Manawatu River	..	Calm	When backing out the vessel swung into bank of river, broke two propeller-blades and bent rudder	Jas. Owen.
Aug. 1	Ariosto, s.s., 10 years	Schooner	2,760	37	..	General	Fire; no damage	N.E.	Outside Taiaroa Heads, Otago	Moderate	Moderate	Fire occurred in coal in reserve bunker; cause not known	R. L. Biggins.

RETURN OF WRECKS AND CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT, ETC.—*continued.*

Date of Casualty.	Vessel's Name, Age, and Class.	Reg. Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
			Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1920. Aug. 6	Te Teko, aux., 6 years	56	8	..	General	Stranded; total loss	1	South-east end of Slipper Island	N.E.	Gale ..	Vessel ran ashore and became a total wreck. The Court found that the stranding was caused by a strong set towards the coast and that the casualty could not reasonably have been avoided	E. Sellars.
" 13	Cygnets, s.s., 35 years	66	9	..	General	Leaking	..	Off Point Gibson, Gore Bay	S.W.	Gale ..	Whilst lying at the wharf, Kaikoura, a heavy south-west gale came up, and the "Cygnets" was compelled to make for Lyttelton for safety. Owing to the heavy bumping against the wharf at Kaikoura she was leaking badly, and had to be towed into port by the tug "Lyttelton"	..
" 15	Rakanoa s.s., 25 years	1,366	30	100	Sugar ..	Stranded; no damage	..	Lat. 17° 2' S., long. 178° 42' E.	N.	Light ..	Touched patch of coral in Vuya Passage, Fiji, landmarks being obscured by rain	E. J. M. Appleyard.
" 17	Oban, o.e.v., 23 years	21	3	..	Coal ..	Collision; slight damage	..	3 miles off Waikato, Golden Bay, Nelson	S.	Light	The Court found that the master of the "Oban" was in fault in not keeping a proper lookout, and that the master of the "Vindex," approaching the "Oban," did not give sufficient sea room to allow for emergencies. They were ordered to pay the costs of the inquiry in equal shares	J. M. Reeves.
" 17	Vindex, o.e.v., 23 years	16	3	..	..	Collision; slight damage	..					W. J. Tregidga.
" 18	Canadian Exporter, s.s., new	3,384	43	..	General	Fire; no damage to ship	..	Lat. 48° 10' N., long. 125° W.	N.W.	Light ..	Whilst on passage from Vancouver to Union Bay, B.C., fire was discovered in coal-bunker and was apparently extinguished. After leaving Victoria, B.C., for Auckland, fire again appeared in wooden bulkhead and was finally extinguished	W. Bradley.
" 19	Fairburn, aux., 14 years	58	6	..	General	Damaged rigging, £100	..	Hicks Bay	S.S.E.	Gale ..	Whilst vessel was at Hicks Bay the wind suddenly shifted and she had to beat to sea. In lifting anchor windlass carried away, anchor and chain being lost, and a heavy squall striking the vessel carried away the mainmast and sails	S. Hakanson.
" 27	Tasman, s.s., 17 years	87	14	2	General	Stranded; damage, £60	..	Whakatane Harbour	S.W.	Light ..	Vessel struck Pipe Beacon Rock when leaving harbour and broke rudder and a propeller-blade	F. G. Shirley.
" 27	Altair, 17 years ..	57	2	..	..	Collision; no damage to ship	..	Off Albert Wharf, Auckland	W.	Squally	The scow "Alert" weighed anchor to be towed to the wharf, but before the tug reached her a heavy squall caused her to drift down on the "Altair" and carried away the latter's spare anchor	J. Jackson.
" 30	Ohinemuri, s.s., 29 years	73	9	..	..	Boiler-plate blown out; damage, £250	..	Kaipara Bar	..	..	Hole blew out in combustion-chamber	E. Sellars.
Sept. 4	Jubilee, aux., 23 years	90	10	7	General	Probably foundered	17	In vicinity of Nine Island	..	..	The "Jubilee" left Auckland on 15th August, 1920, for Nine Island, where she was due on 4th September. A heavy cyclonic storm arose on that day, accompanied by water-spouts, and it is supposed the vessel was lost in the storm	W. H. Champion.

Sept. 10	Ngoiro, s.s.	Ferry-boat	139	4	..	..	Collision with raft; slight damage	..	Auckland Harbour	N.E.	Fresh breeze	The "Ngoiro" ran into a raft of logs which was being towed by the o.e.v. "Muriwai," owing to the latter vessel not showing proper lights. The master of the "Muriwai" was prosecuted and fined for breach of the regulations
" 11	Otira, s.s., 1 year	Schooner	4,911	80	..	General	Steam pipe cracked; damage, £250	..	Lat. 6° 21' S., long. 108° 11' W.	S.E.	Light ..	Starboard main steam-pipe developed extensive crack, probably caused by vibration of engines through defective engine-bed foundation
" 14	Port Alma, s.s., 19 years	Schooner	4,344	62	..	Wool ..	Damaged plates; trifling	..	New Plymouth	S.S.E.	Moderate	Whilst swinging inside the breakwater the port bow struck wharf and damaged some plates
Oct. 15	Waimarie, s.s., 24 years	Schooner	159	17	..	General	Collision with wharf; trifling damage	..	Hikutaita Wharf, Parua River	..	..	The tide set the vessel against the wharf and the projecting end of a stringer damaged her side
" 20	Mokoia, s.s., 22 years	Schooner	2,112	102	150	General	Stranded; no damage	..	Laucala Bay Passage, Fiji	S.E.	Light ..	Touched some obstruction when going through the passage
" 23	War Lord, s.s., 3 years	Schooner	98	8	..	..	Fire; trifling damage	..	Wharf, Gisborne	..	..	Fire occurred in donkey-room
" 25	Flora, s.s., 48 years	Schooner	818	33	..	..	Collision with jetty; slight damage	..	No. 4 jetty, Lyttelton	S.W.	Gale ..	The vessel was blown against the jetty and damaged some of her plates
" 29	Mana, s.s., 36 years	Schooner	77	11	1	..	Stranded; no damage	..	Bar, Wanganui River	W.N.W.	Fresh breeze	Vessel grounded when crossing the bar owing to its having shoaled
Nov. 2	Kennedy, s.s., 55 years	Schooner	131	12	..	General	Stranded; damage, £3,000	..	Bar, Manawatu River	W	Moderate	Vessel struck on the bar, gradually worked off, and then struck the south spit
" 2	Huon Belle, 24 years	Ketch ..	3	..	..	Coal ..	Boysprit broken; damage, £15	..	Whangarei River	S.W.	Light ..	Struck bridge over river owing to sudden change of wind and squall
" 2	Lily, o.e.v., 46 years	Schooner	59	6	..	General	Stranded; total loss	..	Kapiti Island	N.N.W.	Fresh breeze	Accident was due to error of judgment on the part of the master in not taking shelter for the night in lee of Kapiti Island instead of continuing into a position of difficulty when he found the wind and sea increasing. He was ordered to pay costs of the inquiry
" 9	Wotton, s.s., 30 years	Schooner	90	9	..	..	Leaking; trifling damage	..	25 miles off Godley Head	N.W.	Gale ..	The vessel was found to be leaking, and as the pumps could not keep the water down she returned to Lyttelton to have seams recaulked
" 11	Corinthic, s.s., 15 years	Schooner	7,830	210	..	General	Fire; considerable damage	..	Glasgow Wharf, Wellington	..	..	Fire occurred in No. 1 upper 'tween deck. Damage to ship being two beams bent and three plates buckled. Cause unknown
" 15	Cobar, s.s., 17 years	Sloop ..	69	5	107	..	Collision; slight damage	..	Wellington Harbour	S.	Light ..	When backing out from Ferry Wharf the vessels collided. Trifling mishap
" 15	Natone, s.s., 20 years	Cutter	50	4	..	..	Collision, no damage	..	Lat. 52° N., long. 25° W.	W.S.W.	Moderate	As the result of heavy weather some drums of phosphorus were broken and ignited, causing fire amongst the cargo
" 19	Waotapu s.s., 7 years	Schooner	4,561	56	..	General	Fire; no damage to ship	..	Evans Bay, Wellington Harbour	N.N.W.	Gale ..	Vessel was at anchor in Evans Bay when a heavy gale arose, causing the cable to part, and she drifted ashore
" 22	Coronation, o.e.v., 18 years	Ketch ..	59	6	..	..	Stranded; slight damage	..				A. Taylor.

W. P. Clifton-Moag.
J. Jack.
E. J. Wann.
J. Mawson.
E. Johansen.
A. A. McLellan.
D. Bonner.
J. R. Owen.
E. Donovan.
A. E. H. Purvis.
A. J. Holm.
F. Hart.
{ A. Durlow.
H. W. Har-
greaves.
F. P. Evans.
A. Taylor.

RETURN OF WRECKS AND CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT, ETC.—*continued.*

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	Tonnage	Number of		Nature of		Number of Lives Lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry	Name of Master.
				Crew	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1920.													
Dec. 4	Flora, s.s., 38 years	Schooner	818	33	..	General	Stranded; trifling damage	..	French Pass	S.W.	Moderate	When proceeding through the Pass the wheel-chain carried away and the vessel grounded on the middle bank, floating off on rise of tide	A. A. McLellan.
"	Zila, aux., 43 years	Brigantine	73	9	..	General	Fire; damage, £200	..	16 miles N.E. off Farewell Spit	W.	Moderate	Fire broke out in engine-room, caused by heavy lurch causing a lamp to upset	R. Goldie.
"	Apanui, s.s., 15 years	Schooner	135	15	28	General	Stranded; damage, £200	..	Karaka Channel, Awarui North	N.N.W.	Moderate	Vessel stranded in a fog which came down suddenly. The Court exonerated the master and officers from blame	E. H. Goertz.
"	Te Aroha, o.e.v., 11 years	Schooner	7	10	..	Frozen meat	Stranded; slight damage	..	Bar, Wairoa River, Hawke's Bay	N.W.	Moderate	Stranded owing to strong current and beam sea. Vessel refloated. Total loss of cargo valued at £2,000	B. M. Carpenter.
"	Remuera, s.s., 9 years	Schooner	7,154	165	..	General	Fire; no damage	..	King's Wharf, Wellington	N.	Light ..	Fire occurred in No. 5 hold. Slight damage to cargo	J. J. Cameron.
"	Armagh, s.s., 4 years	Schooner	7,878	102	..	General	Stranded; no damage	..	Bluff Harbour	W.	Fresh breeze	When leaving the harbour the ship touched ground slightly with port bilge	S. Vint.
"	Oban, aux., 23 years	Ketch ..	21	3	..	..	Stranded; no damage	..	Entrance Nelson Harbour	S.W.	Strong..	Lost way through engine stopping, and was driven ashore by the strong wind	G. N. Westrupp.
"	Waitangi, s.s., 23 years	Schooner	31	6	..	..	Fire; damage, £40	..	Wharf, Dunedin	..	..	Fire broke out in fore-castle. Cause not known	M. Hargreaves.
"	Nora Niven, s.s., 14 years	Schooner	66	..	..	..	Leaking; damage, £100	..	Queen's Wharf, Wellington	..	..	Vessel was found to have 2 ft. of water in her over stokehold plates. Pumped dry and small hole found in bottom plate, caused by internal corrosion	C. Ormes.
1921.													
Jan. 2	Huia, s.s., 42 years	Schooner	64	9	..	..	Fire; trifling damage	..	Queen's Wharf, Wellington	..	Calm ..	Fire occurred in No. 1 hold bulkhead, caused by heat from boiler	J. W. Crotty.
"	Dorset, s.s., 17 years	Schooner	5,542	106	..	General	Winch carried away	..	Napier Roadstead	E.N.E.	Gale ..	When heaving the anchor the winch carried away	S. S. Vine.
"	Navua, s.s., 17 years	Schooner	1,773	79	..	General	Fire; damage, £629	..	King's Wharf, Auckland	S.W.	Light ..	An explosion of gas occurred in starboard fore and side bunker	H. Fletcher.
"	Navua, s.s., 17 years	Schooner	1,773	40	..	General	Fire; damage, £250	..	King's Wharf, Auckland	S.W.	Light ..	Oil accumulated round "fan" and was fired whilst boiler-makers were cutting out a plate, and the fan-rotary was damaged	H. Fletcher.
"	Omaka, aux., 34 years	Schooner	39	6	..	Produce	Capsized; total loss	6	Pencarrow Heads, Wellington Harbour	S.	Gale ..	When entering Port Nicholson the vessel broached to and capsized in the heavy confused sea, the master and crew being drowned	A. E. H. Purvis.
Feb. 23	Kini, s.s., 27 years	Schooner	702	25	..	Coal and timber	Fire; damage, £30	..	Wharf, Lyttelton	..	Calm ..	Fire occurred in the lamp-room, supposed to have been caused by watchman dropping a match	R. Cordy.
"	Moa, 14 years	Schooner	99	5	..	Timber	Fire; damage, £100	..	Tauranga Harbour	S.W.	Fresh breeze	Fire occurred in forehold, probably caused by spark from donkey-boiler	W. Bourke.
Mar. 18	Nikau, s.s., 12 years	Schooner	248	16	28	General	Stranded; no damage	..	French Pass	S.W.	Light ..	Vessel grounded owing to strong eddy and swirl of tide	R. J. Hay.
"	Magio, aux., 20 years	Schooner	58	6	..	Marble..	Stranded; total loss	..	Pencarrow Heads, Wellington Harbour	N.W.	Gale ..	After entering Port Nicholson a heavy squall struck the vessel, and she missed stays and went ashore, becoming a total wreck	W. Mackintosh.

SUMMARY OF CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Nature of Casualty.	Casualties on or near the Coasts of the Dominion.						Casualties outside the Dominion.						Total Number of Casualties reported.								
	Steamers.			Sailing-vessels.			Total within Dominion.			Steamers.						Sailing-vessels.			Total outside Dominion.		
	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.
Strandings— Total wrecks Partial loss Slight damage No damage Total strandings	5	244	1	..	..	1	5	244	1	..	..	..	..	..	..	..	..	..	..	..	..
	4	865	..	..	..	..	4	865	..	..	..	..	..	..	..	..	..	..	..	..	..
	7	1,978	..	..	..	..	7	1,978	..	..	..	..	..	..	..	..	..	..	..	..	..
	7	11,825	..	..	..	..	7	11,825	..	..	..	..	..	..	..	..	..	..	..	..	..
	23	14,912	1	..	..	..	23	14,912	1	..	..	..	..	..	..	..	23	14,912	1	..	1
Foundered— Total loss	3	154	27	..	..	..	3	154	27	..	..	..	..	..	..	..	3	154	27	..	27
	2	6,960	..	..	..	..	2	6,960	..	..	..	..	..	..	..	..	2	6,960	..	..	..
Collisions— Partial loss Slight damage No damage Total collisions..	10	1,458	..	..	..	..	10	1,458	..	..	..	..	..	..	..	..	10	1,458	..	..	..
	2	69	..	..	..	..	2	69	..	..	..	..	..	..	..	..	3	126	..	..	..
	14	8,487	..	1	57	..	15	8,544	..	..	..	..	..	..	..	..	15	8,544	..	..	..
	1	9	..	..	..	..	1	9	..	..	..	..	..	..	..	..	1	9	..	..	..
Fires— Total loss Partial loss Slight damage No damage Total fires	5	9,906	..	..	..	..	5	9,906	..	..	..	..	..	..	..	..	5	9,906	..	..	..
	8	13,730	..	..	..	..	9	13,789	..	..	..	..	..	..	..	..	9	13,789	..	..	..
	2	9,914	..	1	99	..	3	10,013	..	..	..	..	..	..	..	..	6	23,810	..	..	..
	16	33,559	..	2	158	..	18	33,717	..	..	..	..	..	..	..	..	21	47,514	..	..	..
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	13	16,623	1	1	3	..	14	16,626	1	..	..	..	..	..	..	..	19	36,160	1	..	1
	69	73,735	29	4	218	..	73	73,953	29	..	..	..	..	..	..	..	81	107,284	29	..	29
Total casualties to shipping	2	2,306	2	..	..	..	2	2,306	2	..	..	..	..	..	..	..	2	2,306	2	..	2
Loss of life only	71	76,041	31	4	218	..	75	76,259	31	..	..	..	..	..	..	..	83	109,590	31	..	31
Total number of casualties reported																					

RETURN SHOWING THE NUMBER OF LAND BOILERS AND MACHINERY INSPECTED DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Boilers.

Class.	Not exceeding 5 Horse-power.	Exceeding 5 but not exceeding 10 Horse-power.	Exceeding 10 Horse-power.	Total.
Stationary	2,894	824	2,170	5,888
Portable	191	1,214	453	1,858
Totals	3,085	2,038	2,623	7,746

Class.	Machinery.	Number.
Hydraulic lifts	262
Gas-lifts	14
Electric lifts	675
Steam-lifts	16
Gas, hydraulic, and electric-motor hoists	770
Water-engines, water and electric motors, and water-wheels	6,002
Peltons	242
Turbines	111
Gas-engines	1,308
Oil-engines	11,406
Steam machinery	1
Total	20,807

RETURN SHOWING THE NUMBER OF SERVICE AND COMPETENCY CERTIFICATES ISSUED TO STATIONARY, WINDING, LOCOMOTIVE AND TRACTION, LOCOMOTIVE, AND TRACTION-ENGINE DRIVERS, AND TO ELECTRIC-TRAM DRIVERS DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1921.

Class.	Number.
Steam stationary—	
Service—First class	10
Competency—	
Extra first-class engineer	14
First class	52
Second class	234
Steam winding, competency	6
Electric winding, competency	2
Locomotive and traction, competency	141
Locomotive, competency	3
Traction, competency	100
Electric tram, competency	141
Total	703

RETURN OF ENGINEERS TO WHOM EXTRA FIRST-CLASS CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Adair, James Graham	4/3/21	120	Mountfort, Haworth Hillary	26/8/20	110
Andrews, Ernest Percival	27/11/20	117	Neich, Augustus Hugh	29/5/20	107
Brown, Arthur Edward Holmes	29/5/20	108	Rasmussen, Wilfred Neill	27/11/20	116
Dawson, Wilfred Milne	27/11/20	113	Read, George Blakeway	27/11/20	114
Durbridge, Albin Russell	29/5/20	109	Rickards, Percy William	26/8/20	112
Hunter, William Patterson	27/11/20	118	Stephenson, Harry Newton	4/3/21	119
McAllister, Archibald	26/8/20	111	Thomas, Frank George	27/11/20	115

RETURN OF FIRST-CLASS STATIONARY-ENGINE DRIVERS TO WHOM CERTIFICATES OF SERVICE HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Adams, John Bird Hunter	27/11/20	1784	Ingerson, Herman Henry	27/11/20	1785
Dean, James Vincent	29/5/20	1779	Jones, Alfred	4/3/21	1787
Fleming, William Robertson	29/5/20	1780	Kitching, Lionel Thomas	4/3/21	1788
Green, John	4/3/21	1789	Patterson, Lorenzo	27/11/20	1786
Hickman, William Francis	27/11/20	1783	Thackeray, Richard Nelson	26/8/20	1781

RETURN OF FIRST-CLASS STATIONERY-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY
HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Andrews, William Edward ..	27/11/20	1998	Keeble, Henry William ..	4/3/21	2010
Barber, Joseph Henry ..	27/11/20	1999	Levings, Alfred John ..	27/11/20	1996
Boyd, William Erskine ..	26/8/20	1981	Lodge, Clement ..	26/8/20	1974
Boyd, William Philip ..	27/11/20	1990	Lucas, Cecil Osborne ..	29/5/20	1967
Burge, Henry ..	27/11/20	2000	McDowell, Roy ..	26/8/20	1984
Challis, Alfred James ..	27/11/20	1994	McKay, John ..	29/5/20	1965
Clifford, James ..	29/5/20	1966	McQuillan, Gladwyn ..	29/5/20	1970
Cook, George Halden ..	29/5/20	1973	Marsh, William Nicholas ..	27/11/20	2004
Cooper, Hilliard Charles ..	4/3/21	2013	Mason, James, jun. ..	4/3/21	2012
Crossan, Charles Baden Powell	26/8/20	1979	Morettes, Francis ..	4/3/21	2007
Dale, William ..	27/11/20	2001	Morton, Thomas William ..	26/8/20	1976
Drake, Thomas Waddington ..	29/5/20	1971	Nicholson, Neil Leslie ..	27/11/20	1997
Elgie, Herbert ..	27/11/20	1992	Norman, Albert Edward ..	27/11/20	1991
Fleming, James Naismith ..	29/5/20	1969	Pettit, Herbert ..	27/11/20	2003
Furby, Harold Richard ..	4/3/21	2008	Rooke, Edward ..	29/5/20	1968
Grundy, John ..	26/8/20	1980	Sadd, Philip Nelson ..	29/5/20	1963
Hamilton, William James ..	26/8/20	1985	Spicer, Herbert Richard ..	29/5/20	1964
Harrison, Frederick ..	4/3/21	2011	Stapley, Charles Lewis ..	4/3/21	2006
Healy, Victor Joseph ..	26/8/20	1978	Tatton, Zala Cromer ..	26/8/20	1977
Herk, William August ..	29/5/20	1972	Walker, Frederick John ..	29/5/20	1961
Higgins, George Leslie ..	26/8/20	1982	Wiles, William ..	5/10/20	1989
Holmes, William ..	26/8/20	1986	Wilkinson, James Henry ..	29/5/20	1962
Houston, Cecil ..	4/3/21	2009	Willan, Thomas George ..	26/8/20	1987
Johnson, Arthur William ..	26/8/20	1975	Winstanley, Thomas William	27/11/20	1995
Jones, Reginald Herbert ..	27/11/20	2002	Wood, David ..	27/11/20	1993
Joy, Joseph William ..	4/3/21	2005	Wood, George Francis ..	29/5/20	1960

RETURN OF SECOND-CLASS STATIONARY-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY
HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Adamson, Sydney ..	4/3/21	5328	Coward, Frank ..	27/11/20	5292
Ahern, James Patrick ..	26/8/20	5220	Craig, James Matthew ..	26/8/20	5208
Alexander, Frank ..	26/8/20	5239	Craig, William Victor ..	27/11/20	5307
Allen, Charles William ..	29/5/20	5136	Creagh, Peter ..	29/5/20	5135
Andersen, Oscar Smith ..	26/8/20	5243	Cresswell, Cuthbert John ..	27/11/20	5275
Anderson, David Rutherford	26/8/20	5225	Crothers, James ..	26/8/20	5188
Armstrong, Hector ..	4/3/21	5329	Davis, Alfred Cyril ..	26/8/20	5211
Armstrong, William Thomas	29/5/20	5132	Dawson, Alfred ..	4/3/21	5336
Arnerich, Harry ..	27/11/20	5286	Day, Dudley Vivian ..	26/8/20	5226
Baker, Ernest Walter ..	26/8/20	5213	Dearlove, Arthur Honore ..	29/5/20	5123
Barnes, James Carrington ..	29/5/20	5145	Denham, Lewis Stewart ..	26/8/20	5246
Barnsdale, William ..	27/11/20	5297	Dent, Jack ..	26/8/20	5255
Baxter, Thomas Joseph ..	27/11/20	5287	Donnelly, James ..	27/11/20	5271
Beange, Alexander ..	26/8/20	5231	Drake, Alfred George ..	29/5/20	5146
Beesley, Henry Abel ..	27/11/20	5263	Drube, Herbert Louis ..	26/8/20	5227
Bertram, Herman Weston ..	29/5/20	5137	Drummond, Donald ..	26/8/20	5193
Bigland, John ..	29/5/20	5156	Duff, Bertram Lawrence ..	29/5/20	5159
Blance, John William ..	29/5/20	5155	Eden, Richard ..	4/3/21	5344
Braithwaite, Charles Harold	27/11/20	5300	Egan, John ..	29/5/20	5133
Bull, David Kerr ..	26/8/20	5198	Ellicott, Reginald George ..	26/8/20	5221
Bunn, John ..	27/11/20	5259	Ellis, Frederick George ..	29/5/20	5142
Calder, George ..	29/5/20	5131	Emery, Charles James ..	26/8/20	5189
Cameron, John Stewart ..	26/8/20	5191	Eteveneaux, Louis ..	29/5/20	5140
Campbell, Kenneth William	26/8/20	5244	Ewens, Thomas Henry Biddlecombe	27/11/20	5293
Cannons, Lionel ..	27/11/20	5283	Ferrel, Henry Albert ..	4/3/21	5331
Capper, Henry James ..	29/5/20	5127	Fieldsend, Octavius ..	27/11/20	5308
Carlson, John Victor ..	29/5/20	5175	Fleming, John James ..	29/5/20	5177
Cashion, Jeremiah ..	29/5/20	5149	Ford, John Goodwin ..	27/11/20	5272
Cave, Francis Harold ..	26/8/20	5224	Ford, Samuel ..	27/11/20	5264
Cave, William Arthur ..	4/3/21	5340	Foster, William Andrew ..	29/5/20	5160
Chalmers, Alexander ..	27/11/20	5301	Fowler, Arthur ..	27/11/20	5276
Chambers, William ..	4/3/21	5330	Garton, Allan Franklin ..	4/3/21	5319
Chiplin, Edward John ..	26/8/20	5245	Glass, David Munro ..	29/5/20	5178
Clarke, Christopher ..	27/11/20	5285	Goodey, Joseph Edward ..	27/11/20	5309
Clarkson, Samuel ..	27/11/20	5298	Gow, John Cameron ..	27/11/20	5310
Clearwater, Albert James ..	26/8/20	5232	Grant, Horace James ..	4/3/21	5341
Clement, Harry ..	27/11/20	5291	Gray, Albert ..	27/11/20	5311
Clements, Reginald ..	29/5/20	5158	Grooby, Reginald Thornton	29/5/20	5150
Coddington, Henry Francis ..	27/11/20	5274	Guy, Charles Richard ..	26/8/20	5206
Cole, Reginald Stanley ..	29/5/20	5126	Hall, John ..	4/3/21	5315
Coleman, Andrew Anthony ..	26/8/20	5196	Hampton, Harry ..	29/5/20	5179
Condon, William Alexander	26/8/20	5202	Hardy, Frank Leslie ..	26/8/20	5247
Cook, Walter ..	27/11/20	5305	Harris, Ernest Alexander ..	29/5/20	5157
Coombes, John Roy ..	26/8/20	5205	Harris, Thomas Dromgool ..	4/3/21	5320
Cooper, Francis George ..	27/11/20	5260	Harvey, Harold Edward ..	4/3/21	5355

RETURN OF FIRST-CLASS STATIONERY-ENGINE DRIVERS, ETC.—*continued.*

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Haylock, Ernest John	29/5/20	5161	Potter, Ernest Harold	29/5/20	5184
Heaven, Raymond George	26/8/20	5222	Potter, William John	26/8/20	5249
Henderson, Henry Thomas	29/5/20	5162	Prentice, Allan	26/8/20	5207
Hilford, Frank Christopher, jun. ..	29/5/20	5153	Prestney, David	26/8/20	5216
Hill, Stacey Edward	27/11/20	5266	Prince, Horace Thomas	26/8/20	5250
Hollins, Arthur	27/11/20	5267	Pritchard, George	29/5/20	5147
Holmes, Robert Anthony	27/11/20	5265	Pulham, Leslie Bannatyne ..	4/3/21	5324
Horton, John Pearson	29/5/20	5172	Purvis, George	29/5/20	5144
Hosie, Allan	29/5/20	5176	Radford, Gilbert	4/3/21	5323
Hourston, Glenen Robert	26/8/20	5235	Randerson, Claude Douglas ..	29/5/21	5151
Hughes, William	4/3/21	5337	Ree, Andrew	29/5/21	5186
Hutchinson, Thomas Fowler	26/8/20	5228	Reesby, Thomas Charles	29/5/21	5152
James, George Henry	26/8/20	5203	Reid, Lester Herbert	4/3/21	5322
Jenkins, Patrick Philip	26/8/20	5214	Restall, George Alfred	4/3/21	5354
Johnston, Arthur Sharpe	27/11/20	5269	Revell, Lewis St. John	4/3/21	5326
Johnstone, Charles	26/8/20	5201	Rider, James Harry Munro ..	27/11/20	5304
Jones, Alfred Rees	29/5/20	5163	Robertson, Robert George Hepburn ..	4/3/21	5318
Judson, Frank Reginald	27/11/20	5296	Ross, James David	27/11/20	5257
Julian, Louis Nicholas	4/3/21	5314	Rowell, Harry Ernest	4/3/21	5338
Jull, Edward	26/8/20	5229	Ruffett, James	4/3/21	5357
Kay, David	26/8/20	5204	Rutledge, Frederick Robert ..	29/5/21	5174
Keaney, Hughy	4/3/21	5349	Ryan, Albert John	26/8/20	5251
Kerr, William	4/3/21	5350	Scott, Robert James	27/11/20	5262
Knapman, Reginald George	4/3/21	5334	Seath, James Coutts	4/3/21	5351
Knapp, Kempster James	27/11/20	5284	Secombe, Frank Gordon	4/3/21	5325
Knight, John William	29/5/20	5138	Seddon, Clifford	27/11/20	5280
Lamond, John	26/8/20	5236	Seddon, William	29/5/20	5141
Landman, Leopold Valentine	29/5/20	5154	Seidelin, Alfred George	29/5/20	5170
Langhorne, Charles Owen	26/8/20	5256	Shiels, William	29/5/20	5164
Latta, Robert James	29/5/20	5167	Sinclair, Dugald	26/8/20	5192
Le Prou, Edmund Emile	27/11/20	5277	Single, George Dunmore	27/11/20	5281
Lockington, Francis Edward	27/11/20	5306	Smith, James Roy	27/11/20	5282
Long, Harry Kin Hong	27/11/20	5288	Sorensen, George Thomas	29/5/20	5143
Low, George Clarke	26/8/20	5240	Sorensen, Paul Charles	29/5/20	5165
Lowndes, Frederick Edin	27/11/20	5313	Sorenson, William Alfred	27/11/20	5294
Lyall, Robert Alexander	26/8/20	5197	Souness, Fergus Robert George ..	26/8/20	5210
McArtney, Alfred David	26/8/20	5187	Spray, Edward Francis	26/8/20	5217
McConnell, Robert Harold	4/3/21	5352	Stevens, Harold Morrison	27/11/20	5258
McDonald, Angus	26/8/20	5237	Stevens, John Ascott	29/5/20	5139
McDowell, Robert John	4/3/21	5317	Stevenson, William John	29/5/20	5166
McEwin, John Andrew	26/8/20	5241	Strong, Percy Alfred	26/8/20	5252
Mackay, Donald	4/3/21	5342	Sturt, William Arthur	27/11/20	5295
McLachlan, Robert	29/5/20	5180	Summers, Walter Frederick ..	26/8/20	5253
McLelland, James Thomson	29/5/20	5168	Sweney, Frederick Charles ..	26/8/20	5219
MacRae, Norman Thomas	26/8/20	5230	Symes, Frederick St. Elmo ..	27/11/20	5268
Madsen, Hans Peter	29/5/20	5128	Tanner, Walter	26/8/20	5209
Mann, Charles	4/3/21	5321	Taylor, Frank Herbert	4/3/21	5348
Mason, William	26/8/20	5233	Thompson, John	29/5/20	5148
Mason, William	27/11/20	5302	Tilley, Ernest	29/5/20	5171
Mawhinney, Leonard	29/5/20	5181	Todd, Arthur	26/8/20	5200
Meharry, James Alexander	26/8/20	5194	Todman, William	26/8/20	5190
Meiklejohn, Robert James	29/5/20	5182	Tregea, James Henry	27/11/20	5270
Michelle, Richard Harvey, jun. ..	27/11/20	5303	Trounson, Lucius	4/3/21	5346
Milne, Charles Robert	4/3/21	5347	Walker, Francis Pullen	29/5/20	5134
Mitchell, James Scott	27/11/20	5289	Walker, George	26/8/20	5242
Moffitt, William Robert	26/8/20	5234	Walker, James John	4/3/21	5345
Moore, Fred	27/11/20	5261	Walker, Thomas	4/3/21	5353
Morrow, John	29/5/20	5169	Wallace, John	26/8/20	5254
Mortensen, Axel Brerad	4/3/21	5333	Warren, Charles Edward	26/8/20	5212
Mortensen, Peter Axel	27/11/20	5278	Waters, John	26/8/20	5195
Napier, Ernest Colin	29/5/20	5183	Watts, Charles William	29/5/20	5122
Nicholson, Albert Edward	27/11/20	5312	Webb, William Charles	26/8/20	5223
Nicol, Claud David William	27/11/20	5299	Wells, Clinton Frederick	29/5/20	5124
Nicol, James	27/11/20	5290	Wells, Richard Charles	4/3/21	5343
Norton, William	27/11/20	5279	West, Fred Howard	4/3/21	5339
Olen, James Gladstone York	29/5/20	5129	West, William Henry	4/3/21	5335
Paisley, Walter	4/3/21	5356	Whitaker, George Herbert	29/5/20	5125
Parson, Walter	27/11/20	5273	Whittington, Horace Henry Harold ..	26/8/20	5199
Pearce, William Henry	26/8/20	5238	Wickstone, John	29/5/20	5173
Petch, Oswald Herbert	26/8/20	5215	Williams, Charles	29/5/20	5185
Petersen, William Mervyn	26/8/20	5218	Workman, Edward	29/5/20	5130
Pitts, William Henry	26/8/20	5248	Wright, George Thomas John ..	4/3/21	5316

RETURN OF WINDING (STEAM) ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Desmond, John Patrick	29/5/20	574	Mills, Harry Grant	4/3/21	577
Hill, James	27/11/20	575	Williams, Frederick	29/5/20	573
McEwan, Joseph Taylor	4/3/21	576	Wilson, Sidney Robert	29/5/20	572

RETURN OF LOCOMOTIVE- AND TRACTION-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY
HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Allan, Charles Alfred	4/3/21	3830	Kelliher, Patrick	26/8/20	3743
Allen, Joseph	4/3/21	3821	Kitto, John	27/11/20	3805
Anderson, John Ander	26/8/20	3761	Latham, Edward Reginald ..	29/5/20	3716
Anderson, Peter	4/3/21	3813	Lawrence, Joseph Howard ..	27/11/20	3806
Annabell, Arthur	27/11/20	3775	Lawson, Herbert Wilfred ..	29/5/20	3703
Armstrong, Richard	26/8/20	3754	Lay, George John	29/5/20	3717
Barnes, Frederick George ..	26/8/20	3738	Lees, Albert	27/11/20	3772
Bartholomew, Charles Henry	26/8/20	3744	Levings, Alfred John	27/5/20	3721
Bartholomew, Joe	26/8/20	3739	Leyland, Ernest Charles ..	4/3/21	3838
Bateman, Archie Otto	26/8/20	3733	Lindsay, George Nairn	26/8/20	3740
Beatson, Conrad Martin ..	29/5/20	3706	Luxton, Thomas Davey	26/8/20	3769
Benyon, Walter James	29/5/20	3720	Lyons, Benjamin Bennett ..	26/8/20	3768
Bisset, Ernest James	26/8/20	3752	McDell, William Henry	29/5/20	3727
Blight, Joseph	4/3/21	3822	McGaughey, Benjamin	27/11/20	3798
Blows, Percival Thomas Wright	4/3/21	3820	McGillivray, John	29/5/20	3745
Booth, Herbert	26/8/20	3763	McLeod, Mark Francis	4/3/21	3812
Bradbury, John Johnson ..	27/11/20	3780	McNeil, Donald	27/11/20	3799
Brighton, John	29/5/20	3712	McWilliams, Frederick Douglas	29/5/20	3699
Brothers, Joseph Edward Eric	27/11/20	3786	Mason, William	4/3/21	3825
Brown, William Nimmo	29/5/20	3700	Metherell, Harold	26/8/20	3747
Buchanan, Robert Louis ..	26/8/20	3729	Moody, Arthur James	4/3/21	3835
Calvert, Oswyne	27/11/20	3789	Mudford, John Leslie	29/5/20	3707
Cantwell, Duncan Hepburn ..	26/8/20	3764	Muir, James Crosbie	4/3/21	3816
Cartman, Frank	29/5/20	3725	Murfitt, Malcolm James ..	29/5/20	3708
Cheeseman, Edwin Thomas ..	27/11/20	3773	Nathan, Richard	4/3/21	3814
Clark, Charles Henry	27/11/20	3781	Nicol, John Hector	4/3/21	3827
Clark, David Fraser	26/8/20	3750	Nissen, Eric Clause	27/11/20	3785
Coard, James	27/11/20	3804	Olipphant, Robert	27/11/20	3790
Colligan, Robert	29/5/20	3711	Olive, Samuel Thomas	29/5/20	3695
Corich, John James	29/5/20	3724	Osborne, Francis William ..	29/5/20	3705
Cox, William Beresford	4/3/21	3824	Page, William	27/11/20	3807
Crothers, Cecil Samuel	29/5/20	3698	Painter, Frederick Joseph ..	26/8/20	3736
Curtis, Arnold	26/8/20	3755	Parker, William Alexander ..	27/11/20	3794
Davidson, Leonard George ..	29/5/20	3694	Parsons, David Isaac	26/8/20	3732
Davy, Edgar Palgrave	4/3/21	3834	Pearson, John Watson	27/11/20	3783
Devine, John William	4/3/21	3809	Penny, Robert	26/8/20	3728
Dixon, Thomas Henry	29/5/20	3710	Penrose, John Christopher ..	29/5/20	3713
Doyle, James Arnold	27/11/20	3792	Peryman, Keith Lavington ..	26/8/20	3760
Duff, Donald	27/11/20	3802	Potter, George Stephen	4/3/21	3832
Evans, Herbert Shaw	4/3/21	3831	Prain, George Munro	4/3/21	3836
Everiss, Arthur William ..	27/11/20	3795	Reynolds, Arthur Pretoria ..	29/5/20	3714
Farrell, Leslie	26/8/20	3734	Richards, Victor Norman Voake	27/11/20	3782
Flynn, John David Joseph ..	4/3/21	3828	Riley, Victor George	26/8/20	3748
Fowler, William Thorpe	26/8/20	3737	Robertson, Robert	29/5/20	3718
Fry, Henry Edward	26/8/20	3751	Rowse, Frank Henry	26/8/20	3757
Garlick, Thomas	5/10/20	3771	Scott, Thomas Graham	27/11/20	3779
Gibson, Ernest Stanley	26/8/20	3735	Shaw, Gordon James	27/11/20	3784
Gibson, James Arthur	26/8/20	3762	Smart, Ernest Frederick ..	29/5/20	3719
Gichard, William George ..	27/11/20	3776	Smith, Edgar Arthur	26/8/20	3766
Gilshenan, Lawrence Peter ..	4/3/21	3810	Smith, Joseph	4/3/21	3833
Gough, John James	26/8/20	3765	Stapley, Charles Lewis	4/3/21	3815
Graham, George	4/3/21	3826	Sterling, Isaac Alfred	29/5/20	3726
Haigh, James William	26/8/20	3741	Stewart, Donald Allan	26/8/20	3753
Hamilton, Joseph Edmund ..	27/11/20	3778	Storey, Herbert John Lisle ..	29/5/20	3715
Harle, William Ridley	29/5/20	3702	Strong, Percy Alfred	27/11/20	3808
Harris, Norman Eugene	27/11/20	3774	Tennant, Fleetwood Robert ..	27/11/20	3800
Hauschild, Frederick William	26/8/20	3742	Thomas, Frank George	27/11/20	3801
Hay, David	29/5/20	3723	Thomas, William Harold ..	26/8/20	3758
Herries, Frederick Stanfield	26/8/20	3746	Thomson, David	4/3/21	3839
Higgins, Charles Vincent ..	27/11/20	3791	Trevella, James	26/8/20	3731
Higgins, Robert William ..	27/11/20	3787	Treweek, Reginald James ..	26/8/20	3767
Hill, George	27/11/20	3793	Turkington, Walter	29/5/20	3704
Hill, Leslie Arnold	27/11/20	3796	Twomey, Patrick	26/8/20	3759
Horton, John Pearson	26/8/20	3756	Wallace, John	29/5/20	3722
Hughes, Bernard	4/3/21	3837	Watt, James Richard	4/3/21	3823
Hume, Charles John William	4/3/21	3811	Whiting, Alfred Charles ..	4/3/21	3818
Hynes, Peter Aloysius	26/8/20	3730	Wilkins, Robert	29/5/20	3696
Jackson, Willie	7/11/20	3777	Wilsner, George Albert	26/8/20	3749
James, Henry Herbert Moray	26/8/20	3770	Wilson, Walter	4/3/21	3819
Johansen, William John ..	27/11/20	3788	Young, Albert	29/5/20	3709
Kelleher, William	4/3/21	3817			

RETURN OF LOCOMOTIVE-ENGINE DRIVERS TO WHOM CERTIFICATE OF COMPETENCY HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Dawson, John Henry	29/5/20	14	Fraser, William George	27/11/20	17
Dreckman, Alfred Edward ..	29/5/20	15			

RETURN OF TRACTION-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Adams, William George	26/8/20	349	Higgins, David Emery	27/11/20	368
Alexander, Frank	29/5/20	325	Holland, Samuel	4/3/21	402
Andreassen, Teodor August ..	29/5/20	319	Hore, Joseph	27/11/20	379
Ballance, John Selby Osborne ..	26/8/20	348	Hughan, Eric	4/3/21	404
Barker, Walter Frederic	27/11/20	370	Ironsides, William Richard ..	26/8/20	346
Barter, Frederick William	26/8/20	331	Jackman, Thomas, jun.	4/3/21	399
Bassett, Robert William	27/11/20	367	Jane, Cecil Godfrey	4/3/21	408
Bateman, Arthur George	26/8/20	347	Johnston, Charles Stuart McDonald ..	26/8/20	328
Bell, Daniel	27/11/20	360	Jones, Frederick Gordon	27/11/20	377
Bishell, William Marriott	26/8/20	329	Lang, John William	27/11/20	374
Blair, Henry	29/5/20	317	Lawrence, Harry Douglas	27/11/20	389
Bowman, Richard Oscar	4/3/21	407	Le Prou, Victor Eugene	27/11/20	359
Bowring, Charles Alfred	27/11/20	355	Long, Charlie Winifred Ekin ..	27/11/20	363
Brogden, Douglas John	4/3/21	398	Lott, James	29/5/20	320
Brooks, Hector Francis	27/11/20	358	McIntosh, George	26/8/20	334
Campbell, William	26/8/20	350	MacIntosh, Walter Wilson	29/5/20	326
Carl, John Henry	27/11/20	361	Mackie, William Valentine	27/11/20	390
Chambers, Charles Harold	26/8/20	332	McMahon, John William	26/8/20	335
Clark, Alfred Edward	27/11/20	373	Maindonald, Lauritz Eugene	27/11/20	392
Cooper, Archard Wilfred	27/11/20	381	Marshall, John Henry	26/8/20	342
Crawford, John	29/5/20	314	Mills, Frank Hubert	29/5/20	324
Croy, Albert Arthur	27/11/20	372	Morris, Sydney William	4/3/21	397
Cullen, Peter Leo	29/5/20	321	Murdock, Robert	4/3/21	412
Dawson, Arthur Ernest	27/11/20	385	Newell, Seth	4/3/21	413
Dawson, Christopher Henry	27/11/20	386	O'Callaghan, Alec.	27/11/20	383
Dillon, James	27/11/20	387	Osborne, George William Reginald ..	4/3/21	395
Dobson, Charles Herbert	4/3/21	405	Page, John James	26/8/20	343
Dobson, Edwin	4/3/21	400	Pearson, Lawrence George William ..	27/11/20	375
Dobson, Henry	27/11/20	362	Reid, Andrew Garden	26/8/20	352
Downes, Fritz Silvester	27/11/20	356	Richards, Henry Edward Harrison ..	27/11/20	365
Ealam, William John	26/8/20	337	Rooke, Arthur Percy	4/3/21	406
Eden, Clement William	26/8/20	339	Ryan, Norman George	4/3/21	410
Eden, James Thornton	26/8/20	340	Sefton, David	29/5/20	327
Egerton, Arthur William	27/11/20	388	Small, Phillip Geoffrey	27/11/20	384
Ferrier, Robert Adam	29/5/20	315	Smallfield, Percy Walton	27/11/20	382
Fowler, Ralph Howard	26/8/20	341	Smith, Harold Colin	4/3/21	414
Fuller, William Henry	4/3/21	401	Soal, Ernest	27/11/20	366
Garlick, Richard	27/11/20	378	Souter, James, jun.	29/5/20	318
Giesen, Herbert Wellington ..	26/8/20	338	Spark, John	4/3/21	411
Gillespie, Lawrence Livingstone ..	27/11/20	376	Storer, Edward William	26/8/20	336
Goodrick, Robert Percy	26/8/20	354	Stringer, Francis Henry Champ ..	26/8/20	353
Grant, John Vincent	29/5/20	322	Sutherland, John Comrie Campbell ..	4/3/21	396
Gray, Herbert Howard	27/11/20	357	Taylor, George Maxwell	26/8/20	344
Hague, Charles	26/8/20	330	Troup, James Wilson	26/8/20	345
Hanifin, Jeremiah	29/5/20	323	Vavasour, Edward Joseph	27/11/20	369
Harkness, Charles Scott	27/11/20	364	Walker, William	29/5/20	316
Harrington, Duncan Hoise	27/11/20	393	Ward, Ernest	27/11/20	371
Hattrill, Albert Victor	26/8/20	351	Watson, Arthur	4/3/21	403
Haugh, Robert Alexander	4/3/21	409	Watts, Charles Frederick	27/11/20	391
Henderson, Robert Ramsay	27/11/20	394	Whale, Arthur Edward	27/11/20	380

RETURN OF WINDING (ELECTRIC) ENGINE DRIVERS TO WHOM CERTIFICATE OF COMPETENCY HAVE BEEN GRANTED FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Burns, Egerton Joseph	26/8/20	66	Parker, Edmund Barton	27/11/20	67

RETURN OF ELECTRIC-TRAM DRIVERS TO WHOM CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED
FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Name of Person.	Date of Issue.	No.	Name of Person.	Date of Issue.	No.
Agnew, Edward Donnelly ..	28/5/20	996	McIntosh, Alexander ..	24/8/20	1035
Askew, Ernest Walter ..	22/11/20	1057	McKnight, Hugh ..	24/8/20	1020
Belworthy, Charles Windsor ..	22/11/20	1079	McLaughlin, Arthur ..	22/11/20	1066
Beresford, Edmund ..	24/8/20	1003	McLennan, Donald ..	24/8/20	1046
Berridge, Cyril ..	4/3/21	1099	McNicholl, Herbert James ..	28/5/20	979
Bignold, Alfred Ernest ..	28/5/20	985	McPike, Samuel ..	22/11/20	1069
Blundell, Percy ..	24/8/20	1004	Mark, Thomas Ernest ..	28/5/20	984
Bool, Rupert Lawrence ..	22/11/20	1073	Mason, Oscar Christian ..	24/8/20	1036
Brodie, William ..	24/8/20	1005	Metcalfe, Frederick ..	24/8/20	1021
Brown, William Thomas ..	28/5/20	986	Mills, Ernest Henry ..	4/3/21	1113
Buckley, Lance Norman ..	24/8/20	1006	Minnear, Ernest Alfred ..	22/11/20	1068
Burns, David ..	24/8/20	1040	Mitchell, Sidney Charles ..	24/8/20	1022
Butler, Charles Edward ..	4/3/21	1106	Molloy, William John ..	22/11/20	1058
Byatt, Bernard Benson ..	22/11/20	1070	Morris, Lewis Owen ..	4/3/21	1098
Calvert, Albert Horace ..	22/11/20	1117	Morris, William Alonza ..	22/11/20	1082
Carson, Martin ..	28/5/20	997	Murtha, William ..	24/8/20	1047
Carter, Bertram Henry ..	24/8/20	1007	Neely, James Blackwood ..	22/11/20	1071
Cecil, Egerton Burleigh Cooper ..	22/11/20	1067	Neely, William Leonard John ..	28/5/20	990
Clark, Charles Arthur ..	22/11/20	1060	Nevin, Herbert Harold ..	28/5/20	980
Colhoun, Robert ..	24/8/20	1008	Norris, George Stanley ..	24/8/20	1048
Conley, Ernest Alexander ..	22/11/20	1075	Noyer, Alfred Joseph ..	24/8/20	1023
Cook, George William ..	24/8/20	1009	O'Hara, William Hector ..	4/3/21	1104
Cramp, William ..	24/8/20	1010	Parkes, Isaac ..	4/3/21	1092
Crawford, Alphonso ..	22/11/20	1080	Pearce, Mark Allen ..	24/8/20	1037
Crawford, John ..	28/5/20	998	Piening, Leopold George ..	22/11/20	1056
Currie, James Thomas ..	28/5/20	1001	Pilkington, Harry ..	22/11/20	1074
Delahunt, William ..	4/3/21	1109	Pine, Harold Daniel ..	4/3/21	1116
Donaldson, Richard ..	28/5/20	1002	Piner, George ..	28/5/20	981
Doughty, Harry Isle ..	28/5/20	999	Pivach, Ivan Joseph ..	4/3/21	1090
Drake, Henry ..	4/3/21	1110	Powley, Thomas Henry ..	22/11/20	1083
Driver, John Alexander ..	4/3/21	1107	Pycroft, Edward James ..	4/3/21	1114
Duffey, Patrick ..	28/5/20	987	Quayle, Frederick Earnest ..	24/8/20	1049
Ellis, Francis Pearce ..	4/3/21	1095	Ricketts, Ernest Henry ..	24/8/20	1050
Ellis, Hugh Warwick ..	28/5/20	976	Robbins, John Isaac ..	4/3/21	1112
Emmerson, Robert ..	28/5/20	1000	Rollerson, Edward William ..	24/8/20	1030
England, Francis Hugh ..	28/5/20	977	Ryan, William Patrick ..	4/3/21	1094
Evans, Harold ..	24/8/20	1029	Ryland, Andrew Gilbert ..	22/11/20	1089
Eyre, Frederick James ..	24/8/20	1041	Sadler, Jack ..	22/11/20	1076
Ferrel, William ..	22/11/20	1061	Scoble, William ..	24/8/20	1051
Findlay, Roderick George ..	24/8/20	1011	Shannon, John ..	28/5/20	991
Fletcher, Christopher ..	24/8/20	1032	Shaw, James Alexander ..	22/11/20	1078
Fowler, Ernest Vincint ..	24/8/20	1033	Sheahan, Francis Daniel ..	28/5/20	982
Gallagher, Leonard Francis ..	22/11/20	1062	Siffleet, Stephen Alexander ..	4/3/21	1091
Gard, Vernon Claud ..	22/11/20	1063	Sim, Alexander ..	24/8/21	1024
Griffiths, William Evan Charles ..	4/3/21	1108	Simpkiss, John Charles ..	22/11/20	1072
Hamlin, William Henry ..	28/5/20	988	Skelsey, Thomas ..	4/3/21	1105
Harding, Leslie Alexander ..	4/3/21	1115	Smith, William De Lamotte ..	28/5/20	992
Harris, Sidney Frank ..	24/8/20	1012	Sneddon, Samuel Brittain ..	22/11/20	1084
Harvey, Edgar ..	24/8/20	1034	Sullivan, Ernest James ..	28/5/20	983
Hawkins, John ..	24/8/20	1042	Sullivan, George Francis ..	28/5/20	993
Heeney, John ..	4/3/21	1096	Sundberg, Otto ..	24/8/20	1052
Hellberg, John ..	4/3/21	1093	Sundgren, Eric ..	24/8/20	1053
Hill, Harold Walter ..	24/8/20	1013	Taylor, Thomas Charles ..	24/8/20	1025
Horton, Charles Thomas ..	28/5/20	978	Thompson, Ernest Henry ..	4/3/21	1101
Howie, Arthur Thomas ..	22/11/20	1081	Thornhill, Edward William ..	24/8/20	1054
Iremonger, James Frederick ..	24/8/20	1043	Tuck, Norman Henry ..	28/5/20	995
Jackson, Leo Michael ..	24/8/20	1044	Urquhart, Murdoch MacIvor ..	24/8/20	1027
Jarvis, Sydney William ..	24/8/20	1015	Vickers, George Anthony ..	24/8/20	1028
Johnston, Thomas Albert ..	24/8/20	1014	Wagner, James ..	24/8/20	1038
Jones, George ..	22/11/20	1077	Walker, Harold William ..	22/11/20	1065
King, Daniel John ..	22/11/20	1064	Ward, William John ..	24/8/20	1031
Kingstone, Thomas James ..	4/3/21	1100	Watson, Arthur ..	22/11/20	1085
Lacey, Albert Edward ..	4/3/21	1103	Watt, James Lionel ..	22/11/20	1088
Lawrence, Arthur ..	24/8/20	1016	West, George Isaac ..	22/11/20	1086
Lott, James Stanhope ..	24/8/20	1017	Wilkinson, George Henry ..	24/8/20	1039
Maber, Arthur William ..	4/3/21	1097	Williams, Cedric Joseph ..	22/11/20	1087
McBratney, William Alexander ..	22/11/20	1059	Williamson, James George ..	28/5/20	994
McClymont, Hugh ..	24/8/20	1018	Wolland, Kenneth Hilton ..	24/8/20	1055
McCullough, William James ..	28/5/20	989	Wren, Richard Henry ..	4/3/21	1102
McDermott, Robert Reginald ..	24/8/20	1019	Young, John Stewart ..	4/3/21	1111
McGuire, Archie Howard ..	24/8/20	1045			

NUMBER OF CANDIDATES WHO WERE EXAMINED FOR EXTRA FIRST-CLASS ENGINEER, FIRST- AND SECOND-CLASS STATIONARY, WINDING (STEAM AND ELECTRIC), LOCOMOTIVE AND TRACTION, LOCOMOTIVE, AND TRACTION ENGINE DRIVERS' AND ELECTRIC-TRAM DRIVERS' CERTIFICATES FROM THE 1ST APRIL, 1920, TO THE 31ST MARCH, 1921.

Place.	Extra First.		First Class.		Second Class.		Winding.				Locomotive and Traction		Locomotive.		Traction.		Electric Tram.		Total.		Grand Total.
							Steam.		Electric.												
	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	
*Auckland ..	3	..	17	4	39	6	1	..	1	..	14	3	..	..	..	..	78	5	153	18	171
*Blenheim	1	..	..	..	..	..	..	1	..	..	1	..	..	..	2	1	3
Carterton	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
*Christchurch ..	5	1	3	2	11	2	..	..	..	..	12	..	..	..	27	1	23	1	81	7	88
Dannevirke	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Dunedin ..	3	..	2	4	19	2	2	..	..	..	5	1	..	..	13	1	16	1	60	9	69
*Gisborne ..	1	..	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	4	1	5
*Greymouth	6	2	15	4	3	1	..	..	14	4	1	..	..	..	..	..	39	11	50
*Greytown	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
*Hamilton	3	2	20	3	..	..	1	..	11	3	..	..	1	..	..	..	36	8	44
Hokitika	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Invercargill	1	2	11	2	..	..	..	..	8	..	..	..	11	..	5	..	36	4	40
Kaingaroa	1	..	..	..	..	..	..	..	1	..	1
Karamea	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Martinborough	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Masterton	1	..	..	..	1	..	1
*Napier	1	1	4	1	..	..	..	..	2	..	..	..	2	..	1	..	10	2	12
*Nelson	1	..	7	3	..	..	..	..	1	2	..	..	6	3	..	..	15	8	23
*New Plymouth	1	..	25	5	..	..	..	..	2	1	..	..	3	1	..	..	31	7	38
Ngatapa	1	..	..	..	..	..	..	..	1	..	1
Norsewood	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Opunake	1	..	..	..	1	..	1
Otaki	1	..	..	..	..	..	..	..	..	1	1
Pahiatua	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Palmerston North	3	13	9	..	..	..	..	..	1	..	..	..	2	..	..	..	16	12	28
Puponga	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Reefton	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Takapau	1	..	..	..	1	..	1
Taumarunui	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Tauranga	1	..	..	..	..	..	1	1	..	..	..	..	..	..	2	1	3
Te Kopuru	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Timaru ..	1	..	..	..	4	..	..	..	..	..	2	..	..	..	24	1	..	..	31	1	32
Waiuku	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
*Wanganui	1	1	11	1	..	..	..	..	..	..	..	..	3	..	4	1	19	3	22
*Wellington ..	1	1	12	1	17	..	..	..	..	..	9	1	..	..	2	1	29	1	70	5	75
*Westport	1	4	..	..	..	..	..	1	..	..	..	..	..	..	..	5	1	6
*Whangarei	1	8	..	..	..	..	..	8	2	..	..	..	..	..	..	16	3	19
Totals ..	14	2	49	25	225	40	6	1	2	..	93	20	1	..	98	8	156	9	644	105	749

* Places where more than one examination was held.

RETURN SHOWING THE NAMES OF OWNERS OF ADDITIONAL BOILERS AND TRANSFERS WHICH REQUIRE TO BE IN CHARGE OF CERTIFICATED ENGINE-DRIVERS—*continued.*

Name of Owner.	Where Boiler used.	Purposes for which used.	Horse-power of Boiler.	Diameter of Cylinders of Engine in Inches.	Class of Driver required.	Additional Boilers, Names of late Owners of Transferred Boilers; and also showing where Size of Cylinders are now amended.
AUCKLAND DISTRICT— <i>continued.</i>						
New Zealand Co-operative Dairy Company	Waikau	Dairy factory	50	12	Second	Late New Zealand Dairy Association.
"	Tuakau	"	20	"	"	Late Waikato Cheese-factory.
New Zealand Government Public Works Department	Paeroa	Steam-shovel	32	"	"	Late Waikato Co-operative Dairy Company.
"	"	"	49-46	Two 6	"	Additional.
"	Huarau	"	49-46	Two 6	"	"
"	Tauranga	Railway-works	22	Two 6	"	"
"	"	Steam-shovel	21-4	Two 6	"	"
"	"	"	21-4	Two 6	"	"
Porter, E., and Co.	Auckland	General	4½	6	Traction	"
Ross, W. J. R.	Mangawai	Sawmill	59	Two 12	First ..	Late D. E. Morrison.
"	"	"	59	Two 12	"	Late Ferguson Mining and Smelting Company.
Smeed, W. A.	Tuakau	General	9	6½ and 10½	Traction	Additional.
Thames County Council	In district	Road-rolling	4	4 and 6	Locomotive and traction	"
Tyer and Co.	Auckland	Fruit-preserving	20	"	Second	Late Taupo Totara Timber Company.
Union Steamship Company	"	Hoisting	22	Two 4½, two 6, and one 7½	Second	Cylinders amended.
Waikato Gold-mining Company (Limited)	Waikato	Quarry	8	Two 10	"	"
"	Waikato	Pumping and winding	88	60 and 110, 35 and 70, 15 and 30, two 8, two 12, two 18	First and winding	"
"	"	Ditto	88	"	"	"
"	"	"	88	"	"	"
"	"	"	145	"	"	"
"	"	"	145	"	"	"
"	"	"	88	"	"	"
Wright, Stephenson, and Co.	Otahuhu	Fertilizer-works	84	"	Second	Additional.
AUCKLAND SOUTH DISTRICT.						
Atiamuri Sawmilling Company	Atiamuri	Sawmill	30	13	Second	Late Arthui Sawmill Company.
Cambridge Co-operative Dairy Company	Hautapu	Milk-powder factory	132	"	"	Additional.
"	"	"	132	"	"	"
"	"	"	132	"	"	"
Ellis and Burnand	Waihou	Sawmill	132	Two 8½	"	"
Endean and Co.	Maharaka	"	13	12	"	"
"	"	"	26	15½	"	"
"	"	"	40	"	"	"
Gardner, George, and Sons	Taringamotu	"	40	"	First ..	Late Stevens and Anderson.
Glaxo Manufacturing Company	Matamata	Dried milk	40	"	"	Late Taringamotu Sawmill Company.
Hardy and Co.	Waimarino	Sawmill	20	12½	Second	Additional.
Heller, F. F.	Popio	Hauling	8	5½ and 9	Traction	Late New Zealand Dairy Association.
Innis, C. L., and Co.	Hamilton	Brewery	35	9½	Second	Additional.
Millburn, J.	Tammarunui	Sawmill	12	7 and 10	"	Late Cambridge Co-operative Dairy Company.

New Zealand Co-operative Dairy Company										Additional.	
Rukuhia ..	Frankton Junction	..	..	26	6½	..	..	Second	..	..	..
"	Gordonton	..	..	50	10 and 16	..	..	First ..	..	..	"
"	Matangi ..	..	..	20	6½	..	..	Second	..	..	Late New Zealand Dairy Association.
"	Ngauawahia	..	..	72	11 and 19	..	..	First ..	..	..	"
"	"	..	..	70	16½	..	..	"	..	..	"
"	Orini ..	..	..	44	16½	..	..	"	..	..	"
"	Matamata	..	..	35	6	..	..	Second	..	..	"
"	"	..	..	50	13	..	..	"	..	..	"
"	Manawaru	..	..	84	13	..	..	"	..	..	"
"	Matangi ..	..	..	30	9	..	..	"	..	..	"
"	"	..	..	95	11 and 19	..	..	First ..	..	..	Late Manawaru Cheese Company.
"	"	..	..	95	11 and 19	..	..	"	..	..	Late New Zealand Dairy Association.
"	"	..	..	72	11 and 19	..	..	"	..	..	"
"	"	..	..	72	11 and 19	..	..	"	..	..	"
"	"	..	..	72	11 and 19	..	..	"	..	..	"
"	Frankton Junction	..	..	72	11 and 19	..	..	"	..	..	"
"	"	..	..	43	10	..	..	Second	..	..	"
"	Waitoa	..	..	86	10 and 11	..	..	First ..	..	..	"
"	"	..	..	84	..	..	..	"	..	..	Additional.
"	"	..	..	84	..	..	..	"	..	..	"
"	"	..	..	84	..	..	..	"	..	..	"
"	Huntly ..	..	..	84	..	..	..	"	..	..	"
"	"	..	..	22	Two 6	..	..	Second	..	..	"
New Zealand Government Public Works Department											
Pukemiro Collieries (Limited)	..	..	..	74	12 and 17	..	..	First ..	..	..	"
Selwyn Timber Company ..	..	..	..	3	3½ and 6	..	..	Locomotive and traction	..	..	"
Thames Valley Co-operative Dairy Company ..	..	..	..	40	14½	..	..	First ..	..	..	Late Waioa Flax-mill Company.
Tunnel Timber Company ..	..	..	..	5	5 and 8½	..	..	Traction	..	..	Late C. Jarrett and Son.
Waihou Valley Co-operative Dairy Company ..	..	..	..	5	5½ and 8	..	..	"	..	..	"
"	"	..	..	57	12 and 22	..	..	First ..	..	..	Cylinders amended.
"	"	..	..	57	12 and 22	..	..	"	..	..	"
"	"	..	..	50	12 and 22	..	..	"	..	..	"
"	"	..	..	45	12 and 22	..	..	"	..	..	"
Waikato Timber Company (Limited)	..	..	..	20	12	..	..	"	..	..	"
Walsh, J. A. ..	..	..	..	25	12½	..	..	Second	..	..	Late Orini Sawmilling Company.
Waiotu Timber Company ..	..	..	..	20	12 and 20	..	..	"	..	..	Late P. Hendry.
Watkins Bros. ..	..	..	..	20	13	..	..	First ..	..	..	Additional.
..	..	..	..	20	13	..	..	Second	..	..	"
CANTERBURY DISTRICT.											
Anson, G. E. M. ..	Christchurch	..	..	4	3 and 5	..	..	Traction	..	..	Late J. Goodman.
Bailey, R. ..	Ashley ..	..	..	6	6 and 10½	..	..	"	..	..	Late G. W. Bailey.
Bowman, J. W. ..	Riccarton	..	..	6	8	..	..	"	..	..	Late J. Johnston.
Bradshaw, G. ..	Sheffield ..	..	..	6	8	..	..	"	..	..	Late Meredith and Co.
Bryden Bros. ..	Waipara ..	..	..	8	6½ and 11½	..	..	"	..	..	Additional.
Buckman, C. S. R. ..	Coalgate ..	..	..	8	8½	..	..	"	..	..	Late H. Gurdler.
Christchurch Tramway Board	Christchurch	..	..	6	4 and 7	..	..	"	..	..	Additional.
Clark and Cook ..	Ohoka ..	..	..	8	8½	..	..	"	..	..	Late Clark Estate.
Doreen, F. G. ..	Loburn ..	..	..	8	6½ and 10½	..	..	"	..	..	Late W. Gee.
Gibbs Bros. ..	Halwell ..	..	..	8	9	..	..	"	..	..	Late R. Reddick.
Gurdler, H. ..	Christchurch	..	..	7	8½	..	..	"	..	..	Late A. Swanson.
"	"	..	..	8	6½ and 10	..	..	"	..	..	Late Hewson Bros.
Homebush Pottery Company	Glentunnel	..	..	20	8 and 5	..	..	Locomotive and traction	..	..	Cylinders amended.
Jones and Hodgetts ..	Oxford ..	..	..	8	6½ and 10	..	..	Second	..	..	Late E. Feather and Sons.
Kemphorne, Prosser, and Company	Hornby ..	..	..	23	Two 9½	..	..	Traction	..	..	Additional.
King, A. ..	Barry's Bay	..	..	9	6½ and 10	..	..	Locomotive	..	..	Late S. Lizzard.
..	..	..	..	9	6½ and 10	..	..	Traction	..	..	"

RETURN SHOWING THE NAMES OF OWNERS OF ADDITIONAL BOILERS AND TRANSFERS WHICH REQUIRE TO BE IN CHARGE OF CERTIFICATED ENGINE-DRIVERS—*continued.*

Name of Owner.	Where Boiler used.	Purposes for which used.	Horse-power of Boiler.	Diameter of Cylinders of Engine in Inches.	Class of Driver required.	Additional Boilers: Names of late Owners of Transferred Boilers; and also showing where Size of Cylinders are now amended.
CANTERBURY DISTRICT—<i>continued.</i>						
Lytelton Harbour Board ..	Lytelton ..	Hauling ..	38	Two 8 ..	Second	Cylinders amended.
Marshall, J. ..	Glentunnel ..	Sawmill ..	16	8 and 12½ ..	First	Late Marshall and Roud.
McIntosh, George ..	Southbrook ..	Chaff-cutting ..	8	9 ..	Traction	Late R. McIntosh.
McIntosh, K. ..	Kaipoi ..	General ..	4	7½ ..	"	Additional.
Maw Bros. ..	Southbridge ..	Threshing ..	8	9 ..	"	Late Mrs. A. Moorhead.
Pearson, W. G. ..	Southbrook ..	General ..	8	6½ and 10½ ..	"	Cylinders amended.
Small Bros. ..	North Loburn ..	" ..	10	6½ and 11½ ..	"	Late P. J. Pulley.
Southbridge Timber Company ..	Ohoka ..	Sawmill ..	12	6½ and 11½ ..	Second	Late Andrews Twine Company.
Spreydon Borough Council ..	Spreydon ..	Road-roller ..	6	8 ..	Traction	Additional.
St. Helen's Coal Company ..	Whitecliffs ..	Wagon ..	23	14½ and 7 ..	"	Late W. A. McLaren and Co.
Tai Tapu Dairy Company ..	Tai Tapu ..	Dairy factory ..	8	8½ ..	Traction	Additional.
Taylor, R. J. ..	Rangiora ..	General ..	15	12 and 21 ..	First	Late H. Storer.
Union Sawmilling Company ..	Christchurch ..	Sawmill ..	15	12 and 21 ..	"	Late William Hunsley.
" ..	" ..	Hoisting ..	21	Two 8 ..	Second	"
Union Steamship Company ..	Lytelton ..	Woodwork ..	30	12 ..	"	Cylinders amended.
Watson, Gavin, and Son ..	Christchurch ..	" ..	"	" ..	"	Late J. Brighting.
HAWKE'S BAY DISTRICT.						
Benson, Henry ..	Ormond ..	Hauling ..	7½	6½ and 10 ..	Traction	Late T. Willan.
Gardner and Yeoman ..	Woodville ..	Sawmill ..	30	13 ..	Second	Additional.
Graham, S. ..	Kiritahi ..	" ..	12	7½ and 11½ ..	"	Late W. J. Graham.
New Zealand Government ..	Gisborne ..	Hoisting ..	40	Two 8½ ..	"	Additional.
Parsons and Christiansen Bros. ..	Makaretu ..	Sawmill ..	14	Two 9 ..	"	Late W. Parsons.
Pearson Bros. ..	Tahoraiti ..	Chaff-cutting ..	6	8 ..	Traction	Late S. Park.
Poverty Bay Farmers' Co-operative Meat Company ..	Waipaea ..	Steaming ..	95	4 ..	Second	Additional.
Riddiford, D. G. ..	Takapau ..	Threshing ..	6	8 ..	Traction	Late D. Cattinach.
Smith, F. ..	Gisborne ..	General ..	6	9 ..	"	Late F. Hall.
Waipatiki Oil Wells ..	Waipatiki ..	Drilling ..	21	Two 11 ..	First	Cylinders amended.
Waioara Farmers' Co-operative Meat Company ..	Waioara ..	Steaming ..	95	15 and 32 ..	"	"
" ..	" ..	" ..	95	15 and 32 ..	"	"
" ..	" ..	" ..	95	15 and 32 ..	"	"
" ..	" ..	" ..	95	15 and 32 ..	"	"
MARLBOROUGH DISTRICT.						
Downie Bros. ..	Owen Junction ..	Sawmill ..	30	8 and 12½ ..	First	Additional.
Gray and Waters ..	Blenheim ..	Wood-working ..	15	7 and 11½ ..	Traction	Late J. A. Moreland.
Jackson, S. R. ..	" ..	Threshing ..	8	9 ..	Second	Late A. W. Jackson.
Marlborough Fruit Packing and Preserving Company (Limited) ..	" ..	Fruit-preserving ..	20	Nil ..	"	Additional.
Pike, W. D. ..	" ..	General ..	7	6½ and 11 ..	Traction	Late W. D. and T. Pike.
" ..	" ..	" ..	8	7 and 11 ..	"	"
Prentice Bros. ..	Opouri Valley ..	Sawmill ..	20	Two 10½ ..	First	Late Griffiths Bros. and Co. (Limited).
Robertson Bros. ..	Tunakino Valley ..	" ..	20	9 ..	Second	Additional.
Vavasour, J. D. ..	Ugbrooke Station ..	General ..	10	6½ and 11½ ..	Traction	Late John Higgins.
Webley and Wallace ..	Opouri Valley ..	Sawmill ..	14	Two 9½ ..	Second	Additional.

NELSON NORTH DISTRICT.

Neiman, C. H.	Appleby ..	General ..	6 8	..	Traction	Late F. A. J. Bockman.
Onakaka Iron and Steel Company	Onakaka ..	Iron-works ..	68 15	..	First	Additional.
Schroder, P. A. E.	Hope ..	General ..	8 5½ and 9½	..	Traction	Late P. H. Best.
Blackball Coal Company	Blackball ..	Mining ..	48 Two 7, 11, and 15, one 13, 14½, and 21	..	First	Cylinders amended.
Davidson, G., and party	Humphreys ..	Sawmill ..	33 Two 10½ ..	..	"	Late Westland Gold-prospecting Company.
Diggers' Sawmilling Company	Buller Road ..	" ..	20 8 and 12½	..	"	Late T. Lanes.
"	Rimu ..	" ..	36	..	"	Late New Zealand Government State Coal-mines.
Dobson Coal-mining Company	Dobson ..	Mining ..	60 Two 16	..	"	Additional.
Ferndale Coal Company	Reefton ..	Hauling ..	16	..	Second	Cylinders amended.
New Zealand Government State Coal-mines	Seven Mile ..	Mining ..	64 Two 7, one 14	..	First	Late Moonlight Gold-dredging Company.
Nyberg and Armstrong	Ngahere ..	Mining ..	20 8 and 13	..	"	Late Buller County Council.
Schroder	Rimu ..	Sawmill ..	12 Two 12½ ..	..	Second	Late D. J. Williams.
Watson, D.	Waimangaroa ..	Flaxmill ..	30 8 and 11½	..	"	

9—H. 15.

OTAGO DISTRICT.

Bruce County Council	Milton ..	Motor-wagon	6	..	Traction	Late Ross and Glendining.
Bruce Railway and Coal Company	Waronui ..	Hauling ..	23 Two 6½	..	Locomotive	Additional.
Bruce Woollen Mills	Milton ..	Woollen mills	118 Two 9½ ..	..	First	"
Campbell, Colin	Puketiro ..	Sawmill ..	18 14	..	Second	Late W. Gwyer.
Carrodus, J. H.	Windsor ..	General ..	8 9	..	Traction	Late D. Clarke.
Clutha Dairy Company	Balclutha ..	Dairy factory	20 6½	..	Second	Late Dawson and McKechnie.
Currie, W.	Hyde ..	Chaffing ..	8 10	..	Traction	Late Hay Bros.
Dunedin City Corporation	Dunedin ..	Asphalt roller	10-4 Two 6	..	"	Additional.
Goss, William (Limited)	Ratanui ..	Sawmill ..	20 Two 10	..	Second	Late Christie and Begg.
Griffiths, A. H.	Kyebrum ..	Chaffing ..	8 9½	..	Traction	Late S. Harris.
Hansen, Edgar	Middlemarch ..	General ..	8 9	..	"	Late C. Garlick and Co.
Henley Dairy Factory	Henley ..	Dairy factory	18 Two 10	..	Second	Late Perseverance Gold-dredging Company.
Hogg and Co.	Tahakopa ..	Sawmill ..	20	..	"	Late William McLachlan.
Hogg, William	Evans Flat ..	Chaffing ..	9	..	"	Late J. E. Watson and Co.
Houpa Sawmill Company	Romahapa ..	Sawmill ..	30 16	..	First	Late H. F. Moss.
Hurring, John	Houpa ..	Flaxmill ..	20 8½ and 11½	..	Second	Late D. McKenzie.
Jackman, Thomas	Reidston ..	Threshing ..	8 6½ and 10½	..	Traction	Late Robertson Bros.
Kemphorne Prosser and Co.	Dunedin ..	Chemical works	20 7 and 14½	..	First	Cylinders amended.
McLennan, William	Owaka ..	Sawmill ..	18	..	Second	Late A. Sime.
McSkimming and Son	Benhar ..	Brick and tile works	16 7 and 11½	..	"	Cylinders amended.
Main, J. A.	Waivera South ..	General ..	6 3 and 10	..	Traction	Late W. Kirkland.
Milburn Lime and Cement Company	Milburn ..	Hauling ..	12½ Two 8	..	Locomotive	Late Bruce Rail and Coal Company.
Miller, John	Clinton ..	General ..	9½ 9	..	Traction	Additional.
Otago Iron-rolling Mills	Green Island ..	Iron-works	55 20	..	First	"
"	" ..	" ..	55 20	..	"	"
Polson, J.	Enfield ..	Chaffing ..	8 8	..	"	Late W. A. Milmine.
Shag Point Coal-mining Company	Shag Point ..	Hauling ..	23 Two 9½	..	Locomotive	Additional.
Sharp and McDowell	Tahakopa ..	Sawmill ..	12 7½ and 11½	..	Second	Late W. Brown.
Sim, G. G.	Kaitangata ..	Hauling ..	8 9	..	Traction	Late Reed Bros.
Somerville, J. A., and Sons	Waitapeka ..	Chaffing ..	8 9	..	"	Additional.
South Otago Freezing Company	Balclutha ..	Hauling ..	23	..	Locomotive	"

RETURN SHOWING THE NAMES OF OWNERS OF ADDITIONAL BOILERS AND TRANSFERS WHICH REQUIRE TO BE IN CHARGE OF CERTIFICATED ENGINE-DRIVERS—*continued.*

Name of Owner.	Where Boiler used.	Purposes for which used.	Horse-power of Boiler.	Diameter of Cylinders of Engine in Inches.	Class of Driver required.	Additional Boilers; Names of late Owners of Transferred Boilers; and also showing where Size of Cylinders are now amended.
OTAGO DISTRICT— <i>continued.</i>						
Stewart, D. A.	Waitapeka	General	6	8	Traction	Late Brown Bros.
Waite, George	Tapanui	Threshing	7½	8	"	Late Tapanui Chaff-cutting Syndicate.
Wilson Malt-extract Company	Dunedin	Steaming	16	Nil	Second	Late James Watson.
Tweedie, William	Milburn	Threshing	8	9	"	Late A. Leslie.
SOUTHLAND DISTRICT.						
Bates and Duncan	Waikawa	General	8	9	Traction	Late Seammell and Saunders.
Butcher, W. E.	Wright's Bush	"	6	8	"	Late Hardy and O'Connor.
Butler, Frederick	Lochiel	Threshing	6	8	"	Late Mrs. E. Poole and Sons.
Butler, John Thomas	Winton	General	8	9	"	Late James Butler.
Clifden Sawmilling Company	Clifden	Sawmill	20	9½ and 13½	First	Late J. P. Graham.
Clode and Svensson	Colac	"	14	Two 8½	Second	Late T. H. Watson.
Dawson Bros.	Kennington	General	8	9	Traction	Late Garvie Bros.
Dawson Bros.	"	"	6	7½	"	Late C. Collett and Sons.
Doherty, J.	Centre Bush	Lime-works	16	7 and 11	Second	Late James Butler.
Federal Hardware Company	Oware	Sawmill	20	8 and 13	First	Late Paterson and Kelly.
Goodlet, Colin	Edendale	General	6	7	Traction	Late R. Marshall.
Henry, Francis	West Plains	Sawmill	20	15	First	Late John Cameron.
McIntosh, Walter	Fortrose	General	6	6 and 10½	Traction	Additional.
McKenzie Bros.	Barkly	Lime-works	20	One 9, one 10	Second	Cylinders amended.
McLeary, John	Wyndham	General	6	7½	Traction	Late McLeary and Sinclair.
Milne, P. D. Y.	Woodlands	"	86	Four 10	First	Late Milne and Capon.
Murray's Limited	Underwood	Sawmill	20	Two 10	Second	Additional.
Neiderer, L. A.	Gorge Road	Hauling	6½	Two 7	Locomotive	Late Glenham Sawmilling Company.
New Zealand Government Public Works Department	Gore	"	23	Two 9½	"	Additional.
New Zealand Pine Company	Colac	"	87	Nil	"	"
Ocean Beach Freezing-works	Ocean Beach	Steaming	6	7½	Second	Late O'Shannessy Bros.
Poole Bros.	Centre Bush	General	20	8 and 12½	Traction	Late T. Steel.
Price, Thomas	Kawana	Flaxmill	6	7½	First	Late McLeary and Sinclair.
Sinclair, Donald	Wynham	Chaff-cutting	5	6½	Traction	Additional.
Smith, Albert	Grove Bush	General	12	Two 8½	"	Late Hamilton and Co.
Southland Electric-power Board	Monowai	Sawmill	8	9	Second	Late Thomas Crooks.
Tipsett, D. T.	Waimatua	General	8	8½	Traction	Additional.
Watson, J. E., and Co.	Mabel Bush	"	"	"	"	"
TARANAKI NORTH DISTRICT.						
Awatuna Co-operative Dairy Company	Awatuna	Cheese-factory	22	9	Second	Additional.
Bartle, H. M.	Taungatara	"	38	8	"	"
Bell Block Co-operative Dairy Company	Oaonui	Sawmill	25	11	"	"
	Bell Block	Cheese-factory	25	10	"	"

Company	Waitara	Freezing	190	11 and 20	First	Additional
Borthwick, T., and Sons	Waitara ..	..	65	18 and 32	..	..
"	" ..	"	65	18 and 32	"	"
"	" ..	"	179	18 and 32	"	"
Brown, Henry, and Co.	New Plymouth	"	26	12	Second	"
Cape Egmont Co-operative Dairy Company	Pungarehu	Sash and door factory	27-9	10	"	"
Cardiff Co-operative Dairy Company	Cardiff ..	Cheese-factory	32	9	"	"
Chant, C. D.	New Plymouth	"	6	5 $\frac{1}{4}$ and 9 $\frac{1}{4}$	Traction	"
Christoffel, John ..	"	General ..	14	Two 8 $\frac{3}{4}$	Second	"
Egmont Brewery Company	"	"	22	7 $\frac{1}{2}$	"	"
Inglewood County Council	Inglewood	Brewery ..	6	6 and 10	Traction	"
Johnston, A. W. ..	Waitara ..	General ..	3-8	4 $\frac{1}{2}$ and 7 $\frac{1}{2}$	"	"
Joll Co-operative Dairy Company	Te Ngutu	"	17	6	Second	"
"	Auroa ..	Cheese-factory	17	8 $\frac{1}{2}$	"	"
"	Te Ngutu	"	30	8	"	"
Kaimata Co-operative Dairy Company	Kaimata	"	25	8	"	"
Kaponga Co-operative Dairy Company	Kaponga	"	41	10	"	"
"	Rowan Road	"	21 $\frac{1}{2}$	9	"	"
"	Riverlea ..	"	16	8	"	"
Kaupokonui Co-operative Dairy Company	Kapuni	"	20	8	"	"
Lepperton Co-operative Dairy Company	Lepperton	"	20	6	"	"
McCluggage, J. ..	Pohokura	"	20	12 $\frac{1}{4}$	"	"
Mangatoki Co-operative Dairy Company	Mahoe ..	Sawmill ..	20	8	"	"
"	Mangatahi	Cheese-factory	30	8	"	"
Midhurst Co-operative Dairy Company	Midhurst	"	20	9	"	"
Mini Co-operative Dairy Company	Waitotoi	Dairy factory	20	8	"	"
New Plymouth Borough Council	New Plymouth	Cheese-factory	6	5 $\frac{1}{2}$ and 9	Traction	"
New Plymouth Harbour Board	Moturoa ..	Road-roller	10	Two 9 $\frac{1}{2}$	Second	"
"	Moturoa ..	Crane ..	24	Two 10	Locomotive	"
New Plymouth Sash and Door Factory	New Plymouth	Hauling ..	45	13	Second	"
New Zealand Government Public Works Department	Mokau ..	Sash and door factory	12-7	Four 5, two 3 $\frac{1}{2}$	Traction	"
North Taranaki Dairy Company	Onero ..	Steam-shovel	25	8	"	Cylinders amended.
Oaonui Co-operative Dairy Company	Oaonui	Butter-factory	31-5	9	Second	Additional.
Okato and Puniho Co-operative Dairy Company	Puniho ..	Cheese-factory	17	5 $\frac{1}{4}$	"	"
"	Okato ..	"	35	8	"	"
Pembroke Road Co-operative Dairy Company	Pembroke Road	"	17	9	"	"
Rahotu Co-operative Dairy Company	Rahotu ..	"	20	9	"	"
Stratford Farmers' Co-operative Association (Limited)	Toko ..	"	28	8	"	"
Ditto	Stratford..	"	36	10	"	"
Tahora Land and Sawmilling Company	Tahora ..	Cheese and butter factory	32	13 $\frac{1}{2}$	"	"
Taranaki County Council	New Plymouth	Sawmill ..	8	7 and 11	Traction	"
"	"	Stone-crushing	4-9	4 $\frac{1}{2}$ and 7	"	"
Taranaki Farmers' Meat Company	"	General ..	28	Two 8, one 7	Second	"
Taranaki Oil Lands and Acquisition Company	"	Freezing ..	32	One 13 $\frac{1}{2}$, 9, and 15	"	"
Taranaki Producers' Freezing Company	Moturoa	Oil wells ..	40	One 21 $\frac{1}{2}$, one 10	First	"
"	"	Steaming	42	One 21 $\frac{1}{2}$, one 10	"	"
Tikurangi Co-operative Dairy Company	Tikurangi	Freezing ..	25	10	Second	"
Waitara Co-operative Dairy Company	Waitara ..	Butter-factory	21	10	"	"
Warea Co-operative Dairy Company	Newall Road	"	20	8 $\frac{1}{2}$	"	"
		Cheese-factory	20	8 $\frac{1}{2}$	"	"

RETURN SHOWING THE NAMES OF OWNERS OF ADDITIONAL BOILERS AND TRANSFERS WHICH REQUIRE TO BE IN CHARGE OF CERTIFICATED ENGINE-DRIVERS—continued.

Name of Owner.	Where Boiler used.	Purposes for which used.	Horse-power of Boiler.	Diameter of Cylinders of Engine in inches.	Class of Driver required.	Additional Boilers: Names of late Owners of Transferred Boilers; and also showing where Size of Cylinders are now amended.
TARANAKI DISTRICT.						
Hawera Co-operative Dairy Company	Whareora	Cheese-factory	27	8	Second	Cylinders amended.
McGregor, Gregor..	Wanganui	General ..	6	8	Traction	Additional.
Maoriland Dairy-produce Company (Limited) ..	"	Butter-factory	25	7	Second	Late Ingledwood Co-operative Bacon Company.
Meremere Co-operative Dairy Company	Ohangai ..	Cheese-factory	50	6½	"	Cylinders amended.
New Zealand Casein Company (Limited)	Aramoho..	Casein-factory	30	12	"	Additional.
New Zealand Meat-packing and Bacon Company (Limited)	Eltham ..	Bacon-factory	56	Nil	"	"
Wanganui Gas Company	Wanganui	Gasworks	26	12	"	Cylinders amended.
Warrengate Threshing Company	"	Threshing	6	5¾ and 8½	Traction	Late A. G. McDonald.
TIMARU DISTRICT.						
Bean, T.	Hook	General ..	8	8½	Traction	Late William Hanifin.
Bell Bros.	Lismore	"	8	9	"	Late J. Bell.
Bishop, James	Tinwald ..	"	8	6 and 10½	"	Additional.
Boulton, A. H.	Otaio	"	8	6½ and 10½	"	Late G. Sparke.
Breach, W.	Methven ..	"	8	9	"	Late Capon Bros.
Casey, Thomas	Fairlie	"	6	8	"	Late Hanifin Bros.
Capon, A.	Winchmore	"	8	6½ and 10½	"	Late Capon Bros.
Clandeboyne Dairy Company	Clandeboyne	Dairy factory	20	Nil	Second	Additional.
Coffey Bros.	Makikihi	"	8	9	"	Late J. Meyers.
Dominion Tile and Porcelain Company	Temuka ..	Tile-works	15	9 and 14	First	Additional.
Dunstan, W.	Chertsey ..	General ..	9	6½ and 10½	Traction	Late D. Crothers.
Dunstan, W. D.	"	"	8	6½ and 11	"	Late D. Campbell.
Gadd Bros.	Lyndhurst	"	8	6 and 10	"	Late J. Drummond.
Gadd, Charles	"	"	8	8½	"	Late A. Drummond.
Grant and McCraw	Otipua ..	"	8	9	"	Late R. and J. Tacon.
Hunt, J.	Ashburton	"	8	6½ and 10½	"	Late J. Thompson.
Knox Bros.	"	"	8	6 and 11	"	Late G. Saunders.
Lane, Walker, and Rudkin	"	Woollen-factory	20	"	Second	Additional.
Long Bros.	Chertsey ..	General ..	8	9	Traction	Late T. Rainey.
Long, Charles	Pendarnis	"	10	6½ and 11½	"	Late J. L. Soal.
Maiger and Manning	Methven ..	"	8	6 and 10	"	Late D. and W. Anderson.
Moriarty, J.	Ashburton	General ..	8	6½ and 10½	"	Late W. Moses.
Mount Somers Lime and Stone Company	Mount Somers	Crushing ..	20	Two 10 ..	Second	Additional.
Mulford Dairy Company	Temuka ..	Dairy factory	25	"	"	"
Myers and Saners	Waimate	General ..	6	8½	Traction	Late Lane Bros.
O'Brien, R.	"	"	8	8½	"	Late J. McLachlan.
Patterson, W., and Co.	"	"	6	6 and 10	"	Late McElhinney Bros.
Pearson Bros.	"	"	8	6½ and 10½	"	Late J. Moriarty.
Quinn's South Canterbury Brickworks (Limited)	Makikihi ..	"	20	8½ and 13½	First	Late Quinn Bros.
Ruddenkian, George	Glenavy ..	Brick-works	9	6½ and 11½	Traction	Late Pelvin Bros.

Soal, F. and E.	..	Longbeach	General	6	5½ and 8½	Traction	Late James Bishop.
Stewart, D.	..	Waimate..	"	7	5½ and 9½	"	Additional.
Tozer, E.	..	Levels	"	8	6½ and 11½	"	Late H. J. Tozer.
Tozer, F.	..	"	"	8	6½ and 11	"	Additional.
Tozer, H. J.	..	Pleasant Point	"	9	6½ and 10½	"	Late G. Saunders.
"	..	"	"	8	6 and 10½	"	Late S. Gibson.
Waimate County Council	..	Waimate..	"	8	9	"	Late T. Lister.
Watson, A.	..	Ashburton	"	8	6½ and 11	"	Late W. H. Bell.
Wright, C. W.	..	Waimate..	"	9	9½	"	Late J. Greaves.

Andrew and Gray	..	Sanson	General	8	9	Traction	Late J. Warring.
Egmont Box Company	..	Ohakune	Sawmill	16	Two 9½	Second	Additional.
Felding Sash and Door Company	..	Makarau	"	65	16	First	"
Gray, Arthur	..	Marion	General	6	8	Traction	Late R. G. Edwards.
Kairanga Dairy Company	..	Longburn	Dairy factory	30		Second	Additional.
Makatuku Timber Company	..	Raetihi	Log-hauling	15	Two 8½	"	"
Nathan, Joseph, and Co.	..	Makino	Dairy factory	30	13½	"	"
Paraeroa Sawmilling Company	..	Raetihi	Sawmill	15	Two 10	"	"
Reliance Co-operative Dairy Company	..	Rangitoto	Dairy factory	16	8	"	Late M. Beazer.
Tiratn Sawmilling Company	..	Pokako	Sawmill	14	7½ and 12	First	Late Manawatu Co-operative Dairy Company.
Waugh, Robert	..	Kimbolton	General	7	8	Traction	Late George Jack.
Webley, Frank	..	Moutoa	Flax-mill..	17	12	Second	Late Waugh and Son.

WELLINGTON NORTH DISTRICT.

WELLINGTON DISTRICT.

Booth, W., and Co. (Limited)	..	Booth's Siding	Sawmill	35		Second	Additional.
Brownlee (Limited)	..	Featherston	"	14	Two 10	"	Late Pohui Fibre Company.
George, T., and Co.	..	Pirroa	"	12	Two 8½	"	Late Martinborough Sawmill Company.
Konini Co-operative Dairy Company	..	Konini	Butter-factory	32	10	"	Cylinders amended.
Lever Bros.	..	Petone	Soap-works	30	14 and 19	First ..	"
"	..	"	"	30	14 and 19	"	"
Murphy Bros.	..	Wellington	Brick-works	25	13½	Second	Late H. Hill and Co.
New Zealand Farmers' Co-operative Bacon and Meat-packing Company (Limited)	..	Ngahauranga	Meat-works	118		First ..	Additional.
New Zealand Government Public Works Department	..	Shannon	Public Works	64		"	"
Ditto	..	Mangahao	Sawmill	14	7½ and 12	"	"
New Zealand Rubber Products (Limited)	..	Miramara	Cooking waste rubber	30	12	Second	"
Odlin, C. and A.	..	Petone	Sawmill	35	9	"	Late H. Udy.
Pahiataua Dairy Company (Limited)	..	Pahiataua	Cheese-factory	30		"	Additional.
Silverstream Brick and Tile Company	..	Silverstream	Brick-works	35	7 and 13½	First ..	Cylinders amended.
"	..	"	"	30	7 and 13½	"	"
Union Steamship Company	..	Evans Bay	Laundry ..	32	8	Second	"
Wellington City Council	..	Wellington	Generating electric light	455	Turbines ..	First ..	"
"	..	"	Ditto	455		"	"
Wellington City Council Municipal Milk Depot	..	Otaki	Dairy factory	37	12½	"	Additional.
Wellington Woollen Manufacturing Company	..	Petone	Hosiery-factory	20	6	Second	Late Upton's laundry.

RETURN SHOWING THE NAMES OF OWNERS OF ADDITIONAL BOILERS AND TRANSFERS WHICH REQUIRE TO BE IN CHARGE OF CERTIFICATED ENGINE-DRIVERS—*continued*.

Name of Owner.	Where Boiler used.	Purposes for which used.	Horse-power of Boiler.	Diameter of Cylinders of Engine in Inches.	Class of Driver required.	Additional Boilers: Names of late Owners of Transferred Boilers; and also showing where size of Cylinders are now amended.
WESTLAND DISTRICT.						
Aratika Sawmilling Company	Greymouth	Hauling	14	Two 9	Locomotive	Additional.
Brownlee and Co.	Bell Hill	Hauler	25	Two 9	Second	Late Lake Brunner Sawmilling Company.
Dense Bros.	The Camp	Sawmill	19	8 and 12 $\frac{3}{4}$	First	Late Kotuku Oil Syndicate.
Donnelly Bros.	Nelson Creek	Hauling	7	5 and 8 $\frac{3}{4}$	Traction	Late New Zealand Greenstone Company.
Forest Sawmilling Company	Bell Hill Road	Hauler	20	Two 8 $\frac{1}{2}$	Second	Cylinders amended.
"	Nelson Creek	Hauling	13	Two 7 $\frac{1}{2}$	Locomotive	Additional.
"	Ngahere	Sawmill	87	Two 11	Second	"
Graham and Johnston	Hokitika	"	20	Two 9	First	Late Ikamatua Sawmill Company.
Humphrey's Sawmills (Limited)	Humphrey's	Hauler	29	Two 9	Second	Additional.
Kumara Sawmilling Company	Dillmanstown	Sawmill	47	14	"	"
McGuire and party	Flowery Creek	"	20	12 and 8	First	Late New Zealand Government State Coal-mines.
Stratford, Blair, and Co. (Limited)	Greymouth	"	20	Two 10	"	Additional.
Stuart and Chapman	Kokatahi	"	12	Two 8 $\frac{3}{4}$	Second	Late Kanieri Sawmill Company.
Te Kinga Land and Timber Company	Cashmere Bay	"	48	17	First	Cylinders amended.
Westland Sawmilling Company	Mananui	Locomotive	12	Two 7	Locomotive	Additional.
Whitley, R., and Co.	Kanieri Junction	Sawmill	16	Two 9	Second	Late Rotomana Flax-milling Company.
Wright, J.	Umara	"	12	Two 8 $\frac{3}{4}$	"	Late Waitaha Flax-milling Company.

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