SESSION II.
1912.
NEW ZEALAND.

INSPECTION OF MACHINERY:

ANNUAL REPORT OF THE DEPARTMENT FOR 1911–12.

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

The Hon. the MINISTER IN CHARGE OF THE INSPECTION OF MACHINERY DEPARTMENT to His Excellency the GOVERNOR.

MY LORD,— Inspection of Machinery Department, Wellington, 27th June, 1912.

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

GEO. LAURENSON,
Minister in Charge of the Inspection of Machinery Department.

His Excellency the Right Hon. Baron Islington,
Governor of the Dominion of New Zealand.

The CHIEF INSPECTOR OF MACHINERY to the Hon. the MINISTER IN CHARGE OF THE INSPECTION OF MACHINERY DEPARTMENT.

Inspection of Machinery Department,
SIR,— Customhouse Buildings, Wellington, 7th May, 1912.

I have the honour to submit herewith the annual report on the operations of the Inspection of Machinery Department during the twelve months which ended on the 31st March, 1912.

During the year nothing has occurred to mar the smooth working of the Department. No loss of life or limb has been reported with boilers during the year, and at the end of a year this is a very gratifying statement to be able to make. I heartily congratulate the various Inspectors on their year's work, on the zeal they have displayed, and on the means they have adopted to ensure public safety against accident with steam machinery. In reading over the British Board of Trade's latest available returns as recorded in that body's reports on Preliminary Inquiries under the Boiler Explosions Acts, I find the total number of explosions during the year 1909–10 was 103. As a result of these explosions 14 persons were killed and 62 were injured, making a total of 76 casualties. There is no doubt that compulsory inspection tends to diminish the dangers attendant on the working of all vessels carrying steam under pressure. The owners themselves are alive to this fact also, for they seldom object to make the timely repairs asked for by the Inspectors at their annual inspections.

Owing to the great increase in the use of machinery in many ways to save labour in manufactures, &c., throughout the Dominion, the present staff is quite inadequate to cope with the inspecting of it, and in the near future it will be necessary to increase the number of Inspectors and Surveyors. It is illegal to work such plants without a certificate. Every year several hundreds of new boilers, machinery, and ships are added to our books, and as the Dominion grows the increase will be proportionately greater.

Very few prosecutions have been made during the year. In most cases the prosecutions have been for working boilers without having the prescribed certificated engine-driver in charge.

Several accidents have occurred to persons who were attending to moving machinery, but it is impossible to entirely eliminate these.

The surveys of steamships that were due for survey have all been dealt with and completed during the year, excepting in cases where extensions have been given to vessels near the close of the year.

Several extensive repairs to steamships have been made with the autogenous welding and cutting-out process during the year. When the work had to be done in a confined space this process has proved of the greatest value as a time-saver, and also in diminishing the cost of repairs where such work had formerly to be done by hand-labour. In building up wasted parts of boilers and in welding fractured parts it has been used with great advantage.

During the year there has been a large amount of general repairs done to both steamships and sailing-vessels which has called for close supervision by the staff.

The passing of the Shipping and Seamen Amendment Act, 1909, which received the Royal assent last year, necessitated the surveying of a great number of additional sailing-vessels and

oil-launches throughout the Dominion. In many cases long distances had to be traversed to get to the place where the vessels could be surveyed. The necessity for such legislation was apparent in many cases where the structures of some of the ships dealt with had wasted to such an extent as to make them unsafe. The appliances for the safe navigation of the vessels and for life-saving were often found defective and insufficient. This new work has occupied the whole time of one Surveyor of Ships, and the work was not quite complete at the end of the financial year.

I met a great many of the engineers and steamship-owners during the year in different parts of the Dominion. The engineering trade generally has been busier this year than last year. This applies more particularly to the South Island. Shipbuilding has been fairly busy in Auckland and Dunedin, and most of the vessels that have been turned out do credit to the Dominion. Shipping interests will always, from our insular position, be of paramount importance. The recent additions to steamers engaged in the intercolonial trade would do credit to any country, and afford ample comfort to the traveller. The enterprise of the shipping companies is to be commended in bringing out such vessels to trade in these waters.

The Examiners of marine engineers, land engineers, land-engine drivers, and electric-tram drivers have had a busy time during the year, the official examination of electric motormen in New Zealand having been undertaken by the officers of this Department this year for the first time.

Boilers inspected.

The number of boilers inspected and for which certificates were issued during the year total 5,968. This section of the Department's work is still in arrears. Each year adds to the number of boilers that have to be dealt with, and the country to be traversed to get to them also covers a wider area. The weather-conditions have not been so favourable this year, and this made a considerable difference in some of the country districts where the roads are not properly formed and metalled. All the machinery driven by these boilers was also attended to and inspected.

The plans of new boilers submitted for the Department's ruling as to pressure, design, and scantlings total 498. These were all carefully examined before a decision as to the safe working-pressure to be granted was arrived at. The whole of the details were arranged amicably between the Department and the owner. The plan of deciding before construction as to the pressure to be granted seems to have met a want, for it secures uniformity of construction throughout the Dominion.

Government Boilers and Machinery.

Most of the Government boilers and machinery at their works and institutions have been inspected during the year. The total inspections made were 128, and consist of 84 boilers, 14 lifts, 16 oil-engines, 9 gas-engines, and 5 electric motors. Certificates were issued in each case, and repairs were carried out where necessary.

Defects of Boilers and Fittings.

A great many defects were found both in boilers and in their fittings. The total defects found numbered 1,006. Of this number 50 were very dangerous. Return No. 2 gives a complete list of the defects discovered.

New Boilers.

The new boilers inspected during the year numbered 498, with a total horse-power of 6,441½. Of this number 313, of 3,232¾ total horse-power, were made in the Dominion.

During the year the percentage of imported boilers is greater than was the case during the previous year. This I consider a great loss to the Dominion and to those firms who have installed hydraulic and other appliances for dealing expeditiously with this class of manufactured goods, and who can turn out work that compares favourably with any imported boilers.

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

District.	Local.		Imported.		Total.	
	Number.	Horse-power.	Number.	Horse-power.	Number.	Horse-power.
Auckland	41	556¼	53	1,483	94	2,039¼
Auckland South	26	338¼	12	83	38	421¼
Hawke's Bay	22	130	9	65½	31	195½
Taranaki	23	312½	13	80	36	392½
Wellington North	38	505½	6	43¼	44	548¾
Wellington	38	262¾	19	327½	57	590¼
Marlborough	7	108½	...	...	7	108½
Nelson North	3	8½	3	18	6	26½
Nelson South	6	34	6	156½	12	190½
Westland	11	180¼	6	98	17	278¼
Canterbury	34	262	17	145½	51	407½
Canterbury South	4	17	7	121	11	138
Otago	27	277¾	11	200½	38	478¼
Southland	33	239½	23	387	56	626½
Totals	313	3,232¾	185	3,208¾	498	6,441½

Gas-, Water-, and Electric-driven Machinery, Lifts, and Machinery Inspections.

The total number of inspections made during the year of this class of machinery was 6,702. The number of gas-engines inspected was 1,413, of oil-engines 2,283, of lifts and motors (which include water and electric motors) 2,962, and also 44 steam-machinery inspections.

Fencing of Machinery.

A good deal of guarding of machinery has been done to lessen the risk to those who work at or near it. Return No. 4 gives full particulars of the guarding done.

Examination of Land Engineers and Engine-drivers.

These examinations have been held at the stated times and places as set out in the printed regulations. In order to save candidates time and expense special examinations were held in other centres when the Inspectors were making inspections in the country districts. The places at which examinations were held were—Auckland,* Blenheim,* Christchurch,* Gisborne,* Greymouth,* Hamilton,* Hawera, Invercargill,* Kaponga, Kowiti, Manakau, Mangarakau, Masterton, Napier,* Nelson,* New Plymouth, Oamaru, Palmerston North,* Patea, Puponga, Shannon, Timaru,* Waitara, Wanganui,* and Wellington.* For the extra first-class engineers' certificate 11 sat, 6 of whom passed; 110 sat for the first-class engine-drivers' certificate, 44 of whom passed; 243 sat for the second-class engine-drivers' certificate, and 160 passed; 243 sat for the locomotive and traction engine drivers' certificate, and 193 of these passed; 14 sat for the winding-engine drivers' certificate, of whom 11 passed. The total number of candidates who sat for examination was 621.

Reciprocal certificates were issued to applicants who held certificates from other States as follows: New South Wales, 1; Queensland, 1; Tasmania, 1; Transvaal, 1; Western Australia, 1: total, 5.

Returns Nos. 7 to 13 give full particulars of those who passed these examinations, together with the different grades and classes of examination.

Examination of Electric-tram Drivers.

For the first time in New Zealand examinations were held during the year to test the qualifications of the drivers of electric-tram cars. The engineers connected with the different tramway systems assisted the Department materially in placing cars at the disposal of the examiners when required so that the drivers' knowledge could be put to a practical test. Circular instructions were issued from the Head Office with respect to the examinations, and a large number of questions suitable for the testing of the driver's knowledge in matters connected with his duties as a motorman were sent to each examiner at centres where the examinations were held. Regulations governing the conduct of these examinations were gazetted on the 20th July, 1911. Examinations were held at Auckland, Christchurch, Dunedin, Invercargill, Wanganui, and Wellington. 148 candidates presented themselves for examination. These examinations will now be held periodically. A service certificate was issued to each person who, not later than the 24th December, 1911, applied for one and produced evidence to the satisfaction of the Board of Examiners that he was, for a period of not less than one year at any time before the passing of the Tramways Amendment Act, 1910, employed as a motorman and had not been subsequently dismissed for misconduct.

Returns Nos. 14 and 15 give full particulars of those to whom service certificates were issued and those who passed the examination for competency certificates.

The Board of Examiners.

The Board sat for the conduct of business connected with examinations, &c., on nine occasions. An addition was made to the Board by appointing Mr. E. Parry, B.Sc., A.M.I.C.E., M.I.E.E., Electrical Engineer of the Public Works Department, as a member when dealing with electric-tram drivers' certificates. The date of his appointment was the 6th August, 1911.

Accidents.

A number of accidents have been reported to the Department to those who have been working in connection with machinery in motion. A large number of the accidents have been in the wood-working industries. Nearly all the machines run at a high speed, and those who work them are liable to accident unless they exercise great care. In nearly every case the fingers are affected. A great deal of attention has been given to the protection of this and other classes of machinery in motion, but such protection, without due care by the employee, does not eliminate all the danger.

No boiler accident with loss of life or injury to any attendant has been recorded during the year, and the high standard and rigid methods adopted by the officers of the Department in making their inspections must tend to lessen the risks with boilers which are now used at very high pressures. The owners do not place any obstacles in the way of an Inspector carrying out his duties, and they materially assist the Department by getting their plants clean and cool for the Inspector's visit.

Returns Nos. 5 and 6 give full particulars of each reported accident.

Postal and Police Departments.

The Police and Postal Departments have rendered signal service to this Department in many ways. The number of certificates that are issued to machinery-owners through the Postal Depart-

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

ment has increased enormously of late years, owing to so many more machinery prime movers being used. The police, on being notified by this Department that a machinery-owner has not taken up his certificate, do their best to secure the lifting of the certificate by the owner. In some cases the assistance of the police has been secured in connection with prosecutions for breaches of the Act.

Examination of Marine Engineers.

Examinations for marine engineers were held at Auckland,* Alexandra,* Balclutha, Christchurch,* Cromwell,* Dunedin,* Eketahuna, Gisborne,* Greymouth,* Hamilton,* Havelock, Invercargill,* Karamea, Kawakawa, Napier,* Nelson,* Paeroa, Palmerston North,* Pongaroa, Timaru,* Waihi, Wanganui,* Wellington,* Westport, and Whangarei. When possible, candidates were examined at other times and places than those set out in the printed regulations, but it is almost impossible now to accede to the many requests made in this direction, as the staff cannot spare the time for the additional work. The candidates have ample time to make up their minds as to when and where to sit for examination, as the dates of examinations at the various centres are given in the regulations. At some of the centres more than a week in a month is taken up with the ordinary examination-work before all the candidates are put through. The number of candidates who sat this year total 245: of these, 53 failed. The different classes for which the candidates sat were as follows: First-class marine engineer, second-class marine engineer, third-class marine engineer, river engineer, first-class engineer of auxiliary sea-going powered vessels, second-class engineer of auxiliary sea-going powered vessels, and restricted-limits engineer of auxiliary-powered vessels. The fees for these examinations amounted to £214.

Return No. 16 gives the names of the successful candidates, the various grades for which they passed, the total number of applicants, fees payable, and the number of candidates who failed to pass such examinations.

Explosives.

During the year, at the Port of Wellington, 264 permits were issued for the carriage of explosives on passenger and non-passenger ships.

Annual Survey of Steamships and Auxiliary-powered Vessels.

The work in connection with the annual survey of vessels has been well maintained during the year. As a ship gets older greater care has to be exercised in dealing with scantlings that may have become reduced through corrosion or decay. So far, the officers of the Department are to be congratulated on the judgment they have shown in dealing with ship-survey work, for during the year no ship has been detained through a faulty survey. Several new vessels have been built in New Zealand during the year, and these have been duly inspected throughout the whole period of construction. Plans and detailed specifications were submitted in each case, and were approved of before the construction of the vessels was authorized.

Forty-nine of the vessels surveyed were fitted with new propeller-shafts, seventeen had new propellers fitted, eight had new engines fitted, two had new cylinders fitted, and one had a new boiler installed. For some time past now propeller-shafts have been withdrawn every two years for examination, and the number which are found to be defective shows that this procedure is a very necessary one. No objection is now made to this being done by shipowners. It is much better to find the flaw in a shaft when the vessel is in dock than to have to search for a steamer that may have had the misfortune to break her propeller-shaft in mid-ocean.

The total number of surveys made during the year total 613. The fees for these surveys amounted to £2,091.

The usual special excursion trips were run during the year, and without any mishap. The intercolonial ships had to have additional accommodation provided to cope with the passenger traffic on many of the weekly trips run. The whole of the extra berthing, ventilation, lighting, and equipments were duly inspected, before the vessels were permitted to sail, by the Surveyors of the Department.

Return No. 17 gives the total number of steamers and of auxiliary-powered vessels surveyed by the Surveyors of the Department during the year. It also gives the names and registered tonnage of each vessel, the nominal horse-power and indicated horse-power of steam-vessels, the brake horse-power of auxiliary-powered vessels, and the nature of machinery and propeller.

The following is a brief description of the work involved in some of the most important surveys made during the year:—

S.s. "*Admiral.*"—This vessel had the following repairs made to the hull: Two new deck-beams were fitted aft; two new horn timbers were fitted under the deck-beams aft, extending from inner stern-post right aft. These timbers were ironbark, 6 in. by 7 in. by 12 ft. long. Eleven new stanchions for the stern bulwarks were fitted, and the bulwarks and railings were renewed. 120 ft. of deck-planking, 4 in. by 2½ in., were renewed on the after-deck, and also 20 ft. of the covering-board, 12 in. by 3 in. About twenty sheets of Muntz-metal were put on the hull. To the engines a new mild-steel block was fitted to the h.p. link motion. To the boiler some caulking in the combustion-chambers and shell was necessary. Of the steering-gear chains, the defective portion was renewed and the remainder annealed.

S.s. "*Aorangi.*"—This is a passenger-steamer engaged in the foreign-going trade, and was surveyed in New Zealand for the first time last year. She received a general overhaul. A new M.P. crank-pin and piece of shafting were fitted to the main engines. Several stays and their nuts were renewed in the main boilers. All auxiliary steam-pipes were tested by hydraulic pressure to double the working steam-pressure. The watertight doors were made workable, and new

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

rubber joints and bolts were fitted to some of them. Some air-tanks for lifeboats were repaired, and thirty-six new patent sheaves were fitted to boat's tackles. The mizzen-mast was taken out and the defective portion in way of tops was cut out, 12 ft. of new mast put in, and the mast converted into a pole mast.

S.s. "Aotea," of Kaipara.—The hull of this vessel has been thoroughly strengthened, and there is now no vibration of the hull when vessel is under way. The hull-planking under the covering-board on each side was removed, and a 10 in. by ½ in. steel-plate longitudinal stringer was fitted for the full length on both sides of hull. New timber was fitted over the stringers and bolted with through bolts to the frames of the vessel. All fittings inside the vessel were removed, and twelve angle-iron bars, 3 in. by 3 in. by $\frac{7}{16}$ in., were fitted diagonally from under the deck, down the sides of the vessel, and bolted to the sister keelsons. Four plate brackets were fitted vertically on the outside of the vessel to underneath the skeleton keel, which supports a bare stern-post carrying the outer end of the tail-shaft. The tail-shaft was drawn, a new brass liner fitted, and the stern bush rewooded.

S.s. "Arapawa."—No. 1 hatch of this steamer was removed and the foremast put 8 ft. further forward. No. 2 hatch was lengthened to 20 ft. 6 in. Three large gusset-stays were fitted to each side of the vessel in lieu of stanchions. The coamings of the new length of the hatch were made thicker than those in the old part, and were stiffened with angle irons to compensate for the larger opening in the deck. A sketch of the alterations to be made were submitted to the Department and approved of before the contract for the work was let.

P.s. "Clutha."—The steel hull, engines, and boiler of this vessel were built last year in Dunedin under the supervision of the Department's Surveyors. The vessel is engaged carrying passengers and cargo on the Clutha River. Her tonnage is 173 gross and 95 register, and the length, breadth, and depth are 107 ft., 26 ft., and 5 ft. 3 in. respectively. The vessel is propelled by two stern paddle-wheels driven by two sets of compound surface-condensing engines, with cylinders 12 in. and 24 in. diameter and 33 in. stroke. Steam is supplied by a locomotive boiler fitted with a superheater, at a working-pressure of 160 lb. per square inch. The boiler-barrel is 5 ft. 3 in. diameter, and there are 146 tubes, 2½ in. diameter by 8 ft. 9 in. long. The firebox is 6 ft. 3½ in. long by 4 ft. 9 in. wide inside. The paddle-wheels are of the feathering type, and are 10 ft. diameter over all.

S.s. "Energy."—The hull, engines, and boiler of this vessel received a thorough overhaul. To the hull new bulwarks and coamings were fitted, and a new skylight to the engine-room. A new lamp-locker and deck-house were built. A complete new rudder was fitted. In the engine-room, pistons, pumps, &c., were overhauled, and new crossheads and guides and a new l.p. slide-valve supplied. All plain tubes and combustion-chamber crown stays, fifteen space-stays, the patch in furnace and combustion-chamber, all water-gauge mountings and test-cocks, and the funnel were renewed.

S.s. "Fire Float," of Auckland.—A new set of compound surface-condensing engines was fitted to this vessel. The cylinder-diameters are 9 in. and 18 in., with a stroke of 10 in. New main and auxiliary steam-pipes were fitted, and tested by hydraulic pressure to double the working steam-pressure.

S.s. "Flora."—Extensive alterations and repairs were made to this vessel, which has now been converted from a passenger to a cargo vessel. A new h.p. valve and a new tail-shaft and propeller-blades were fitted to the engines. Several patches and stay-nuts in the main boilers were renewed. The donkey boiler was put ashore. A deck-house was renewed. Three extra hatches and five new winches were fitted. The masts were shortened and moved aft 8 ft. Sixteen new stanchions were fitted in the 'tween decks, and one new mooring-pipe and sheathing-plates fitted in way of same. Thirty of the ports were closed up in the ship's side. The passenger accommodation was converted into hold space. The deck was repaired under the donkey boiler, and also the bulwarks in way of Nos. 3 and 4 hatches; 30 ft. of new bulwarks were fitted in way of Nos. 1 and 2 hatches, and some of the rivets were renewed in the hull.

S.s. "Hauiti."—This vessel, which is of wood, was built in Auckland for the passenger and cargo trade. The plans of the hull were submitted for approval and passed before the construction was begun. The principal dimensions of the vessel are—Tonnage, 147 gross and 82 register; length, 100 ft.; breadth, 20 ft.; depth, 7 ft. 6 in. The propelling machinery consists of one set of compound surface-condensing engines of 230 i.h.p., supplied with steam from a marine multitubular boiler. The passenger accommodation consists of a dining-saloon and ladies' cabin in the after-part of the vessel. The vessel may carry 28 passengers at sea, and 242 and 439 passengers in partially smooth and smooth water limits respectively.

S.s. "Hawera."—This vessel, which is also of wood, was built in Auckland for the Patea Shipping Company. Plans and specifications of the hull were submitted to the Department and approved before the construction of the vessel was commenced. The hull is built on the diagonal principle, and is insulated. The keel, keelsons, stem, stern-post, engine, and boiler-beds, &c., are of ironbark. All the planking and decks are of kauri. The tonnage is 174 gross and 92 register. The length is 108 ft., breadth 20 ft., depth 9 ft. 4 in. The main engines consist of one set, compound surface-condensing, with cylinders 12 in. and 28 in. diameters by 18 in. stroke. They were made in Auckland. The main boiler is 9 ft. 9 in. diameter by 9 ft. long, with a working-pressure of 130 lb. per square inch, and was built in Glasgow. The "Hawera" is principally employed carrying general cargo and produce.

S.s. "John."—This is a steel screw vessel built in 1898 at Dundee, and has been bought by a New Zealand owner for the coastal cargo trade. The vessel was surveyed for the first time in New Zealand this year. The principal dimensions are—Length, 125 ft.; breadth, 25 ft. 3 in.; depth, 9 ft. 9 in. Tonnage — Gross, 342; register, 111. The engines are compound surface-condensing; diameters of cylinders, 15 in. and 32 in.; length of stroke, 24 in.; boiler pressure, 130 lb. per square inch.

S.s. "*Kanieri.*"—The plating under the engine and boiler space, running into the fore and after holds, was renewed; 24 ft. of the keel-plate was renewed, and also, on the starboard side, 24 ft. A strake, 32 ft. 4 in. B strake, 46 ft. C strake; and on the port side, 30 ft. 6 in. A strake and 12 ft. B strake renewed. A spare tail-shaft and a new stern-bush were fitted. The main steampipes were tested by hydraulic pressure. Tubes were removed from condenser, and the condenser was cleaned out. The engines and boiler received a general overhaul.

S.s. "*Kanna.*"—This is a new cargo-steamer built at Leith, Scotland, for New Zealand owners. The tonnage is 1,948 gross and 1,049 register, and the dimensions are—Length, 272·1 ft.; breadth, 41·2 ft.; depth of hold, 17·9 ft. The propelling machinery consists of one set of triple-expansion surface-condensing engines, with cylinders 21 in., 34 in., and 56 in. diameters by 36 in. stroke, and two Scotch marine boilers working at a pressure of 180 lb. per square inch. The vessel was surveyed in September last.

S.s. "*Lauderdale.*"—Built in Scotland for New Zealand owners, this vessel was surveyed for the first time in 1911. The length of the vessel is 229·35 ft., beam 35·85 ft., depth of hold 15·6 ft. The tonnage is 1,214 gross and 719 register. The propelling machinery consists of one set of triple-expansion engines, having cylinders 18 in., 27½ in., and 45 in. diameters by 33 in. length of stroke, worked from two multitubular boilers, 11 ft. 8 in. diameter by 10 ft. 6 in. long, working at a pressure of 180 lb. per square inch. This vessel is engaged carrying cargo in the foreign trade.

S.s. "*Mararoa.*"—The repairs to this vessel consisted of four new intercostals in No. 4 ballast-tank and two sheathing-plates, 10 ft. by 2 ft. by ⅜ in., and eight smaller patches, fitted on top of tank. The main boilers received a thorough overhaul. In the forward port boiler twenty-eight combustion-chamber stays and one longitudinal stay-nut were renewed. In the forward starboard boiler thirty-two combustion-chamber stays were renewed. In the after starboard boiler 143 plain tubes were renewed, and all cracks at junction of tube-plate and furnace were welded and reriveted. Twenty-two rivets were renewed on the side of combustion-chamber, one small patch was renewed on the top of furnace, and sixteen permanent stoppers were renewed. In the after port boiler 113 plain tubes were renewed, some cracks welded and joint reriveted, some side stays in combustion-chambers renewed, and thirteen permanent stoppers fitted. The main engines and auxiliaries were also put in good order.

S.s. "*Moa.*"—Under the boiler of this vessel five new frames have been fitted, and new sides put in bottom half of port and starboard bunkers. In the boiler one tube was renewed, a patch was put on the back of the combustion-chamber, and several rivets were renewed. A new funnel was fitted. To the main engines a new tail-shaft and propeller were fitted, and a new Lignum Vitæ bush was fitted to the stern-tube. The shafting was lined up and the engines put into thorough working-order.

S.s. "*Mokoia.*"—This vessel received a good overhaul to hull, boilers, and machinery. One plate, 24 ft. by 2 ft. by ⅜ in., was fitted on deck in alleyways over stokehold and bunker, and the stringer on the port side of stokehold was repaired. All plain tubes and three combustion-chamber stays were renewed in the forward boiler; three plain tubes and five combustion-chamber stays were renewed in the after port boiler. Seven plain tubes were renewed in the after starboard boiler. A new cover was fitted to the h.p. cylinder, and new metal put on l.p. guide-shoe, top half of h.p. eccentric straps, and bottom half of No. 6 main bearing. The tunnel shafting was lined up. All auxiliaries were also overhauled.

S.s. "*Monowai.*"—The hull of this vessel was repaired under the main boilers, where twenty-two intercostals and 24 ft. of keelson on each side were renewed. Six floors were sheathed, each with plates 7 ft. by 2 ft. by ⅜ in. The hull in way of ash-chute was sheathed with two plates, one 6 ft. by 3 ft. by ½ in and one 3 ft. square by ½ in. In the boiler several cracked rivet-holes were repaired with the autogenous welding process, and several stays and nuts were renewed. In the centre furnaces of the starboard boiler and port boilers the bottom parts of the tube-plates were renewed, and forty-three tubes were renewed in the port furnace of the starboard boiler.

S.s. "*Moturoa.*"—The pressure of the boiler of this vessel had been reduced 20 lb. per square inch owing to the tail-shaft being corroded. At last survey a new end was welded on the tail-shaft, and the stern-bush was relined. In the boiler all patches on the bottom were taken off, and two new ones were fitted extending over the wasted portion. A compensating-ring was fitted round the mudhole opening, and a new mud-door fitted. Part of the bottom of the combustion-chamber was renewed, and the patch on the back end of the furnace at bottom and the lower part of back plate was cut out and a new patch put on. Twelve new screwed stays have been put in combustion-chamber, three new bar stays in steam-space, six new stay-tubes and twelve new ordinary tubes have also been put in. The shaft and boiler are in good repair now, and the safety-valves of the boiler have been set to blow off at an increase in pressure of 10 lb.

S.s. "*Muritai*" ("*Karaka*").—This new steamer, the first to be built in Wellington for some years, is owned by the Wellington Harbour Ferries Company (Limited). The hull, which is of wood, has a length of 77 ft. 6 in. by 15 ft. 6 in. beam, and is built on the bent-frame principle. The keel, keelsons, stem, stern, and rudder-posts are of ironbark timber; kauri has been used for the bottom planking and the main deck, and Oregon pine has been used for the top planking. The beams are of blue-gum timber. The tonnage is 43 gross and 10 register. The vessel is propelled by one set of compound surface-condensing engines and one cylindrical return-tube boiler, working at a pressure of 160 lb. per square inch, and which have been made in England. The vessel is engaged carrying passengers and towing in Wellington Harbour.

S.s. "*Opouri.*"—This vessel was specially built for the requirements of the New Zealand coastal cargo and timber trade by a Paisley firm for New Zealand owners. The "Opouri" is a steel single-screw steamer of 571 tons gross and 218 tons net register, her dimensions being—length, 170 ft.; beam, 27 ft.; depth of hold, 12 ft. 6 in.; and her deadweight carrying-capacity is 650 tons on a mean loaded draught of 11 ft. 9 in. The vessel has one set of triple-expansion

engines, cylinders 15 in., 25½ in., and 41 in. diameters by 30 in. stroke, supplied with steam from two marine multitubular boilers, 11 ft. diameter by 10 ft. 6 in. long, at a pressure of 180 lb. per square inch.

S.s. "Pateena."—The engines of this vessel received a good overhaul. The condenser-tubes were drawn and cleaned, and twenty-three new tubes and 700 new ferrules were fitted. Some patches were put in the starboard boiler, new main check-valves were fitted to both boilers, and the water-gauge mountings overhauled and defective cocks renewed. Under the main boilers sheathing-plates were fitted on six intercostals. Sheathing-plates and angle-iron stiffeners were riveted to bunkers; 64 square feet of sheathing-plate was put on the watertight bulkhead at the after end of the forehold. Some repairs were made to the steering-gear, and the rudder was lifted ½ in. A new funnel was also fitted.

S.s. "Plucky."—The main boiler of this vessel was repaired by cutting out and renewing the bottoms of both combustion-chambers and both back plates from above the first row of screwed stays. The bulwarks-plating on the port bow of hull in the way of hawse-pipe was renewed.

S.s. "Regulus."—When an examination was made of the hull of this vessel at the annual survey it was found that a number of the rivets were loose. The majority of them were under the fore part of the hull, and a number were scattered over the bottom. The number of new rivets put in was 1,140. Other repairs made include a joggled strap fitted over landing between A and B strakes on the starboard side of the hull at the fore end of No. 1 tank, 22 ft. long, and one on the port side in the same position, 20 ft. long. One joggled butt strap was fitted on the keel-plate under the fore end of No. 1 tank, and one on the port side on A strake. In the engine-room a new water-chest was fitted to the general donkey-pump, and new main injection-valves and seats were fitted. The propeller-shafts were drawn and examined, and the propeller-brackets rebushed.

O.e.v. "Saxon."—This vessel was formerly the schooner "Saxon," and went ashore off Mahurangi Heads in September, 1911. She was refloated and taken to Auckland, where she was on the slip for five months undergoing extensive repairs. It is doubtful if the vessel has been in better order than at present except when she was new. The most important repairs and alterations include several new timbers and planks to hull, nearly the whole of the lining-boards renewed, hull refastened, recaulked, and coppered on the bottom with new sheets. New galvanized steel-plate rudder, steel gudgeons, steering-chains, and blocks were fitted. Other renewals include the hatch-coamings, hatches, chain-plates for rigging, wooden lining in forecastle, cabin, and engine-room aft, deck-house over cabin, stern tube and sea-cock, step-blocks to keelson for both masts, one set of oil-engines with three cylinders, 8 in. diameter by 10 in. stroke, brake horse-power 50. The decks have been caulked and pitched. The windlass was overhauled, and suitable anchors and cables were placed on board.

O.e.v. "Selwyn."—This is an auxiliary wooden ketch, built in Auckland in 1911 for the Melanesian Mission Trust Board. The leading dimensions of the hull are—Length, 52·7 ft.; breadth, 15·2 ft.; depth, 8·4 ft. Gross and register tonnage are 29·3 and 15·4 tons respectively. The vessel is fitted with one set of four-cylinder oil-engines developing 30 b.h.p.

S.s. "Sparrowhawk."—This new vessel was built in Auckland, and will be engaged carrying passengers and vehicles in Auckland Harbour. The hull is of wood and iron, and the leading dimensions are—Length, 130 ft.; breadth, 32 ft.; depth, 11 ft. The gross tonnage is 207 and the register 99. The vessel is propelled by one set of compound surface-condensing engines with cylinders 14 in. and 28 in. in diameter and a length of stroke of 1 ft. 6 in. They are supplied with steam at a pressure of 130 lb. per square inch from a cylindrical marine-type boiler, 9 ft. 6 in. in diameter and 9 ft. long. The boiler and engines were made in Scotland.

S.s. "Stormbird."—This old steamer, the oldest afloat engaged in constant trading, has been gradually reduced from a passenger-vessel of some importance to a cargo-vessel. In July last five berths were removed to provide accommodation for the mate of the vessel, whose former cabin-space has been utilized for a 2-ton Hercules refrigerator. The forehold was stripped of all ceilings and battens, chipped, painted, and insulated for the carrying of butter.

S.s. "The Peregrine."—This vessel, the hull of which is of wood, was built in Auckland for the Devonport Steam Ferry Company. Her principal dimensions are—Length, 130 ft.; breadth, 31 ft.; depth, 8 ft. The tonnage is 245 gross and 162 register. The propelling machinery consists of one set of triple-expansion engines with cylinders of 12 in., 20 in., and 32 in. diameters by 21 in. length of stroke, and they are supplied with steam from a Scotch multitubular boiler at a pressure of 180 lb. per square inch. The boiler is 11 ft. 6 in. diameter by 10 ft. long, and was built in Glasgow, as also were the engines. This vessel has accommodation for 1,370 passengers in river limits and 773 in extended-river limits.

S.s. "Theresa Ward."—The most extensive repairs to this vessel at the annual survey were made to the hull and boiler. Five floors under the boiler were sheathed, and the angle-bars at the top of same were renewed. The centre keelson was sheathed in five spaces. Two new floors were fitted in the after-peak. In the boiler the centre furnace was renewed, also the centre combustion-chamber bottom and the back of this chamber for a height of 2 ft. 8 in. Thirteen new stays in the combustion-chamber were put in. Two bottom doors and one stay-tube were also renewed.

S.s. "Toiler."—This new wooden steamer, which was built at Te Kopuru to plans and specifications approved by the Department before the building of the vessel had commenced, has the following dimensions: 75 ft. long by 15 ft. wide by 8 ft. deep (moulded); tonnage—49 gross, 28 register. The keel, floors, transoms, rudder-trunk, stringers, beams, planking, and decking are of kauri, and the keelsons, stem, stern-post, and rudder-post of ironbark. There is a 9 ft. by 5 ft. hatch in the forward deck, and cabin accommodation below deck aft. The engines and boiler were made at the Thames. The boiler is made of steel, and is of the usual marine type; it is 7 ft. in diameter and 7 ft. 6 in. in length, and carries a safety-valve load of 130 lb. per square inch. The vessel will be employed carrying passengers and cargo in Kaipara Harbour.

S.s. "*Warrimoo.*"—Some important repairs were made to the boilers of this vessel, as follows: In the after starboard boiler all plain tubes in centre combustion-chamber were renewed. In the centre furnace twenty-four rivets were taken out and cracks welded with oxyacetone blowpipe and reriveted. In the after port boiler eighty-five plain tubes and one stay-tube were renewed, also several combustion-chamber stays and rivets. In the starboard forward boiler several stays, nuts, and rivets were renewed. In the port forward boiler, besides some stays and rivets, a new furnace of the Fox type was fitted on the starboard side, and the boiler tested by hydraulic pressure. In the donkey-boiler all girders were taken off and refitted to tops of combustion-chambers. This boiler was tested by hydraulic pressure. In the bulkhead between No. 2 hold and bunker six plates, each 12 ft. by 5 ft. by $\frac{3}{8}$ in., were renewed, and one sheathing-plate, 6 ft. by 5 ft. by $\frac{3}{8}$ in., was fitted. In the forward bunker three plates, 8 ft. by 4 ft. by $\frac{5}{16}$ in., were renewed. On the ship's side in way of the forward bunkers eight reverse bars, each 6 ft. long by 5 in. by 3 in. by $\frac{3}{8}$ in., were fitted. In the after cross-bunker one beam was repaired by fitting two plates, one on each side, 6 ft. by 9 in. by $\frac{1}{2}$ in. In the saddle-back one patch, 4 ft. square by $\frac{5}{16}$ in., was fitted, and one plate, 6 ft. by 3 ft. by $\frac{5}{16}$ in., was renewed. Four stiffeners, each 8 ft. long by 5 in. by 3 in. by $\frac{3}{8}$ in., were fitted on after bulkhead of after cross-bunker. In the fore and after bunker one patch, 16 ft. by 2 ft. by $\frac{5}{16}$ in., and five small patches, each 5 ft. by 3 ft. by $\frac{5}{16}$ in., were fitted. Several patches were put into the starboard ballast-tank. A new watertight door was put in the bulkhead between No. 2 hold and the bunker. Thirty-five stanchions were fitted between the main and upper decks. To the main engines a new h.p. piston-rod was fitted. The l.p. valve was faced up, and two brass bars were fitted to the edges of the steam-ports. New l.p. crank-pin brasses were fitted. New bolts in No. 2 coupling, new liner in circulating-pump bucket, and new coils in feed-heater were also fitted.

Surveys of Ships for Seaworthiness.

Special surveys of steamships and other vessels totalling fifty-six were made during the year. The repairs that were found necessary to make some of the vessels safe were of a very extensive character, and necessitated the removal of a great many hull-plates and the reconstruction of the framing of the vessels in parts. Some of the causes for these surveys include collisions, strandings, defects in fastenings, defective rudders, shaft defects, loss of propeller-blades, defective rivets, steam-pipe fractures, defects in steering-gear, fires in holds, defective furnace-tubes in boilers, and defects in engines. The fees for these surveys amounted to £169.

Return No. 19 gives a full description of each seaworthiness survey made.

Government Steamers.

The Government steamers surveyed this year include the s.s. "Amokura," s.s. "Antrim," s.s. "Ben Lomond," o.e.v. defence launch "W," s.s. "Hinemoa," o.e.v. "Huia," o.e.v. "Irini," s.s. "Janie Seddon," o.e.v. "Maroro," s.s. "Mountaineer," o.e.v. "Patiti," o.e.v. "Reremoana," s.s. "Tawera," and s.s. "Tutanekai," a total of fourteen. A brief summary of the principal repairs effected to these steamers is given.

S.s. "*Amokura.*"—The air-pump chamber of the main engines was bored out, a new gun-metal ring and tongue-piece was fitted to the bucket, four new gun-metal valve-seat plates were made and fitted in the recesses in the pump, and the old valves and springs were fitted to the plates. The drainpipe from the whistle and syren was altered and lengthened, and a new non-return valve fitted. Four new steel flanged furnace-fronts, with brackets, &c., were made and fitted to the boilers, and two new steel furnace-doors were made and fitted. Four new cast-iron bridge-chairs were made and fitted into the back of furnaces. The floor-plates under the boilers were sheathed, and additional reverse bars were fitted where necessary. One new ash-shoot was made for the port side. Three ventilator-slides in air-casing were taken off, the casing was patched, and the slides were refitted in position. Seven relief port-doors in bulwarks were renewed. Four boat-davits were fitted with new pins and bushes in the bottom joints. Six new bunker-gratings were fitted. Four new mooring-pipe covers were made and fitted. A new cover was made and fitted to the port-side hawse-pipe, and new hinges were fitted to the starboard hawse-pipe cover. The forecastle-deck skylight was fitted with four new wrought-iron covers and fittings complete. The mess-deck skylight was fitted with new stanchions and chains for holding skylights open. Two new doors were fitted to the galley. One new ventilator was made and fitted to the steerage and mess decks, and six other ventilators were fitted with new cowls. The funnel was taken out and the lower portion of it and the air-casing were renewed. New angle-irons were fitted in the smoke-boxes. Two new gun-metal check-valve spindles were made and fitted. Seven sheathing-plates were fitted to bunker-plates. Four new stanchions were fitted to the gangways.

S.s. "*Antrim.*"—Several of the planks of the hull under the paddle-boxes on both sides of hull were renewed. All butts and seams in the hull were caulked where necessary. The engines were also thoroughly overhauled.

S.s. "*Ben Lomond.*"—A new stern-tube was fitted, and 10 ft. of the belting on the port side of the vessel was renewed.

Defence Oil-launch "*W.*"—New cylinders were fitted to the engines, and also one new connecting-rod.

S.s. "*Tutanekai.*"—A new funnel was fitted, 5 ft. 6 in. diameter and 44 ft. long, also a new foundation-plate for funnel, and new damper. A new donkey-boiler funnel was made and fitted inside the main funnel. The two waste steam-pipes were each lengthened 6 ft. and attached to funnel. The whole of the wooden decking on the bridge deck was renewed.

S.s. "*Hinemoa.*"—A new Chadburn's repeating telegraph with all the necessary connections was fitted on the bridge and in the engine-room. Two new plates and angle-irons were fitted in the stern bulwarks. The angle-iron on the top of bulwarks all round the counter was renewed.

also a portion of the wooden rail. A new set of piston-rings was fitted to the dynamo-engine and the rods relined. A temperature balance circulator was fitted in both main boilers. All the main and auxiliary steam-pipes were tested to 180 lb. hydraulic pressure. 35 ft. of shoeing on keel was renewed. The main boiler uptake was repaired, and the windlass was overhauled. New neck and gland bushes for both h.p. and m.p. tail-rods were fitted.

S.s. "Janie Seddon."—In the main boiler twelve rivets were renewed in the bottom of the starboard combustion-chamber, and both chambers were recaulked where necessary. Two new rivets were put in bottom of front circumferential seam, and a new bottom manhole-door was fitted. A temperature balance circulator was fitted to boiler.

S.s. "Mountaineer."—Several butt joints in the keel-plating were caulked, the bottom rudder-pintle was renewed, and the sponson beam on port side was straightened and strengthened. All the joints in the paddle-wheel arms were relined with white metal. Eight new screwed stays were fitted in the firebox of the boiler, and the engines were thoroughly overhauled.

Additional Steamers and Auxiliary-powered Vessels surveyed for the First Time.

During the past year 275 new steamships and vessels fitted with oil-engines as a motive power have been surveyed for the first time. The names of these vessels are as follows: "Advance," "Advance II," "Aerial," "Ailoma," "Airship," "Albatross," "Alert," "Alexandra," "Alice," "All Black No. 1," "All Black No. 2," "Annie," "Aorangi," "Arapawa," "Arawa" (Auckland), "Arawa" (Port Underwood), "Ariadne," "Aroha," "Arrino," "Arumai," "Atlas," "Awarua," "Balder," "Beatrix," "Beldame," "Benares," "Bittern," "Bletsoe," "Brooklyn," "Centaur," "Clutha,"* "Countess," "Dairymaid," "Daphne," "Dart," "Defender," "Dolphin," "Doris" (Napier), "Doris" (Picton), "Doris" (Russell), "Dorrigo,"* "Dove" (Picton), "Dove" (Pelorus Sound), "Dovey," "Dreadnought" (Akaroa), "Dreadnought" (Port Underwood), "Duchess," "Earl," "Echo," "Eclipse," "Eileen," "Elsie" (Auckland), "Elsie" (Nelson), "Elswick," "Eureka," "Fairy," "Fiona," "Firefly," "Flora" (Akaroa), "Flora" (Bluff), "Foam," "Gipsy," "Gladsome," "Glenlee," "Gordon,"* "Greyhound" (Havelock), "Greyhound" (Port Underwood), "Hauiti,"* "Hawera,"* "Heather," "Hilary," "Hina," "Hinemoa" (Hokianga), "Hinemoa" (Rotorua), "Hokimai," "Holliday," "Houmoana," "Houto," "Huia," "Ilex," "Independence," "Iris" (Thames), "Iris" (Waikato), "Isa" (Picton), "Isa" (Whangarei), "Jersey Lily," "John,"* "John Kennedy," "Kaiapoi," "Kanieri," "Kanna,"* "Karaka,"* "Kawa," "Kea," "Kia Ora," "Kingfisher," "King Hami," "Kiwi," "Kokiri" (Opua), "Kokiri" (Russell), "Kopapu," "Koroi," "Koutu," "Kura," "Kyra," "La Mascotte" (Picton), "La Mascotte" (Rotorua), "Larola" (Picton), "Larola" (Wanganui), "Lauderdale,"* "Lupe," "Mahinapua," "Majestic" (Hokianga), "Majestic" (Mercer), "Makere," "Makura," "Mana" (Nelson), "Mana" (Riverton), "Manaia," "Maori" (Havelock), "Maori" (Picton), "Maori" (Riverton), "Mapu II," "Maranui," "Mararoa," "Marawa," "Marikena," "Maritana," "Matakokiri," "Matareka," "Matariki" (Admiralty Bay), "Matariki" (Tuakau), "Maude," "Mavis," "May" (Rawene), "May" (Wanganui), "Melville," "Mere-Aua," "Merlin," "Mermaid" (Admiralty Bay), "Mermaid" (Tuakau), "Merry Duchess," "Meteor," "Midlothian," "Mira," "Mizpah," "Moana," "Moata," "Mokoia," "Mona," "Monarch," "Mongonui," "Muritai," "Myrtle," "Namu," "Nautilus" (Bluff), "Nautilus" (Hokianga), "Nautilus" (Onehunga), "Nelly," "Ngaru" (Huntly), "Ngaru" (Onehunga), "Ngaru" (Thames), "Nicola," "Nimrod" (Auckland), "Nimrod" (Rotorua), "Nopera," "Norah," "Nydia," "Nymph," "O.K.," "Oleo," "Olive Branch," "Opouri,"* "Pakeha," "Palatine," "Pararoa," "Parua," "Pauline," "Pearl," "Petrel," "Phyllis" (Hokitika), "Phyllis" (Russell), "Psyche," "Ralaco," "Rangi," "Rangiora," "Rangiriri," "Ratanui," "Rawene," "Redwing," "Regal," Reliance," "Rene," "Roamer," "Rongotai," "Rose," "Rotoehu," "Rotongaru," "Rotorua No. 1," "Ruahine," "Ruru," "Samson," "Saxon," "Scout," "Sea Bird," "Seagull," "Seamen," "Seawolf," "Secret," "Selwyn," "Settler," "Sonoma" (Hokianga), "Sonoma" (Rotorua), "Sparrowhawk," "Spray," "Stella" (Hokianga), "Stella" (Whangarei), "Sterling," "St. George," "Stromboli," "Success," "Sunbeam," "Sybil," "Sylph," "Sylvia," "Tainui," "Tanfield Lea," "Tauranganui," "Te Akau," "Te Anau," "Te Aumiti," "Te Kooti," "Te Kura," "Te Rangi," "Te Rhino," "Te Wake," "Te Wharu," "Thelma," "The Peregrine,"* "Thistle," "Tikitere," "Tio," "Tiro," "Toiler," "Tui" (Nelson), "Tui" (Picton), "Tutanekai," "Undine," "Utu," "Victoria," "Victory" (Mercer), "Victory" (Rotorua), "Viking," "Vixen," "Waihou," "Wai-iti" (Akaroa), "Wai-iti" (Wanganui), "Waikare," "Waikato," "Waikuku," "Waima," "Waimarama," "Wainui" (Akaroa), "Wainui" (Picton), "Waiomo," "Waiora," "Waireka," "Wairoa," "Waitana," "Waituna," "Whaka," "Whanui," "Winifred," "Zealandia," "Zephyr."

Sailing-ships.

A large amount of time has been spent by the Surveyors of Ships on sailing-vessels during the year. By the Shipping and Seamen Amendment Act, 1909, all sailing-vessels over 5 tons register and employed in the home trade have now to be surveyed. Altogether 104 sailing-vessels were surveyed and inspected during the year. A large number were found to be very defective in the hull, and had in some cases to undergo considerable overhaul. The whole of the repairs and renewals were carefully supervised and afterwards passed by the Surveyors before the vessels were permitted to run.

Return No. 18 gives the names of these vessels, their gross and registered tonnage measurements, class of vessel, and the number of times surveyed.

The total fees for the survey of these sailing-vessels amounted to £329 10s.

* Steamers.

Some of the principal surveys of sailing-ships during the year are as follows:—

Schooner "Atalanta."—Twenty-eight new timbers were fitted on each side of the bottom of the hull. The hull was refastened in several places and recaulked. Nearly the whole of the wooden lining in the hold was renewed. All chain plates, except three, on the forward and after rigging were renewed. Most of the decks were also renewed, and the rudder, steering-gear, &c., received a thorough overhaul.

Schooner "Clio."—To this vessel a new keel was fitted and coppered. Nearly the whole of the planking in stern was renewed. Several new bolts were put into the chain-plate fastenings, and the hull was all recaulked. The sheathing was renewed where required, and hull cleaned and painted. The firebox of the donkey-boiler was found to be corroded, and the working-pressure was reduced by 15 lb. per square inch.

Ship "Dartford."—This vessel was placed in dry dock and thoroughly examined. All the linings in the holds were taken up, and the frames and floor-plates were cleaned and painted. Several planks were renewed in the deck. Extra crew accommodation was fitted, reducing the register tonnage by 56 tons.

Ketch "Glenae."—This vessel was altered from a hold to a deck scow. New deck-planking and several new deck-beams were fitted, and two new wooden beams, each 5 in. by $6\frac{1}{2}$ in., were bolted along the bottom of the vessel inside, fore and aft. The worm-eaten plank was cut out of the port bow and several out of the stem, and new planks fitted. Repairs were also made to the sheathing on the bottom of the hull and to the centre-board and rudder. An additional length of cable, 15 fathoms, $\frac{9}{16}$ in. diameter, was placed on board.

Schooner "Hawk."—From the bottom of this vessel two worm-eaten planks were taken out and replaced with new ones. A piece of the stern-post was cut out and a new graving-piece fitted in. A new rudder was fitted. The centre-boards were lifted out, and several new planks put in after centre-board. The donkey-boiler was cleaned out and overhauled, and a new pressure-gauge was fitted.

Schooner "Huia."—The principal repairs to this vessel were the renewing of the whole of the port bow from stem right down to keel and to about 9 ft. abaft the stem. A new wooden knee was fitted on starboard bow of bulwarks. A new breast-hook and a new bowsprit were fitted. The sheathing was renewed in several places on the bottom. A new kedge anchor and 30 fathoms of $\frac{5}{8}$ in. chain cable were placed on board.

Ketch "Huon Belle."—All deck-planking at the stern for the full width of this vessel and from the end of deck-house to aft was lifted. Several beams under deck in the vicinity of the rudder-trunk were renewed. All new deck-planking was laid on the after deck, caulked and pitched. The rudder-trunk was repaired and caulked. Repairs were also made to bulwarks, centre-board, rudder, and steering-gear.

Schooner "Korora."—Several worm-eaten planks were cut out of the bottom of this vessel just abaft the stem. New planks were fitted in and caulked. The bottom seam in centre-board casing was recaulked, and new sheathing was put round the edge of aperature. The top sides of hull were caulked all round. A new mainmast is to be fitted. The donkey-boiler was also overhauled.

Schooner "Kahu."—This vessel was formerly an auxiliary ketch. The centre-board was lifted out, three new planks fitted in same, and replaced. The whole of the keel aft and the deadwood, also the stern-post, were renewed. The rudder was repaired, and new wheel-chains were fitted to the steering-gear.

Ketch "Lizette."—Some of the more important repairs to this vessel include two new chain-plates for after rigging, a hardwood rider keelson the full length of hold, side pieces of timber fitted to the keel for the full length of the hold, new false keel of jarrah timber, 9 in. by 3 in., on whole length of keel. A new piece of timber was scarfed into stern-post. A new port bow anchor and 30 fathoms of $\frac{5}{8}$ in. chain cable were put on board.

Schooner "Toafa Haamea."—This vessel received a good overhaul. Fifteen new frame timbers were fitted from the bilge up to deck-line, and fastened in on both sides. All the lining amidships was renewed. The whole of the hull from the bilge upwards was caulked. All bolts in chain-plates were renewed. The vessel was fully equipped for foriegn trade.

Districts and Inspectors.

Mr. Matthew Sharp, Inspector of Machinery and Surveyor of Ships, died on the 19th December, 1911, after an illness of some four months. He joined the Department on the 1st February, 1902. He was a very careful and trusted surveyor and inspector, and his decisions, both in shipping and land work, were never questioned either by shipowners or machinery-owners. By his death the Department has lost the services of a very capable officer.

Mr. Archibald Walker, one of the Inspectors of Machinery and Surveyors of Ships stationed at Dunedin, left the service on the 12th March, 1912, to take up the position of Lloyd's Marine Surveyor and representative at Wellington. Mr. Walker joined the service on the 3rd January, 1901, and has been continuously in the Otago District. He proved himself to be a very reliable and trustworthy officer, and carried out his duties at all times to the satisfaction of the Department.

Mr. Henry Wetherilt, who was the senior officer as Inspector of Machinery and Surveyor of Ships at Auckland, retires from the service on superannuation on the 14th June, 1912. He joined the service on the 27th February, 1896, and was stationed first at Dunedin, but afterwards transferred to Auckland on the 4th April, 1902. He was a trusted servant of the Department, and carried out his duties at all times to the satisfaction of the Department.

To fill the vacancies thus caused the following appointments were made: Mr. Thomas Cooper was appointed on the 3rd January, 1912, Mr. Henry Noy on the 13th March, 1912, and Mr. James McAlpine on the 25th March, 1912.

Mr. Douglas, who had been stationed at Hamilton for some years, was transferred to Napier to take up the late Mr. Sharp's duties, and Mr. John Kydd, of the Head Office staff, was transferred and promoted to take charge at Hamilton.

Inspectors Suisted, Crawford, and Kydd each assisted in the Auckland District for some weeks, Inspector Mackenzie assisted in the Southland District for some months, and Inspector Williamson assisted in the Wanganui District for a month.

RETURNS.

The following are the returns in detail, numbered 1 to 21 :—

1. Number and class of boilers inspected, and fees payable thereon; the machinery inspected, and the fees payable; and the classes and numbers of engine-drivers' and electric-tram drivers' certificates issued, and the fees payable therefor.
2. Return of defects found on inspection of boilers.
3. Return of notices given to repair boilers.
4. Return of notices given to fence dangerous parts of machinery.
5. Return of accidents which were not fatal.
6. Return of accidents which proved fatal.
7–15. Names of persons to whom land stationary, winding, locomotive and traction engines, and electric-tram drivers' certificates of competency and service have been granted during the year.
16. List of persons who were examined and passed for marine engineers' certificates of competency.
17. Return of steamers and oil-engined vessels surveyed during the year.
18. Return of sailing-vessels surveyed during the year.
19. Return of vessels surveyed for seaworthiness, &c., during the year.
20. Return showing sums earned or received and amount spent during the financial year for inspection of machinery, examination of engineers, engine-drivers, and electric-tram drivers, and survey of steamers and sailing-vessels.
21. Return showing the names of owners of additional boilers and transfers which require to be in charge of certificated engine-drivers.

I have, &c.,

ROBERT DUNCAN,

Chief Inspector of Machinery, Chief Surveyor of Ships, and Chief Examiner of Marine Engineers, Land Engineers, and Engine-drivers.

The Hon. the Minister in Charge of the Inspection of Machinery Department.

RETURNS.

No. 1.

(*a.*) RETURN SHOWING THE NUMBER OF LAND BOILERS AND MACHINERY FOR WHICH CERTIFICATES WERE ISSUED DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1912.

Boilers.

Class.	Not exceeding 5 Horse-power.	Exceeding 5 but not exceeding 10 Horse-power.	Exceeding 10 Horse-power.	Total.
Stationary	1,896	899	1,582	4,377
Portable	162	1,102	327	1,591
Totals	2,058	2,001	1,909	5,968

Machinery.

Class.	Number.
Hydraulic lifts	281
Gas-lifts	30
Electric lifts	287
Steam-lifts	33
Oil-lifts	4
Gas, hydraulic, and electric-motor hoists	389
Water-engines, water and electric motors, and water-wheels	1,686
Peltons	155
Turbines	97
Gas-engines	1,413
Oil-engines	2,283
Steam machinery	44
Total	6,702

Summary.

Boilers	5,968
Machinery	6,702
Total	12,670

(*b.*) RETURN SHOWING THE FEES PAYABLE FOR THE INSPECTION OF BOILERS AND MACHINERY, AND FOR THE ISSUE OF ENGINE-DRIVERS' AND ELECTRIC-TRAM DRIVERS' CERTIFICATES DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1912.

Fees payable—On boilers, £6,594 10s.; on machinery, £2,441 10s.; for engine-drivers' certificates issued, £431 15s.; for electric-tram drivers' certificates issued, £138: total, £9,605 15s.

The cash actually received for boilers and machinery inspected, and paid into the Public Account, amounted to £9,774 7s. 6d. The difference is represented by extra fees for late payment. The cash actually received and paid into the Public Account for engine-drivers' and electric-tram drivers' application fees amounted to £815 5s. This amount includes fees for certificates not yet issued and fees from candidates who failed to pass the examinations.

(*c.*) RETURN SHOWING THE NUMBER OF SERVICE AND COMPETENCY CERTIFICATES ISSUED TO WINDING, LOCOMOTIVE AND TRACTION, AND STEAM STATIONARY ENGINE DRIVERS, AND TO ELECTRIC-TRAM DRIVERS, DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1912.

Class of Certificate.	Number of Certificates issued.	Fees received.	Total. Number of Certificates issued.	Total. Fees received.
		£ s. d.		£ s. d.
Steam winding—				
Competency	14	14 0 0	...	...
Electric winding—				
Service	13	3 5 0	27	17 5 0
Locomotive and traction—				
Competency	196	196 0 0	196	196 0 0
Steam stationary—				
Service—First class	6	1 10 0	...	...
Competency—				
Extra first class	6	6 0 0	...	...
First class	50	50 0 0	...	...
Second class...	161	161 0 0	223	218 10 0
Electric-tram—				
Service	413	...	...	
Competency	138	138 0 0	551	138 0 0
			997	£569 15 0

No. 2.—Return of Defects found on Inspection of Boilers during the Financial Year ended the 31st March, 1912.

Description of Defects.	Dangerous.	Defective in Lesser Degree.	Total.
A number of rivets in shell defective	..	1	1
All screwed stays in firebox bad	1	..	1
All sling stays defective	1	..	1
Angle collars on uptake wasted	..	2	2
Back end of furnace wasted	..	1	1
Back end-plate pitted	..	1	1
Badly pitted	..	1	1
Boilers dirty inside	2	48	50
Bottom of firebox wasted	..	2	2
Bottom of shell thin	1	2	3
Brickwork-setting defective	..	10	10
Bulged slightly at back end	..	3	3
Bulged under bottom of shell	..	10	10
Corroded internally	..	1	1
Coupling-pins in longitudinal stays defective	..	2	2
Cracked in firebox	..	1	1
Cracked slightly at a number of rivet-holes	..	18	18
Cross-tubes wasted	..	2	2
Crown of boiler wasted	..	3	3
Crown of firebox bad	1	2	3
Crown of firebox badly bulged	..	3	3
Crown of firebox cracked	..	1	1
Crown of firebox slightly bulged	..	4	4
Crown of firebox wasted	..	2	2
Crown plate of boiler bad	1	..	1
Eight screwed stays in firebox bad	..	1	1
Eighty-four screwed stays in firebox bad	1	..	1
Fifteen tubes bad	..	1	1
Fifty tubes bad	..	1	1
Firebox general waste	8	..	8
Firebox sides bulged	..	3	3
Firebox sides thin	2	3	5
Firedoor-ring cracked at corners	..	1	1
Five screwed stays in throat-plate broken	..	1	1
Flanging of furnace cracked	..	1	1
Forty-two screwed stays in firebox bad	1	..	1
Forty-three rivets in shell defective	..	1	1
Foundation-rings round bottom of firebox wasted	..	3	3
Four stay-tubes bad	..	1	1
Fourteen screwed stays in firebox bad	..	1	1
Front tube-plates wasted	..	2	2
Furnace-crowns down	..	1	1
Furnace-crowns wasted (pressure reduced)	..	2	2
Furnaces thin at bottom	..	1	1
Galloway tube bulged	..	1	1
Galloway tubes thin	..	2	2
General deterioration (pressure reduced)	..	90	90
Girders on crown of firebox wasted	..	2	2
Girder-stays defective	..	1	1
Grooved at foundation-ring	..	2	2
Grooved on furnace-crowns	..	1	1
Grooved on tube-plates	..	1	1
Gusset-stays defective	..	3	3
Hanger bracket for boiler defective	..	1	1
Lamination in bottom shell-plate	..	3	3
Lamination in furnace-plate	..	1	1
Leaking at corners of foundation-ring	..	2	2
Longitudinal seams wasted	..	1	1
Longitudinal stays wasted	..	6	6
Manhole-doors bad	..	15	15
Manhole-door riveting defective	..	2	2
Manhole-door spigots defective	..	7	7
Mudhole-doors bad	5	32	37
Mudhole-door dogs bad	..	2	2
Mudhole-door studs bad	..	6	6

No. 2.—Return of Defects—*continued.*

Description of Defects.	Dangerous.	Defective in Lesser Degree.	Total.
Nine screwed stays in firebox bad	..	1	1
Nine tubes bad	..	2	2
One hundred tubes bad	..	1	1
Patches defective	..	5	5
Pitting badly in places	..	4	4
Pitting on crown of firebox	..	2	2
Pitting slightly internally	..	4	4
Rivets in gusset-stays defective	..	2	2
Rivets in manhole compensating-ring bad	..	2	2
Rivets in tube-plate defective	..	1	1
Seams leaking	..	2	2
Several rivets defective in furnace	..	1	1
Several rivets in shell bad	..	1	1
Several rivets in foundation-ring bad	..	3	3
Several screwed stays in firebox bad	..	15	15
Several stay-nuts on crown of firebox bad	..	1	1
Several tubes bad	..	13	13
Shell wasted at circumferential seams	..	2	2
Shell wasted at manhole-openings	..	7	7
Shell wasted at mudhole-openings	..	63	63
Shell wasted externally	..	3	3
Shell wasted where blow-off cocks jointed to boiler	..	7	7
Shell wasted where check-valve chests jointed to boiler	..	1	1
Shell wasted where safety-valve chests jointed to boiler	..	2	2
Shell wasted where stop-valve chests jointed to boiler	..	1	1
Shell wasted where water-gauge mountings jointed to boiler	..	1	1
Six nuts on girder-stays bad	..	1	1
Sixteen screwed stays in firebox bad	..	1	1
Sixteen tubes bad	..	1	1
Sixty-eight screwed stays in firebox bad	1	..	1
Stay-nuts on back tube-plate defective	..	1	1
Steam dome defective	..	1	1
Steam-dome flange wasted	..	1	1
Ten screwed stays in firebox bad	..	1	1
Ten tubes bad	..	1	1
Thirteen tubes bad	..	1	1
Thirty-five rivets in shell wasted	..	1	1
Thirty-nine screwed stays in firebox bad	1	..	1
Three rows of tubes bad	..	1	1
Throat-plates thin	..	2	2
Top of steam-dome wasted	..	1	1
Top row of tubes bad	..	1	1
Top tube-plates thin (pressure reduced)	..	3	3
Tubes bad	..	69	69
Tube-ends leaking	..	4	4
Tube-plates bad	7	9	16
Tube-plates bulged	..	5	5
Tube-plates wasted	..	26	26
Twelve screwed stays in firebox bad	..	1	1
Twelve tubes bad	..	1	1
Twenty defective rivets in shell	..	1	1
Twenty-five screwed stays in firebox bad	..	1	1
Twenty-four screwed stays in firebox bad	..	1	1
Twenty-four stay-nuts on crown bad	1	..	1
Twenty screwed stays in firebox bad	..	1	1
Twenty-seven screwed stays in firebox bad	..	1	1
Twenty-two screwed stays in firebox bad	..	1	1
Two coupling-pins in stays bad	..	1	1
Two longitudinal stays bad	..	1	1
Two lower rows of tubes bad	..	1	1
Uptakes bad	2	3	5
Uptakes wasted	..	9	9
Vertical stays wasted	..	2	2
Wasted at crown of boiler	..	2	2
Wasted at crown of firebox round fusible plug	..	3	3

No. 2.—Return of Defects—*continued.*

Description of Defects.	Dangerous.	Defective in Lesser Degree.	Total.
Wasted at foundation-ring	..	2	2
Wasted at front end of boiler	..	1	1
Wasted round bottom of firebox	..	7	7
Wasted round bottom of shell	..	2	2
Wasted round furnace-door	..	1	1
Wasted round galloway tube	..	1	1
Wasted under hanger	..	1	1
Total	36	648	684

Digesters found to be defective on Inspection during the Financial Year ended the 31st March, 1912.

Description of Defects.	Dangerous.	Defective in Lesser Degree.	Total.
A number of rivets defective	..	3	3
All rivets defective	1	..	1
All rivets in top end bad	4	..	4
Circumferential seams at top end bad	1	..	1
Crown plates wasted	..	2	2
Defective seams	..	3	3
Eighty rivets bad	1	..	1
Fifty rivets bad	..	1	1
Forty rivets bad	..	1	1
Four hundred and nine rivets bad	1	..	1
General deterioration (pressure reduced)	..	2	2
Laminated plate in bottom	..	1	1
Large number of rivets bad	1	..	1
Manhole-door bad	..	1	1
Rivets in bottom circumferential seams bad	1	..	1
Riveting in vertical seams and top door bad	..	1	1
Seams defective, and several studs in door bad	..	1	1
Seventy-five rivets bad	1	..	1
Several rivets bad	..	3	3
Sixteen rivets bad	..	1	1
Thirteen rivets bad	..	1	1
Thirty rivets bad	..	1	1
Thirty rivets bad, and seams defective	..	1	1
Thirty-six rivets bad	..	1	1
Top hemispherical end bad and fifty rivets	1	..	1
Twenty rivets bad	..	1	1
Twenty-six rivets bad	..	1	1
Two longitudinal seams on cone bad	1	..	1
Two seams wasted	..	1	1
Wasted at bottom door	..	1	1
Wasted on crown badly	1	..	1
Total	14	28	42

DEFECTIVE FITTINGS FOUND ON INSPECTION OF BOILERS FOR WHICH NOTICE WAS GIVEN TO REPAIR DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1912.

1 Bend of feed-pipe defective: has been renewed.
1 Bends of main steam-pipes bad: have been renewed.
10 Blow-off cocks bad: have been renewed.
5 Blow-off cocks defective: have been repaired.
6 Blow-off pipes bad: have been renewed.
5 Crank shafts of engine fractured: were renewed.
2 Cylinders rejointed to boiler.
2 Cylinders renewed, and pistons fitted with new rings.
1 Defective clutch on shaft renewed.
2 Feed check-valve chest defective: was renewed.
4 Feed check-valves defective: were renewed.
2 Feed-pipes bad: were renewed.
2 Feed-pumps defective: have been repaired.
5 Ferrules fitted under spring-balance safety-valve levers.
1 Flywheel of engine cracked: was renewed.
18 Fusible plugs defective: were renewed.
2 Governors defective: were put in order.
2 Injectors found defective: were renewed.
1 Main steam-pipe bad: was renewed.
1 Main steam-pipe defective: was repaired.
14 Manhole-doors bad: have been renewed.
3 Manhole-door studs bad: were renewed.
37 Mudhole-doors bad: have been renewed.
5 Mudhole-door studs bad: have been renewed.
1 New brake fitted to traction-engine.
1 New cylinder fitted to engine.
1 New stop-valve for injector fitted.
1 New studs fitted in safety-valve chests.
6 Safety-valves bad: have been renewed.
2 Safety-valve chests defective: have been renewed.
17 Safety-valves defective: were repaired.
6 Safety-valve levers cut to correct length.
28 Steam-pressure gauges bad: have been renewed.
2 Steam-pressure gauge-pipes defective: were renewed.
2 Steam stop-valves bad: were renewed.
4 Steam stop-valves refaced.
2 Syphon-pipes for steam-pressure gauges renewed.
4 Tapered mud-plugs defective: have been renewed.
1 Tapered sight-plugs defective: have been renewed.
14 Test-cocks bad: have been renewed.
3 Test-cocks defective: were repaired.
1 Traction-engine brakes repaired.
1 Traction-engines' steering-gear defective: was put in order.
1 Traction-engines' steering-gear worm renewed.
25 Water-gauge-glass protectors fitted.
20 Water-gauge mountings bad: have been renewed.
5 Water-gauge mountings defective: were repaired.

Total 280

NO. 3.—RETURN OF NOTICES GIVEN TO REPAIR BOILERS DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1912.

Number.	Type.	Description of Repairs.
1	Cornish	Bosom-piece fitted round flanging of furnace-front.
1	,, ...	Brickwork repaired.
1	,, ...	Cracked portion of furnace-crown cut out and patch fitted.
1	,, ...	Furnace-seams caulked.
1	,, ...	Gusset-stays reriveted.
1	,, ...	Patch fitted on back end of furnace.
1	,, ...	Small crack in furnace repaired.
1	,, ...	Two stays fitted between crown of boiler and furnace where furnace-crown down.
1	,, ...	Two stays renewed.
1	Cornish tubular ..	Four new stay-tubes fitted.
2	,, ..	Gusset-stays reriveted.
2	,, ..	Patches renewed.
1	,, ..	Retubed, and new back tube-plate fitted.
1	,, ..	Two patches fitted over seams on bottom of boiler, and one tube renewed.
1	,, ..	Two stays rejointed.
1	Cornish vertical ..	New angle-ring fitted at top end of flue.
1	,, ..	Two new plates and two new angle-rings fitted to top of flue.
1	Dryback marine ..	Retubed.
1	,, ..	Seams on bottom of shell caulked.
1	Lancashire ..	Furnace caulked.
1	,, ..	New bosom-piece fitted to front end of right-hand flue.
2	,, ..	One galloway tube renewed.
1	,, ..	Patch fitted over landing where corroded.
3	Locomotive ..	A number of new screwed stays fitted in firebox.
1	,, ..	All sling stays renewed, and four new screwed stays fitted in firebox.

No. 3.—Return of Notices given to repair Boilers—*continued.*

Number.	Type.	Description of Repairs.
1	Locomotive ..	Crown stay-nuts renewed.
1	,, ..	Fifteen new tubes fitted.
1	,, ..	New firebox fitted.
1	,, ..	New tube-plate, new barrel, and retubed.
1	,, ..	One hunderd new tubes fitted.
2	,, ..	Patches fitted in firebox under door.
3	,, ..	Patches renewed.
3	,, ..	Retubed.
4	,, ..	Several new nuts fitted to crown-stays.
3	,, ..	Several new screwed stays fitted in firebox.
1	,, ..	Sixteen new screwed stays fitted in firebox.
1	,, ..	Thirty-nine new screwed stays fitted in firebox.
1	,, ..	Twelve new screwed stays fitted in firebox, and patch under door.
1	,, ..	Twenty-four new nuts fitted to crown-stays.
1	,, ..	Twenty-four new screwed stays fitted in firebox.
1	,, ..	Twenty tubes renewed.
1	,, ..	Two new longitudinal stays fitted, and compensating-ring round mudhole-opening.
1	,, ..	Two patches fitted on external firebox, and retubed.
1	,, ..	Two patches renewed in firebox.
1	Manure-dryer ..	New bottom fitted to inner shell.
1	,, ..	New tube fitted.
1	,, ..	Several rivets renewed.
1	Marine ..	Landings on bottom caulked.
2	Multitubular ..	Bottom back end-plate cut out of shell, and new plate fitted.
6	,, ..	Brickwork repaired.
1	,, ..	Brickwork repaired, and new hanger fitted to boiler.
1	,, ..	Bulge cut out of bottom of shell, and patch riveted on.
1	,, ..	Circumferential seam reriveted.
2	,, ..	Compensating-rings fitted round manhole-openings.
11	,, ..	Compensating-rings fitted round mudhole-openings.
1	,, ..	Compensating-ring fitted round mud-hole opening, and new door fitted.
2	,, ..	Compensating-rings round manhole-openings reriveted.
1	,, ..	Crown plate of steam-dome patched.
1	,, ..	Dog and stay fitted to bulge in bottom.
1	,, ..	Doubling plate fitted under hanger at back end of boiler.
1	,, ..	Eleven rivets in gusset-stays renewed.
1	,, ..	End seam reriveted.
1	,, ..	Fifteen new rivets put in circumferential seam.
1	,, ..	Fifteen new tubes and one new longitudinal stay fitted.
1	,, ..	Four stays fitted where tube-plate bulged.
1	,, ..	Gusset-stay angle-irons renewed.
1	,, ..	Large patch fitted on bottom at back end.
4	,, ..	Manhole-doors repaired.
2	,, ..	Manhole-door spigots reriveted.
3	,, ..	Mudhole-doors repaired.
1	,, ..	New back tube-plate fitted.
4	,, ..	New manhole-doors.
4	,, ..	New manhole-door, and compensating-ring fitted round opening.
1	,, ..	New manhole-door, and compensating-ring reriveted.
13	,, ..	New mudhole-doors.
2	,, ..	New mudhole-doors and compensating-ring fitted.
1	,, ..	New mudhole-door and new spigot for manhole-door.
3	,, ..	New studs fitted in mud-doors.
1	,, ..	One new longitudinal stay fitted.
2	,, ..	Opening for manhole dressed out, and new door fitted.
1	,, ..	Part of bottom shell renewed.
1	,, ..	Patch fitted on boiler-bottom where bulge cut out.
1	,, ..	Patch fitted on boiler under hanger-bracket, and new bracket fitted.
2	,, ..	Patch fitted on front tube-plate.
2	,, ..	Patch fitted over wasted part of longitudinal seam.
1	,, ..	Patch on bottom of shell reriveted.
2	,, ..	Patches renewed.
4	,, ..	Retubed.
1	,, ..	Retubed and bottom of shell repaired.
2	,, ..	Retubed, and compensating-ring fitted to mud-door.

No. 3.—Return of Notices given to repair Boilers—*continued.*

Number.	Type.	Description of Repairs.
1	Multitubular ..	Retubed, and new longitudinal stays fitted.
1	,, ..	Retubed, and twenty rivets renewed in shell.
5	,, ..	Several new tubes fitted.
1	,, ..	Several rivets in gusset-stays renewed.
1	,, ..	Small patch fitted under bottom of shell.
2	,, ..	Steam-dome repaired.
1	,, ..	Steam-dome, several rivets renewed.
1	,, ..	Ten new tubes fitted.
1	,, ..	Thirteen tubes renewed.
1	,, ..	Top of back tube-plate patched.
1	,, ..	Top row of tubes renewed.
1	,, ..	Two new longitudinal stays fitted.
1	,, ..	Two new stay-tubes, and forty rivets renewed.
1	,, ..	Two patches fitted on shell.
4	Portable ..	A number of new screwed stays fitted in sides of firebox.
1	,, ..	All crown-stays in firebox renewed.
1	,, ..	Bottom of firebox patched.
12	,, ..	Compensating-rings fitted to mudhole-openings.
2	,, ..	Compensating-rings fitted to mudhole-openings, and patch in firebox.
2	,, ..	Compensating-rings fitted to mudhole-openings, and new studs in doors.
1	,, ..	Crown girder-stays renewed.
1	,, ..	Crown of firebox cut out where cracked, and patch fitted.
2	,, ..	Crown of firebox repaired.
3	,, ..	Defective patches taken off and larger ones fitted.
1	,, ..	Eight new screwed stays fitted in firebox.
1	,, ..	Eighteen new screwed stays fitted in firebox.
1	,, ..	Extra girders fitted on crown of firebox where bulged.
2	,, ..	Firebox-crowns renewed.
1	,, ..	Five new screwed stays fitted in each side of firebox.
1	,, ..	Five new screwed stays fitted in throat-plate.
1	,, ..	Five new tubes fitted.
1	,, ..	Four longitudinal stays renewed.
1	,, ..	Four mudhole-openings fitted with compensating-rings.
1	,, ..	Fourteen new screwed stays fitted in firebox.
1	,, ..	New firebox fitted.
1	,, ..	New fire-door ring fitted, and plate renewed.
1	,, ..	New girders fitted on crown of firebox.
1	,, ..	New manhole-doors fitted.
2	,, ..	New manhole-doors fitted, and compensating-rings reriveted.
4	Portable ..	New mudhole-doors fitted.
1	,, ..	New mudhole-door fitted, and compensating-ring renewed.
1	,, ..	New stud and dog fitted to mud-door.
1	,, ..	One new longitudinal stay fitted.
1	,, ..	Patch at corner of foundation-ring renewed.
3	,, ..	Patches fitted in firebox.
2	,, ..	Patches fitted in firebox, and compensating-rings fitted to mudhole-openings.
2	,, ..	Patches fitted in firebox, and several new screwed stays.
2	,, ..	Patches fitted on tube-plate.
2	,, ..	Patches fitted on shell of boiler under mountings.
6	,, ..	Retubed.
1	,, ..	Retubed, and new firebox fitted.
1	,, ..	Retubed, and new longitudinal stays fitted.
1	,, ..	Retubed, and new tube-plate fitted.
5	,, ..	Several new screwed stays fitted in firebox.
2	,, ..	Several new screwed stays fitted in firebox, and compensating-rings to mudhole-openings.
1	,, ..	Strengthening stays fitted to crown of firebox.
1	,, ..	Ten new screwed stays fitted in firebox.
1	,, ..	Thirteen new screwed stays fitted in firebox.
1	,, ..	Thirty new screwed stays fitted in firebox.
1	,, ..	Three new girders and stays fitted on firebox crown.
1	,, ..	Three new tubes fitted.
1	,, ..	Twenty new screwed stays fitted in firebox.
1	,, ..	Twenty-seven new screwed stays fitted in firebox.
1	,, ..	Twenty-two new screwed stays fitted in firebox.

No. 3.—Return of Notices given to repair Boilers—*continued.*

Number.	Type.	Description of Repairs.
1	Portable ..	Two girders on crown of firebox renewed.
2	,, ..	Two new longitudinal stays fitted.
1	,, ..	Two new longitudinal stays, and compensating-rings round mudhole-openings fitted.
1	,, ..	Two new pins fitted in joints for longitudinal stays.
1	Semi-portable ..	Compensating-rings fitted to mudhole-openings.
1	,, ..	Cracked portion of plate in firebox cut out and patch fitted.
1	,, ..	Foundation-ring repaired.
1	,, ..	Patch in firebox rejointed.
1	,, ..	Several new screwed stays fitted in firebox.
1	,, ..	Twelve new screwed stays fitted in firebox.
1	,, ..	Two new mudhole-doors fitted.
1	,, ..	Two new pins fitted in stays.
1	Semi-tubular ..	Compensating-ring fitted to mudhole-opening.
1	,, ..	Four patches renewed on bottom.
1	,, ..	New mudhole-door fitted.
1	,, ..	Patch fitted on shell under blow of cock.
1	,, ..	Retubed.
2	Traction ..	A number of new screwed stays fitted in firebox.
1	,, ..	All screwed stays in firebox renewed.
2	,, ..	Compensating-rings fitted to manhole-openings.
1	,, ..	Crown of firebox, where cracked, repaired.
1	,, ..	Eight new screwed stays fitted in firebox.
1	,, ..	Eighty-four new screwed stays fitted in firebox.
1	,, ..	Five additional stays and cross-girders fitted on crown of firebox.
1	,, ..	Forty-two new screwed stays, and patch fitted in firebox.
1	,, ..	Foundation-ring reriveted.
1	,, ..	Longitudinal stays renewed.
2	,, ..	New firebox fitted.
1	,, ..	New firebox and back plate fitted.
1	,, ..	New manhole-door fitted.
2	,, ..	New mud-doors fitted.
1	,, ..	New pins fitted in longitudinal stays.
1	,, ..	New stays fitted in crown of firebox.
1	,, ..	New studs fitted in manhole-doors.
1	,, ..	Patch fitted in crown at fusible plughole.
1	,, ..	Patch fitted in firebox.
1	,, ..	Patch fitted under blow-off cock, nine new tubes, and forty-two new screwed stays fitted in firebox.
2	,, ..	Patches fitted on front tube-plate.
2	,, ..	Patches in firebox renewed.
2	,, ..	Plugholes retapped, and new tapered plugs fitted.
10	,, ..	Retubed.
3	,, ..	Retubed, and new firebox fitted.
1	,, ..	Retubed, and new firebox sides and crown fitted.
1	,, ..	Retubed, several new screwed stays fitted in firebox, and a patch on back plate.
1	,, ..	Retubed, sixty-eight new screwed stays, and patch fitted in firebox.
1	,, ..	Several defective rivets in foundation-ring renewed.
2	,, ..	Several new screwed stays fitted in firebox.
1	,, ..	Several rivets in foundation-ring renewed, and compensating-ring to mudhole-opening.
3	,, ..	Several tubes renewed.
1	,, ..	Six new screwed stays fitted in throat-plate.
1	,, ..	Sixteen new screwed stays fitted in firebox.
1	,, ..	Two lower rows of tubes renewed.
1	,, ..	Two new mud-doors fitted.
1	,, ..	Two new tapered sighthole-plugs fitted.
1	Vertical cross-tube	Bottom shell-plate renewed.
3	,,	Compensating-rings fitted to mudhole-openings.
1	,,	Compensating-rings fitted to mudhole-openings, and two new doors.
1	,,	Four new vertical stays fitted, patch under blow-off cock, and patch on shell where laminated.
1	,,	New collar fitted on crown of boiler round uptake.
1	,,	New crown fitted in boiler.
2	,,	New manhole-doors fitted.
2	,,	New mudhole-doors fitted.

No. 3.—Return of Notices given to repair Boilers—*continued.*

Number.	Type.	Description of Repairs.
1	Vertical cross-tube	New spigot fitted to manhole-door.
3	,,	New uptakes fitted.
1	,,	Patch fitted on shell round fire-door.
1	,,	Patch fitted on uptake, and compensating-ring round manhole-opening.
1	,,	Patch fitted under blow-off cock.
1	,,	Several rivets in foundation-ring renewed.
1	,,	Several rivets in manhole compensating-ring renewed.
1	,,	Shell-plate round bottom renewed, and patch fitted under fire-door in firebox.
1	Vertical field-tube	Manhole-door fitted with new spigot.
1	,,	New uptake fitted, new tubes, one half of firebox renewed, new collar on crown, and compensating-ring, 9 in. wide, fitted round bottom of shell.
1	,,	Several new tubes fitted.
1	,,	Three new tubes fitted.
1	,,	Two compensating-rings fitted to mudhole-openings.
1	Vertical flue ..	Compensating-rings fitted to mudhole openings.
1	,, ..	Manhole-door reriveted.
1	,, ..	New crown fitted in boiler.
1	,, ..	New manhole-door fitted.
1	,, ..	New uptakes fitted.
1	,, ..	New uptakes and new mud-door.
1	,, ..	Opening for mudhole dressed out, and new door fitted.
1	,, ..	Patch at mudhole extended, and patch fitted on shell under blow-off cock.
1	,, ..	Patch fitted in firebox.
1	,, ..	Patch fitted round bottom of firebox, and defective rivets renewed.
1	,, ..	Patch renewed at fire-door.
1	,, ..	Several rivets renewed.
1	Vertical tubular ..	Compensating-rings fitted to four mudhole-openings.
5	,, ..	Compensating-rings fitted to mudhole-openings.
1	,, ..	New manhole-door fitted.
1	,, ..	New mudhole-door fitted.
1	,, ..	Opening for mud-door dressed out, and new door fitted.
1	,, ..	Patch fitted on shell under safety-valve chest.
1	,, ..	Patch fitted round furnace-door.
15	,, ..	Retubed.
1	,, ..	Retubed, and compensating-ring fitted to mudhole-openings.
9	,, ..	Retubed, and new top tube-plate fitted.
3	,, ..	Retubed, new top tube-plate, and compensating-rings fitted to mudhole-openings.
2	,, ..	Several tubes renewed.
1	,, ..	Several tubes renewed, and compensating-ring to mudhole-opening.
1	Water-tube ..	Bottom row of tubes renewed.
1	,, ..	Brickwork repaired.
1	,, ..	Fifty new tubes fitted.
1	,, ..	Fourteen new tubes and eight new studs fitted.
1	,, ..	Nine new tubes fitted.
1	,, ..	Retubed.
2	,, ..	Several tubes renewed.
1	,, ..	Three rows of tubes renewed.
433	Total.	

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc., during the Financial year ended the 31st March, 1912.

Number.	Machinery.	Particulars.
1	Abattoirs	Fly-wheel, pulley, and main belting.
1	Air-compressing	Belting and wheel.
1	,, ...	Pulleys.
1	Bacon-factory	Machinery.
1	Bakery	Belting.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
1	Bakery	Belting and spur-gearing.
1	,,	Engine.
2	,,	Fly-wheel of engine.
1	,,	Mixing-machine, belt, and pulley.
1	,,	Two belts and fly-wheel of engine.
1	Boot-factory	Belting.
1	,,	Belting, pulley, and shafting.
1	,,	Driving-belt.
1	,,	Fly-wheel and driving-belts.
1	,,	Main driving-belt.
1	,,	Shafting of two machines.
1	Boring	Side of pump and main belting.
1	Box-factory	Emery wheel.
1	,,	Machinery.
1	Brewery	Machinery.
1	Brickmaking	Belting.
2	,,	Fly-wheels of engine.
1	,,	Machinery.
1	,,	Motor and main driving-belt.
1	,,	Motor and side of crusher-belt.
1	,,	Pulley and brick-machine belting.
1	,,	Side of main belting.
2	Butchery	Belting.
3	,,	Belting and fly-wheel of engine.
1	,,	End of crank-shaft, fly-wheel, and belting.
2	,,	Engine.
2	,,	Fly-wheels of engine.
2	,,	Machinery.
2	,,	Pulleys.
1	,,	Pulley and belting.
1	,,	Pulley and shafting.
1	,,	Spur-gearing, fly-wheel, and belting.
1	Butter-factory	Belting.
1	,,	Churn.
1	,,	End of crank-shaft.
1	,,	Fly-wheel of engine.
2	,,	Fly-wheels and circular saw.
1	,,	Intermediate shafting.
1	,,	Machinery.
2	,,	Main driving-belt, wheel, and pinion.
1	,,	Water-wheel.
1	,,	Wheel and pinion.
1	Chaff-cutting	Belting.
2	,,	Belting and pulley.
1	,,	Belting, engine, and firewood saw.
1	,,	Belting, pulleys, and wheels.
1	,,	Circular saw, wheels, and belting.
6	,,	Fly-wheel of engine.
1	,,	Fly-wheel of engine and spur-gearing.
1	,,	Machinery.
1	,,	Machinery and belting.
1	,,	Main driving-belt.
1	,,	Shafting and coupling.
1	,,	Shafting, belting, and saw.
1	,,	Spur-gearing.
1	,,	Water-race to cover.
1	Cheese-factory	Engine.
3	,,	Fly-wheels of engine.
1	,,	Machinery.
1	Cleaning grain	Countershaft.
1	,,	Fly-wheel, main belting, and pulley.
1	,,	Machinery and belting.
1	Clothing-factory	Belting.
1	,,	Machinery.
1	Coach-factory	Countershaft.
1	,,	End of crank-shaft.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
2	Coach-factory	Fly-wheels of engine.
1	,, ...	Key on crank-shaft.
2	,, ...	Machinery.
1	,, ...	Side of engine, saw-shafting, and belt.
1	,, ...	Two pulleys.
1	Coal-mining	End of crank-shaft.
1	,, ...	Belting, and bolts in pulley.
1	,, ...	Shafting.
1	Contractors..	Fly-wheel of engine.
1	,, ...	Motor and friction-winch.
1	Cordial-factory	Belting.
1	,, ...	Bottling-machine.
2	,, ...	Fly-wheels of engine.
1	,, ...	Machinery.
1	,, ...	Side of engine.
1	,, ...	Wheels, pulley, and belting.
2	Creamery	End of crank-shaft.
4	,, ...	Fly-wheel of engine.
2	,, ...	Machinery.
1	,, ...	Main driving-belt.
1	Crushing grain	All machinery.
1	,, ...	Belting, engine, and saw.
1	,, ...	Belting, pulley, and fly-wheel.
1	,, ...	Belting, wheel, and circular saw.
1	,, ...	End of countershaft.
1	Crushing grain	Engine, saw, and belting.
2	,, ...	Fly-wheels of engine.
1	,, ...	Fly-wheels of engine and emery wheel.
1	,, ...	Main driving-belt.
1	Cycle-works	Coupling on shafting.
1	,, ...	Driving-pulley and belting.
1	,, ...	Engine and belting.
1	Dairy factory	Belting.
2	,, ...	Churns.
1	,, ...	Circular saw.
1	,, ...	Fly-wheel of engine.
1	,, ...	Main driving-belt.
1	,, ...	Motor belting.
1	Dye-works	Washing-machine.
1	Electric hoist	Crown beam to strengthen.
1	,, ...	Handrail fitted on top platform.
1	,, ...	Hatchways.
1	,, ...	Top landing of well.
1	Electric lift..	Door-catches in cage repaired.
1	,, ...	Door-openings.
1	,, ...	Door to fit at bottom of well.
1	,, ...	Girder repaired.
1	,, ...	Hatchways.
2	,, ...	New safety-gear fitted.
1	,, ...	New safety-grips fitted.
4	,, ...	New steel-wire ropes for balance-weights fitted.
15	,, ...	New steel-wire ropes for cage fitted.
1	,, ...	New worm-wheels fitted.
1	,, ...	Overhead-joist renewed.
1	,, ...	Safety grips overhauled, and springs adjusted.
1	,, ...	Safety-grips renewed.
1	,, ...	Springs adjusted.
1	Electric lighting	Belting.
1	,, ...	Countershaft.
1	,, ...	Engine and belting.
2	,, ...	Fly-wheel and belting.
3	,, ...	Fly-wheels of engine.
1	,, ...	Main driving-belt.
1	,, ...	Side of fly-wheel.
1	,, ...	Two pulleys.
1	Engineering	Belting.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
1	Engineering	Belting, spur-gearing, and fly-wheels.
1	,,	Couplings on shaft.
2	,,	Emery wheels.
2	,,	Fly-wheels of engine.
1	,,	Machinery.
2	,,	Punching-machine.
1	Firewood-cutting	Belting.
1	,,	Belting and pulley.
1	,,	Belting, circular saw, and pulley.
3	,,	Circular saws.
1	,,	Emery wheel.
2	,,	Engine, belting, and saw.
3	,,	Fly-wheels.
1	,,	Fly-wheel, belting, and circular saw.
1	,,	Machinery.
1	,,	Shafting.
1	,,	Wheels, belting, pulley, and circular saw
1	Flax-mill	All machinery.
1	,,	Belting
1	,,	Belting, wheels, and shafting
1	,,	Bevel-wheels.
1	,,	Countershaft and pulleys.
2	,,	End of shaft and spur-gearing.
1	,,	Engine.
1	,,	Engine and pulleys.
1	,,	Fly-wheels and machinery.
2	,,	Fly-wheels of engine.
1	,,	Intermediate shafting.
1	,,	Machinery.
1	,,	Main and scutcher-belting.
1	,,	Main driving-belt.
1	,,	Scutcher-mouth reduced in width.
1	,,	Shafting.
1	,,	Spur-gearing, shafting, and belting.
1	,,	Water-wheel.
1	,,	Water-wheel and machinery.
1	,,	Wheel-race.
1	Flour-mill	Belting.
1	,,	Belting and machinery.
1	,,	Fly-wheel and belting.
1	,,	Fly-wheel of engine.
1	,,	Machinery.
1	,,	Main driving-belt.
1	,,	Side of several machines.
1	,,	Two main belts.
1	,,	Water-race.
3	,,	Water-wheels.
1	,,	Water-wheel and race.
1	Friction hoist	Motor.
1	,,	New steel-wire rope fitted.
1	,,	Opening in floor.
1	Fruit-preserving	Machinery.
1	Gas-engines	Belting.
7	,,	End of crank-shaft.
2	,,	Engines.
1	,,	Engine and shafting.
1	,,	Fly-wheel and belting.
1	,,	Fly-wheel and end of shaft.
13	,,	Fly-wheels of engine.
1	,,	Keylead, end of shaft, and wheel.
1	,,	Keys in fly-wheel.
1	Gas-lift	End of crank-shaft.
1	,,	Main belting.
1	,,	New steel-wire rope fitted to cage.
1	Gas-works	Machinery.
1	General work	Belting.
1	,,	Belting and saw.
2	,,	Engine, belting, and wheels.
4	,,	Fly-wheels of engine.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
1	General work	Gearing of pump.
1	,,	Gearing of vertical drilling-machine.
2	,,	Machinery.
2	,,	Main belting, pulley, and fly-wheel.
1	,,	Main driving-pulley and belt, and key in fly-wheels.
1	Glass-works	Length of shafting on floor, and two belts.
1	,,	Machinery.
1	,,	Main belting.
3	Grindery	Bevel-wheels and belting.
1	,,	Machinery.
2	,,	Pulleys.
2	Hoisting	Belting.
2	,,	Engine.
1	,,	Machinery.
1	,,	Wheels and belting.
1	Hydraulic crane	Chains annealed.
1	,,	New sheave fitted.
2	,,	Pins renewed.
1	Hydraulic hoist	Hatchways.
1	,,	New steel-wire ropes fitted.
1	Hydraulic lift	Cage repaired.
1	,,	Chains annealed.
1	,,	Cross bars at hatchways renewed.
1	,,	Door at bottom of well, and top of cage protected.
1	,,	Door in cage renewed.
2	,,	Fences repaired.
1	,,	Guides for cage repaired.
1	,,	New cage fitted.
2	,,	New chains fitted.
1	,,	New cylinder fitted.
1	,,	New doors fitted to bottom of well.
1	,,	New gripper-ropes fitted.
2	,,	New leathers fitted to ram.
2	,,	New springs fitted to safety-gear.
1	,,	New steel-wire ropes fitted to balance-weights.
16	,,	New steel-wire ropes fitted to cage.
1	,,	Rails fitted round floor-openings.
1	,,	Rail fitted round platform.
11	,,	Safety-catches overhauled and adjusted.
1	,,	Safety-catches renewed.
1	,,	Safety-catches renewed, and new spring fitted.
1	,,	Side of staircase guarded.
3	,,	Top of cage protected.
2	,,	Valves fitted with new leathers.
2	,,	Valves overhauled.
6	Hydraulic press	Floor-openings.
1	Joinery	Belting.
1	,,	Countershaft and belting.
1	,,	Fly-wheel and driving-belt.
3	,,	Fly-wheels of engine.
5	,,	Machinery.
1	,,	Shafting and planer-belt.
1	Laundry	Fly-wheel of engine.
1	,,	Machinery.
1	Leather-works	Belting.
1	,,	Shafting.
1	Log-hauling	End of shafting.
1	,,	Engine.
1	,,	Spur-gearing.
1	Machine-shop	Belting.
2	,,	Circular saws.
1	,,	End of crank-shaft.
1	,,	Fly-wheel and dynamo belting.
1	,,	Fly-wheel of engine.
1	,,	Fly-wheel of punching-machine.
2	,,	Machinery.
1	,,	Saw-belting and machinery.
3	,,	Shafting.
1	Manure-drying	Belting.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
1	Manure-drying	Electric switch.
2	,,	Main belting and pulley.
1	,,	Pulleys.
2	Match-factory	Driving-belt and main driving-pully.
2	,,	Ends of machines and motor.
1	,,	Pulleys, belts, and machinery.
1	,,	Side of machine and motor.
1	Merry-go-round	Belting.
7	Milking	Belting.
1	,,	Belting and end of crank-shaft.
1	,,	Belting and pulleys.
1	,,	Circular saw and belting.
1	,,	Crank-shaft.
5	,,	Engines and belting.
2	,,	Engines and pumps.
7	,,	Fly-wheels and belting.
3	,,	Fly-wheels and end of shaft.
40	,,	Fly-wheels of engine.
2	,,	Fly-wheels, pulley, and belting.
9	,,	Machinery.
1	,,	Shafting.
1	,,	Water-wheel.
1	Mincing	Belting.
1	,,	Engine.
1	,,	Fly-wheels of engine.
1	Motor-works	Belting.
1	,,	Fly-wheel and toothed wheel of drilling-machine.
2	,,	Fly-wheels of engine.
1	,,	Key in fly-wheel.
7	Oil-engines	End of crank-shaft.
2	,,	Engines.
2	,,	Engines and belting.
83	,,	Fly-wheels of engine.
2	,,	Keys in fly-wheel.
1	,,	Side of fly-wheel.
2	,,	Wheels and belting.
1	Pelton wheel	Pulley and belting.
1	Pipe-making	Driving-belt.
1	Planing-mill	Circular saw, shafting, and belting.
1	,,	Machinery.
1	,,	Planer and main belting, and friction-clutch.
1	,,	Shafting.
1	Power lift	Bottom of well.
1	,,	New ropes fitted.
1	,,	Safety-catches overhauled and adjusted.
1	Printing	Belting.
1	,,	Countershaft.
1	,,	Driving-wheels.
1	,,	Engine, belting, and wheels.
2	,,	Fly-wheel of engine.
1	,,	Keys in fly-wheel.
2	,,	Machinery.
2	,,	Main driving-belt and motor.
1	,,	Shafting and key in fly-wheel.
1	,,	Side of driving-pulley and belting.
1	,,	Side of wheel.
1	,,	Two wheels.
2	,,	Wheels and belting.
2	Pumping	Belting.
1	,,	Engine.
2	,,	Fly-wheels of engine.
1	,,	Fly-wheel, shafting, and belts.
1	,,	Keys in fly-wheel.
3	,,	Machinery.
1	,,	Shafting.
1	,,	Wheels and belting.
1	Quartz-crushing	Machinery, belting, and end of shafting.
1	,,	Machinery, belting, and loose collars on shaft.
1	,,	Spur-gearing.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc. *continued.*

Number.	Machinery.	Particulars.
1	Refrigerating	Belting.
1	,, ...	Driving-belt.
1	,, ...	Engine, and refrigerator belt.
2	,, ...	Fly-wheels of engine.
1	,, ...	Machinery.
1	,, ...	Main driving-belt.
1	,, ...	Two pulleys.
2	Sash and door factory ..	Band saws.
1	,, ..	Belting.
1	,, ..	Belting and circular saws.
2	,, ..	Circular saws.
1	,, ..	Engine and machinery.
1	,, ..	Fly-wheel of engine.
1	,, ..	Machinery.
1	,, ..	Machinery and saws.
1	,, ..	Main driving-belt.
1	,, ..	Pulleys.
1	Sawmill	All machinery.
1	,, ...	Band saws.
1	,, ...	Belting and bevel-pinions.
3	,, ...	Belting and machinery.
1	,, ...	Bevel-wheels and shafting.
1	,, ...	Bevel-wheels on dust-creeper.
2	,, ...	Breast-bench saw, firewood saw, and belting.
3	,, ...	Circular saws.
2	,, ...	Circular saws and belting.
2	,, ...	Circular saws and emery wheels.
1	,, ...	Circular saws, belting, and shaft.
1	,, ...	Circular saws, countershaft, and belt.
2	,, ...	Circular saws, machinery, and belting.
1	,, ...	Driving-pulley and belting.
2	,, ...	Emery wheels.
1	,, ...	End of saw-spindle, band saw, pulley, and belting.
2	,, ...	Engine and pulleys.
2	,, ...	Fly-wheels of engine.
1	,, ...	Intermediate shafting.
6	,, ...	Machinery.
4	,, ...	Machinery and circular saws.
5	,, ...	Main belting and circular saws.
1	,, ...	Main belting, bevel-wheels, and shafting.
1	,, ...	Main belting, pulley, set screw on shaft, grindstone pulley and shaft.
1	,, ...	Main shafting and circular saw.
1	,, ...	Main shafting, belting, and circular saw.
1	,, ...	Planer belting and set screws.
1	,, ...	Planer-shafting.
1	,, ...	Pulleys and shafting.
1	,, ...	Pulleys, belting, and shafting.
1	,, ...	Saw-shafting and belting.
1	,, ...	Shafting, belting, and breast-bench saw.
1	,, ...	Side of vertical pulley and circular saw.
1	,, ...	Stop fitted to swinging saw.
1	,, ...	Two pulleys.
1	Saw-sharpening	Emery wheels.
1	,, ...	Key on crank-shaft.
1	Seed-cleaning	Belt, pulley, and fly-wheel.
1	,, ...	Side of engine.
1	,, ...	Side of one machine.
2	,, ...	Three belts.
1	,, ...	Water-wheel.
1	Sewing-machines	Driving-belt and pulley.
2	Shearing	Belting.
2	,, ...	Belting and pulley.
1	,, ...	Belting, fly-wheel, and pulley.
2	,, ...	Emery wheels.
1	,, ...	End of crank-shaft.
1	,, ...	Engine and belting.
1	,, ...	Engine, shafting, and belting.
10	,, ...	Fly-wheel and belting.

No. 4.—Return of Notices given to fence or repair Dangerous Parts of Machinery, etc.—*continued.*

Number.	Machinery.	Particulars.
2	Shearing	Fly-wheel and emery wheels.
1	,, ...	Fly-wheel and key-lead.
1	,, ...	Fly-wheel, driving-belt, and pulley.
10	,, ...	Fly-wheels of engines.
12	,, ...	Machinery.
1	,, ...	Side of engine and driving-belt.
1	,, ...	Side of wheel-gearing.
2	,, ...	Wheels.
1	Shop-tools	Air-compressor and pugmill.
1	,, ...	Belting.
2	,, ...	Emery wheels.
2	,, ...	Emery wheels and pulleys.
2	,, ...	End of lathe.
1	,, ...	Engine.
3	,, ...	Fly-wheels of engine.
2	,, ...	Machinery.
1	,, ...	Shafting.
9	Station-work	Belting.
6	,, ...	Fly-wheel of engine.
5	,, ...	Fly-wheel, pulley, and belting.
2	,, ...	Machinery.
1	,, ...	Saw and belting.
1	Steam-hoist	Machinery.
1	Steam lift	New steel-wire rope fitted to cage.
1	,, ...	Safety-gear adjusted.
1	Stone-crushing	Driving-belt.
1	,, ...	Machinery.
2	Tannery	Countershaft.
1	,, ...	Ends of two shafts.
1	,, ...	Main belting, hydro-extractor belting, and set screws on countershaft.
1	Threshing	Belting.
1	Ventilating	Belting and pulley.
1	Water-wheel	Side of wheel.
1	,, ...	Spur-gearing and belt.
1	Wood-working	All machinery.
2	,, ...	Band saws.
1	,, ...	Band-saw belting.
1	,, ...	Band saw belting and engine.
2	,, ...	Belting.
2	,, ...	Belting and circular saw.
1	,, ...	Belting and pulleys.
1	,, ...	Belting and side of engine.
1	,, ...	Belting, sandpaper-machine, and circular saw.
3	,, ...	Circular saws.
1	,, ...	Circular saws and end of shaft.
1	,, ...	Driving-pulley and belting.
1	,, ...	Driving-shaft and belting.
2	,, ...	Emery wheels.
1	,, ...	End of shaft and belting.
1	,, ...	End of shaft, circular saw, and fly-wheel.
1	,, ...	Engine.
1	,, ...	Engine and band-saw belting.
1	,, ...	Engine, pulleys, and belting.
1	,, ...	Fly-wheel and belting.
1	,, ...	Fly-wheel, belting, and countershaft.
3	,, ...	Fly-wheels of engine.
2	,, ...	Fly-wheels of engine and machinery.
1	,, ...	Key on end of crank-shaft.
4	,, ...	Machinery.
1	,, ...	Pulley, shafting, and belting.
1	,, ...	Shafting.
1	,, ...	Side of belting.
2	,, ...	Side of planer-pulley.
1	,, ...	Two belts.
1	,, ...	Two planer-pulleys.
1	Wool-dumping	Fly-wheel of engine.
889	Total	

No. 5.—Return of Non-fatal Accidents in connection with Machinery during the Financial Year ended the 31st March, 1912.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Date of Accident and Nature of Injury.	Cause of Accident, and Remarks.
A. and T. Burt (Limited), Dunedin ..	Band saw ..	Cyril Brookes; 16 years ..	10th April, 1911; thumb injured	While cutting hardwood-wedges Brookes's hand came in contact with the band saw, lacerating his right thumb.
W. and G. Donaldson, Golden Point ..	Gas-engine ..	W. J. Stevenson; 45 years ..	20th April, 1911; knee injured ..	In attempting to stop the engine in a certain position Stevenson got his knee crushed through coming into contact with the outer rim of the fly-wheel.
N. Z. Paper Mills (Limited), Auckland..	Paper-making ..	James Williamson; 21 years ..	29th April, 1911; fingers injured	When feeding paper through the machine Williamson got the fingers of his left hand crushed with the rollers.
Wilson's Portland Cement Company (Limited), Warkworth	Tube-mill ..	J. E. Pemberton: 30 years ..	29th April, 1911; hand crushed ..	While attending to the mill Pemberton's right hand was accidentally drawn into the machinery and crushed so severely that it had to be amputated.
James McAndrew and Co., Paeroa ..	Chain-mortiser ..	Thomas Carthy; 19 years ..	1st May, 1911; thumb injured ..	While working the machine Carthy's hand came into contact with the knives, causing injury to his right thumb.
George Kent and Son, Newmarket ..	Dough-durder ..	Alfred Stewart; 19 years ..	1st May, 1911; thumb cut off ..	Stewart was feeding the durder when he slipped. To save himself he stretched out his right hand, when his thumb was drawn into the machinery and cut off.
Maurice Lyons, Christchurch.. ..	Goods-lift ..	L. McConchie; 24 years ..	3rd May, 1911; body bruised ..	McConchie overbalanced himself and fell down the lift-well, and the lift being in motion at the time he was caught by it and severely bruised.
A. and T. Burt (Limited), Dunedin ..	Shaping	Herbert Reid; 21 years ..	9th May, 1911; finger hurt ..	Reid allowed his hand to get into contact with the shaping-machine when in motion.
Wilson's Portland Cement Company (Limited), Warkworth	Governor on engine	George Tappin; 29 years ..	14th May, 1911; finger injured ..	Tappin was cleaning the governor of an oil-engine while the engine was in motion, when a projecting pin came into contact with the middle finger of his right hand, fracturing it.
C. H. Jones, Wellington	Flour mixing ..	Charles Mardell; 21 years ..	16th May, 1911; leg amputated ..	Mardell got his leg entangled in a belt, and he was drawn up and around the shafting. One of his legs was so severely injured that it had to be amputated.
Mataura Implement Works, Mataura ..	Grindstone ..	William McNarry; 22 years ..	29th May, 1911; thumb injured ..	The tool McNarry was grinding slipped between the grindstone and the board protecting it, causing injury to his thumb.
Phelps, Wilson, and Co., Wellington ..	Electric lift ..	Douglas McGirr; 16 years ..	6th June, 1911; back injured ..	McGirr fell down the lift-well and injured his back. He opened the door at the landing leading to the cage of the lift, and thinking the cage was there he stepped out and fell to the bottom of the well.
City Sawmills (Limited), Dunedin ..	Planing	John Clisby; 45 years ..	7th June, 1911; fingers injured ..	While planing a piece of timber Clisby's hand slipped and came in contact with the bottom cutters of the machine, when several fingers of his right hand were badly lacerated.
Keeling and Mundy, Palmerston North..	Printing	Frank Carson; 16 years ..	14th June, 1911; hand amputated	Carson was feeding the machine when his hand got in between the impression-plate and the fixed type-frame. His hand was so severely crushed that it had to be amputated.
James McAndrew and Co., Paeroa ..	Sash-mortiser ..	David Kellett; 30 years ..	20th June, 1911; hand injured ..	Kellett's hand was injured through coming into contact with the saw.
Kauri Timber Company (Limited), Kohukohu	Drag saw ..	George Simmons; 20 years ..	23rd June, 1911; thumb and finger cut off	While working at the drag saw Simmons allowed his hand to come into contact with it, when the thumb and part of the index finger of his right hand were cut off.
Henry Tunnicliff, Dovedale	Sawmill travelling-bench	F. M. Tunnicliff; 48 years ..	29th June, 1911; fingers severed..	Tunnicliff's hand got in between the saws, causing the loss of three of the fingers of his right hand.
S. Kirkpatrick and Co. (Limited), Nelson	Circular saw ..	Charles Stone; 17 years ..	14th July, 1911; finger cut ..	While engaged sawing wood Stone's finger came in contact with the saw.

Directors "Woodford House School," Havelock North	Hydro-extractor ..	David McDonald; 27 years ..	21st July, 1911; arm amputated	McDonald stepped forward to stop the hydro-extractor. He slipped and threw out his arm to save himself, when his hand was caught in the revolving cage of the machine. His arm was wrenched off at the elbow, and later on it had to be amputated a few inches below the shoulder.
Mangorei Co-operative Dairy Factory (Limited), New Plymouth	Dairy factory ..	James Vole; 21 years ..	26th July, 1911; fingers amputated	While engaged oiling the churn Vole got his fingers crushed in the gearing of the machine. Three of them were so severely injured that they had to be amputated.
P. and D. Duncan (Limited), Christchurch	Turning-lathe ..	Alexander Archibald; 18 years	9th August, 1911; fingers crushed	Archibald was turning a trolly-wheel in the turning-lathe, when the wheel fell out of the chuck, crushing his fingers.
Ross and Glendining (Limited), Auckland	Electric lift ..	Walter Armstrong; 17 years ..	11th August, 1911; body bruised	Armstrong attempted to get into the cage of the lift while it was in motion, but failed to do so, and was caught by it and had his hip severely bruised.
Kauri Timber Company (Limited), Kohukohu	Crosscut circular saw	Tony Burgess; 24 years ..	17th August, 1911; finger injured	Burgess had the middle finger of his left hand crushed between the timber and the saw-belt when working at the saw-bench.
Ross and Glendining (Limited), Dunedin	Wringing.. ..	William Armstrong; 39 years	19th August, 1911; fingers crushed	Through inattention, Armstrong's left hand got between two pinions of the machine, and had two of the fingers crushed.
Wilson's Portland Cement Company (Limited), Warkworth	Friction-winch countershaft	Herbert Young; 36 years ..	21st August, 1911; body bruised..	Young was attending to the lubrication of shaft when his clothing was caught by it. He was wound around the shafting until his clothing gave way. He was bruised all over his body, but had no bones broken.
Mace and Nicholson, Wellington ...	Stone-crushing ..	Thomas Lineham; 23 years ..	28th August, 1911; body and arm bruised	Lineham was oiling the machinery while it was in motion, when his shirt-sleeve was caught by the belting. One of his arms and parts of his body were considerably bruised.
Parker and Jones, Christchurch ..	Planing	F. C. Pearce; 22 years ..	4th September, 1911; finger crushed	When Pearce was planing a piece of timber the second finger of his left hand was caught by the rollers.
Anderson's Limited, Lyttelton ..	Hydraulic riveting	Thomas Bain; 23 years ..	11th September, 1911; hand crushed	A workman started the machine, not knowing that Bain had his right hand on it. Bain's hand was crushed by the compressor, necessitating the amputation of portion of the first three fingers.
Waihi Gold-mining Company (Limited), Waihi	Quartz-crushing ..	G. Leather; 40 years ..	13th September, 1911; fingers injured	Leather's hand was caught by the clip of the air-compressor belt, injuring the fingers.
Sam Aburn and Sons, Dunedin ..	Woodworking ..	C. R. Aburn; 37 years ..	14th September, 1911; fingers injured	The timber Aburn was planing slipped and brought his left hand into contact with the knives of the machine, causing injury to several of his fingers.
Robert Holt and Sons, Napier ..	Circular saw ..	Frank Bennett; 16 years ..	14th September, 1911; hand cut off	Bennett was attempting to shift the saw-guard while the saw was running, when his left hand slipped on to the saw and was severed at the wrist.
Waihi Gold-mining Company (Limited), Waihi	Emery grinder ..	W. Smith; 22 years ..	15th September, 1911; finger injured	Whilst grinding a cotter at an emery wheel Smith's finger was caught between the rest and emery wheel, and lacerated.
Mrs. E. V. Couchman, Petone ..	Mangle	Ivy Gregg; 23 years ..	18th September, 1911; hand amputated	While working at the mangle Gregg's hand was caught in the mangle and crushed so severely that it had to be amputated.
Arthur M. Myers, Auckland	Electric elevator ..	Mrs. Pezaro; 33 years ..	25th September, 1911; body bruised	Mrs. Pezaro was stepping on to lift from the second floor when the lift-attendant must have inadvertently touched the starting. lever before she got into the cage. She was caught between lift-floor and overhead boarding, and afterwards precipitated on to the outside floor.
Skelton, Frostick, and Co. (Limited), Christchurch	Leather-splitting ..	H. Rump; 35 years.. ..	27th September, 1911; fingers crushed	Rump was working the machine when his left hand was caught between the rollers, three fingers being crushed.
Palmerston North Fresh Food and Cooling Stores (Limited), Palmerston North	Refrigerator ..	C. W. Graves; 24 years ..	30th September, 1911; arm broken	Graves was trying to put a belt on a pulley in motion when his right arm got in between the belting and the pulley, fracturing both bones in the arm.
Takapuna Tramways and Ferry Company (Limited), Auckland	Locomotive ..	E. Nolan; 33 years ..	25th October, 1911; arm fractured	Nolan was repairing a locomotive, and had gone into the pit underneath to look for a leak in the firebox. To get a better look at part of the engine he gave orders for it to be moved a little. It was being moved when he got pinned between the engine and a board that had been placed across the pit. He had an arm fractured and several ribs broken.

No. 5.—Return of Non-fatal Accidents in connection with Machinery, etc.—*continued.*

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Date of Accident, and Nature of injury.	Cause of Accident, and Remarks.
Stevenson and Cook, Port Chalmers ..	Main shafting ..	Philip Middleditch; 19 years..	30th October, 1911; legs fractured	Middleditch was engaged shifting the position of a set of chain blocks near the main driving-shaft when his clothing was caught by the shafting. He was whirled round several times, and his legs, coming into contact with a beam, were both broken.
John Court (Limited), Auckland ..	Hydraulic goods-lift	H. Plummer; 24 years ..	4th November, 1911; foot injured	When going up on the goods-lift Plummer allowed his foot to project over the outside edge of the flooring of the cage on which he was standing. When ascending it was caught on the first floor and bruised.
Clutha Timber and Hardware Company (Limited), Balclutha	Buzzer	A. Bryant	4th November, 1911; fingers injured	Bryant lost the tips of two of his fingers through contact with the knives of the machine.
Oamaru Woollen Factory Company (Limited), Oamaru	Spinning-mule ..	R. J. Smart; 15 years ..	4th November, 1911; left hand injured	Smart was cleaning the machine while it was in motion, when his hand was drawn into the gearing. His hand was so badly crushed that it had to be amputated.
Le Manquais, Lamb, and Co., Paeroa..	Band saw ..	A. Gambling; 19 years ..	8th November, 1911; hand injured	When working at the saw Gambling's hand slipped and came in contact with the saw, causing a flesh wound.
Andrew Miller, Nelson	Saw-bench ..	William Surrell; 39 years ..	9th November, 1911; fingers injured	Surrell attempted to adjust the guide while the saw was in motion, when his left hand was caught by the saw, causing injury to three of his fingers.
Murrays Limited, Invercargill ..	Can-body former ..	Charles Myers; 18 years ..	9th November, 1911; finger injured	A can-body got jambed in the machine, and Myers tried to take it out without stopping the machine when he got his finger injured.
The Western Taieri Land Drainage Board, Mosgiel	Oil-engine ..	Samuel McNeish; 43 years ..	11th November, 1911; brain injured and body bruised	Whilst attending to the oil-engine McNeish's coat was caught in the belting and was drawn round the shaft. His body was bruised, and he also suffered slight concussion of the brain.
Aulsebrook and Co., Christchurch ..	Milk-chocolate refining	J. Woods; 20 years ..	13th November, 1911; fingers injured	Woods had three fingers of right hand injured while working at the machine.
Aulsebrook and Co., Christchurch ..	Biscuit-cutting ..	Edward Hudson; 26 years ..	13th November, 1911; finger injured	In attempting to remove a piece of dough that was sticking to the underside of the cutter, whilst the machine was in motion, Hudson's middle finger of right hand was caught between the cutter and bedplate and crushed.
Dalgety and Co. (Limited), Blenheim ..	Petrol-engine ..	H. H. Horne; 34 years ..	15th November, 1911; left arm mutilated	Horne allowed his coat to get caught by the shafting, when he was wound around it. His arm was fractured and afterwards amputated.
Green, McLean, and Beaven (Limited), Wanganui	Shaper	F. McDavitt; 21 years ..	27th November, 1911; hand injured	When working at the shaper McDavitt's right hand slipped and came into contact with the knife of the machine, causing the loss of the thumb at first joint and three of the fingers.
L. D. Nathan and Co., Auckland ..	Electric lift ..	James Stone; 42 years ..	27th November, 1911; skull fractured	Stone was leaning over the side of the lift-well to adjust a rope which had fouled when the descending cage of the lift caught his head, fracturing his skull and doing injury to his cheek and the back of his head.
Frank Greenslade and Co., Nelson ..	Gas-engine ..	William Greenslade; 27 years..	4th December, 1911; body bruised	Greenslade's clothing caught on the shafting, drew him in, and his body was badly bruised. No bones were broken.
A. and L. Seifert's Flax-dressing Company (Limited), Shannon	Flax-dressing ..	James Norton; 23 years ..	12th December, 1911; hand crushed	When working at the machine Norton's left hand was caught in the flax-stripper and crushed.
Murrays Limited, Invercargill ..	Guillotine ..	Roy McKenzie; 16 years ..	16th December, 1911; finger injured	While reaching over to remove a sheet of tin McKenzie accidentally put his foot on the starting-treadle, causing the knife to come down on his finger.
Oamaru Woollen Factory Company (Limited), Oamaru	Power-loom ..	Mary White; 20 years ..	16th December, 1911; scalp injured	White was cleaning the loom while in motion when the crank caught her hair ribbon and hair, causing injury to her scalp.

Otago Harbour Board, Dunedin ..	Circular saw ..	Stanley Callon; 17 years ..	18th December, 1911; fingers injured	Callon was sawing a piece of timber when his left hand slipped and came into contact with the saw, injuring two fingers.
P. and D. Duncan (Limited), Christchurch	Steam-hammer ..	Sydney Shackle; 28 years ..	12th January, 1912; toe injured ..	While working at the steam hammer an iron beam struck Shackle's right foot, injuring the little toe.
Alliance Box Company (Limited), Dunedin	Circular saw ..	Angus Robertson; 18 years ..	17th January, 1912; finger cut ..	When greasing the saw while in motion Robertson's left hand came into contact with it, cutting the index finger.
Thomas Latta, Owaka	Circular saw ..	P. R. Campbell; 20 years ..	18th January, 1912; three fingers of right hand cut off	When cleaning the sawdust away from the circular saw Campbell's hand came in contact with the saw.
Alliance Box Company (Limited), Dunedin	Stitching-boxes ..	Eileen Bourke; 19 years ..	20th January, 1912; finger injured	Bourke got her finger crushed when working the machine.
Kelly and Moore, Auckland	Boot-press ..	Charles Deason; 30 years ..	24th January, 1912; fingers injured	Deason was picking bits of the leather out of the gearing while the machine was in motion, when two of his fingers were crushed.
The Waikato Farmers' Co-operative Bacon Company (Limited), Frankton Junction	Air-battery fan ..	H. Watts; 52 years ..	24th January, 1912; arm crushed	Watts was standing on a pipe feeling the bearing of fan when he slipped. He threw his left arm out to save himself, when it was caught by the fan, crushing it severely and necessitating its amputation.
Sargood, Son, and Ewen (Limited), Dunedin	Heeling	Victor Barnes; 21 years ..	26th January, 1912; finger injured	Barnes' finger was injured while working at the heeling-machine.
Robert Holt and Sons, Napier ..	Circular saw ..	F. Ball; 40 years	7th February, 1912; leg cut ..	Ball was sawing a piece of timber when it flew back and struck him on the leg, causing a flesh wound.
Sargood, Son, and Ewen (Limited), Dunedin	Sole-cutting press	William Clarkson; 20 years ..	8th February, 1912; fingers cut ..	Clarkson's finger came into contact with the circular knife of the press.
Aulsebrook and Co., Christchurch ..	Milk-kiss rollers ..	James Dodson; 19 years ..	9th February, 1912; fingers crushed	In attempting to pick something off the rollers while the machine was in motion Dodson's left hand was caught by the rollers and crushed.
William Cable and Co., Kaiwarra ..	Lathe	R. Dudley; 17 years ..	12th February, 1912; fingers cut	Dudley's left hand was crushed while engaged at the lathe.
A. and T. Burt (Limited), Dunedin ..	Turret lathe ..	T. N. Mooney; 21 years ..	12th February, 1912; fingers injured	When working at the lathe Mooney's right hand was crushed.
Christchurch Meat Company (Limited), Burnside	Steam-engine ..	John Stuart; 61 years ..	12th February, 1912; finger crushed	Stuart's hand got into the bevel-gearing of the governor while the engine was in motion.
Kempthorne, Prosser, and Co. (Limited), Dunedin	Rip saw	W. S. Ireland; 19 years ..	13th February, 1912; finger cut..	Ireland's hand came into contact with the saw when it was in motion.
Smith and Smith Sawmilling Company (Limited), Christchurch	Planing	Robert Douglas; 46 years ..	14th February, 1912; thumb cut off	Douglas allowed his hand to get into contact with the cutters of the planing-machine.
Mann and Addison, Newton	Buzzer	Frank Andrews; 40 years ..	19th February, 1912; five fingers cut off	Andrews's hands came into contact with the knives of the machine, causing injury to five of them.
Butler Bros. (Limited), Ruatapu ..	Gang-saw ..	Frederick Jusick; 26 years ..	22nd February, 1911; thumb and finger injured	In endeavouring to remove a chip from the saw while it was in motion Jusick's hand came in contact with the saw.
Alexander Harvey and Sons (Limited), Auckland	Stamping-press ..	R. Harris; 17 years ..	27th February, 1912; finger cut..	Harris allowed his finger to get under the die of the press.
The New Zealand Times Company (Limited), Wellington	Rotary-printing press	William Kemp; 21 years ..	4th March, 1912; arm crushed ..	While feeding paper into the machine Kemp's fingers slipped between the rollers. His hand and arm were drawn in before the machine could be stopped, crushing the arm severely. His arm had to be amputated above the elbow.
Griffin and Son (Limited), Nelson ..	Chocolate-refining	W. H. R. Harris; 14 years ..	6th March, 1912; fingers crushed..	When working at the machine Harris's hand was caught in the gearing, causing the loss of three fingers of his left hand.
Waihi Gold-mining Company (Limited), Waikino	Sawmill	J. Miller; 55 years	29th March, 1912; finger injured	While engaged sawing timber Miller's finger came into contact with the saw.

No. 6.—Return of Fatal Accidents in connection with Machinery during the Financial Year ended the 31st March, 1912.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured	Date of Accident and Nature of injury.	Cause of Accident, and Remarks.
New Zealand Express Company (Limited), Auckland	Hydraulic lift ..	Colin Charles Clark; 26 years	3rd April, 1911; crushed ..	It is presumed that Clark missed his footing and fell down the well of the lift. While falling he must have clutched the ropes attached to the cage, causing the cage to come down on top of him, and crushing him.
James Stephen, Stavely	Water-wheel ..	James Stephen; 60 years ..	22nd April, 1911; head crushed ..	While cleaning out the trench under the wheel Stephen's clothes were caught by the flexible coupling which drew him round the shaft, causing the injuries to his head and chest.
Smith and Caughey (Limited), Auckland	Electric lift ..	William Henry Brewer; 15 years	1st May, 1911; neck broken ..	Brewer knelt on the floor to look down the lift-well when the cage of lift came down, caught his head, and broke his neck.
Wilson's Portland Cement Company (Limited), Auckland	Shell-washing ..	Frederick Gallagher; 42 years	31st May, 1911; legs injured ..	While Gallagher was walking alongside the machine in motion he slipped and fell into it. Both legs were caught by the spiral conveyor, and so injured as to cause his death.
John McLean and Sons (Limited), Bealey Flat	3-throw electric-driven pump	Steven Wood; 23 years ..	22nd June, 1911; arm crushed ..	Wood was attending to the brushes of the electric motor when his overcoat got entangled in the gearing of the pump and pulled him over. In falling his left arm got into the gearing, and was crushed from the elbow to the wrist. He died nineteen days after the accident from nervous exhaustion.
Dispatch Foundry Company (Limited), Greymouth	Overhead crane ..	A. Ellison; 19 years ..	6th July, 1911; crushed ..	Ellison was drilling holes in the rails which carried the crane, and failed to notice the crane approaching him. The crane pinned him against the drilling-post he was using, and killed him instantly.
H. S. Dadley, Auckland	Hydraulic lift ..	Douglas Manttan; 26 years ..	9th August, 1911; crushed ..	When using the lift on the first floor Manttan neglected to close the sliding door which protects the lift-well. While assisting to load the goods on a dray, some one had raised the cage of the lift to another floor landing. The deceased, thinking the cage of the lift was still where he had left it, stepped back and fell down the lift-well, causing such injuries that he died a few days later.
John McLean and Sons (Limited), Otira	Electric locomotive	Frank Cuthbert; 35 years ..	22nd August, 1911; body crushed	Cuthbert was driving the electric locomotive with the trolly-pole turned the wrong way, and when going down the hill the pole came off; he caught the pole with one hand and put the brake on with the other. He afterwards let go the brake and caught hold of the pole with both hands. The pole, however, slewed round, struck the concrete-mixer, broke, and swinging round caught Cuthbert across the chest and pinned him against the motor, and crushed him. He died from shock.
Harold Jarvis, Rongotea	Flax-mill ..	Frank Healy; 31 years ..	2nd September, 1911; crushed ..	Healy was repairing the belt of the scutcher when by some means the engine started. His clothing was caught by the belting, and he was dragged around the shafting, striking the platform with great violence. He died half an hour after the accident.
Kauri Timber Company (Limited), Kohukohu	Drag saw ..	Papa Huru Titore; 19 years ..	19th October, 1911; abdomen injured	While sawing a piece of timber it flew over the saw and struck Titore in the abdomen, injuring him severely. His death occurred two days after the accident.
Oates Bros., Green Hills	Stone-crusher ..	William Parsons; 16 years ..	1st November, 1911; skull fractured	Parsons was oiling the crank-shaft bearing when the loose end of his coat was caught by the revolving shaft. His skull was fractured, and he received other injuries so serious that death ensued a few hours after the accident.
Aulesbrook and Co., Christchurch ..	Pulley on main shaft	William Lurch; 22 years ..	13th November, 1911; crushed ..	Lurch was putting the belt on the pulley when his shirt-sleeve was caught between the belt and the pulley, drawing him round the shaft several times before the engine could be stopped. He died shortly after the accident.
L. Zala, The Forks	Sawmill	John Minson; 45 years ..	20th November, 1911; skull fractured	Minson was struck on the head by the belt-fastener of a revolving belt, which fractured his skull. Death ensued four days after the accident.
Smeaton's Dredging Syndicate, Reefton	Gold-dredge ..	George Roberts; 53 years ..	18th March, 1912; crushed ..	Roberts was examining one of the bearings on the elevator-shaft when by some means his clothing was caught by the shaft. He was carried round by the shaft, and received such injuries as to cause his death.

No. 7.—Return of Steam-winding-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Israel Webster	Winding, competency	May 12	459
Frederick Cullmann	,, ,,	,, 12	460
Richard Sidney Austin	,, ,,	,, 12	461
Thomas Helling	,, ,,	July 12	462
Robert Meikle Grant	,, ,,	August 15	463
Alfred Ernest Robinson	,, ,,	,, 15	464
Alfred George Butement	,, ,,	,, 15	465
Archibald John McInnes	,, ,,	December 1	466
		1912.	
Wilmot Armstrong	,, ,,	February 15	467
Harold Leslie Williams	,, ,,	,, 15	468
James Fowler	,, ,,	,, 15	469
Alfred Turner	,, ,,	,, 15	470
Chisholm Grant Hawken	,, ,,	,, 15	471
Edgar Nelson	,, ,,	,, 15	472

No. 8.—Return of Electric-winding-engine Drivers to whom Certificates of Service have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Samuel George Veal	Electric-winding, service	December 1	1
Thomas Murray, jun.	,, ,,	,, 1	2
Hugh Edward McQuillan	,, ,,	,, 1	3
Edward Morrison Mackie	,, ,,	,, 1	4
Edwin Richard Mitchell	,, ,,	,, 1	5
Albert Collins Yelland	,, ,,	,, 1	6
John Patrick McDonald	,, ,,	,, 1	7
Benjamin Burgess	,, ,,	,, 1	8
		1912.	
William Keyston Clark	,, ,,	February 15	9
Thomas Francis O'Sullivan	,, ,,	,, 15	10
John George Snow	,, ,,	,, 15	11
Charles Black	,, ,,	,, 15	12
Thomas Matthew Snow	,, ,,	,, 15	13

No. 9.—Return of Locomotive and Traction Engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
William Morse	Locomotive and traction, competency	May 12	2366
Arthur Win	Ditto	,, 12	2367
Charles Penny	,,	,, 12	2368
William Donald Cattanach	,,	,, 12	2369
Thomas Courtney Devery	,,	,, 12	2370
Frank Hugh Burns	,,	,, 12	2371
Thomas Joseph Henry	,,	,, 12	2372
George Derby Horgan	,,	,, 12	2373
William Leonard Rapley	,,	,, 12	2374
Alexander Macgregor Macpherson	,,	,, 12	2375
Jens Poulsen Pallesen	,,	,, 12	2376
Otto Albert Petrowski	,,	,, 12	2377

No. 9.—Return of Locomotive and Traction Engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
James Gordon McKay	Locomotive and traction, competency	May 12	2378
Charles Dickson	Ditto	,, 12	2379
Charles Herbert Graham	,,	,, 12	2380
William John Harkness	,,	,, 12	2381
Samuel Jacob King	,,	,, 12	2382
James Milne	,,	,, 12	2383
Francis Herbert Edward Ritchie	,,	,, 12	2384
John Benjamin Winter	,,	,, 12	2385
James Young	,,	,, 12	2386
Henry Knight	,,	,, 12	2387
John McLachlan	,,	,, 12	2388
William Perry	,,	,, 12	2389
Owen Ruddy	,,	,, 12	2390
Henry Walter Vicary	,,	,, 12	2391
George Henry William Daikee	,,	,, 12	2392
Harold Winter	,,	,, 12	2393
William James Appelbe	,,	,, 12	2394
John Lambert Taylor	,,	,, 12	2395
Frederick Ellis, jun.	,,	,, 12	2396
John Gunn	,,	,, 12	2397
Albert Beliski	,,	,, 12	2398
James Don Taylor	,,	,, 12	2399
Arthur Haydon Wood	,,	,, 12	2400
Roy Leo Parkin	,,	,, 12	2401
Alexander Holmes	,,	,, 12	2402
George Augustus Williams	,,	,, 12	2403
Clement Lodge	,,	,, 12	2404
Hugh Ballantine	,,	,, 12	2405
George Herbert Duffell	,,	,, 12	2406
William Johnson	,,	,, 12	2407
Robert Morrison	,,	,, 12	2408
William O'Shannessy	,,	,, 12	2409
Walter James Sinclair	,,	,, 12	2410
Carl August Blank	,,	,, 12	2411
Michael Collett	,,	,, 12	2412
Ernest Victor Garlick	,,	,, 12	2413
James Duncan Hearn	,,	,, 12	2414
Thomas Francis Turner	,,	,, 12	2415
John Brown	,,	July 12	2416
James Jack	,,	,, 12	2417
James Davies	,,	,, 12	2418
John Alsop	,,	,, 12	2419
Frederick Francis Mills	,,	,, 12	2420
Joseph Alfred Mills	,,	,, 12	2421
Frank Oldham White	,,	,, 12	2422
Albert Edward Church	,,	,, 12	2423
George Newman Hunt	,,	,, 12	2424
James Benjamin Garnham	,,	August 15	2425
Joseph Roger Todd	,,	,, 15	2426
Edmond Barry	,,	,, 15	2427
William Edward Corbett	,,	,, 15	2428
Charles Alfred Pascoe	,,	,, 15	2429
William Henry Rayworth	,,	,, 15	2430
William Patrick Sheehy	,,	,, 15	2431
Kenneth Gilbert Hunt	,,	,, 15	2432
Charles Mackie Smith	,,	,, 15	2433
William Henderson	,,	,, 19	2434
William Kerr	,,	,, 15	2435
William Townley	,,	,, 15	2436
Thomas McAvoy	,,	,, 19	2437
Arthur John Pitcher	,,	,, 15	2438
Francis Harper Blakemore	,,	,, 15	2439
Albert Victor Fairey	,,	,, 15	2440
Nathaniel Fidler	,,	,, 15	2441
William John Fisher	,,	,, 15	2442

No. 9.—Return of Locomotive and Traction Engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Samuel Humm	Locomotive and traction, competency	August 15	2443
Charles Montgomery	Ditto	,, 15	2444
Charles Henry Morriss	,,	,, 15	2445
Ernest Roland Morrison	,,	,, 15	2446
Thomas Reid	,,	,, 15	2447
John Henry Thompson	,,	,, 15	2448
Ernest Vincent	,,	,, 15	2449
Stephen McDonald	,,	,, 15	2450
David Beattie	,,	,, 15	2451
James Arthur Meek	,,	,, 15	2452
John Clement	,,	,, 15	2453
Daniel Thomas Madden	,,	,, 15	2454
Edwin Alfred Watkins	,,	,, 15	2455
William James Shaw	,,	,, 15	2456
Robert Allan	,,	,, 15	2457
Herbert Alfred Bridgman	,,	,, 15	2458
Michael Edward Cody	,,	,, 15	2459
Walter Barr Craig	,,	,, 15	2460
James Hamilton	,,	,, 15	2461
John Lamb	,,	,, 15	2462
Angus Patterson	,,	,, 15	2463
John Taylor Pope	,,	,, 15	2464
William Pope	,,	,, 15	2465
John Laidlaw Woodward	,,	,, 15	2466
William Dale	,,	,, 15	2467
Moses Gollan	,,	,, 15	2468
Thomas Henwood	,,	,, 15	2469
Arthur Charley Gadd	,,	,, 15	2470
James Percival Prouse	,,	December 1	2471
James Allan	,,	,, 1	2472
William Percy Allen	,,	,, 1	2473
James Francis Lilly	,,	,, 1	2474
John Edwin Mudgway	,,	,, 1	2475
John Sutton Millett	,,	,, 1	2476
Charles Edward Brassington	,,	,, 1	2477
George Robert Pirie	,,	,, 1	2478
Charles George Silvester	,,	,, 1	2479
William Alfred Andrew	,,	,, 1	2480
James Egan	,,	,, 1	2481
Edward Bloomfield	,,	,, 1	2482
John Elmslie Coskerie	,,	,, 1	2483
William Leonard Harrison	,,	,, 1	2484
William Hayes	,,	,, 1	2485
John Leonard	,,	,, 1	2486
Owen Joseph Francis McKee, jun.	,,	,, 1	2487
Walter Henry Traves	,,	,, 1	2488
Graham Augustus Bruere	,,	,, 1	2489
Samuel David Cupples	,,	,, 1	2490
William Henry Feather	,,	,, 1	2491
Harley Thomas James Gibbs	,,	,, 1	2492
Leslie Hall	,,	,, 1	2493
Frederick Jackson	,,	,, 1	2494
Richard Trehair Matthews	,,	,, 1	2495
William O'Neill	,,	,, 1	2496
Arthur Edward Rossiter	,,	,, 1	2497
George Arthur Smith	,,	,, 1	2498
William Smith	,,	,, 1	2499
William James Lobb	,,	,, 1	2500
John Osbaldeston Kitching	,,	,, 1	2501
Arthur Hill	,,	,, 1	2502
Edwin Alexander Menzies	,,	,, 1	2503
Percy George Rentone Small	,,	,, 1	2504
William Byers	,,	,, 1	2505
Alexander Chalmers	,,	,, 1	2506
James Cusack	,,	,, 1	2507

No. 9.—Return of Locomotive and Traction Engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Alexander Grant	Locomotive and traction, competency	December 1	2508
William Hollebon	Ditto	,, 1	2509
Alexander Hunter McKenzie	,, ...	,, 1	2510
James Francis Norman	,, ...	,, 1	2511
Charles Jess Reynolds	,, ...	,, 1	2512
Andrew Chambers Robinson	,, ...	,, 1	2513
Thomas Weatherburn	,, ...	,, 1	2514
John Williamson	,, ...	,, 1	2515
Cyril George Knipe	,, ...	,, 1	2516
John Jones	,, ...	,, 1	2517
Sydney Edward Smith	,, ...	,, 1	2518
Alan Colin Lowe	,, ...	,, 1	2519
Pierre Louis Guillard, jun.	,, ...	,, 1	2520
John Llewellyn Williams	,, ...	,, 1	2521
Thomas Hibbs	,, ...	,, 1	2522
Henry James Hopgood	,, ...	,, 1	2523
John Butcher	,, ...	,, 1	2524
Henry John Ellis	,, ...	,, 1	2525
Hugh Matthew Blair	,, ...	,, 1	2526
Horace Campbell Cockburn	,, ...	,, 1	2527
William Francis McIsaac	,, ...	,, 1	2528
Leslie William Wright	,, ...	,, 1	2529
James Aikman	,, ...	,, 1	2530
Herbert Milner Carr	,, ...	,, 1	2531
Joseph Parkes	,, ...	,, 1	2532
Arthur Williams	,, ...	,, 1	2533
Charles Mitchell	,, ...	,, 1	2534
Thomas Sheehy	,, ...	,, 1	2535
		1912.	
John Steffens	,, ...	February 15	2536
James Pennington Bates	,, ...	,, 15	2537
Michael Joseph Walsh	,, ...	,, 15	2538
George Herbert Bransby Lill	,, ...	,, 15	2539
Daniel Bishop	,, ...	,, 15	2540
William Collett	,, ...	,, 15	2541
Richard Stott	,, ...	,, 15	2542
George Herbert Hansen	,, ...	,, 15	2543
Alfred Harris	,, ...	,, 15	2544
Albert Edney Briggs	,, ...	,, 15	2545
William Couper Donnelly	,, ...	,, 15	2546
Henry Austin Kirby	,, ...	,, 15	2547
Herbert Henry Martyn	,, ...	,, 15	2548
Percy Edwin Ford	,, ...	,, 15	2549
John William Soper	,, ...	,, 15	2550
Francis Sydney Watson	,, ...	,, 15	2551
William Penfold Biddle	,, ...	,, 15	2552
Francis Ivan Cross	,, ...	,, 15	2553
William John Eynon	,, ...	,, 15	2554
Charles Henry Hargreaves	,, ...	,, 15	2555
Jesse Mace Maisey	,, ...	,, 15	2556
Thomas Baxter	,, ...	,, 15	2557
John Blair	,, ...	,, 15	2558
Richard Jamieson	,, ...	,, 15	2559
James Andrew Stewart	,, ...	,, 15	2560
William Frederick Charles Hahn	,, ...	,, 15	2561

No. 10.—Return of Engineers to whom Extra First-class Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Arthur Frederick Priddey	Extra first-class stationary, competency	July 12	78
Francis Howard Lorking	Ditto	August 15	79
Harold Humphrey Matthews	,,	,, 15	80
Nicol James Webster	,,	December 1	81
		1912.	
Thomas Richard Overton	,,	February 15	82
Thomas Steele Goudie	,,	,, 15	83

No. 11.—Return of First-class Stationary-engine Drivers to whom Certificates of Service have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Robert Moore	First-class stationary, service	May 12	1691
James Sheppard	,, ,,	July 12	1692
Charles Adams	,, ,,	December 1	1693
John Sangster	,, ,,	,, 1	1694
Edward Snowball	,, ,,	,, 1	1695
		1912.	
John Carless	,, ,,	February 15	1696

No. 12.—Return of First-class Stationary-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
John Thomas Clark	First-class stationary, competency	May 12	1509
Arthur James Merrifield	Ditto	,, 12	1510
Adam Scott Mitchell	,,	,, 12	1511
William Bruce Robson	,,	,, 12	1512
Frederick Harmond Briggs	,,	,, 12	1513
Samuel Stringer	,,	,, 12	1514
Edward George Langham	,,	,, 12	1515
John King	,,	,, 12	1516
Colin Campbell Algie	,,	,, 12	1517
Patrick Galway	,,	,, 12	1518
Henry Scott	,,	,, 12	1519
Thomas Helling	,,	,, 12	1520
Daniel Phillips McIntyre	,,	,, 12	1521
William David Blake	,,	August 15	1522
Percy Hellyer Davey	,,	,, 15	1523
Hugh Campbell	,,	,, 15	1524
Edward Walter Hodgson	,,	,, 15	1525
Frank Le Roi	,,	,, 15	1526
George Ledingham	,,	,, 15	1527
Charles Ernest Rillstone	,,	,, 15	1528
James Newsham West	,,	,, 15	1529
Alfred George Butement	,,	,, 15	1530
Richard Stevens	,,	December 1	1531
Wilfred John Allcock	,,	,, 1	1532
William Arthur Tomlinson	,,	,, 1	1533
Bower Pearce	,,	,, 1	1534
Thomas Edmund McMillan	,,	,, 1	1535
Richard James Arthur	,,	,, 1	1536

No. 12.—Return of First-class Stationary-engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Francis George Gibbs	First-class stationary, competency	December 1	1537
Leonard Alexander Jardin	Ditto	,, 1	1538
John Chapman Trebilcock	,,	,, 1	1539
Thomas Richard Overton	,,	,, 1	1540
George Wilson Tinning	,,	,, 1	1541
John William Ebbitt Kennedy	,,	,, 1	1542
Frederick Charles Purvis	,,	,, 1	1543
John Alexander Falconer	,,	,, 1	1544
Mayo Carlton Clark	,,	,, 1	1545
Walter Coburne	,,	,, 1	1546
Francis Arthur Llewellyn Murray	,,	,, 1	1547
Harry Williams	,,	,, 1	1548
Henry Lowther Williams	,,	,, 1	1549
John Gillow Elliott	,,	,, 1	1550
		1912.	
Wilmot Armstrong	,,	February 15	1551
Adam Millar Cook	,,	,, 15	1552
William Walker	,,	,, 15	1553
Thomas Henry Dawson Boles	,,	,, 15	1554
Benjamin Lee	,,	,, 15	1555
Henry Robert Linkhorn	,,	,, 15	1556
Charles Percy Baker	,,	,, 15	1557
Henry William Thorpe	,,	,, 15	1558

No. 13.—Return of Second-class Stationary-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
William Thomas Gilbert	Second-class stationary, competency	May 12	3424
John Broadbent	Ditto	,, 12	3425
Joseph Muhlegger	,,	,, 12	3426
Edwin Thomas Jeffrey May	,,	,, 12	3427
Thomas Duncan Bathgate	,,	,, 12	3428
William James Maslen	,,	,, 12	3429
John Joseph Beagley	,,	,, 12	3430
George Henry Lamb	,,	,, 12	3431
Francis William Smith	,,	,, 12	3432
Horton Henry Hitchon	,,	,, 12	3433
Charles Hector McLean	,,	,, 12	3434
Alexander Harper	,,	,, 12	3435
Charles Edward Crews	,,	,, 12	3436
Duncan Gilbert Howard	,,	,, 12	3437
William Grant Morrison	,,	,, 12	3438
John Edward Mudford	,,	,, 12	3439
Archibald David Brown	,,	,, 12	3440
John Leonard Taylor	,,	,, 12	3441
Robert Scott	,,	,, 12	3442
John Alfred Thompson	,,	,, 12	3443
William Byers	,,	,, 12	3444
Frederick Wright	,,	,, 12	3445
Valentine Armstrong	,,	,, 12	3446
William Thomas Harris	,,	,, 12	3447
Robert Leslie Metcalfe	,,	,, 12	3448
Simpson McIvor	,,	,, 12	3449
John Frederick Tollan	,,	,, 12	3450
John Martin	,,	,, 12	3451
Donald Calder Bower	,,	,, 12	3452
Andrew Mitchell Stirling	,,	July 12	3453
Albert Bary	,,	,, 12	3454

No. 12.—Return of Second-class Stationary-engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Louis Matthew Brunetti	Second-class stationary, competency	July 12	3455
James Spencer White	Ditto	,, 12	3456
Charles August Ambrose	,, ...	,, 12	3457
James Waterstreet	,, ...	,, 12	3458
William Henry Arnold	,, ...	,, 12	3459
Otto Alfred Gundersen	,, ...	August 15	3460
William Alexander Mason	,, ...	,, 15	3461
Frederick Joseph Sparrow	,, ...	,, 15	3462
George Robert Ernest Neüman	,, ...	,, 15	3463
Leslie Campbell	,, ...	,, 15	3464
Thomas Hansen	,, ...	,, 15	3465
Niels Olsen	,, ...	,, 17	3466
Philip Gerard Milne	,, ...	,, 15	3467
Ernest Clifford Wadsworth	,, ...	,, 15	3468
James Alfred Freeman Johnston ..	,, ...	,, 15	3469
William Archibald Wilson	,, ...	,, 15	3470
John Barclay	,, ...	,, 15	3471
Edward Walter Hodgson	,, ...	,, 15	3472
Percy Charles Viggers	,, ...	,, 15	3473
John William Garner	,, ...	,, 15	3474
Alexander Aitken	,, ...	,, 15	3475
John Thomas Coffey	,, ...	,, 15	3476
Leslie Martin Tweedie	,, ...	,, 15	3477
Boyd Bennie Richardson	,, ...	,, 15	3478
Hugh Bryce	,, ...	,, 15	3479
John Alexander Kerr	,, ...	,, 15	3480
Henry Murray	,, ...	,, 15	3481
James Ritchie Mochan	,, ...	,, 15	3482
John Williamson Shand	,, ...	,, 15	3483
James Emanuel Palmer	,, ...	,, 17	3484
Frederick William Sparke	,, ...	,, 15	3485
Thomas Alfred Watkins	,, ...	,, 15	3486
Frank Mark Collins	,, ...	,, 15	3487
James Milne, jun.	,, ...	,, 15	3488
Norman Luja Dahl	,, ...	,, 15	3489
William Holmes	,, ...	,, 15	3490
William Mugridge	,, ...	,, 15	3491
John O'Donnell	,, ...	,, 15	3492
Francis Sydney Watson	,, ...	,, 15	3493
Joseph Harris	,, ...	,, 15	3494
Charles Stafford Dickinson	,, ...	,, 15	3495
Dudley Starr	,, ...	,, 15	3496
Albert George Thompson	,, ...	,, 15	3497
Lionel George Morris	,, ...	,, 15	3498
William James Kirker	,, ...	,, 15	3499
John William Thompson	,, ...	,, 15	3500
John Alexander Adams	,, ...	,, 15	3501
William John Baker	,, ...	,, 15	3502
Alexander Mackenzie	,, ...	,, 15	3504
Percy Clyde Payne	,, ...	,, 15	3505
William Henry Shaw	,, ...	,, 15	3506
William Charles Clarke	,, ...	,, 15	3507
David Bruce Murdoch	,, ...	,, 15	3508
John Linaker	,, ...	December 1	3509
William Roberts	,, ...	,, 1	3510
James Morris Stephenson	,, ...	,, 1	3511
John George Brady	,, ...	,, 1	3512
Harold William James Beck	,, ...	,, 1	3513
William James Child	,, ...	,, 1	3514
William Sessions Hanford	,, ...	,, 1	3515
David Andrew Murray	,, ...	,, 1	3516
Joseph Forrester Stirling	,, ...	,, 1	3517
Albert Raynor Anderson	,, ...	,, 1	3518
George Best Edwards	,, ...	,, 1	3519
Edward Carlton Gibbs	,, ...	,, 1	3520

No. 13. Return of Second-class Stationary-engine Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Carl Theodore Kuhtze	Second-class stationary competency	December 1	3521
Thomas O'Dea	Ditto	,, 1	3522
Robert Alexander Needs	,,	,, 1	3523
Matthew Aunger Robert Spear	,,	,, 1	3524
Walter William Wilson	,,	,, 1	3525
Colin Alexander McDonald	,,	,, 1	3526
John William Gray	,,	,, 1	3527
William Eric Baxter Robertson	,,	,, 1	3528
George Westwood Kidd Miller	,,	,, 1	3529
Matthew Miller	,,	,, 1	3530
George Henry Williams	,,	,, 1	3531
Gavin Ballantyne	,,	,, 1	3532
Ernest Harold Atkinson	,,	,, 1	3533
Roy Arthur Bird	,,	,, 1	3534
Michael Sherlock	,,	,, 1	3535
William Botham White	,,	,, 1	3536
Francis John William McKeown	,,	,, 1	3537
Hugh Reid	,,	,, 1	3538
Edward Ball	,,	,, 1	3539
George Cammock	,,	,, 1	3540
Martin Coyne	,,	,, 1	3541
Charles Keatley	,,	,, 1	3542
William Keefe	,,	,, 1	3543
Henry Albert Goodhue	,,	,, 1	3544
Henry John Bignall	,,	,, 1	3545
Frederick Daw	,,	,, 1	3546
Levi James	,,	,, 1	3547
Edward Matthews	,,	,, 1	3548
Joseph Taylor McEwan	,,	,, 1	3549
David Joseph Williams	,,	,, 1	3550
Albert Edwin Burrell	,,	,, 1	3551
Albert Siddall	,,	,, 1	3552
Benjamin Fleetwood Cargill	,,	,, 1	3553
		1912.	
Walter Dawson Gordon Howatson	,,	February 15	3554
Stanley Bennett Hall	,,	,, 15	3555
Frederick Aggett	,,	,, 15	3556
John Dyer	,,	,, 15	3557
Victor Stephen Bravo	,,	,, 15	3558
David Cairns	,,	,, 15	3559
Carl Otto Hans Peter Nielsen	,,	,, 15	3560
Herbert Leslie Sigley	,,	,, 15	3561
Wellwood Stanley Anderson	,,	,, 15	3562
Thomas Adams	,,	,, 15	3563
Bartholomew Farrington	,,	,, 15	3564
Edwin George Green	,,	,, 15	3565
John Mitchell	,,	,, 15	3566
John Bird	,,	,, 15	3567
Tanjore Boyce	,,	,, 15	3568
Francis Henry Donovan	,,	,, 15	3569
Frederick De Bert Wells	,,	,, 15	3570
John Vevers Buse	,,	,, 15	3571
John Melville	,,	,, 15	3572
Ernest William Skeet	,,	,, 15	3573
Donald Cameron	,,	,, 15	3574
Andrew Duckworth	,,	,, 15	3575
Augustaff Albert Johnson	,,	,, 15	3576
William Andy Wilson	,,	,, 15	3577
John Solomon Taylor	,,	,, 15	3578
William Fleming	,,	,, 15	3579
John Glen	,,	,, 15	3580
Stephen Herbert Adams	,,	,, 15	3581
Alban Joseph Rosenbaum	,,	,, 15	3582
Matthew Bennie	,,	,, 15	3583
William McCaffrey	,,	,, 15	3584
Alexander Dickson	,,	,, 15	3585

No. 14.—Return of Electric-tram Drivers to whom Certificates of Service have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
William Read	Electric-tram, service	September 5	1
Robert Alexander Bremner	,,	,, 5	2
Alfred Richard Jones	,,	,, 5	3
Edward Alfred Mills	,,	,, 5	4
George Bell Anderson	,,	,, 5	5
John Robert Gillies	,,	,, 5	6
Harry Corbett Green	,,	,, 5	7
Frederick George Hilliker	,,	,, 5	8
John Samuel Johnson	,,	,, 1	9
Frederick William Macdonald	,,	,, 5	10
James McKane	,,	,, 5	11
George Pearce	,,	,, 5	12
Edward Joseph Quarterman	,,	,, 5	13
James Albert Richardson	,,	,, 5	14
James Hugh Cormick	,,	,, 5	15
John Helmsley	,,	,, 5	16
Edwin Montague Rix	,,	,, 5	17
George McDowall	,,	,, 5	18
John Thomas Sturgeon	,,	,, 5	19
David Park Heatley	,,	,, 5	20
Walter Robert Deane Homan	,,	,, 5	21
James Read	,,	,, 5	22
Owen James Ward	,,	,, 5	23
Alexander Berland	,,	,, 5	24
Robert James Bowles	,,	,, 5	25
Thomas Hopkins	,,	,, 5	26
Harry Cross	,,	,, 5	27
William Murray	,,	,, 5	28
John McTague	,,	,, 5	29
James Neame	,,	,, 5	30
William Pryde Robertson	,,	,, 5	31
George Thom	,,	,, 5	32
Nicholas Mathewson	,,	,, 5	33
William Blair	,,	,, 5	34
Archibald Grubb Drummond	,,	,, 5	35
Charles Pearce	,,	,, 5	36
Richard Randle	,,	,, 5	37
William Hope	,,	,, 5	38
John Broadfoot	,,	,, 5	39
Francis Gantley	,,	,, 5	40
Alfred Charles Lenz	,,	,, 5	41
George Ernest James	,,	,, 5	42
John Peter Peterson	,,	,, 5	43
Andrew Lindsay	,,	December 4	44
Isaac Stephenson	,,	,, 4	45
Charles Robert Stewart	,,	,, 4	46
Sidney Lionel Leonard	,,	,, 4	47
John William Hopper	,,	,, 4	48
Henry Innis, jun.	,,	,, 4	49
Andrew Couper	,,	,, 4	50
Timothy Herlihy	,,	,, 4	51
Louis Robert Hill	,,	,, 4	52
William Woolley	,,	,, 4	53
Edward Draper	,,	,, 4	54
George Edward Tricker	,,	,, 4	55
Thomas Allan	,,	,, 4	56
Malcolm Campbell Cormack	,,	,, 4	57
Thomas Henry Palmer	,,	,, 4	58
Frederick Randell	,,	,, 4	59
George Roberts	,,	,, 4	60
Thomas Walter Gibson	,,	,, 4	61
John Joseph Golden	,,	,, 4	62
Albert Edward Bennett	,,	,, 4	63
William John Hilder	,,	,, 4	64
John Young Alexander Paterson Clark	,,	,, 4	65

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
William Arthur Hilliker	Electric-tram, service	December 4	66
Donald Archibald McLeod	,,	,, 4	67
Robert Brown	,,	,, 4	68
William Thomas Charles Wortley	,,	,, 4	69
William Russell Dixon	,,	,, 4	70
Frederick James Cocker	,,	,, 4	71
Roland John Dredge	,,	,, 4	72
Alexander Duncan Gordon	,,	,, 4	73
John Kemp	,,	,, 4	74
John Paton	,,	,, 4	75
Frederick Leslie Howard	,,	,, 4	76
George Canterbury Tibbs	,,	,, 4	77
Ernest Baker	,,	,, 4	78
John Dwyer	,,	,, 4	79
Albert Edward Edwards	,,	,, 4	80
William Foster	,,	,, 4	81
William Keane	,,	,, 4	82
James Alexander Ronald	,,	,, 4	83
George Johnston Clark	,,	,, 4	84
Walter Briggs	,,	,, 4	85
Leonard Diamond	,,	,, 4	86
Alfred John Maiden	,,	,, 4	87
Gustav Svenson	,,	,, 4	88
Charles Patrick Howard	,,	,, 4	89
Joseph Hughes	,,	,, 4	90
William Henry Knox	,,	,, 4	91
Robert Faire	,,	,, 4	92
John Stewart Wellington Bunting	,,	,, 4	93
Thomas Orchard	,,	,, 4	94
Robert Ester Anderson	,,	,, 4	95
Alfred Dowding	,,	,, 4	96
John Wallace Duncan	,,	,, 4	97
Duncan Claude James Ingle	,,	,, 4	98
Ernest Lionel Holland	,,	,, 4	99
Ernest Eli Hill Rowe	,,	,, 4	100
Samuel Burgess Brettell	,,	,, 4	101
William Walter Brown	,,	,, 4	102
Albert Ernest Victor Chaney	,,	,, 4	103
Harry Thomas Russell	,,	,, 4	104
Thomas Coffey	,,	,, 4	105
Emerson Brook	,,	,, 4	106
Ernest William Huntly Bull	,,	,, 4	107
Harry Dunn	,,	,, 4	108
William Barker Myles	,,	,, 4	109
Charles O'Donnell	,,	,, 4	110
James Robert Smith	,,	,, 4	111
Benjamin Whitehouse	,,	,, 4	112
William Henry Wilks	,,	,, 4	113
John Benson Blackburn	,,	,, 4	114
Edgar Crespin	,,	,, 4	115
Albert James Henley	,,	,, 4	116
George Lomas	,,	,, 4	117
John Wilson	,,	,, 4	118
Charles Williams	,,	,, 4	119
Arthur William Parker	,,	,, 4	120
Alfred Thomas Beaver	,,	,, 4	121
George Ernest Bluett	,,	,, 4	122
William Herbert Colman	,,	,, 4	123
Albert Charles Cone	,,	,, 4	124
Herbert Thomas Fullwood	,,	,, 4	125
Thomas Robert Reade	,,	,, 4	126
Cornelius Sullivan	,,	,, 4	127
Stephen Fuller	,,	,, 4	128
George Grayling Miller	,,	,, 4	129
Horace Rogers	,,	,, 4	130
Frank Scott	,,	,, 4	131

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Louis Frederick Weeber	Electric-tram, service	December 4	132
Samuel Williams	,,	4	133
Thomas Jeffry Bland	,,	4	134
George Edward Cooke	,,	4	135
Alexander Errol Miller Fraser	,,	4	136
William Gilbert Johnson	,,	4	137
Menotte Giacomo Marcantelli	,,	4	138
Martin Murphy	,,	4	139
Frederick Ruck	,,	4	140
Frederick Short	,,	4	141
Herbert Hughes	,,	4	142
William Joseph Lewis	,,	4	143
Leonard Herbert Philpott	,,	4	144
Arthur Reade	,,	4	145
Thomas William Richardson	,,	4	146
Cornelius Wiking	,,	4	147
George Absalom Chivers	,,	4	148
Arthur Edwin Waller Clarke	,,	4	149
Charles Edward North	,,	4	150
George Alfred Oakley	,,	4	151
James Arthur Dotchin	,,	4	152
William Brownlie	,,	4	153
Charles Counsel	,,	4	154
Albert Timmings	,,	4	155
William Henry Baker	,,	4	156
Jeremiah Crowley	,,	4	157
Stanley Thurbin Pepperell	,,	4	158
James Thomson	,,	4	159
David Durell	,,	4	160
Charles Hobbs	,,	4	161
Harry John Matthews	,,	4	162
George Murray	,,	4	163
John Joseph McCarthy	,,	4	164
Kenneth Hugh Hunter Raddon	,,	4	165
William Rodney Smith	,,	4	166
Hiram Barnes	,,	4	167
Archibald Butters	,,	4	168
George William Francis Corley	,,	4	169
Robert Douglas	,,	4	170
Michael Joseph Dwyer	,,	4	171
William Firth	,,	4	172
William James Hueston	,,	4	173
George Lewis	,,	4	174
Adam John Mills	,,	4	175
James Gerald Peters	,,	4	176
Arthur James Shearer	,,	4	177
Walter Whyte	,,	4	178
Richard Culmer Alsop	,,	4	179
George Henry Dabourn	,,	4	180
Stephen Jocelyn Grammer	,,	4	181
Henry Charles Heyder	,,	4	182
Partick Joseph Gerald Kennedy	,,	4	183
William Vincent Morris	,,	4	184
Walter David Tinker	,,	4	185
Thomas George Florence	,,	4	186
James Patrick Cunnolly	,,	4	187
Gordon Charles Mervyn Dumbleton	,,	4	188
Albert Ernest Moorhouse	,,	4	189
John McArthur	,,	4	190
Edmund George Tilleyshort	,,	4	191
Herbert Albert Thomas Alderson	,,	4	192
James Henry Dunn	,,	4	193
John William Marshall	,,	4	194
Andrew Gregg	,,	4	195
Francis Augustus Clapshaw	,,	4	196
Daniel Whitford	,,	4	197

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Percy Charles Dixon	Electric-tram, service	December 4	198
George Henry Lister	,,	,, 4	199
John Daniel Peoples	,,	,, 4	200
Clement Weeber	,,	,, 4	201
William John Duff	,,	,, 4	202
Thomas Francis Parker	,,	,, 4	203
George Henry Evans	,,	,, 4	204
Boyd Thomson Mitchell	,,	,, 4	205
William Alfred Rockland	,,	,, 4	206
Thomas Ryley	,,	,, 4	207
Arthur Dean	,,	,, 4	208
Percy Taylor	,,	,, 4	209
Robert Riley Richards	,,	,, 4	210
Joseph Daniel Carty	,,	,, 4	211
Thomas Finnerty	,,	,, 4	212
Walter Albert	,,	,, 4	213
James Tetheridge	,,	,, 4	214
Herman Lang	,,	,, 4	215
George Thomas Barker	,,	,, 4	216
Sydney Richard Meatchem	,,	,, 4	217
David Lynn Thomson	,,	,, 4	218
Gilbert George Scott	,,	,, 4	219
John Andrew Jamieson	,,	,, 4	220
James Albert Storer	,,	,, 4	221
William James Pearson	,,	,, 4	222
Henry James Quarterman	,,	,, 4	223
William Henry Spiller	,,	,, 4	224
William Grant	,,	,, 4	225
George Aberdeen	,,	,, 4	226
Leo Allen	,,	,, 4	227
Thomas Alfred Auckram	,,	,, 4	228
Edward Bach	,,	,, 4	229
Frederick Batson	,,	,, 4	230
Charles Spencer Bayley	,,	,, 4	231
James Beachem	,,	,, 4	232
Francis Henry Bishop	,,	,, 4	233
Frederick Fitzroy Bolton	,,	,, 4	234
George Ernest Bourband	,,	,, 4	235
Arthur Leslie Brairby	,,	,, 4	236
Walter Leslie Breen	,,	,, 4	237
John Brodie	,,	,, 4	238
Christopher Oaksford Brown	,,	,, 4	239
Spencer Frank Brown	,,	,, 4	240
John Buchanan	,,	,, 4	241
Richard William Buckby	,,	,, 4	242
Sydney Buckingham	,,	,, 4	243
Patrick Coady Buckley	,,	,, 4	244
William Buckley	,,	,, 4	245
Robert John Burbidge	,,	,, 4	246
Charles Bustoff	,,	,, 4	247
Edward Callow	,,	,, 4	248
William Campbell	,,	,, 4	249
Cuthbert Downey Carson	,,	,, 4	250
Alfred Chorley	,,	,, 4	251
George Frederick Christmas	,,	,, 4	252
Henry Clark	,,	,, 4	253
Frederick William Clarke	,,	,, 4	254
John Clarken	,,	,, 4	255
Sydney Colquhoun	,,	,, 4	256
Thomas Daniels	,,	,, 4	257
William Dixon	,,	,, 4	258
Robert Donovan	,,	,, 4	259
John Joseph Doorty	,,	,, 4	260
Francis Doyle	,,	,, 4	261
Gilbert Henry Elliot	,,	,, 4	262
Sidney William Eustace	,,	,, 4	263

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Frank Montague Eveleigh	Electric-tram, service	December 4	264
William George Everitt	,,	,, 4	265
Ernest Edward Faber	,,	,, 4	266
Sydney Michael Farrelly	,,	,, 4	267
Hugh Farrer	,,	,, 4	268
Thomas Edward Fletcher	,,	,, 4	269
Erwin Clarence Francks	,,	,, 4	270
Edward Frith	,,	,, 4	271
Harry Fulcher	,,	,, 4	272
Peter Glen	,,	,, 4	273
George Archibald Green	,,	,, 4	274
Francis Greene	,,	,, 4	275
John Griffin	,,	,, 4	276
Charles Henry Gutry	,,	,, 4	277
Arthur Hall	,,	,, 4	278
John Henry Hall	,,	,, 4	279
Charles Halley	,,	,, 4	280
Frank William Hankins	,,	,, 4	281
Hans Peter Hansen	,,	,, 4	282
Arthur Percy Haslam	,,	,, 4	283
Walter Henry Haslam	,,	,, 4	284
James Alexander Hearling	,,	,, 4	285
John Houston	,,	,, 4	286
Jacob Dynes Hurfitt	,,	,, 4	287
Alfred Percy Ingley	,,	,, 4	288
Arthur Alfred Irvine	,,	,, 4	289
Andrew Jack	,,	,, 4	290
Olaf Jensen	,,	,, 4	291
Thomas Alger Johnson	,,	,, 4	292
Leslie Jones	,,	,, 4	293
William McAnulty Kerr	,,	,, 4	294
William James Kirkwood	,,	,, 4	295
Charles Lawson	,,	,, 4	296
Joseph Robert Loney	,,	,, 4	297
William Mason	,,	,, 4	298
Percy John Miller	,,	,, 4	299
James Sidney Mills	,,	,, 4	300
David Morrison	,,	,, 4	301
Patrick Murphy	,,	,, 4	302
Walter James Murray	,,	,, 4	303
Frank McDermott	,,	,, 4	304
Walter McDonald	,,	,, 4	305
Peter McElwain	,,	,, 4	306
Peter McGorum	,,	,, 4	307
Richard McLaren	,,	,, 4	308
Thomas Neal	,,	,, 4	309
William Robert Neville	,,	,, 4	310
George Nichols	,,	,, 4	311
Thomas Noon	,,	,, 4	312
Charles Joseph Norris	,,	,, 4	313
Alfred Henry Olney	,,	,, 4	314
Harold William Parker	,,	,, 4	315
Courtney Parks	,,	,, 4	316
George Thomas Parnell	,,	,, 4	317
Richard William Partridge	,,	,, 4	318
Alexander Paton	,,	,, 4	319
Frank Paton	,,	,, 4	320
Robert Rae	,,	,, 4	321
Frederick Reuss	,,	,, 4	322
Paul Richardson	,,	,, 4	323
William George Righton	,,	,, 4	324
James Rigney	,,	,, 4	325
Charles Robinson	,,	,, 4	326
Walter Rogers	,,	,, 4	327
James Elijah Rollerson	,,	,, 4	328
William Thomas Rowe	,,	,, 4	329

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
John Ryan	Electric-tram, service	December 4	330
Ernest Scorringi	,,	,, 4	331
Abraham Sherson	,,	,, 4	332
Clarence Walwin Smith	,,	,, 4	333
Ernest Smith	,,	,, 4	334
John James Smith	,,	,, 4	335
Henry Smithies	,,	,, 4	336
William Spiers	,,	,, 4	337
Richard Spry	,,	,, 4	338
William Wallace Stewart	,,	,, 4	339
Philip Suchting	,,	,, 4	340
John James Taylor	,,	,, 4	341
Wallace George Taylor	,,	,, 4	342
Alfred Horner Thrussell	,,	,, 4	343
Thomas Troy	,,	,, 4	344
John Urquhart	,,	,, 4	345
Robert Wade	,,	,, 4	346
Herbert Henry Ward	,,	,, 4	347
John Watson	,,	,, 4	348
Harry Marshall White	,,	,, 4	349
William Henry Willcocks	,,	,, 4	350
John James Williams	,,	,, 4	351
John Willis	,,	,, 4	352
John Wilson	,,	,, 4	353
William Gilpin	,,	,, 4	354
Charles Ernest Wilkinson	,,	,, 4	355
Amos Hollingworth	,,	,, 4	356
Mathew Whalen	,,	,, 4	357
Robert Adams	,,	,, 4	358
Benjamin Musgrave	,,	,, 4	359
Charles Johnstone	,,	,, 4	360
Alfred Clark Napier	,,	,, 4	361
Peter Smith	,,	,, 4	362
John Spence	,,	,, 4	363
John Reid	,,	,, 4	364
Frederick Richard Stevenson	,,	,, 4	365
Daniel Alfred Tucker	,,	,, 4	366
Robert James James	,,	,, 4	367
Joseph Small	,,	,, 4	368
Noel Ivan Wills	,,	,, 4	369
William Dolbey Aitken	,,	,, 4	370
Francis Henry Cooper	,,	,, 4	371
John Percy Coyne	,,	,, 4	372
John Francis	,,	,, 4	373
George Fuller	,,	,, 4	374
Frederick Henry Hull	,,	,, 4	375
Hector Liardet	,,	,, 4	376
John Henry Little	,,	,, 4	377
Gavin Miller	,,	,, 4	378
Charles Mitchell	,,	,, 4	379
Duncan McGillivray	,,	,, 4	380
Charles Patchett	,,	,, 4	381
Albert Gore Ward	,,	,, 4	382
Charles Lawrence	,,	,, 4	383
Herbert Phillips	,,	,, 4	384
Andrew Fraser	,,	,, 4	385
Benjamin John Glancifield	,,	,, 4	386
George Edward Handcock	,,	,, 4	387
		1912.	
James Hill	,,	January 25	388
Walter McDonald	,,	,, 25	389
John Joseph Glynn	,,	,, 25	390
John Welch	,,	,, 25	391
William Bateman	,,	,, 25	392
William Henry Cross	,,	,, 25	393
David Dalton	,,	,, 25	394

No. 14.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1912.	
Warwick Edward Daman Sadler	Electric-tram, service ..	January 25	395
William James Bright	,, ..	,, 25	396
William Henry Moyle	,, ..	,, 25	397
Frank Taylor	,, ..	,, 25	398
Maurice Allen	,, ..	,, 25	399
Robert Waterland	,, ..	,, 25	400
Alfred William Catchpole	,, ..	,, 25	401
John Henry Timms	,, ..	,, 25	402
Joseph Charles Minifie	,, ..	,, 25	403
Frederick William Arnold	,, ..	,, 25	404
Francis Charles Jones	,, ..	,, 25	405
Richard Rogers Hall	,, ..	,, 25	406
William Milroy Beveridge	,, ..	,, 25	407
George Thomson	,, ..	,, 25	408
Harold Gordon Bowe	,, ..	,, 25	409
Richard Wall	,, ..	,, 25	410
Harry Raymond Christmas	,, ..	,, 25	411
John Beresford Clough	,, ..	,, 25	412
Sydney Frederick Charlesworth Crane ..	,, ..	,, 25	413

No. 15.—Return of Electric-tram Drivers to whom Certificates of Competency have been granted from the 1st April, 1911, to the 31st March, 1912.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Henry Alfred Bade..	Electric tram, competency	December 4	1
Walter Thomas Baker	,, ,,	,, 4	2
Neil Stuart Boyle	,, ,,	,, 4	3
Anthony Robinson Broadbent	,, ,,	,, 4	4
Thomas Albert Christeson	,, ,,	,, 4	5
Bertie Edward Church	,, ,,	,, 4	6
Alexander Clark	,, ,,	,, 4	7
John Flint Clark	,, ,,	,, 4	8
Victor Frederick Cook	,, ,,	,, 4	9
Ernest Arthur Evans	,, ,,	,, 4	10
Robert George Forbes	,, ,,	,, 4	11
Frank Foxwell	,, ,,	,, 4	12
Albert Edward Hack	,, ,,	,, 4	13
Bernard Hepburn	,, ,,	,, 4	14
Thomas Hepburn	,, ,,	,, 4	15
Edwin Cuthbert Kirk	,, ,,	,, 4	16
William Alfred Longhurst	,, ,,	,, 4	17
William Henry Moore	,, ,,	,, 4	18
John Christopher Macdonald	,, ,,	,, 4	19
Leonard John O'Flaherty	,, ,,	,, 4	20
Sydney Potter	,, ,,	,, 4	21
Percival Victor Rollins	,, ,,	,, 4	22
Francis Sexton	,, ,,	,, 4	23
Dominic Smith	,, ,,	,, 4	24
Frank Twort	,, ,,	,, 4	25
Walter Cecil Wiggins	,, ,,	,, 4	26
Sydney Clarence Willis	,, ,,	,, 4	27
Frederick Christian Zantuch..	,, ,,	,, 4	28
Thomas Callaghan McCarthy	,, ,,	,, 4	29
John Warwood, jun.	,, ,,	,, 4	30
William Wallace Pennycuick	,, ,,	,, 4	31
Arthur Henry Cameron	,, ,,	,, 4	32
John James Broom	,, ,,	,, 4	33
William Healy	,, ,,	,, 4	34
Charles Robert Watson	,, ,,	,, 4	35
Albert Flavel Saul	,, ,,	,, 4	36
Alexander Ferguson	,, ,,	,, 4	37

No. 15.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1911.	
Harry Skeels	Electric tram, competency	December 4	38
John Charles Henry Colyer	,, ,,	,, 4	39
Andrew Martin	,, ,,	,, 4	40
Arthur Edmond Hayward	,, ,,	,, 4	41
Dugald Stuart Mackay	,, ,,	,, 4	42
James Claude Carnegie	,, ,,	,, 4	43
Benjamin Henry Reid	,, ,,	,, 4	44
Duncan MacLaren	,, ,,	,, 4	45
Alexander Orr Butters	,, ,,	,, 4	46
John William Payn	,, ,,	,, 4	47
John Joseph Madigan	,, ,,	,, 4	48
William Henry Gordon McLennan	,, ,,	,, 4	49
George Arnott	,, ,,	,, 4	50
Charles Belton	,, ,,	,, 4	51
Peter John Berkhout	,, ,,	,, 4	52
Richard Bolton	,, ,,	,, 4	53
Leonard Boulton	,, ,,	,, 4	54
William Charles Caldwell	,, ,,	,, 4	55
Thomas Cameron	,, ,,	,, 4	56
James Thomas Chadderton	,, ,,	,, 4	57
Peter Cleary	,, ,,	,, 4	58
John Arthur Copley	,, ,,	,, 4	59
George Dickinson	,, ,,	,, 4	60
Arthur Frankham	,, ,,	,, 4	61
Will Ingrham Hancock	,, ,,	,, 4	62
Henry Hewitt	,, ,,	,, 4	63
James Charles Frederick Hudson	,, ,,	,, 4	64
Peter Patrick Knowles	,, ,,	,, 4	65
Edward Sainthill Maples	,, ,,	,, 4	66
Herbert James May	,, ,,	,, 4	67
Hugh Munro	,, ,,	,, 4	68
John Munro	,, ,,	,, 4	69
Charles McBride	,, ,,	,, 4	70
John McCormack	,, ,,	,, 4	71
Owen McGrath	,, ,,	,, 4	72
John McPherson	,, ,,	,, 4	73
John Neate	,, ,,	,, 4	74
Archibald Charles Rowlands	,, ,,	,, 4	75
Robert John West Saunders	,, ,,	,, 4	76
David Taylor	,, ,,	,, 4	77
George Taylor	,, ,,	,, 4	78
Robert Arthur Williams	,, ,,	,, 4	79
Thomas Frater Wilson	,, ,,	,, 4	80
Thomas Wray	,, ,,	,, 4	81
Arthur Claud Bartram	,, ,,	,, 4	82
Frederick Blewitt	,, ,,	,, 4	83
James William Clive	,, ,,	,, 4	84
John Davidson	,, ,,	,, 4	85
John Dunn	,, ,,	,, 4	86
Thomas Hazelhurst	,, ,,	,, 4	87
William Horgan	,, ,,	,, 4	88
Lawrence Henry Lagan	,, ,,	,, 4	89
John Alfred Lummis	,, ,,	,, 4	90
Frederick Thomas Minchall	,, ,,	,, 4	91
Walter Henry Moyle	,, ,,	,, 4	92
John Percy Horace Pine	,, ,,	,, 4	93
Lancelot Harold Pruden	,, ,,	,, 4	94
George Herbert Reese	,, ,,	,, 4	95
William Smiddy	,, ,,	,, 4	96
Charles Mitchell Stewart	,, ,,	,, 4	97
Thomas Wareing	,, ,,	,, 4	98
Andrew Webb	,, ,,	,, 4	99
Robert Westwood	,, ,,	,, 4	100
Henry James Wicks	,, ,,	,, 4	101
Joseph Winthrop	,, ,,	,, 4	102
Charles Gatehouse	,, ,,	,, 4	103
Henry William Gomm	,, ,,	,, 4	104

No. 15.—Return of Electric-tram Drivers—*continued.*

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1912.	
George Edward Baker	Electric-tram, competency	January 25	105
Charles Francis	,, ,,	,, 25	106
Edward Milner	,, ,,	,, 25	107
Charles Williams Wood	,, ,,	,, 25	108
James William Simpson	,, ,,	February 26	109
William Arthur Clarke	,, ,,	,, 26	110
Walter Golding Hickman	,, ,,	,, 26	111
Herbert Stokes	,, ,,	,, 26	112
Andrew Sinclair Bennington	,, ,,	,, 26	113
James Gowanlock	,, ,,	,, 26	114
Frederick William Minchin	,, ,,	,, 26	115
Harold Abbott	,, ,,	,, 26	116
Thomas Henry Ashe	,, ,,	,, 26	117
Evan Bartlett	,, ,,	,, 26	118
William Dennis Lysaght	,, ,,	,, 26	119
Evelyn Harry Morris	,, ,,	,, 26	120
Ralph Turner	,, ,,	,, 26	121
William Wilkie Bennet	,, ,,	,, 26	122
William James Douglas	,, ,,	,, 26	123
John James Galvin	,, ,,	,, 26	124
John Herlihy	,, ,,	,, 26	125
Malcolm Hubert Howard	,, ,,	,, 26	126
George William Hoy	,, ,,	,, 26	127
Arthur Hyde	,, ,,	,, 26	128
George Mathews Lindsay	,, ,,	,, 26	129
Alexander James McDonald	,, ,,	,, 26	130
Richard John Pentecost	,, ,,	,, 26	131
John Byron Percy Smethurst	,, ,,	,, 26	132
Norman George Sturzaker	,, ,,	,, 26	133
Joshua Turnbull	,, ,,	,, 26	134
John Lee Walker	,, ,,	,, 26	135
Charles Martin Wallace	,, ,,	,, 26	136
Peter Joseph Yates	,, ,,	,, 26	137
Clarence Murray Denham	,, ,,	,, 26	138

No. 16.—Return of Engineers who were examined and passed for Certificates of Competency during the year ended the 31st March, 1912.

Name of Person.	Rank.	Class for which examined.	Date of Examination.
Stephen Collier	First-class engineer	Foreign trade	3, 4, 5, 6 April, 1911.
Alexander Oliver Inverarity	,,	,,	3, 4, 5, 6 April, ,,
George Maxwell	,,	,,	1, 2, 3, 4 Aug., ,,
Robert Laurie	,,	,,	2, 3, 4 October, ,,
John George Whyte	,,	,,	2, 3, 4 October, ,,
Allan Clyde Dickie	,,	,,	3, 4, 5, 6 Oct., ,,
George Gordon Smith	,,	,,	16, 17 October, ,,
Percy John Gibson Ward	,,	,,	7, 8 November, ,,
Charles Frederick Hales West	,,	,,	8, 9 November, ,,
Montague Charles Alexander	,,	,,	4, 5, 6 Dec., ,,
Arthur James McIndoe	,,	,,	3, 4, 5, 8 Jan., 1912.

No. 16.—Return of Engineers who were examined and passed for Certificates of Competency —*continued.*

Name of Person.	Rank.	Class for which examined.	Date of Examination.
David Gilmour Stephens	First-class engineer	Foreign trade	25, 26, 27 Jan., 1912.
William James Russell Ross	,,	,,	5, 6, 7 Feb., ,,
Sydney James Munn	,,	,,	29 Feb., 1, 2 Mar., ,,
John Peter Burns	,,	,,	4, 5, 6 March, ,,
Thomas Hamilton Murray	,,	,,	21, 22, 23 Mar., ,,
Charles Scott	Second-class engineer	,,	8, 9 June, 1911.
Cecil Roy McLean Baird	,,	,,	2, 3 October, ,,
Gilbert Stuart Mitchell	,,	,,	10, 11 October, ,,
Neil John McMurrich	,,	,,	16 October, ,,
William Patrick Kiely	,,	,,	6 November, ,,
Roger Parr	,,	,,	4, 5 December, ,,
Walter Rogers	,,	,,	4, 5 December, ,,
Harry Rayner Salmon	,,	,,	3, 4, 6 Jan., 1912.
Alston Hadfield McLean	,,	,,	9, 10 January, ,,
Stephen Herbert Head	,,	,,	8, 9 March, ,,
John William Dow	Third-class engineer	,,	3 April, 1911.
Ernest Edgar Flamank Grimmett	,,	,,	3 April, ,,
Alfred Seymour Thomas	,,	,,	3 April, ,,
Frank Bernard Williams	,,	,,	3 April, ,,
Richard Bentley Headdey	,,	,,	2 May, ,,
Jay Grover Hooker	,,	,,	2 May, ,,
Gerald Stanley Lewis	,,	,,	2 May, ,,
Leopold Sidney Kendell	,,	,,	2 May, ,,
Arthur George Rogerson	,,	,,	2 May, ,,
Thomas Boyd Scott	,,	,,	2 May, ,,
Watson Whitwell	,,	,,	1, 2, 3 May, ,,
Robert Lewis Barnett Lockett	,,	,,	1 June, ,,
Lionel Wilfred Morgan	,,	,,	1 June. ,,
Ralph Beaufoy	,,	,,	5 June, ,,
Vincent James Burns	,,	,,	5 June, ,,
George Burt	,,	,,	5 June, ,,
Thomas Steel Goudie	,,	,,	5 June, ,,
John Henry Holmes	,,	,,	5 June, ,,
Henry Stuart Pauling	,,	,,	6 June, ,,
Stanley Bassett	,,	,,	30 June, ,,
Alexander Hope Gordon Grant	,,	,,	3 July, ,,
Leslie Jacob Mander	,,	,,	3 July, ,,
John Mitchell	,,	,,	3 July, ,,
Karl Hugo Vogeler	,,	,,	3 July, ,,
Harry Brotherton	,,	,,	4 July, ,,
Walter James Chaplin	,,	,,	4 July, ,,
William Donald Whyte Robertson	,,	,,	11 July, ,,
Louis Isaac Ziman	,,	,,	25 July, ,,
Roy Lewis Ditcham	,,	,,	1, 2 August, ,,
William Byers Stanley Sealy	,,	,,	2 August, ,,
Ernest Winsloe George	,,	,,	3 August, ,,
Kenneth Alexander Gunn	,,	,,	3 August, ,,
Herbert John Allen Knewstubb	,,	,,	7 August, ,,
George Frederick Maclean	,,	,,	7 August, ,,
Alfred James Mathewson	,,	,,	7 August, ,,
Alfred Joseph Robertson	,,	,,	7 August, ,,
Thomas Murray Woodrow	,,	,,	7 August, ,,
James Robert Latta	,,	,,	8 August, ,,
Alexander Miller	,,	,,	8 August, ,,
Alexander Ledingham Smith Cassie	,,	,,	4 September, ,,
Sydney George Fuller	,,	,,	4 September, ,,
Roy Jocelyn Grainger	,,	,,	4 September, ,,
Harry Granger	,,	,,	4 September, ,,
Charles James Hally	,,	,,	4 September, ,,
Hugh Fairchild Smith	,,	,,	4 September, ,,
Charles Edward Storer	,,	,,	4 September, ,,
Gordon Keith Wilson	,,	,,	4 September, ,,
Thomas Moore Campbell	,,	,,	5 September, ,,
Horace Charles Delaney	,,	,,	5 September, ,,
William Henry Munn	,,	,,	21 September, ,,

No. 16.—Return of Engineers who were examined and passed for Certificates of Competency —*continued.*

Name of Person.	Rank.	Class for which examined.	Date of Examination.
Roy Sortain Smith	Third-class engineer	Foreign trade	2 October, 1911.
Arthur Reginald Sommerville	,,	,,	2 October, ,,
Thomas John Gregg Brandford Robb	,,	,,	3 October, ,,
Frederick Theodore Okeby	,,	,,	6 October, ,,
Frank Vincent Thomas	,,	,,	1 November, ,,
Henry Joseph Schaw	,,	,,	1, 2 November, ,,
Sarsfield Daly	,,	,,	2, 3 November, ,,
William James Bowman	,,	,,	6 November, ,,
Charles Cranfield Emmett Butcher	,,	,,	6 November, ,,
Harold Robins Barnes	,,	,,	13 November, ,,
Charles Cameron Begg	,,	,,	4 December, ,,
John Thomas Kelman	,,	,,	4 December, ,,
William Anderson Schaumann	,,	,,	4 December, ,,
John Vereker Bindon	,,	,,	5 January, 1912.
Douglas Buckland	,,	,,	5 January, ,,
James Comrie	,,	,,	5 January, ,,
David Cuthbert	,,	,,	5 January, ,,
William Cameron Ferguson	,,	,,	5 January, ,,
Reginald George Houghton	,,	,,	5 January, ,,
George Gilbert Jamieson	,,	,,	5 January, ,,
Wentworth Augustus Johnson	,,	,,	5 January, ,,
Charles Fredrick Morgan	,,	,,	5 January, ,,
William John Ormiston	,,	,,	5 January, ,,
Stanley Howard Pilkington	,,	,,	5 January, ,,
Norman Reginald Rawlings	,,	,,	5 January, ,,
Harry Turner	,,	,,	5 January, ,,
Ronald Gray	,,	,,	9 January, ,,
Henry Lawrance Bettis	,,	,,	1 February, ,,
John McConchie Brown	,,	,,	5 February, ,,
Ronald Gordon Gallien	,,	,,	5 February, ,,
George Walter Haycock	,,	,,	5 February, ,,
John Frankland Kirk	,,	,,	5 February, ,,
William Edward John Marsden McCormick	,,	,,	5 February, ,,
John Seggie	,,	,,	5 February, ,,
Fredrick Oliver Harding	,,	,,	15 February, ,,
Thomas Lester Anderson Osborn	,,	,,	4 March, ,,
John William Crombie	,,	,,	28 March, ,,
John Pollock Faulds	River engineer	River trade	10 April, 1911.
James Campbell	,,	,,	1 May, ,,
John Cochrane	,,	,,	1 May, ,,
Charles Henry Cook	,,	,,	1 May, ,,
Thomas Mahoney	,,	,,	1 May, ,,
James Douglas Falconer	,,	,,	1, 2 May, ,,
Charles Herbert Gentil	,,	,,	1, 2 May, ,,
George Henry Dean	,,	,,	2 May, ,,
William Sumner	,,	,,	31 May, ,,
Charles James Sandilands	,,	,,	1 August, ,,
William James Fisher	,,	,,	3 August, ,,
Mayo Carlton Clark	,,	,,	1 September, ,,
George Patrick Marchant	,,	,,	5 September, ,,
Robert Gillespie	,,	,,	1 November, ,,
William Durry	,,	,,	4 December, ,,
Charles Richard Hearn	,,	,,	4 January, 1912.
Alfred Keane	,,	,,	4 January, ,,
Noel Peat	,,	,,	1 February, ,,
Percy Thornton	,,	,,	5 February, ,,
George Andrews	First-class engineer (powered vessels other than steam)	Sea-going	2 May, 1911.
William Latham Cutten	Ditto	,,	2 May, ,,
Stanley Nelson Going	,,	,,	2 May, ,,
Leigh Easton Baxter	,,	,,	1, 2 August, ,,
George Walter Haycock	,,	,,	1 November, ,,
Ernest Clyde Fowler	,,	,,	1, 3 November, ,,

No. 13.—Return of Engineers who were examined and passed for Certificates of Competency —*continued.*

Name of Person.	Rank.	Class for which examined.	Date of Examination.
John Cochrane	Second-class engineer (powered vessels other than steam)	Sea-going	2 May, 1911.
William James Pollock	Ditto	,,	5 May, ,,
Charles Seigmond Jacobsen	,,	,,	12 June, ,,
Frederick Thomas Slater Rhodes	,,	,,	3 July, ,,
Dover Goddard Andrews	,,	,,	5 September, ,,
Charles Herbert Gentil	,,	,,	5 September, ,,
William Archibald Smeed	,,	,,	5 September, ,,
Arthur Stephen Lane	,,	,,	5 September, ,,
Thomas Edward Tunnage	,,	,,	7 November, ,,
Thomas Percival Lane	,,	,,	4 January, 1912.
David Reid	,,	,,	8 January, ,,
Thomas Samuel Davies	,,	,,	1 February, ,,
Charles Edward Chittenden	Restricted-limits engineer (powered vessels other than steam)	River trade	1 May, ,,
James McLean Clark	Ditto	,,	1 May, ,,
George William Hutchinson	,,	,,	1 May, ,,
John Jones	,,	,,	1 May, ,,
Archibald Dargue Weir	,,	,,	16 June, ,,
Charles Grey Crone	,,	,,	24 June, ,,
William Ernest Eriksen	,,	,,	4 September, ,,
Archie Fuller	,,	,,	4 September, ,,
Ralph Hardy	,,	,,	4 September, ,,
Harold Hill Jagger	,,	,,	4 September, ,,
Frank Kemp Morris	,,	,,	4 September, ,,
Alan Alexander William Russell	,,	,,	4 September, ,,
Percival Peter Gordon	,,	,,	5 September, ,,
Robert Withers Gunson	,,	,,	5 September, ,,
Arthur Joseph Lennon	,,	,,	5 September, ,,
Sydney Hunter	,,	,,	7 September, ,,
Thomas Hunter	,,	,,	8 September, ,,
Andrew Honyman Bennie	,,	,,	1, 2 November, ,,
Joseph Hannam Bettinson	,,	,,	1, 2 November, ,,
Harry Percy Bevis	,,	,,	1, 2 November, ,,
Alfred Munn	,,	,,	3 November, ,,
Walter Cutten	,,	,,	4 November, ,,
George Sampson	,,	,,	5 December, ,,
John Robert Murrell	,,	,,	20 December, ,,
Arthur Clarence Fitchett	,,	,,	4 January, 1912.
William Edmund Hayes	,,	,,	4 January, ,,
Thomas Herbert Kelsey	,,	,,	4 January, ,,
Robert Ross Colley	,,	,,	5 January, ,,
Charles Edward Hansen	,,	,,	5 January, ,,
James Henry McGinn	,,	,,	5 January, ,,
Harold Arthur Norgrove	,,	,,	5 January, ,,
John William Christopher Deeming	,,	,,	8 January, ,,
George Pinckney Ford	,,	,,	8 January, ,,
Thomas Stewart Spencer	,,	,,	8 January, ,,
Walter Leslie Bayliss	,,	,,	16 January, ,,
Andrew Campbell	,,	,,	16 January, ,,
Günther Laage	,,	,,	16 January, ,,
George Bastin Mead	,,	,,	16 January, ,,
James Linster Passmore	,,	,,	1 February, ,,
Michael Tants	,,	,,	2 February, ,,
John Harold Morrison	,,	,,	5 February, ,,
Frederick Richard Wilkin	,,	,,	4 March, ,,

Failures to pass engineers' examinations: First-class engineer, 7; second-class engineer, 3; third-class engineer, 25; river engineer, 7; first-class engineer (powered vessels other than steam), 3; second-class engineer (powered vessels other than steam), 2; restricted-limits engineer (powered vessels other than steam), 6.

Total number of applicants examined, 245. Amount of fees, £214.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed during the Financial Year ended the 31st March, 1912, with Particulars of Tonnage, etc.

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Admiral	121	82	50	..	Compound S. condensing	Single	..
Advance (Auckland)	18	12	8	..	High pressure	"	..
Advance (Hokianga)	4·2	3·17	7 B.H.P.	..	Oil-engine	"	..
Advance II	5	3·79	8 B.H.P.	..	"	"	..
Aeriel	3·5	2·64	6 B.H.P.	..	"	"	..
A.H.B.	10·54	5·45	15 B.H.P.	..	"	"	..
Ahuriri	85	31	17	..	Compound S. condensing	"	..
Ailoma	8	3·6	15 B.H.P.	..	Oil-engine	"	..
Airship	1·4	0·95	4 B.H.P.	..	"	"	..
Akaroa	76	29	28	103	Compound S. condensing	"	..
Albatross (Auckland)	217·8	111	37	..	"	Single at each end	..
Albatross (Auckland)	50·2	42·5	25 B.H.P.	..	Oil-engine	Single	..
Albatross (Rawene)	2·49	1·87	4 B.H.P.	..	"	"	..
Alert	6·89	5·17	15 B.H.P.	..	"	"	..
Alexander	377	184	72	335	Compound S. condensing	Twin	..
Alexandra	6·6	5	15 B.H.P.	..	Oil-engine	Single	..
Alice	2·18	1·64	5 B.H.P.	..	"	"	..
All Black No. 1	6·6	5	18 B.H.P.	..	"	"	..
All Black No. 2	4·9	3·7	12 B.H.P.	..	"	"	..
Annie	3·3	2·5	4 B.H.P.	..	"	"	..
Aorangi	4,268	2,782	550	4,000	Triple-ex. S. condensing	"	..
Aorere	76·5	49	16	71	Compound S. condensing	"	..
Aotea	263·4	157	33	..	"	"	..
Apanui	243	134	27½	204	Triple-ex. S. condensing	"	..
Aparima	5,703	3,683	284	2,710	"	Twin	..
Arahura	1,596	771·2	145	1,689	"	"	..
Arapawa (Picton)	5·46	4·1	10 B.H.P.	..	Oil-engine	Single	..
Arapawa (Wellington)	291·2	128·3	47	241	Triple-ex. S. condensing	"	..
Arawa (Auckland)	2·45	1·84	5 B.H.P.	..	Oil-engine	"	..
Arawa (Port Underwood)	7·02	5·27	10 B.H.P.	..	"	"	..
Ariadne	1·96	1·47	4 B.H.P.	..	"	"	..
Aroha	4·76	3·57	8 B.H.P.	..	"	"	..
Arrino	3·17	2 38	5 B.H.P.	..	"	"	..
Arumai	7·48	5·61	10 B.H.P.	..	"	"	..
Atlas	3·1	2 3	13 B.H.P.	..	"	"	..
Atua (Dunedin) (2)	3,443	1,894	329	2,617	Triple-ex. S. condensing	Twin	..
Atua (Stewart Island)	2·73	2·05	5 B.H.P.	..	Oil-engine	Single	..
Aupouri	463	220	55	417	Triple-ex. S. condensing	Twin	..
Awaroa (Auckland)	344	210	62	..	"	Single	..
Awaroa (Rangiriri)	5·27	3·9	7 B.H.P.	..	Oil-engine	"	..
Awarua	2·48	1·86	4½ B.H.P.	..	"	"	..
Baden Powell (2)	174·2	72	30	199	Compound S. condensing	"	..
Balder	3·6	2·7	6 B.H.P.	..	Oil-engine	"	..
Baroona	136	78·7	24	..	Compound S. condensing	"	..
Beatrix	3·18	2·4	5 B.H.P.	..	Oil-engine	"	..
Beldame	..	4	20 B.H.P.	..	"	"	..
Benares	3·18	2·38	4 B.H.P.	..	"	"	..
Bittern	1·66	1·25	5 B.H.P.	..	"	"	..
Blenheim	151	85	50	221	Compound S. condensing	"	..
Bletsoe	2·12	1·59	5 B.H.P.	..	Oil-engine	"	..
Breeze	552·5	286·1	84	468	Triple-ex. S. condensing	"	..
Breta Tui	60	35·3	40 B.H.P.	..	Oil-engine	"	..
Britannia	196·5	108·4	40	..	High pressure	..	Paddle.
Brooklyn	3·28	2·46	8 B.H.P.	..	Oil-engine	Single	.
Canopus	1,337	834	250	1,132	Triple-ex. S. condensing	"	..
Canterbury	..	..	24	..	High pressure	Twin	..
Cascade	15·77	10·73	70 B.H.P.	..	Oil-engine	"	..
Centaur	7·9	6	16 B.H.P.	..	"	Single	..
Chelmsford	122	79	24	68	Compound S. condensing	"	..
Clansman	634	379	99	592	"	"	..
Claymore	257·9	119	54	365·5	Triple-ex. S. condensing	"	..
Clutha	172·5	95·5	48	..	Compound S. condensing	..	Stern wheel.
Cobar	158·8	57·8	40	..	"	Single	..
Comet	7·94	5·96	5 B.H.P.	..	Oil-engine	"	..
Condor	272	187	24	..	Compound S. condensing	Single at each end	..
Corinna	1,271	812·3	141	1,047	"	Single	..
Coromandel	99	67	25	..	"	"	..
Countess (Hokitika)	3·43	2·5	6 B.H.P.	..	Oil-engine	"	..
Countess (Napier)	141	56·5	28	171	Compound S. condensing	"	..
Cygnet	124	66	43	188	"	"	..
Dairymaid	2 81	2·11	6 B.H.P.	..	Oil-engine	"	..
Daphne (Auckland)	192	112·6	40	240	Compound S. condensing	"	..
Daphne (Hokianga)	3·09	2·22	6 B.H.P.	..	Oil-engine	"	..
Dart	1·06	0·79	3 B.H.P.	..	"	"	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Dawn	18·9	14	16 B.H.P.	..	Oil-engine	Single	..
Defender (Sydney)	185·2	109·3	36	116	Compound S. condensing	"	..
Defender (Thames)	4·8	3·6	18 B.H.P.	..	Oil-engine	"	..
Despatch	35	24	20	..	Compound S. condensing	"	..
Dolly Varden	31·4	17·4	26 B.H.P.	..	Oil-engine	Twin	..
Dolphin	..	5·5	15 B.H.P.	..	"	Single	..
Doris (Napier)	4·72	3·54	20 B.H.P.	..	"	"	..
Doris (Picton)	2·31	1·73	4 B.H.P.	..	"	"	..
Doris (Russell)	4·47	3·35	12 B.H.P.	..	"	"	..
Dorrigo	302·4	195·4	39·5	..	Compound S. condensing	"	..
Doto	28·5	19·4	30	..	"	"	..
Dove (Pelorous Sound)	2·34	1·75	4 B.H.P.	..	Oil-engine	"	..
Dove (Picton)	2·74	2	4 B.H.P.	..	"	"	..
Dovey	2·75	1·74	5 B.H.P.	..	"	"	..
Dreadnought (Akaroa)	4	3	19 B.H.P.	..	"	"	..
Dreadnought (Port Underwood)	7·97	5·98	16 B.H.P.	..	"	"	..
Dredge No. 121	657	394	100	..	Compound S. condensing	Twin	..
Dredge No. 222	906·6	501·7	140	732	"	"	..
Dredge No. 350	941	488	117	707	Triple-ex. S. condensing	"	..
Dredge No. 404	479	211	78	436	Compound S. condensing	"	..
Duchess (Hokitika)	1·2	0·9	1½ B.H.P.	..	Oil-engine	Single	..
Duchess (Wellington)	308	95	81	..	Triple-ex. S. condensing	"	..
Eagle	219	138	70	..	Compound S. condensing	..	Paddle.
Earl	3·83	2·88	8 B.H.P.	..	Oil-engine	Single	..
Echo (Auckland)	125	98	60 B.H.P.	..	"	Twin	..
Echo (Pelorous Sound)	2·3	1·7	5 B.H.P.	..	"	Single	..
Eclipse	2·65	1·98	8 B.H.P.	..	"	"	..
Eileen	2·3	1·76	4 B.H.P.	..	"	"	..
Eliza	..	9	28 B.H.P.	..	"	"	..
Elsie (Auckland)	27	20·5	30 B.H.P.	..	"	Twin	..
Elsie (Auckland)	5	3·9	15 B.H.P.	..	"	Single	..
Elsie (Nelson)	3·48	2·61	5 B.H.P.	..	"	"	..
Elsie Evans	7·8	5·8	20 B.H.P.	..	"	"	..
Elswick	5·34	4	12 B.H.P.	..	"	"	..
Energy	63·73	16	15	48	Compound S. condensing	"	..
Erin	..	..	3½	..	High pressure	"	..
Erskine	126	98	35	..	Compound S. condensing	"	..
Eureka	4	3	10 B.H.P.	..	Oil-engine	"	..
Eva	17	4·74	20 B.H.P.	..	"	"	..
Excelsior	6·5	4·9	6½	..	High pressure	"	..
Express	53	36	25	82	Compound S. condensing	"	..
Fairy	1·76	1·32	4 B.H.P.	..	Oil-engine	"	..
Fanny	90	55	30	147	Compound S. condensing	"	..
Ferro	13·9	10·4	20 B.H.P.	..	Oil-engine	"	..
Fiona	2·23	1·68	4 B.H.P.	..	"	"	..
Firefloat (2)	..	..	6	..	High pressure	"	..
Firefly	3·7	2·8	9 B.H.P.	..	Oil-engine	"	..
Flora (Akaroa)	2·7	2·03	4 B.H.P.	..	"	"	..
Flora (Bluff)	4·42	3·32	6 B.H.P.	..	"	"	..
Flora (Dunedin)	1,273	838·4	180	1,132	Compound S. condensing	"	..
Foam	2·5	1·9	5 B.H.P.	..	Oil-engine	"	..
Freetrader	132	94	50	..	High pressure	..	Stern wheel.
Gael	95	55	20	98	Compound S. condensing	Single	..
Gannet	15	10	12	..	"	"	..
Gertie	269	118	59	295	Triple-ex. S. condensing	Twin	..
Gipsy	3·7	2·84	4 B.H.P.	..	Oil-engine	Single	..
Gladsome	5·15	2·91	5 B.H.P.	..	"	"	..
Glenelg	288·3	155·6	75	263	Compound S. condensing	"	..
Glenlea	7	5·26	10 B.H.P.	..	Oil-engine	"	..
Goldfinch	..	..	10	..	Compound S. condensing	"	..
Gordon	13·86	10·4	8	..	"	"	..
Gosford	89	23	30	..	"	"	..
Goshawk	238·7	121·9	28	..	"	"	..
Greyhound (Auckland)	107	83	60 B.H.P.	..	Oil-engine	"	..
Greyhound (Port Underwood	7·2	5·4	12 B.H.P.	..	"	"	..
Greyhound (Te Puru)	3·12	2·34	5 B.H.P.	..	"	"	..
Hananui II	127	44·3	45	239	Triple-ex. S. condensing	"	..
Hapai	867·2	363·5	154·8	..	"	Twin	..
Hauiti	147·5	82·45	32	230	Compound S. condensing	Single	..
Haupiri	715	452	88	454	"	"	..
Hawera	174	91·8	31	..	"	"	..
Heathcote	167	94	35	..	"	"	..
Heather	2·6	2	8 B.H.P.	..	Oil-engine	"	..
Himitangi	323	149	45	248	Triple-ex. S. condensing	"	..
Hina (Nelson)	55·7	39	20	89·3	Compound S. condensing	"	..
Hina (Pelorous Sound)	1·67	1·26	4½ B.H.P.	..	Oil-engine	"	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Hinemoa (Hokianga)	1·23	0·93	2 B.H.P.	..	Oil-engine	Single	..
Hinemoa (Rotorua)	5·8	4·38	10 B.H.P.	..	"	"	..
Hipi	37·5	12·5	11	..	Triple-ex. S. condensing	Twin	..
Hirere	48	18	16	..	Compound S. condensing	"	..
Hobsonville	32·5	22·8	15 B.H.P.	..	Oil-engine	Single	..
Hokimai	7·2	5·4	10 B.H.P.	..	"	"	..
Hola	7·48	5·61	10 B.H.P.	..	"	"	..
Holliday	5·5	4·14	15 B.H.P.	..	"	"	..
Holmdale	266	197	27	120	Compound S. condensing	"	..
Houmoana	5·35	4·02	10 B.H.P.	..	Oil-engine	"	..
Houto	141·5	77·5	45 B.H.P.	..	"	"	..
Huanui	139	59	45 B.H.P.	..	"	"	..
Huia (Auckland)	224	200	60 B.H.P.	..	"	"	..
Huia (Hamilton)	1·9	1·4	4 B.H.P.	..	"	"	..
Huia (Wellington)	..	..	2	..	High pressure	"	..
Huia (Wellington)	127	69	25	121	Compound S. condensing	"	..
Ilex	4·73	3·55	10 B.H.P.	..	Oil-engine	"	..
Independence	1·9	1·5	2½ B.H.P.	..	"	"	..
Invercargill	223	123	41	203	Compound S. condensing	"	..
Irene	4·37	3·27	6 B.H.P.	..	Oil-engine	"	..
Iris (Thames)	4	3	12 B.H.P.	..	"	"	..
Iris (Waikato)	3·5	2·6	5 B.H.P.	..	"	"	..
Isa (Picton)	3·74	2·81	5 B.H.P.	..	"	"	..
Isa (Whangarei)	5	3·9	7½ B.H.P.	..	"	"	..
Jane	27	20·3	20 B.H.P.	..	"	"	..
J.D.O.	129	88·	28	..	Compound S. condensing	"	..
Jersey Lily	..	3·7	12 B.H.P.	..	Oil-engine	"	..
John	342	111	40	..	Compound S. condensing	"	..
John Anderson	52	36	20	..	"	"	..
John Kennedy	5·3	4	12 B.H.P.	..	Oil-engine	"	..
John Townley (2)	..	85	39	..	Compound S. condensing	Twin	..
Kaeo	184	146·3	60 B.H.P.	..	Oil-engine	"	..
Kahu	181·9	99	40	241·5	Compound S. condensing	Single	..
Kaiaia	44·9	24·3	24 B.H.P.	..	Oil-engine	Twin	..
Kaiapoi	5·67	4·26	9 B.H.P.	..	"	Single	..
Kaipatiki	53	19·8	9·5	..	Triple-ex. S. condensing	"	..
Kairaki	462·4	181·7	91·6	538	"	Twin	..
Kaitangata	1,981	1,218	200	948	"	Single	..
Kaitoa	303·6	117·6	65	296	Compound S. condensing	Twin	..
Kaituna	1,976	1,246	200	1,009	Triple-ex. S. condensing	Single	..
Kamona	1,425	903	117	748	"	"	..
Kanieri (Auckland)	202	115	20	138	Compound S. condensing	"	..
Kanieri (Lake Kanieri)	2·7	2	3½ B.H.P.	..	Oil-engine	"	..
Kanna	1,948	1,049	158	1,042	Triple-ex. S. condensing	"	..
Kapiti	242	113	35	210	Compound S. condensing	"	..
Kapui	58·2	29·8	30	..	"	"	..
Kapuni	188·4	96·5	30	191	"	"	..
Karaka	42·65	10·35	21·7	..	Triple-ex. S. condensing	"	..
Karoro	76	51	17	..	Compound S. condensing	"	..
Kate	..	..	5	..	High pressure	"	..
Kawa	4·23	3·18	5 B.H.P.	..	Oil-engine	"	..
Kawau (Auckland)	99	52·7	20	..	Compound S. condensing	"	..
Kawau (Auckland)	47	37	14	..	"	"	..
Kea	3·53	2·64	4 B.H.P.	..	Oil-engine	"	..
Kennedy	226	131	38	187	Compound S. condensing	Twin	..
Kestrel	342	203	43	..	"	Single at each end	..
Kia Ora	2	1·5	4 B.H.P.	..	Oil-engine	Single	..
Kina	10	7·8	25 B.H.P.	..	"	"	..
Kingfisher	6·6	4·9	10 B.H.P.	..	"	"	..
King Hami	4·6	3·1	7 B.H.P.	..	"	"	..
Kini	1,122	702	130	703	Triple-ex. S. condensing	"	..
Kiripaka	132·7	74·5	20	102·4	Compound S. condensing	"	..
Kiritona	136·4	75·2	75 B.H.P.	..	Oil-engine	Twin	..
Kittawa	1,246	707	120	728	Triple-ex. S. condensing	Single	..
Kiwi	1·59	1·2	2 B.H.P.	..	Oil-engine	"	..
Koi	136	53·7	32	..	Compound S. condensing	Twin	..
Kokiri (Opua)	4·89	3·67	8 B.H.P.	..	Oil-engine	Single	..
Kokiri (Whangarei)	5·2	3·9	8 B.H.P.	..	"	"	..
Komata	1,993	1,194	260	1,232	Triple-ex. S. condensing	"	..
Koonya	1,090	662	115	724	"	"	..
Kopapu	1·8	1·4	4½ B.H.P.	..	Oil-engine	"	..
Kopu	..	18	13	..	High pressure	..	Paddle.
Koputai	153	5	120	472	Compound S. condensing	Single	..
Koroi (Auckland)	..	..	9·2	..	Triple-ex. S. condensing	"	..
Koroi (Hokianga)	4·1	3·13	7 B.H.P.	..	Oil-engine	"	..
Koromiko	2,479	1,541	313	1,460	Triple-ex. S. condensing	"	..
Kotare	141	79	20	131	Compound S. condensing	"	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle
Kotiti	61·3	42	14	..	Compound S. condensing	Single..	..
Koutu	2·89	2·17	5 B.H.P.	..	Oil-engine	"	..
Koutunui	170·8	93·3	26	186	Compound S. condensing	Twin	..
Kowhai	791·7	403·7	128	597	Triple-ex S. condensing	Single..	..
Kura	21·2	15·9	35 B.H.P.	..	Oil-engine	"	..
Kurow	2,580	1,564	333	1,719	Triple-ex. S. condensing	"	..
Kyra	2·63	1·97	7 B.H.P.	..	Oil-engine	"	..
La Mascotte (Picton)	4·72	3·54	10 B.H.P.	..	"	"	..
La Mascotte (Rotorua)	1·19	0·9	4 B.H.P.	..	"	"	..
Larola (Picton)	4·72	3·54	10 B.H.P.	..	"	"	..
Larola (Wanganui)	4·13	3·13	10 B.H.P.	..	"	"	..
Lauderdale	1,214	718·7	135	734	Triple-ex. S. condensing	"	..
Lomen	..	..	6	..	Compound S. condensing	"	..
Loyalty	100·6	24	35	..	"	"	..
Lupe	4	3	10 B.H.P.	..	Oil-engine	"	..
Lyttelton (Auckland)	207	24	80	231	Compound S. condensing	..	Paddle.
Lyttelton (Lyttelton)	292	0·88	133	..	"	Twin	..
Magic	93	58·3	60 B.H.P.	..	Oil-engine	"	..
Maheno	35	24	90 B.H.P.	..	"	"	..
Mahinapua	2·17	1·63	4 B.H.P.	..	"	Single..	..
Mahurangi	203	94·5	39	..	Compound S. condensing	"	..
Mahuta	29	13	10¾	..	"	"	..
Maidi	16	12	16 B.H.P.	..	Oil-engine	"	..
Maitai (2)	3,393	1,888	490	3,479	Triple-ex. S. condensing	"	..
Majestic (Hokianga)	2·5	1·87	5 B.H.P.	..	Oil-engine	"	..
Majestic (Mercer)	4·48	3·36	7 B.H.P.	..	"	"	..
Makere	3 62	2·52	4 B.H.P.	..	"	"	..
Makura	2·83	2	7 B.H.P.	..	"	"	..
Mana (Nelson)	3·54	2 66	6 B.H.P.	..	"	"	..
Mana (Riverton)	3·25	2·44	4 B.H.P.	..	"	"	..
Mana (Wellington)	134	76·6	25	154	Compound S. condensing	"	..
Mana (Westport)	196	50	90	..	"	..	Paddle.
Manaia	3·6	2·7	7 B.H.P.	..	Oil-engine	Single..	..
Manaroa	122	77·5	24	146	Compound S. condensing	"	..
Manchester	882	366	160	..	Triple-ex. S. condensing	Twin at each end	..
Mangapapa	164	87	28	191	Compound S. condensing	Single..	..
Manukau	65	45	30	..	"	"	..
Manuwai	107	75	5½	..	High pressure	..	Stern wheel.
Maori (Dunedin)	3,398	1,432	..	5,859	Turbine	Triple..	..
Maori (Havelock)	4	3	10 B.H.P.	..	Oil-engine	Single..	..
Maori (Picton)	7·86	5·9	8 B.H.P.	..	"	"	..
Maori (Riverton)	4·47	3 36	5 B.H.P.	..	"	"	..
Mapourika	1,202	718	130	1,182	Triple-ex. S. condensing	"	..
Mapu II.	3·65	2·74	10 B.H.P.	..	Oil-engine	"	..
Maranui	5·66	4·25	5 B.H.P.	..	"	"	..
Mararoa (Dunedin)	2,598	1,380	530	3,071	Triple-ex. S. condensing	"	..
Mararoa (Rotorua)	2·83	2·13	6 B.H.P.	..	Oil-engine	"	..
Marawa	7·4	5·2	18 B.H.P.	..	"	"	..
Marikena	1·76	1·3	4 B.H.P.	..	"	"	..
Maritana	6·45	4·84	8 B.H.P.	..	"	"	..
Mascotte (Auckland)	..	..	5	..	High pressure	"	..
Mascotte (Wanganui)	..	..	12	..	"	"	..
Matakokiri	4·5	3·3	7 B.H.P.	..	Oil-engine	"	..
Matareka	4·88	3·66	10 B.H.P.	..	"	"	..
Matariki (Lyttelton)	5·42	4·07	10 B.H.P.	..	"	"	..
Matariki (Tuakau)	3·69	2 76	6 B.H.P.	..	"	"	..
Matuku	..	..	4	..	High pressure	"	..
Maude	1·4	1	3 B.H.P.	..	Oil-engine	"	..
Maui	557·5	250·8	80	484	Triple-ex. S. condensing	Twin	..
Mavis	4·39	3·3	10 B.H.P.	..	Oil-engine	Single..	..
Mawhera (2)	647·9	291·5	168	..	Triple-ex. S. condensing	Twin	..
May (Rawene)	2·56	1·92	6 B.H.P.	..	Oil-engine	Single..	..
May (Wanganui)	1·8	1·4	4 B.H.P.	..	"	"	..
May Howard	64	55	45 B.H.P.	..	"	"	..
Melville	5·7	4·32	10 B.H.P.	..	"	"	..
Mere Ava	4 93	3·7	12 B.H.P.	..	"	"	..
Merlin (Auckland)	..	..	4	..	Compound S. condensing	"	..
Merlin (Picton)	3·62	2·72	5 B.H.P.	..	Oil-engine	"	..
Mermaid (Admiralty Bay)	5·7	4·3	7 B.H.P.	..	"	"	..
Mermaid (Tuakau)	1·8	1·3	8 B.H.P.	..	"	"	..
Merry Duchess	5·2	3·9	8 B.H.P.	..	"	"	..
Meteor	2·83	2·13	5 B.H.P.	..	"	"	..
Midlothian	4·37	3·28	5 B.H.P.	..	"	"	..
Miro	4·4	3 3	4 B.H.P.	..	"	"	..
Mizpah	3·85	3	5 B.H.P.	..	"	"	..
Moa	188	95	33	163	Compound S. condensing	"	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Moana (Greymouth) ..	7·8	5·8	7	..	High pressure	Single..	..
Moana (Picton) ..	5·66	4·24	8 B.H.P.	..	Oil-engine	" ..	..
Moata	4·26	3·2	5 B.H.P.	..	"	" ..	..
Moerangi	24	15	27½ B.H.P.	..	"	" ..	..
Mokoia (Dunedin) ..	3,502	2,154	255	2,807	Triple-ex. S. condensing	" ..	..
Mokoia (Rotorua) ..	2·6	1·95	5¾ B.H.P.	..	Oil-engine	" ..	..
Mona	3·21	2·41	5 B.H.P.	..	"	" ..	..
Monarch	5·45	4·09	10 B.H.P.	..	"	" ..	..
Mongonui	..	..	1·25	..	Compound non-condensing	" ..	..
Monica	61·8	29·4	20	..	Compound S. condensing	" ..	..
Monowai	3,433	2,136	290	2,795	Triple-ex. S. condensing	" ..	..
Moturata	24·4	12·5	25 B.H.P.	..	Oil-engine	" ..	..
Moturoa (2) ..	..	..	10	..	Compound S. condensing	" ..	..
Moura	2,026	1,247	275	1,865	Triple-ex. S. condensing	Twin ..	..
Mullogh	59	46	15	..	High pressure	Single..	..
Muratai	6·5	4·8	14 B.H.P.	..	Oil-engine	Twin ..	..
Muriel	58·9	15·5	18	..	Compound S. condensing	Single..	..
Murihiku	558	368	70	521	Triple-ex. S. condensing	Twin .	..
Muritai	42·6	10·35	21·7	..	"	Single..	..
Myrtle	1·7	1·2	4 B.H.P.	..	Oil-engine	" ..	..
Namu	2·15	1·6	3 B.H.P.	..	"	" ..	..
Naomi II.	11	9	19 B.H.P.	..	"	" ..	..
Napier	70·8	48	30	..	Compound S. condensing	" ..	..
Natone	72	49	24	..	"	" ..	..
Naumai	47	28·6	12	..	"	" ..	..
Nautilus (Bluff) ..	5·3	3·9	5 B.H.P.	..	Oil-engine	" ..	..
Nautilus (Gisborne) ..	46·6	28·7	71 B.H.P.	..	"	" ..	..
Nautilus (Hokianga) ..	4·3	3·24	7 B.H.P.	..	"	" ..	..
Nautilus (Onehunga) ..	8	6	6 B.H.P.	..	"	" ..	..
Navua	2,929	1,812	220	1,967	Triple-ex. S. condensing	Twin ..	..
Nellie Mason ..	20	13·6	15 B.H.P.	..	Oil-engine	Single..	..
Nelly	3·9	3	8 B.H.P.	..	"	" ..	..
Never Despair ..	..	..	1½	..	High pressure	" ..	..
Ngahere	1,090	556	118	719	Triple-ex. S. condensing	" ..	..
Ngapuhi	691	299	160	613	"	Twin ..	..
Ngaru (Huntly) ..	1·19	0·89	3 B.H.P.	..	Oil-engine	Single..	..
Ngaru (Onehunga) ..	2·7	2·1	4½ B H.P.	..	"	" ..	..
Ngaru (Thames) .	4	3	6 B.H.P.	..	"	" ..	..
Ngatiawa	451	220	55	450	Triple-ex. S. condensing	Twin ..	..
Ngatoro	1,137	583	118	735	"	Single..	..
Nicola	5·8	4·4	20 B.H.P.	..	Oil-engine	" ..	..
Nikau	247·6	98·3	54·6	256	Compound S. condensing	Twin ..	..
Nimrod (Auckland) ..	4·8	3·6	20 B.H.P.	..	Oil-engine	Single..	..
Nimrod (Rotorua) ..	2·28	1·63	3½ B.H.P.	..	"	" ..	..
Nina	..	..	2½	..	Compound S. condensing	" ..	..
Nopera	3·82	2·87	5 B.H.P.	..	Oil-engine	" ..	..
Nora	3	2·28	4 B.H.P.	..	"	" ..	..
Nora Niven (2) ..	116	56·6	40	169	Triple-ex. S. condensing	" ..	..
Norval	56·5	50	20 B.H.P.	..	Oil-engine	" ..	..
Novelty	199·7	98·5	11	..	Compound S. condensing	" ..	..
Nydia	1·5	1·13	4 B.H.P.	..	Oil-engine	" ..	..
Nymph	1·51	1·14	3 B.H.P.	..	"	" ..	..
Ohinemuri	114	73	30	68	Compound S. condensing	" ..	..
Ohura	50	34	25	..	Quadruple-ex. S. conden.	Twin ..	..
O.K.	5·7	4·3	14 B.H.P.	..	Oil-engine	Single..	..
Oleo	14·3	4·88	20 B.H.P.	..	"	" ..	..
Olive Branch ..	4·33	3·25	9 B.H.P.	..	"	" ..	..
Onewa	73·5	31·3	15·5	..	Compound S. condensing	" ..	..
Ongarue	..	10	35 B.H.P.	..	Oil-engine	" ..	..
Opawa	110	64	18	78	Compound S. condensing	" ..	..
Opouri	570·5	218·2	86	484	Triple-ex. S. condensing	" ..	..
Opoutia (2)	..	..	5	..	High pressure	" ..	..
Orete (2)	118·1	91·78	60 B.H.P.	..	Oil-engine	" ..	..
Orewa	59	37	17	72	Compound S. condensing	" ..	..
Osprey	219	13·8	70	..	"	..	Paddle.
Otunui	15·3	11·5	35 B.H.P.	..	Oil-engine	Single..	..
Paeroa	91	45	25	70	Compound S. condensing	" ..	..
Pakeha	7·74	5·81	12 B.H.P.	..	Oil-engine	" ..	..
Palatine	4·9	3·68	4 B.H.P.	..	"	" ..	..
Pania	55·9	34·9	11	..	Compound S. condensing	" ..	..
Pararoa	5·6	4·2	8 B.H.P.	..	Oil-engine	" ..	..
Parera	..	..	4	..	High pressure	" ..	..
Paritutu	564·2	232·9	90	652	Triple-ex. S. condensing	Twin ..	..
Parua	4	3	10 B.H.P.	..	Oil-engine	Single..	..
Pateena	1,212	550	250	1,964	Compound S. condensing	" ..	..
Pauline	4	3	7½ B.H.P.	..	Oil-engine	" ..	..
Pearl (Auckland) ..	..	5·6	5 B.H.P.	..	"	Twin ..	..
Pearl (Hokianga) ..	3·7	2·79	5 B.H.P.	..	"	Single..	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Pelican	161	1	57	292	Triple-ex. S. condensing	Twin	
Pelorus	24	18	40 B.H.P.	..	Oil-engine	Single	
Petone	708	388	82	495	Triple-ex. S. condensing	"	
Petrel	4·9	3·68	10 B.H.P.	..	Oil-engine	"	
Phantom	44	18	11	..	Compound S. condensing	"	
Phyllis (Hokitika)	1·89	1·42	3 B.H.P.	..	Oil-engine	"	
Phyllis (Russell)	5·2	3·89	12 B.H.P.	..	"	"	
Pilot (Lyttelton)	30·9	10·7	13	..	Compound S. condensing	"	
Pilot (Nelson)	4·18	3·14	5 B.H.P.	..	Oil-engine	"	
Pilot (Wellington)	39	26	15	..	Triple-ex. S. condensing	"	
Pitoitoi (Auckland)	81·1	27·6	13·5	..	Compound S. condensing	"	
Pitoitoi (Waitara)	72·5	19	15	..	"	"	
Planet	14	4	8·5	..	"	"	
Plucky	81	29	40	262	"	"	
Poherua	1,174	749	128	703	Triple-ex. S. condensing	"	
Presto	..	..	3	..	Compound S. condensing	"	
Psyche	1·69	1·26	6 B.H.P.	..	Oil-engine	"	
Pukaki	1,444	917	110	646	Quadruple-ex. S. conden.	"	
Pupuke	137·9	68·2	28	..	Compound S. condensing	Twin	
Purau	51	38	18	..	"	Single	
Putiki	408	157	60	292	"	"	
Queen of the South	197	121	40	189	"	"	
Radium	6·16	4·62	5 B.H.P.	..	Oil-engine	"	
Rakiura	17·8	13·4	10 B.H.P.	..	"	"	
Ralaco	3·2	2·4	10 B.H.P.	..	"	"	
Rangi	2·9	2	4½ B.H.P.	..	"	"	
Rangiora	3·65	2·74	7 B.H.P.	..	"	"	
Rangiriri	2·9	2·1	6 B.H.P.	..	"	"	
Rarawa	1,071	460	140	1,082	Triple-ex. S. condensing	Twin	
Ratanui	2·5	2	3 B.H.P.	..	Oil-engine	Single	
Rawene	4·35	3·27	16 B.H.P.	..	"	"	
Rawhiti	3·95	2·97	5 B.H.P.	..	"	"	
Redwing	6·6	5	12 B.H.P.	..	"	"	
Regal	2	1·5	10 B.H.P.	..	"	"	
Regulus	584·1	227·2	150	659	Compound S. condensing	Twin	
Reliance (Auckland)	..	..	24	..	High pressure	..	Stern wheel.
Reliance (Hokianga)	3·71	2·79	5 B.H.P.	..	Oil-engine	Single	
Rene	4·8	3·6	10 B.H.P.	..	"	"	
Result	28	18	10	..	Compound S. condensing	"	
Rimu	358	144	95	538	Triple-ex. S. condensing	Twin	
Ripple (Lyttelton)	412	187	80	289	"	Single	
Ripple (Onehunga)	10·2	7·7	5 B.H.P.	..	Oil-engine	"	
Roamer	5·98	4·49	8½ B.H.P.	..	"	"	
Rongotai	7	5·23	10 B.H.P.	..	"	"	
Rosamond	721	462	90	445	Compound S. condensing	"	
Rose	5·8	4·4	10 B.H.P.	..	Oil-engine	"	
Rotoehu	1·33	1	1¾ B.H.P.	..	"	"	
Rotoiti	7·9	5·8	30 B.H.P.	..	"	"	
Rotokohu	14·6	11	8	..	Compound S. condensing	"	
Rotomahana	183	139	45	..	"	"	
Rotongaro	4·3	3·3	8 B.H.P.	..	Oil-engine	"	
Rotorua No. 1	1·07	0·81	1¾ B.H.P.	..	"	"	
Ruahine	6·24	4·68	12 B.H.P.	..	"	"	
Rubi Seddon	528	348	108	..	Triple-ex. S. condensing	Twin	
Ruru (Auckland)	31	11	10	..	Compound S. condensing	Single	
Ruru (Moana)	4	3	8 B.H.P.	..	Oil-engine	"	
Ruru (Napier)	158	57	50	212	Compound S. condensing	"	
Samson	5	3·8	16 B.H.P.	..	Oil-engine	"	
Saxon	67·27	34·27	50 B.H.P.	..	"	"	
Scout (Auckland)	5·3	4	20 B.H.P.	..	"	"	
Sea Bird	5·48	4·11	14 B.H.P.	..	"	"	
Seagull	4·4	3·3	7 B.H.P.	..	"	"	
Seamen	2 24	1·68	6 B.H.P.	..	"	"	
Sea Queen I	15·8	9·9	25½ B.H.P.	..	"	"	
Seawolf	7·3	5·5	28 B.H.P.	..	"	"	
Secret	4·7	3·5	10 B.H.P.	..	"	"	
Selwyn	29·3	15·4	30 B.H.P.	..	"	"	
Settler (Kaipara)	16·6	8·3	7	..	Ordinary condensing	"	
Settler (Thames)	8	6	18 B.H.P.	..	Oil-engine	"	
Shamrock	109	60	120 B.H.P.	..	"	Twin	
Sir William Wallace	44	30	20	..	Compound S. condensing	Single	
Sonoma (Hokianga)	5·35	4·02	10 B.H.P.	..	Oil-engine	"	
Sonoma (Rotorua)	1·69	1·27	4 B.H.P.	..	"	"	
Southern Cross	682	403	117	518	Triple-ex. S. condensing	"	
Southern Isle	83·4	58·9	28 B.H.P.	..	Oil-engine	Twin	
Sparrow	..	..	1½	..	Compound S. condensing	Single	
Sparrowhawk	207	98·9	32	..	"	Single at each end	

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Tons Measurement. Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Spray	2·6	2	3 B.H.P.	..	Oil-engine	Single	..
Squall	368	133	60	258	Compound S. condensing	"	..
Standard	12	9	10 B.H.P.	..	Oil-engine	"	..
Stella (Auckland)	268	157	90	238	Compound S. condensing	"	..
Stella (Hokianga)	2·49	1·8	4 B.H.P.	..	Oil-engine	"	..
Stella (Whangarei)	4 6	3·5	8 B.H.P.	..	"	"	..
Sterling (Auckland)	5·6	4·2	12 B.H.P.	..	"	"	..
Sterling (Kaipara)	96	26	39	172	Compound S. condensing	"	..
St. George	3·02	2·26	8 B.H.P.	..	Oil-engine	"	..
Storm	405	185	70	271	Compound S. condensing	"	..
Stormbird	217	129	40	203	"	"	..
Stromboli	2·94	2·2	5 B.H.P.	..	Oil-engine	"	..
Success (Auckland)	11·04	8·28	8 B.H.P.	..	"	"	..
Success (Moana)	2·5	1·9	3 B.H.P.	..	"	"	..
Sumner	167	94	35	..	Compound S. condensing	"	..
Sunbeam	3	2·25	4½ B.H.P.	..	Oil-engine	"	..
Swan (Auckland)	5	3·8	1½	..	High pressure	"	..
Swan (Napier)	23·7	16·1	10	..	Compound S. condensing	"	..
Sybil	2·07	1·5	5 B.H.P.	..	Oil-engine	"	..
Sylph	1·13	0·85	4 B.H.P.	..	"	"	..
Sylvia	4·8	3·6	9 B.H.P.	..	"	"	..
Tainui (Kohanga)	2·1	1·6	6 B.H.P.	..	"	"	..
Tainui (Waitara)	128	59·8	24	147	Compound S. condensing	"	..
Takapuna (Auckland)	77	57	25	..	High pressure	..	Paddle.
Takapuna (Dunedin)	1,036	472	165	1,414	Compound S. condensing	Single	..
Talune	2,086	1,370	255	1,765	Triple-ex. S. condensing	"	..
Tanfield Lea	4·6	3·15	12 B.H.P.	..	Oil-engine	"	..
Tangaroa	189	109	70	..	Compound S. condensing	Twin	..
Taniwha (Auckland)	263	191	40	..	"	"	..
Taniwha (Timaru)	..	16	16	..	Ordinary condensing	Single	..
Tarakihi	..	..	4	..	High pressure	"	..
Tarawera	2,003	1,269	250	1,500	Compound S. condensing	"	..
Tarewai (2)	22·8	11·4	11	..	"	"	..
Tauranganui	3·5	2·6	8 B.H.P.	..	Oil-engine	"	..
Taviuni	1,465	978·6	135	811	Quadruple-ex. S. conden.	"	..
Tawera	52	44	40 B.H.P.	..	Oil-engine	"	..
Te Akau	3·3	2·4	7 B.H.P.	..	"	"	..
Te Anau (Bluff)	2·28	1·71	4 B.H.P.	..	"	"	..
Te Anau (Dunedin)	1,652	1,028	250	1,238	Compound S. condensing	"	..
Te Aroha	106·1	56·9	85 B.H.P.	..	Oil-engine	Twin	..
Te Aumiti	4·25	3·2	10 B.H.P.	..	"	Single	..
Te Awhina	220	1·52	99	543	Triple-ex. S. condensing	Twin	..
Te Kooti	3·04	2·28	5 B.H.P.	..	Oil-engine	Single	..
Te Kura	2·4	1·8	7 B.H.P.	..	"	"	..
Te Pioneer	36·2	24·5	13	..	Compound S. condensing	"	..
Te Rangi	2·73	2·05	6 B.H.P.	..	Oil-engine	"	..
Terawhiti	259·8	46·8	99	846	Triple-ex. S. condensing	"	..
Te Rhino	5·52	4·14	5 B.H.P.	..	Oil-engine	"	..
Te Wake	4·58	3·44	5 B.H.P.	..	"	"	..
Te Whaka	323·6	140·5	45	..	Compound S. condensing	"	..
Te Wharu	3·84	2·88	7½ B.H.P.	..	Oil engine	"	..
Thelma	3·5	2·62	5 B.H.P.	..	"	"	..
The Minerva	48·2	21·3	14	..	Compound S. condensing	"	..
The Peregrine	244·9	162·1	52¼	..	Triple-ex. S. condensing	"	..
Theresa Ward (2)	194	9	95	464	"	"	..
Thistle (Moana)	1·98	1·49	4 B.H.P.	..	Oil-engine	"	..
Thistle (Wanganui)	96	77	90 B.H.P.	..	"	Twin	..
Tikitere	3·95	2·98	8 B.H.P.	..	"	Single	..
Tio	3·4	2·55	4 B.H.P.	..	"	"	..
Tiro	4·5	3·4	5 B.H.P.	..	"	"	..
Tofua (2)	4,345	2,634	354	3,234	Triple-ex. S. condensing	Twin	..
Togo	..	..	14	..	Compound S. condensing	"	..
Toiler	49·36	27·79	13½	..	"	Single	..
Traveller	..	..	7¾	..	"	"	..
Tuatea	112	58	28	228	"	"	..
Tui (Nelson)	1·4	1·05	5 B.H.P.	..	Oil-engine	"	..
Tui (Picton)	1·03	0·7	1½ B.H.P.	..	"	"	..
Tuirangi	124·4	71·8	22½	..	Triple-ex. S. condensing	"	..
Tukua	13·9	10·5	9 B.H.P.	..	Oil-engine	Twin	..
Turanga	..	18·3	25 B.H.P.	..	"	Single	..
Tutanekai	2·73	2·05	8 B.H.P.	..	"	"	..
Uira	..	..	3¼	..	High pressure	"	..
Undine	7·09	5·22	10 B.H.P.	..	Oil-engine	"	..
Uta	31	23·2	50 B.H.P.	..	"	"	..
Utu	2·49	1·87	8 B.H.P.	..	"	"	..
Vaite	106·8	92·6	30 B.H.P.	..	"	"	..
Victoria	5·5	4·2	20 B.H.P.	..	"	"	..
Victory (Mercer)	2·6	1·9	9 B.H.P.	..	"	"	..
Victory (Rotorua)	3·9	2·9	6 B.H.P.	..	"	"	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 17.—Return of Steamers and Oil-engine Vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement. Gross.	Register.	Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-trade Steamers and of Foreign-going Steamers only.	Description of Machinery.	Screw.	Paddle.
Viking	5·8	4·4	7 B.H.P.	..	Oil-engine	Single..	..
Vivid	21	6	13	..	Compound S. condensing	" ..	..
Vixen	25·2	14·7	24 B.H.P.	..	Oil-engine	Twin ..	..
Waiapu	67	57	35 B.H.P.	..	"	Single..	..
Waihora	4,637	2,993	410	2,030	Triple-ex. S. condensing	" ..	..
Waihou	5·27	3·96	12 B.H.P.	..	Oil-engine	" ..	..
Wai-Iti (Akaroa) ..	3·84	2·88	6 B.H.P.	..	"	" ..	..
Wai-Iti (Wanganui) ..	6·63	5	45 B.H.P.	..	"	" ..	..
Waikana	153·8	66	200	..	Compound S. condensing	Twin ..	..
Waikare	3·4	2·5	5 B.H.P.	..	Oil-engine	Single..	..
Waikato	2·57	1·83	6 B.H.P.	..	"	" ..	..
Waikuku	2·5	1·9	5 B.H.P.	..	"	" ..	..
Waima	10	5·78	20 B.H.P.	..	"	" ..	..
Waimarama	1·81	1·36	5 B.H.P.	..	"	" ..	..
Waimarie (Auckland) (2)	245	159	48	..	Compound S. condensing	Twin ..	..
Waimarie (Wanganui)	80	53	20	..	High pressure	..	Paddle.
Waimea	454·4	206·8	100	625	Triple-ex. S. condensing	Twin ..	..
Wainui (Akaroa) ..	6·33	4·75	10 B.H.P.	..	Oil-engine	Single..	..
Wainui (Picton) ..	3·07	2·3	5 B.H.P.	..	"	" ..	..
Waiomo	4·9	3·7	10 B.H.P.	..	"	" ..	..
Waione	70	48	80	..	Triple-ex. S. condensing	Twin ..	..
Waiora (Rotorua) ..	3·9	2·9	15 B.H.P.	..	Oil-engine	Single..	..
Waiora (Wanganui) ..	..	..	5	..	Compound S. condensing	" ..	..
Waiotahi	278	167	56	313	"	Twin ..	..
Waipori	1,918	1,229	180	953	Triple-ex. S. condensing	Single..	..
Wairau	143·2	59·2	20	148	Compound S. condensing	" ..	..
Waireka (Dunedin) ..	148·8	71·6	49	..	Triple-ex. S. condensing	Twin ..	..
Waireka (Russell) ..	3·65	2·74	5 B.H.P.	..	Oil-engine	Single..	..
Wairoa (Auckland) ..	100	49	40	117	Compound S. condensing	" ..	..
Wairoa (Nelson) ..	69·8	47·5	20	49·9	"	" ..	..
Wairoa (Queenstown)	6·51	4·88	10 B.H.P.	..	Oil-engine	" ..	..
Wairua	..	..	5	..	Compound S. condensing	" ..	..
Wairuna	3,947	2,529	396	2,182	Triple-ex. S. condensing	" ..	..
Waitana	3	2·25	5 B.H.P.	..	Oil-engine	" ..	..
Waitemata	5,431	3,459	258	2,380	Triple-ex. S. condensing	" ..	..
Waitohi	24	18	10	..	Compound S. condensing	" ..	..
Waituna	4·27	3·21	5 B.H.P.	..	Oil-engine	" ..	..
Waiwera (Auckland) ..	..	..	6	..	Compound S. condensing	" ..	..
Waiwera (Henley) ..	..	..	16 B.H.P.	..	Oil-engine	" ..	..
Waiwiri	..	..	7¾	..	Compound S. condensing	" ..	..
Wakaiti	19·66	14·74	34 B.H.P.	..	Oil-engine	Twin ..	..
Wakapai	..	..	10	..	Compound S. condensing	Single..	..
Wakatere	441	157	140	..	"	..	Paddle.
Wakatu	157	95	30	143·5	"	Single..	..
Wanaka	2,421	1,572	280	1,008	Triple-ex. S. condensing	" ..	..
Waterlily	25·6	18·1	10 B.H.P.	..	Oil-engine	" ..	..
Waverley	156	93	25	128	Compound S. condensing	Twin ..	..
Weka (Auckland) ..	127	86	27	..	"	Single..	..
Weka (Napier) ..	89	52	20	98	"	" ..	..
Westland	152	8·4	86	525	"	..	Paddle.
Whaka	2·9	2·19	10 B.H.P.	..	Oil-engine	Single..	..
Whakarire	819	449	120	661	Compound S. condensing	Twin ..	..
Whangape	2,931	1,900	280	1,186	Triple-ex. S. condensing	Single..	..
Whanui	2·19	1·65	5 B.H.P.	..	Oil-engine	" ..	..
Whati	..	..	1¾	..	Compound S. condensing	" ..	..
Will Watch	87·5	46	45 B.H.P.	..	Oil-engine	" ..	..
Winifred	4·6	3·5	8 B.H.P.	..	"	" ..	..
Wootton	151	89·6	33	121	Compound S. condensing	" ..	..
Young Bungaree (2) ..	80·5	1·6	35	160	"	" ..	..
Zealandia	1·8	1·35	4½ B.H.P.	..	Oil-engine	" ..	..
Zephyr	4·96	3·67	7 B.H.P.	..	"	" ..	..

Note.—The figure (2) after the name of a vessel shows vessel to have been twice surveyed.

No. 18.—Return of Sailing-vessels surveyed during the Financial Year ended the 31st March, 1912, with Particulars of Tonnage, etc.

Name of Vessel.	Tons Measurement. Gross.	Register.	Description.	Times surveyed.
Alert	113·63	98·12	Schooner	1
Alma	63·02	55·96	"	1
Altai	63·41	57·24	Ketch	1
Amelia Sims	121·33	97·89	Schooner	1
Annie Hill	128·2	121·4	"	1
Aratapu	121·8	121·8	Brigantine	1
Atalanta	32·11	23·16	Schooner	1
Awanui	91·96	85	"	1
Bee	32·03	24·35	Ketch	1
Bell Flower	125·7	98	Schooner	1
Bravo	118·4	99·3	"	1
Cead Mile Failte	88·4	62·7	"	1
Clio	80·5	80·5	"	1

No. 18.—Return of Sailing-vessels surveyed, etc.—*continued.*

Name of Vessel.	Tons Measurement.		Description.	Times surveyed.
	Gross.	Register.		
Clyde	94	87	Schooner	1
Combine	55·7	24·3	"	1
Comet	22·4	19·7	Ketch	1
Coronation	94·2	85·3	"	1
Curlew	120·7	96·4	Schooner	1
Dandy	105·3	82·1	Scow	1
Daphne	34·5	19·9	Schooner	1
Dartford	1,327	1,217	Ship	1
Deveron	25·7	25·7	Cutter	1
Dominion	38·1	24·9	Ketch	1
Edna	22·4	14·8	"	1
Eliza Firth	143·4	143·4	Schooner	1
Esme	33·4	19·7	Ketch	1
Ethel Wells	32·9	19·4	"	1
Eunice	189·9	171·4	Schooner	1
Eva	56·2	48·5	"	1
Falcon	97·5	97·5	"	1
Gannet	24·9	24·9	Ketch	1
Glenae	18·5	13·6	"	1
Haere	127	99	Schooner	1
Havoc	78·5	69·3	"	1
Hawk	153·2	138·5	"	1
Helen	344·6	298·7	Barque	1
Herald	82·5	73	Schooner	1
Hero	65·3	56·4	"	1
Hikurangi	73·6	73·6	Ketch	1
Huia	27·5	19·7	Schooner	1
Huon Belle	42·6	42·6	Ketch	1
Irene	37·2	37·2	Schooner	1
Isabella De Fraine	109·6	93·1	Ketch	1
James Craig	670·9	646	Barque	1
Jessie Craig	680·4	634	"	1
Joseph Craig	714	694	"	1
Joseph Sims	105·4	87·4	Schooner	1
Kahu	54·6	35·8	"	1
Kapua	41·8	17·8	Scow	1
Katie S.	34·2	19·8	Ketch	1
Kereru	123·7	99·7	"	1
Kiatere	16·1	11·1	"	1
Kiatia	32·8	19·9	"	1
Kitty Fraser	47·2	24·6	Schooner	1
Kiwi	21·1	16·5	Cutter	1
Korora	177·8	160·4	Schooner	1
Lady of the Lake	21·6	18·9	"	1
Lena Gladys	34	24	Scow	1
Lily	84·3	84·3	Schooner	1
Lizette	39·3	34·7	Ketch	1
Lizzie Taylor	78·3	77·2	Schooner	1
Lobo	945	859·8	Barque	1
Louisa Craig	710	682	"	2
Maggie	27	19·9	Scow	1
Maid of Italy	15	15	Cutter	1
Mana	32·2	21·9	"	1
Marjorie Craig	540·7	498·8	Barque	1
Matakana	21·4	16·8	Cutter	1
May	43·5	43·5	Schooner	1
Moa	127	98·7	"	1
Moehau	22·7	22·7	"	1
Moonah	88·2	83·4	Ketch	1
Morning Light	92·1	92·1	Schooner	1
Ngaru	73·1	65·6	"	1
Northern Chief	287	263	Barque	1
Norwest	28·5	17·7	Ketch	1
Oban	39·4	39·4	Schooner	1
Orakei	32	32	Scow	1
Pearl Kasper	51	24·7	Ketch	1
Pukapuka	27·7	23	Scow	1
Rambler	77·9	76·6	Schooner	1
Ranger	65·4	64·2	Scow	1
Rangi	98·5	85·9	Schooner	1
Result	22·9	22·9	Ketch	1
Rimu	54·4	53·4	Schooner	1
Rona	678·1	617·6	Barque	1
Rosalie	..	7	Cutter	1
Sea Gull	19·1	19·1	"	1
Soot	26·3	17·9	Ketch	1
St. Anne	23·7	18·9	"	1
Talisman	92·6	83·6	Schooner	1
Tay	..	15	Cutter	1
The Portland	73	59·1	Schooner	1
Three Cheers	103·3	97·3	Scow	1
Toafa Haamea	53	53	Schooner	1
Tramp	98	85·5	"	1
Transit	21·4	18·9	Ketch	1
Vindex	40·9	23·2	"	1
Violet	24·1	19·9	"	1
Waikonini	70·3	60·3	Schooner	1
Wanderer	94	85	"	1
Welcome	65·7	61·5	"	1
Winnie	24·1	19	Ketch	1
Ysabel	148·5	148·5	Schooner	1

No. 19.—Return of Vessels surveyed for Seaworthiness, etc., from the 1st April, 1911, to 31st March, 1912.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c
1911.			
April 4 ..	S.s. Wairau ..	Nelson ..	On the 4th April, 1911, as this vessel was leaving Motueka for Karamea, a slight defect was noticed at the flange of the main steam-pipe. The vessel put into Nelson, where the pipe was repaired. It was afterwards tested to 280 lb. per square inch by hydraulic pressure.
April 8 ..	S.s. Jane Douglas	Nelson ..	On the 26th March, 1911, on a trip from Nelson to Hokitika, when about one mile north of the Hokitika Bar, the end of the propeller-shaft broke and the propeller was lost. The vessel was put under sail for Greymouth, and when off that port was taken in tow by the s.s. "Himitangi," which towed her into port. A spare propeller and shaft were then fitted.
April 28 ..	S.s. Strathendrick	Wellington ..	During the voyage of this vessel from New Caledonia to Wellington on the 24th April, 1911, it was noticed that the main steam-pipe was leaking round the brazing of one of the flanges. On arrival at Wellington the pipe was taken on shore for repairs, the defective portion of the pipe being cut off and a new piece 8 in. long brazed on. The pipe was afterwards tested to 360 lb. per square inch by hydraulic pressure.
May 3, 4 ..	S.s. Moana ..	Port Chalmers and Lyttelton	On the 3rd May, 1911, this vessel left Dunedin for Lyttelton. When off Harrington Point, Otago Harbour, she failed to answer her helm and took the ground at 4.20 p.m. She remained aground until 6.20 p.m. when, with the assistance of a tug and her own engines, she came off. After an examination of the vessel at Dunedin she proceeded to Lyttelton, where a further examination of her hull was made by a diver, when the vessel was found to be uninjured. The steering gear was examined and the spring which keeps the clutch in gear was found to be weak. This spring was renewed and the steering-gear was then found to be otherwise in good condition.
May 5, 6, 9	S.s. Whakatane	Auckland ..	On the 4th May, 1911, during the voyage from Tokomaru Bay to Auckland and when off Cuvier Island, the starboard steering-rod carried away. The chain being then slack came off the barrel of the drum, got jambed, and broke the flange of the drum. After several hours work temporary repairs were effected, which enabled the vessel to reach Auckland. New steering-rods were fitted, the drum was repaired by the acetylene welding-process, and the fairleads raised. The steering-gear, after completion of these repairs, was found to be in good condition.
May 6 ..	S.s. Himitangi ..	Wanganui ..	This vessel was making a trip from Foxton to Wanganui on the 16th May, 1911, when she collided with the s.s. "Wairau" in the Manawatu River. After the collision the "Himitangi" proceeded on her voyage to Wanganui, where an inspection was made. The only damage found was a slight bulge at the 5 ft. water-mark on the starboard bow, which did not affect her seaworthiness.
May 28 ..	Kereru (ketch) ..	Auckland ..	At 11 a.m. on the 21st May, 1911, on a voyage from Niue to Auckland, in latitude 34·32 and longitude 175·56 E., this vessel sprang a leak. Some oakum had worked out of the bottom of the centre-board casing. On arrival in Auckland the base of the centre-board casing was recaulked, and a 6 in. by 6 in. angle iron was fitted and jointed the whole length of the casing.
May 29 ..	S.s. Rotomahana	Auckland ..	On a trip from the Thames to Auckland, on the 28th May, 1911, this vessel went ashore in a fog off Motuihi Island. The vessel remained fast for two and a half hours and then floated off as the tide rose. On arrival in Auckland, after examination, she was found to have sustained no damage.
June 2 ..	S.s. Waitangi ..	Auckland ..	On the 1st June, 1911, on the trip from Great Barrier Island to Auckland, two small holes were discovered in this vessel's hull below the water-line. On arrival in Auckland, after a survey of the plate, it was found the holes were caused by corrosion. The plate was otherwise in good condition. The holes were plugged up.
June 2 ..	S.s. Wairau ..	Foxton ..	On the 16th May, 1911, this vessel was on a voyage from Puponga to Foxton, and when proceeding up the Manawatu River she collided with the s.s. "Himitangi." The starboard side of the hull was cut into about 8 ft. forward from the break of the bridge, and the damage extended from the deck to the round of bilge. The vessel settled down by the head and took the ground in the bed of the river. Temporary repairs were made by a diver, and the vessel was pumped out and refloated on the 28th May. Necessary repairs were effected to enable vessel to make the trip to Picton, where permanent repairs were made.
June 6 ..	S.s. Haupiri ..	Auckland ..	On 5th June, 1911, an outbreak of fire occurred in the 'tween decks as she was leaving Auckland for Limestone Island. A survey was made, when the vessel was found to have received no damage.

NO. 19.—RETURN OF VESSELS SURVEYED FOR SEAWORTHINESS—*continued.*

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911. June 6, 9 ..	S.s. Poherua ..	Wellington ..	On the 27th May, 1911, this vessel was crossing the Greymouth Bar, on a trip from Wellington, when she touched the ground off the North-Tip Head. Through suddenly taking a sheer the vessel got too close to the Tip Head. She made no water, and it was decided to load her and return to Wellington. She was placed on the slip at Wellington for survey. The hull forward was found to be set up in several places, and a number of rivets loosened. One new plate was fitted in the garboard strake on the starboard side, and about forty defective rivets were renewed. About three hundred rivets were cut out of dented plates on the port side in the fore peak and No. 1 tank and reriveted, and one new butt-strap fitted. Two dented parts of margin plate were cut out in No. 1 tank on port side and two new pieces of plate and angle irons fitted. Three new gusset-plates were fitted between margin plate and frames on port side, and about 6 ft. of one frame was renewed.
June 12 ..	S.s. Clan Ross ..	Auckland ..	On the 17th May, 1911, as this vessel was entering Tauranga Harbour, on a voyage from Auckland, she took the ground. The vessel remained fast until the 20th May, when she came off after being lightened. A survey of the vessel was made, but no damage of any sort was found.
Feb. 21, 22; April 13, 27; May 11, 19, 24, 29, and 31; June 1, 6, 9, and 13	S.s. Knight of the Garter	Port Chalmers ..	This vessel was on a voyage from Wellington to London, *via* the Bluff. At 7 a.m. on the 17th February, 1911, two hours and a half after high water, the Captain was taking the vessel into the Bluff Harbour without a pilot when, owing to the ebb tide, the vessel sheered over on to the mid-channel rock and grounded. She remained aground until 12.23 p.m. of the same day, when she came off as the tide rose and with the assistance of her own engines. The vessel proceeded to Port Chalmers for docking and examination, when it was found that the hull had been considerably damaged. The following repairs were found necessary: Nine plates on the port side and one keel-plate were renewed. Fifteen plates on the port side, seven on the starboard side, and four keel-plates were taken out, straightened, and replaced in position. Eight plates on the starboard side were straightened in position. Four plates were taken out of the stern of the vessel for the purpose of fitting in a new portion of the stern-frame, and then replaced in position. One plate in the centre girder was renewed, and portions of two margin plates were renewed, one in No. 3 and one in No. 6 tanks. Four floor-plates were renewed, three were removed, straightened, and replaced in position, and five were straightened in position on the starboard side. Two floor-plates and two half plates were renewed, and nine were straightened in position. One intercostal plate was renewed, and a number were straightened in position. One margin bracket was renewed, and a number were straightened in position on the port side. No. 3 tank-top was repaired and reriveted where necessary. The lower portions of the forward and after bulkheads in the forward deep tank were cut out and renewed. The lower section of the stern-frame from scarf on rudder-post to scarf on stern-post was renewed. The following repairs to the rudder were carried out: A new main piece and one new pintle were fitted, and 10 ft. of rudder-head was renewed. The propeller-blades were taken off, straightened, and pieces burnt on where necessary; the propeller-shaft was drawn, the stern-tube nut was removed and the stern-tube examined. Four cast-iron ballast suction-pipes were also renewed.
June 19 ..	S.s. Tofua ..	Auckland ..	On the 30th May, 1911, on a voyage from Auckland to Levuka, this vessel struck a reef in Navula Passage and grounded. After lightening the vessel, and with the assistance of her own engines, she was refloated on the 2nd June. On her return to Auckland she was placed in Calliope Dock for examination; it was then found that the plates in the fore part of the hull were corrugated to some extent. The seams and rivets, however, were very little damaged. Some of the seams were recaulked, and four rivets were renewed.
June 20, 24, 26	S.s. Gertie ..	Foxton and Wellington	On the 15th June, 1911, this vessel was proceeding from Westport to Foxton, and when crossing the Manawatu Bar during a heavy sea went ashore. The vessel was refloated on the 17th June, when she sailed for Wellington in company with the s.s. "Queen of the South," and on arrival there she was placed on the Slip. The following repairs were effected: A sheathing-plate, 5 ft. by 2 ft. 6 in., was fitted on the port side of the hull-plating under the engine-room, and about twenty rivets were renewed; the rudder was unshipped, the shank straightened, and a new boss welded on the rudder quadrant; both outer bushes for propeller-shafts were relined, and a new set of propeller-blades were fitted to starboard propeller.

No. 19.—Return of Vessels surveyed for Seaworthiness—*continued.*

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911.			
June 28 ..	S.s. Turakina ..	Wellington ..	On the 25th June, 1911, whilst berthed at the Glasgow Wharf, Wellington, a slight crack was discovered in the main steam-pipe. The pipe was taken ashore, the defective portion was cut out, and a new piece 20 in. long was fitted and brazed in. The pipe after repairs was tested to 400 lb. hydraulic pressure before being placed in position again.
July 5, 7 ..	S.s. Kaipara ..	Auckland ..	This vessel arrived at Auckland on the 1st July, 1911, from Brisbane, and when berthing against the set of the tide she fouled the corner of the wharf. On examination it was found that two of the frames were slightly set in, one plate dented, and a number of rivets loosened. Forty-six rivets were renewed.
July 5, 6, 11, 12, and 18	S.s. Feliciana ..	Wellington ..	On the 30th March, 1911, on a voyage from Cardiff to Talcahuana, the stern-gland was broken and the liner on the stern-shaft cracked circumferentially. This was caused through overheating. Temporary repairs were effected, and on arrival at Talcahuana a band was forged and put round the gland to bind it together. On the return voyage to Newcastle, New South Wales, the vessel met bad weather and put into Wellington for coal and repairs. The condenser had commenced to leak on the 30th June, and on arrival it was tested and the tube-plate joints found to be leaking; these were rejointed, and the condenser repacked. The vessel's stern was tipped, the spare propeller and shaft fitted, and a new stern-gland made and fitted.
July 4, 7, 10, 13, 14, 19, 26, and 29	S.s. Tongariro ..	Wellington, Dunedin, and Lyttelton	This vessel was on a voyage from London to Wellington on the 19th June, 1911, about 10 p.m., when the crown of the combustion-chamber in the port-wing of the forward port boiler came down between 4 in. and 5 in., and the plate was torn away from the girder-stays. This boiler was disabled, but the vessel continued the voyage with the remaining boilers. On arrival in Wellington an examination was made, and it was found necessary to cut out and renew the defective crown. This was done, and all the girder-stays were renewed. The buckled plates at the back and sides of the combustion-chamber were straightened, the two top rows of tubes and two rows of screwed water-space stays round the combustion-chamber were renewed. The landings were reriveted and caulked where necessary.
July 31; Aug. 2, 3; Nov. 8, 15; Dec. 1	S.s. Hauroto ..	Napier and Dunedin	On the 28th July, 1911, this vessel was steaming up to the wharf at Napier when she struck the end of it and fractured her stem, doing damage to seven of her frames and to four hull-plates. The broken portion of the stem was straightened and fitted with butt-straps on each side—9 ft. long by 10 in. by $\frac{7}{8}$ in.—and all the damaged plates were cut out and renewed. The broken portions of the frames were cut and replaced with Z bars. A gusset-plate was fitted on the inside behind the fractured stem to strengthen it. In addition to the above work carried out in Napier the following repairs were made in Port Chalmers. Twenty feet of the stem was renewed 10½ in. by 3 in. One frame on the starboard side and six on the port side were renewed 9 ft. long by 5 in. by 3 in. by $\frac{3}{8}$ in. Several reverse bars and gusset-plates were fitted, and the following hull-plates renewed: On the port side a shear strake-plate 8 ft. by 4 ft. 6 in. by $\frac{7}{16}$ in.; M strake, a plate 14 ft. by 3 ft. 6 in. by $\frac{7}{16}$ in.; L strake, a plate 10 ft. by 3 ft. by $\frac{7}{16}$ in.: and on the starboard side, M strake, one plate 5 ft. by 3 ft. 6 in. by $\frac{7}{16}$ in.; L strake, one plate 6 ft. by 3 ft. by $\frac{7}{16}$ in.
Aug. 2 ..	O.e.v. Vesper ..	Auckland ..	During the trip from Auckland to Whangarei on 1st August, 1911, and when in Rangitoto Channel, the "Vesper" collided with the s.s. "Oceano." The jib-boom, bobstay, &c., were carried away. The vessel returned to Auckland and had a new jib-boom and all the necessary gear fitted.
Aug. 2 ..	S.s. Oceano ..	Auckland ..	This vessel was proceeding up Rangitoto Channel on the 1st August, 1911, during the voyage from San Francisco to Auckland, when she collided with the o.e.v. "Vesper." On arrival in Auckland an examination was made, when she was found to have sustained no material damage.
Aug. 13 ..	O.e.v. Orete ..	Auckland ..	On the 9th August, 1911, when three miles north of Kennedy Bay, on a voyage from Gisborne to Auckland, the Orete's propeller struck some unseen object, breaking the tail-shaft and losing her propeller. The vessel proceeded under sail, and on arrival in Auckland a new propeller and shaft were fitted.
Aug. 23 ..	S.s. Hyndford ..	Wellington ..	During the voyage of this vessel from Auckland to Wellington on the 19th August, 1911, a crack was detected in the bend of the main steam-pipe. On arrival in Wellington the pipe was taken ashore for repairs. About 5 ft. of the pipe was renewed and one new flange fitted. The pipe was then tested to 360 lb. hydraulic pressure.

No. 19.—Return of Vessels surveyed for Seaworthiness—*continued.*

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911.			
Aug. 28 ..	S.s. Cape Breton	Dunedin ..	This vessel was on a voyage from New York to Dunedin, *via* Durban, when on the 2nd August, 1911, a joint on the steering-gear rod carried away, straining three others and bending the pins. The vessel was encountering heavy weather at the time. On the 6th August 180 ft. of water-service pipes and connections on deck were carried away, and the deck-house doors were stove in. On arrival in Dunedin new joints were made of heavier material and welded to the steering-gear rods. New water-service pipes and connections were also fitted.
Aug. 28, 29	S.s. Waiwera ..	Dunedin ..	This vessel had arrived from London at the mouth of the Tamar River, Tasmania, and on the 24th July, 1911, was proceeding to Beauty Point under charge of a pilot when she went aground. She came off the same day by using her own engine and with the assistance of a tug. After discharging part of her cargo she proceeded to Port Chalmers and was docked there for examination. It was found that the E and L strakes on the port side were dented and a number of rivets started, 19 ft. of the bilge-keel was buckled, and several smaller dents were noticeable on the bottom. Twenty-five rivets were renewed at the junction of the E and L strakes of hull-plating.
Sept. 5, 6 ..	S.s. Petone ..	Lyttelton ..	When moving ship in Gisborne Harbour on the 1st September, 1911, this vessel struck the wharf with her rudder, twisting and bending the rudder-stock. On arrival in Lyttelton the rudder was unshipped, straightened, and examined and found to have no flaws in it. The quadrant was keyed on square with the rudder, and the whole replaced.
Sept. 15 ..	S.s. Hina ..	Nelson ..	On the 13th September, 1911, on a voyage from Nelson to Collingwood, *via* Bays and ports, this vessel touched a rock in Bark Bay. She was going dead slow at the time and did not lose any way. On her return to Nelson she was placed on the hard for examination. It was found that the rolling-chocks on each side amidships had been chafed slightly, but otherwise the vessel was undamaged.
Sept. 16 ..	S.s. Mana ..	Wellington ..	On the 14th September, 1911, whilst crossing the Patea Bar on a voyage from Wellington, this vessel took a sheer and struck the eastern wall of the breakwater. A southerly gale was blowing at the time. The lower part of the stem was twisted, two plates badly dented and cracked, and two plates slightly dented. The vessel returned to Wellington and was placed on the Slip. About 8 ft. of the stem was renewed, and two new hull-plates fitted on both sides of her stem.
Sept. 23 ..	S.s. Komata ..	Wellington ..	This vessel was shifting from the Taranaki Street Wharf to the Glasgow Wharf, in Wellington Harbour, on the 20th September, 1911, during a strong gale of wind. On nearing the Glasgow Wharf she dropped her anchor, but the wind caught her broadside on and slewed the vessel round so that her rudder fouled the wharf. The rudder-shank was twisted 40 degrees, and the steering-gear chains strained. A new end was welded on the rudder-shank, the hole in the quadrant trued out, and the shank refitted. All new chains on the port and one length on the starboard side were fitted, and two lengths of chain on the starboard side repaired.
Oct. 5 ..	S.s. Orari ..	Dunedin ..	This vessel was on a voyage from Dunedin to Sydney. On the 30th September, 1911, at Port Chalmers, a double intermediate main and auxiliary steam stop-valve chest on the port side burst. A new stop-valve chest was made and fitted.
Oct. 9 ..	S.s. Ulimaroa ..	Bluff	On the 9th October, 1911, as this vessel was entering the Bluff Harbour, on a voyage from Melbourne, the port propellor struck a patch of rock in the fairway, breaking off part of one of the blades. No repairs were necessary as the vessel had received no material damage.
Oct. 11, 12 ..	S.s. Whangape ..	Port Chalmers ..	During the voyage of this vessel from Bunbury to Bluff, on the 14th September, 1911, it was noticed that the propeller was slack on the shaft, caused probably by the racing of the engines in heavy weather. The vessel was docked at Port Chalmers, when it was found that the propeller-shaft was damaged by the working of the propeller. A new port-propeller shaft was fitted.
Oct. 20 ..	S.s. Lauderdale	Wellington ..	This vessel was moving away from the wharf at Napier, on the 17th October, 1911, for Westport, when, after swinging, the ebb tide set her stern on to the wharf, which was struck by the propeller, injuring all the blades. The vessel came on to Wellington, and was placed on the Slip and a new propeller fitted.

No. 19.—Return of Vessels surveyed for Seaworthiness—*continued.*

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911. June 28; July 18; Oct. 12, 21, 27	S.s. Takapuna ..	Wellington and Port Chalmers	On the 2nd June, 1911, this vessel was crossing the Westport Bar, on a voyage from Nelson, when she was disabled by the rudder-head carrying away just below the trunkway, through a heavy sea striking the rudder, and a defect in the welding. After the rudder was disabled the vessel was kept going ahead, and managed to get inside the retaining-walls. The anchor was dropped, but the strong current in the river carried the stern of the vessel round and it struck the retaining-wall, breaking the stern-post at the bottom of the aperture, and starting the hull plating and rivets under the stern-tube. The vessel was towed to Wellington, and placed on the Slip for examination. It was then decided to send her to Port Chalmers for repairs. On arrival there she was docked and the following repairs made to the vessel. A new rudder-post and rudder were made and fitted. Eight hull-plates were taken off to allow of the new post being fitted, six were replaced, and two defective plates were renewed. Thirty-two rivets in the forepart of the vessel were renewed. A new propeller-shaft and a new set of propeller-blades were fitted.
Nov. 3 ..	Gannet (ketch) ..	Nelson.. ..	This vessel took the ground at Tarakohe Wharf, on the 3rd November, 1911, during a gale. On examination of the hull it was found that the butts and seams were strained. The jib-boom was broken and the rudder damaged. The butts and the planking were refastened, and also caulked where necessary. A new rudder and jib-boom were also fitted.
Nov. 11, 12..	S.s. Tangaroa ..	Napier.. ..	On the 8th November, 1911, when entering the Wairoa River, on a voyage from Napier, this vessel struck a beam which was projecting from a pile of the old breastwork, making a 12 in. by 9 in. hole in her port side. The water gained entrance at this hole and the vessel sank. At low water temporary repairs were effected, the water was pumped out, and the vessel was refloated on the 9th. She returned to Napier, where permanent repairs were effected. Three new planks were fitted to hull.
Nov. 13 ..	S.s. Wairoa ..	Nelson.. ..	During the voyage of this vessel from Nelson to Waitapu, on the 12th November, 1911, in Blind Bay, a leak was discovered at the back end of the furnace-tube, where it is connected to the combustion-chamber plating, near the edge of an old patch. On arrival in Nelson a small plate was fitted on either side of the thin portion.
Nov. 13 ..	S.s. Chelmsford ..	Auckland ..	On a trip from Coromandel to Auckland, on the 9th November, 1911, when about five miles off Cow and Calf Rocks, this vessel's crank-shaft broke. The vessel was towed to Auckland, where a new after-web was forged and fitted to the crank-shaft.
Dec. 2 ..	S.s. Gertie ..	Wellington ..	On the 24th November, 1911, when crossing the Manawatu Bar, on a voyage from Greymouth to Foxton, this vessel struck the bottom and carried her rudder away. She drifted over to the North Spit and grounded, breaking most of her propeller-blades. The cause of the accident was insufficient water on the bar. The vessel remained aground until the 28th November, when she was refloated, after jettisoning about 12 tons of coal, and proceeded to Foxton. The damaged rudder was unshipped and forwarded to Wellington, where a new one was made to replace it. Two new sets of propeller-blades were also fitted.
Dec. 4 ..	S.s. Napier ..	Dunedin ..	On the 24th November, 1911, this vessel was proceeding from the fishing-ground off Taiaroa Heads to Dunedin, and when inside Otago Heads the L.P. bottom-end connecting-rod bolts broke, causing the breaking of the cylinder-cover and piston.
Dec. 6, 11, 14	S.s. Wootton ..	Lyttelton ..	This vessel was on a voyage from Kaiapoi to Foxton. On the 28th November, 1911, when crossing the Foxton Bar, she grounded, carrying away the rudder-post and the bottom of propeller-aperture.
Dec. 14 ..	S.s. Taniwha ..	Auckland ..	This vessel was proceeding up the Ohinemuri River on a voyage from Auckland to Paeroa, on the 12th December, 1911, when she struck the river-bank and strained her forefoot. She completed the voyage to Paeroa and then returned to Auckland, where she was docked for examination and repairs. It was found necessary to fit a graving-piece into the forefoot.
1912. Jan. 3 ..	S.s. Waipori ..	Dunedin ..	On the 29th December, 1911, as this vessel was passing Quarantine Island, Otago Harbour, on a voyage from Bluff to Dunedin, she touched a rock on the port side, denting her bottom in way of Nos. 1 and 2 ballast-tanks and engine-room spaces. There was a strong ebb tide running, and a fresh south-west breeze blowing at the time, which interfered with the vessel's steering and caused her to take a sheer towards the island. On arrival at Dunedin a survey was made, and, as the vessel was not seriously damaged, she was allowed to proceed to Lyttelton for docking and further survey. It was there found necessary to renew fifty-six rivets in the hull and sixty in the bilge-keel on the port side of the vessel.

No. 19.—Return of Vessels surveyed for Seaworthiness—*continued.*

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911. Dec. 28, 30.. 1912. Jan. 3, 6, 9	S.s. Kumara ..	Wellington ..	On the 24th December, 1911, when proceeding from Dunedin to Gisborne, it was discovered that the furnace-crowns of the after starboard boiler had come down. It was decided to come to Wellington for repairs. An examination was made of the furnaces, when it was found that the starboard and centre furnaces were down 4½ in. and 5 in. respectively. The port furnace was also down a little. A further examination was made of the other boilers, when it was found that the centre furnace of the centre after-boiler was down 2½ in. The examination of the furnaces showed that they had been overheated by an accumulation of scale in the boilers. The furnaces were set back to their original form, and the boilers were afterwards tested to 270 lb. hydraulic pressure.
Jan. 9 ..	S.s. Paparoa ..	Lyttelton ..	Whilst lying at the Lyttelton Wharf, on the 8th January, 1912, it was noticed that a portion of the main steam-pipe of this vessel had worn thin in two places, through the vibration of the pipe where suspended in the hangers. Two small patches were brazed over the thin places, and the pipe was afterwards tested to 360 lb. hydraulic pressure.
Jan. 9, 10 ..	S.s. Mararoa ..	Lyttelton ..	During the voyage of this vessel from Lyttelton to Wellington, on the 8th January, 1912, at 8·45 p.m., it was discovered that the thrust-block was fractured, the vessel being then about thirty miles from Lyttelton. The vessel returned to Lyttelton under easy steam. The thrust-bearing was repaired by fitting a flanged plate round the end of bearing and bolting it over the broken part.
Jan. 12 ..	S.s. Paparoa ..	Wellington ..	On the 11th January, 1912, this vessel was lying at the Glasgow Wharf when a defect was noticed in a length of the main steam-pipe, where it had chafed against the hanger. A small patch was brazed over the thin place on the pipe, and the pipe was afterwards tested to 360 lb. hydraulic pressure.
Jan. 16 ..	S.s. Wimmera ..	Dunedin ..	This vessel was proceeding from Lyttelton to Dunedin, on the 13th January, 1912, and when off Akaroa Peninsula the H.P.-cylinder liner became loose. On examination it was found that the studs which held the liner in position were broken. Temporary repairs were effected, and on the vessel's arrival in Dunedin a ring was fitted between the cylinder-cover and liner and secured to the liner by pinning. This kept the liner securely in position.
Jan. 30 ..	S.s. Holmdale ..	Wellington ..	On the 27th January, 1912, on a trip from Greymouth to Gisborne, when off Farewell Spit, the circulating-pump foot-valve carried away. The thread on the valve-seat had become worn and eventually stripped. After the accident the bucket was drawn and the donkey-pump used for circulating the water. The vessel came on to Wellington for repairs, where a new valve-seat was made and fitted.
Jan. 31 ..	S.s. Kini ..	Dunedin ..	On the 21st January, 1912, this vessel was leaving Westport for Lyttelton, when a strong tide caused her to sheer and touch the end of the east half-tide training-wall at Westport. The hull on the port side was damaged, several plates were dented, a number of rivets were started, and the rolling-chock was bent. The vessel was docked at Port Chalmers, when the following repairs were carried out: On B strake 3 ft. of the seam was caulked, on C strake five rivets were renewed, the butt-strap on the after length of the rolling-chock was reriveted, and the broken cement in fore-bilges was renewed.
Jan. 31, Feb. 3	S.s. Wairau ..	Wellington ..	As this vessel was crossing the Karamea Bar, on a trip to Wellington, on the 10th January, 1912, she was struck by a blind roller and went aground on the Bar, but came off again immediately. The rudder, rudder-post, part of keel and propeller were damaged. Temporary repairs were made, and the vessel came on to Wellington. The following repairs were effected to the vessel: A new rudder and a new rudder-post were fitted, and 7 ft. of the keel was renewed. A new gun-metal propeller and tail-shaft were fitted, and the stern-bush was relined.
Feb. 21 ..	S.s. Holmdale ..	Lyttelton ..	On the trip from Greymouth to Lyttelton, when off Farewell Spit, on the 14th February, 1912, very heavy weather was encountered. The main topmast was carried away above and close to the rigging-band. Temporary repairs were carried out at Lyttelton to enable the vessel to come to Wellington, where a new mast was fitted.
Feb. 23 ..	S.s. Queen of the South	Wellington ..	On the 2nd February, 1912, on a trip from Foxton to Wellington, and when off Terawhiti, this vessel struck some submerged object. On arrival in Wellington an examination was made, when it was found that the vessel had sustained no damage.

No. 19.—Return of Vessels surveyed for Seaworthiness-*continued*.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1911. March 11 ..	S.s. Akaroa ..	Auckland ..	On the 11th March, 1912, an examination was being made of the crank-shaft of the main engines when the vessel was lying at the Auckland wharf. It was noticed that there was a flaw running circumferentially round the H.P. crank-pin. The crank-shaft was taken out of the vessel and cut through at the after web of H.P. crank, and a new built H.P. crank was made. This was shrunk and keyed on to the old shaft. The shaft was relined up, and the engines tried under steam on completion of repairs.

No. 20.—Return showing the Revenue from the Inspection of Machinery Department (including the Examination of Marine Engineers, Land-engine Drivers, and Electric-tram Drivers, and the Amount earned by the Survey of Steamers and Sailing-ships), also the Ordinary Expenditure of the Inspection of Machinery Department (including the Examination of Marine Engineers, Land-engine Drivers, and Electric-tram Drivers, and the Survey of Steamers and Sailing-ships), during the Financial Year ended the 31st March, 1912.

Receipts.	£	s.	d.
Inspection of boilers and machinery (less refunds)	9,774	7	6
Certificates of land-engine drivers (less refunds)	665	5	0
Certificates of electric-tram drivers (less refund)	150	0	0
Survey of steamers (including auxiliary-powered vessels)	2,091	0	0
Survey of sailing-ships	329	10	0
Survey of vessels for seaworthiness ..	169	0	0
Examination of marine engineers ..	195	0	0
	£13,374	2	6

Expenditure.	£	s.	d.
Salaries (less refunds)	8,895	12	5
Advertising, books, &c.	20	4	3
Office furniture, &c.	2	14	0
Collection of inspection-fees	150	0	0
Office equipment and requisites	74	12	7
Postage and telegrams	268	15	8
Rent, cleaning offices, fuel, and light ..	145	15	8
Telephones	70	16	7
Travelling-expenses (less refund) ..	2,510	15	11
Contingencies	21	14	6
	£12,161	1	7

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-drivers.

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.			
Allen, W.	Dargaville	Hauling	8	Two 6¼	Locomotive and traction	Late Kaipara Timber Company, Hoanga.
Auckland City Council	Auckland	Electric lighting	115	10	Second class	Size of cylinders amended.
,,	,,	Road-roller	5⅛	5¼ and 8½	Locomotive and traction	Additional.
,,	Freeman's Bay	Electric lighting	107	13 and 22	First class	,,
Auckland Electric Tramway Company	Auckland	Generators	123	17 and 34, 18¾, 27, and 38½	,,	,,
,, ,,	,,	,,	123	Ditto	,,	,,
,, ,,	,,	,,	123	,,	,,	,,
,, ,,	,,	,,	123	17 and 34	,,	Size of cylinders amended.
,, ,,	,,	,,	123	17 and 34	,,	,,
,, ,,	,,	Power-station	123	17 and 34	,,	,,
,, ,,	,,	,,	123	17 and 34	,,	,,
,, ,,	,,	,,	123	18¾, 27, and 38½	,,	,,
Auckland Farmers' Freezing Company	Southdown	Freezing	84	19 and 28	,,	,,
,, ,,	,,	,,	84	19 and 28	,,	,,
,, ,,	,,	,,	84	10	,,	,,
Auckland Gas Company	Freeman's Bay	Gas-works	95	Turbine	,,	Additional.
,,	,,	,,	95	,,	,,	,,
Cashmore Bros.	Cox's Creek	Sawmill	64	18 7/16	,,	Size of cylinders amended.
Chambers and Son, John	Auckland	Traction	2½	5½	Locomotive and traction	Late W. H. Haggar, Kaitaia.
Colonial Sugar Refining Company	Chelsea	Steaming	190	16 and 18	First class	Size of cylinders amended.
,, ,,	,,	Sugar-refining	168	Two 24	,,	,,
,, ,,	,,	,,	38	Two 24	,,	Additional.
,, ,,	,,	,,	38	Two 24	,,	,,
,, ,,	,,	,,	38	Two 24	,,	,,
,, ,,	,,	,,	38	Two 24	,,	,,
,, ,,	,,	,,	38	Two 24	,,	,,
Comrie and Fausett	Pukekohe district	General work	6	7	Locomotive and traction	,,
Cook and Co., H. F.	Whangamumu	Boiling-down	83	7½ and 6½	Second class	Size of cylinders amended.
Dawson, R.	Papatoetoe district	General work	6	8	Locomotive and traction	,,
Dominion Laundry Company	Auckland	Laundry	43	9	Second class	Additional.
Frost, E. T.	Tuakau district	General work	5	6½	Locomotive and traction	Late J. H. Keith, Tuakau.
Gamman and Co. (Limited)	Omanawa	Sawmill	20	13⅜	Second class	Additional.
,, ,,	Tauranga	,,	70	18	First class	,,
,, ,,	,,	,,	47	18	,,	,,
,, ,,	,,	Hauling	12	Two 7½	Locomotive and traction	,,
Gardner Bros.	New Lynn	Brickworks	56	14¼	First class	Size of cylinders amended.
,,	,,	,,	43	14¼	,,	Late Gardner Bros. and Parker, New Lynn.
Great Northern Brewery Company	Auckland	Brewery	23	10	Second class	Additional.
Hauraki Reefs Gold-mining Company	Coromandel	Pumping and winding	35	20	First class and winding	Late Hauraki Freehold Gold-mining Company. Coromandel.
Hellaby (Limited), R. and W.	Auckland	Refrigerating	79	Two 8 and 12	First class	Size of cylinders amended.
,, ,,	,,	,,	79	Two 8 and 12	,,	,,
,, ,,	Westfield	Boilding-down	62	Two 26	,,	,,

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.,—*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—*continued.*				
Hellaby (Limited), R. and W.	Westfield	Boiling-down	45	Two 26	First class	Size of cylinders amended.
Henderson and Pollard	Mount Eden	Joinery	46	12, 20, 20	,,	Additional.
Kaipara Dairy Company	Helensville	Dairy factory	27	9	Second class	,,
Kapanga Gold-mining Company	Coromandel	Pumping and winding	25	Two 10, one 20	First class and winding	Size of cylinders amended.
Karaka Mines (Limited)	Karaka Creek	Crushing	23	12	Second class	Additional.
Kauri Timber Company	Kohukohu	Sawmill	35	Two 16¼	First class	Size of cylinders amended.
,,	,,	,,	35	Two 16¼	,,	,,
,,	,,	,,	35	Two 16¼	,,	,,
,,	Koutu	,,	50	14¼	,,	,,
Lamb and Co., R. S.	Horehore	Log-hauling	9	Two 6¼	Locomotive and traction	,,
Mikkelson and Co.	Manawahe	Sawmill	20	10	Second class	Late A. W. Ross and Co., Matata.
Mitchelson Timber Company	Owhata	,,	16	Two 9	,,	Size of cylinders amended.
Mount Albert Road Board	Mount Albert	Pumping	20	11½ and 17½	First class	,,
Paeroa Mineral-water Company	Paeroa	Cordial-factory	17	13	Second class	Late R. Fewell, Auckland.
Piako County Council	Te Aroha district	General work	5	5 and 8½	Locomotive and traction	Additional.
Raynor, Dr.	Waikumete	Hauling	7	4¼ and 7	,,	,,
,, ,,	,,	,,	6	Two 6	,,	,,
Rich and Jeffries	Matata	Pumping	50	18 and 36	First class	,,
Smith, T. L.	Clevedon district	General work	6	8	Locomotive and traction	,,
Takapuna Tram and Ferry Company	Takapuna	Hauling	25	Two 12	,,	,,
,,	,,	Tramway	24	Two 12	,,	,,
Thames Drainage Board	Thames	Pumping, winding, and air-compressing	40	30 and 60, 18 and 29½, two 14	First class and winding	,,
Thomas, G.	Kaiaka	Sawmill	25	10	Second class	Late Thomas and Dangen, Kaiaka.
Thorne, A. J. W.	Rangataika	Flax-mill	16	14¼	First class	Size of cylinders amended.
Union Hauraki Gold-mining Company	Coromandel	Pumping and winding	25	One 6 and two 7	Second class and winding	,,
Union Steamship Company (Limited)	Hulk "Countess of Anglesea"	Hoisting	34	Two 6, two 6, two 6, two 6, two 6 two 6	First class	Additional.
,, ,,	Hulk "Helen"	,,	22	Two 8 and two 4½	Second class	Size of cylinders amended.
United Coal Company	Maramarua	Pumping	33	24	First class	,,
,,	,,	,,	25	14	,,	,,
,,	,,	,,	12	24	,,	,,
Waihi Gold-mining Company	Waihi	Winding, No. 2 Shaft	70	Two 12	Winding	,,
,,	,,	,, ,,	70	Two 12	,,	,,
,,	,,	,, No. 6 Shaft	70	Two 30	,,	,,
Waihi Grand Junction Gold-mining Company	,,	,,	80	Two 12 and two 7	,,	,,
Waihi-Paeroa Gold-extraction Company	Paeroa	Gold-saving	83	11 and 22, 21 and 40	First class	Additional
,, ,,	,,	,,	83	11 and 22, 21 and 40	,,	,,
,, ,,	,,	,,	83	11 and 22, 21 and 40	,,	,,
,, ,,	,,	,,	83	11 and 22, 21 and 40	,,	,,
Waitemata Sawmill Company	Auckland	Sawmill	68	16	,,	,,
West Coast Sawmill Company	Karekare	Hauling	4½	6	Locomotive and traction	,,
Wilkinson, J.	Whangarei	Sawmill	20	Nil	Second class	Late A. and T. Burt, Auckland.

Wilson's Portland Cement Company ..	Warkworth ..	Cement-works ..	72	Compound 17 and 29½, 21½ and 44⅛	First class	Size of cylinders amended.
„ ..	„ ..	„ ..	72	17½ and 29½ ..	„	„
AUCKLAND SOUTH DISTRICT.						
Ellis and Burnand	Mananui ..	Sawmill	59	18, 14¼, and two 12	First class	Size of cylinders amended.
„	„	„	59	18, 14¼, and two 12	„	„
„	Mangapeehi ..	„	65	14	Second class	„
„	„ ..	„	50	14	„	„
„	„ ..	Log-hauling ..	15	Two 8½	„	Late Ongarue Sawmilling Company, Ongarue.
Ellis, J. W.	Mananui ..	Veneer-work ..	70	14	„	Size of cylinders amended.
Fraser, G. M.	Huntly	Contracting ..	26	Two 6	„	Additional.
Hansen and Co.	Waitoa	Sawmill	40	14¼	First class	Late S. Bellamy, Waitoa.
Knight, B. L.	Raurimu ..	„	47	13	Second class	Additional.
Massey Bros.	Matamata district ..	Threshing ..	4	6	Locomotive and traction	Late J. Allwill, Hautapu.
Melville, R. J.	Cambridge ..	„ ..	6	8	„	Late Bycroft Bros., Hamilton.
O'Reilly, J.	Taumarunui ..	Brickworks ..	23	14	Second class	Additional.
Prouse Lumber (Limited)	Owhango ..	Sawmill	37	13	„	„
Pukeweka Sawmilling Company	Matapuna ..	Hauling	12	Two 7½	Locomotive and traction	„
Raglan County Council	Raglan	General	6	8	„	„
Selwyn Timber Company	Ngatira	Hauling	28	Two 8	„	„
Smith and Wingers	Taumarunui ..	Sawmill	25	13	Second class	Late Taumarunui Sawmilling Company, Taumarunui.
„	„ ..	„	17	Two 9	„	Size of cylinders amended; late Roper and Winger, Taumarunui.
Steele Bros.	Mamaku ..	„	43	14¼ and 29 ..	First class	Additional.
Taringamutu Sawmilling Company	Taringamutu ..	„	39	12	Second class	Size of cylinders amended.
„	Taumarunui ..	Hauling	19	Two 11¼ ..	Locomotive and traction	Additional.
Taupiri Coal Company	Huntly	Winding and air-compressing	72	Two 14¼, 14, 9, 12, and 7	First class and winding ..	Size of cylinders amended.
„	„	Pumping and winding	42	Ditto	„ ..	„
„	„	Winding and air-compressing	72	Two 14¼ and 14 ..	„ ..	„
„	„	Pumping and winding	20	Two 9	Winding	„
Taupo Totara Timber Company	Mokai	Log-hauling ..	71	Two 12	First class	„
„	„	Sawmill	60	Two 12	„	„
„	„	„	58	Two 12	„	„
Te Kuiti Borough Council	Te Kuiti	Road-rolling ..	4¼	Two 5¾	Locomotive and traction	Additional.
Watkins Bros.	Mananui ..	Hauling	6	8¼	„	Late W. Watkins, Mananui.
CANTERBURY DISTRICT.						
Andrews, J. C.	Rangiora	Flax-mill	9	8½ and 8½ ..	Second class	Additional.
Barnes, James	Cheviot	General	8	9½	Locomotive and traction	Late Charles Barnes, Cheviot.
Blackball Coal Company	Lyttelton ..	Hoisting	20	Two 5, two 5, two 5, two 5	Second class	Size of cylinders amended.
Booth, D.	Cheviot	General	6	6 and 9¾	Locomotive and traction	Additional.
Bowron Bros.	Woolston ..	Tannery	20	Nil	Second class	Engine not now connected.
„	„ ..	„	17	„	„	„
„	„ ..	„	17	„	„	„
„	„ ..	„	16	„	„	„
Brown, Mrs.	Christchurch ..	Laundry ..	20	„	„	„
Canterbury Bye-Products Company	Sockburn ..	Boiling-down ..	44	9 and 13	First class	Additional.

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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—*continued.*				
Canterbury Frozen Meat Company	Belfast	Freezing and electricity	70	8 and 14, 9, 14½, and 25; 9, 14¼, and 25; 10 and 17	First-class	Size of cylinders amended.
,,	,,	Ditto	40	Ditto	,,	,,
,,	,,	,,	40	,,	,,	,,
,,	,,	,,	30	,,	,,	,,
,,	,,	Boiling-down	15	8	Second class	,,
,,	,,	,,	15	8	,,	,,
,,	,,	,,	15	8	,,	,,
Christchurch City Council	Christchurch	Electricity	210	12 and 19, 13 and 19, 9 and 15, 8 and 12	First class	,,
,,	,,	,,	208	Ditto	,,	,,
,,	,,	,,	103	,,	,,	,,
,,	,,	,,	103	,,	,,	,,
Christchurch Gas Company	,,	Gas-works	35	12, 9, and 7	,,	,,
Christchurch Tramway Board	,,	Electricity	117	Turbines	,,	Additional.
Church Bros.	Ashburton	General	8	6½ and 11	Locomotive and traction	,,
Daikee and Son	Waddington	,,	8	6½ and 11	,,	,,
Dearsley and Taylor	Christchurch	Sawmill	30	10¼	Second class	Size of cylinders amended.
Duncan, P. and D.	,,	Engineers' tools	30	8 and 8	,,	,,
Feather, E.	Loburn	General	10	6¾ and 11½	Locomotive and traction	Additional.
Giles, Robert	Balcairn	,,	8	6⅝ and 11	,,	,,
,,	,,	,,	4	7½	,,	Late H. J. Clark, Flaxton.
Glenmore Brick Company	Woolston	Brickworks	50	16	First class	Size of cylinders amended.
Goss and Co., James	Christchurch	Sawmill	30	12 and 23	,,	,,
,,	,,	,,	30	12 and 23	,,	,,
Hall and Son, E.	Rangiora	General	8	9	Locomotive and traction	Additional.
Halswell Quarry Company	Halswell	Hauling	10	7 and 11	,,	Late Pitcaithly and Co., Christchurch.
,,	,,	,,	8	10½ and 10½	,,	Size of cylinders amended.
Hanna, Thomas	Sefton	Threshing	8	8½	,,	Late J. Pawsey, Sefton.
Henderson, C. W.	Kirwee	General	7	8¾	,,	Late Watson Bros., Kirwee.
Johnston, J. A.	Kaikoura	,,	6	8	,,	Additional.
Keltie Bros.	Hororata	,,	6	8	,,	Late Russell and Keltie, Hororata.
Lyttelton Harbour Board	Lyttelton	Pumping	15	13⅛ and 13⅛	First class	Size of cylinders amended.
,,	,,	,,	15	13⅛ and 13⅛	,,	,,
,,	,,	,,	15	13⅛ and 13⅛	,,	,,
Lyttelton Times Company	Christchurch	Printing	15	8 and 13	,,	,,
,,	,,	,,	15	8 and 13	,,	,,
Malvern County Council	Kirwee	Road-work	6	5¾ and 9	Locomotive and traction	Late Courtenay Road Board, Kirwee.
Mann, Frederick	Russell's Flat	General	8	6½ and 10	,,	Late R. Darroch, Cheviot.
Manning and Co.	Christchurch	Brewing	50	7 and two 5	Second class	Size of cylinders amended.
Mehrtens, H.	Rangiora	General	8	6¼ and 10½	Locomotive and traction	Additional.
Mills, John	Waikuku	,,	8	6 and 10	,,	Size of cylinders amended
Moorhead, Mrs. Agnes	Southbridge	Threshing	8	9	,,	Late H. Montgomery, Southbridge.

McConnell, R. J.	Killinchy	General	8	6½ and 10½	„	Additional.
McCrostie and Cullen	Greendale	„	10	7 and 11	„	Late Mills and Cullen, Greendale.
McDonald, T.	Waikuku	Fellmongery	20	12	Second class	Size of cylinders amended.
McEvedy, A. J.	Southbridge	Threshing	8	6 and 10	Locomotive and traction	Late Peter McEvedy, Southbridge.
McLaren and Co.	Christchurch	Road-wagon	4	4½ and 6	„	Late W. R. Creed, Waiau.
McLean, John	Chatham Islands	Freezing	16	8	Second class	Size of cylinders amended.
New Zealand Government (Mental Hospitals Department)	Sunnyside	Heating, &c.	30	5 and 5	Exempt	„
Osborne, Job	Doyleston	General	8	6⅜ and 11	Locomotive and traction	Additional.
Perryman, H. E.	Norwood	„	8	6¼ and 10¾	„	Late A. T. Perryman, Tai Tapu.
Philpott and Co.	Christchurch	Pressing straw	8	9	„	Late A. E. Alston, Christchurch.
Pierson, F.	Brookside	General	8	6¾ and 11	„	Additional.
Quigley, Frank	Doyleston	„	8	6¾ and 11	„	„
Rosseter, John	Loburn	„	8	6⅜ and 11	„	„
Russell, W. J.	Hororata	„	8	9	„	Late Russell and Keltie, Hororata.
Scott Bros.	Christchurch	Shop-tools	20	14 and 24	First class	Size of cylinders amended.
Shields, T. A.	Woodgrove	Chaff-cutting	8	6 and 10½	Locomotive and traction	Late M. McFarlane, Coldstream.
Strachan, J. W.	Kaiapoi	General	9	6½ and 10½	„	Late Moore and Strachan, Kaiapoi.
„	„	„	6	6 and 10	„	Late McVeigh and Walker, Leeston.
Strange and Co.	Christchurch	Furniture-making	25	12	Second class	Size of cylinders amended.
Thornley and Ellmers	Hawarden	General	8	6½ and 10	Locomotive and traction	Late G. Halborough, Hawarden.
Travis, W.	Christchurch	Idle	8	9	„	Additional.
Union Steamship Company (Limited)	Lyttelton	Hoisting	21	Two 5, two 6, and 8	Second class	Size of cylinders amended.
Wardell Bros.	Christchurch	Freezing	50	9 and 14	First class	„
Wright, G. F.	Annat	Threshing	4	6	Locomotive and traction	„

CANTERBURY SOUTH DISTRICT.

Andrews, Matthew	Pleasant Point	General	8	6½ and 10¾	Locomotive and traction	Additional.
Ashburton Woollen Mills	Ashburton	Woollen-mills	30	18	First class	Size of cylinders amended.
„	„	„	30	18	„	„
Ashton Bros.	Seafield	Chaff-cutting	8	9	Locomotive and traction	Late D. J. Doak, Wakanui.
Bennison Bros.	Ashburton	General	8	7 and 11½	„	Size of cylinders amended.
Bennison, G. H.	Dromore	Threshing	8	9¼	„	Late Bennison Bros., Ashburton.
Bishop Bros.	Wheatstone	„	8	6½ and 10	„	Late James Bishop, Wheatstone.
Burgess, John	Mayfield	General	8	6 and 10½	„	Size of cylinders amended.
Campbell, Peter D.	Hakataramea	„	8	6¾ and 11¾	„	„
Chisnall, W.	Hinds	„	8	6¾ and 10 $\frac{9}{16}$	„	„
Christchurch Meat Company	Smithfield	Freezing	83	16 and 29	First class	Additional.
Cleeve Bros.	Highbank	General	6	6 and 9¾	Locomotive and traction	„
Dann, Edwin	Woodbury	„	8	6 and 10½	„	„
Davison, W.	Rakaia	„	10	6¾ and 11¾	„	Late M. Tully, Rakaia.
Douglas, S. J.	Temuka	„	8	9¼	„	Late Sheppard and Douglas, Temuka.
Frost, L.	Mayfield	„	6	6 and 10	„	Additional.
Gaiger, W. W.	Timaru	„	10	6¾ and 11¾	„	„
Geddes, Robert	Redcliff	„	8	6½ and 10½	„	Late George Geddes, Waihao Downs.
Gudsell, Alexander	Winchester	Chaff-cutting	6	8½	„	Late J. C. South, Geraldine.
Gudsell, James	Tinwald	General	8	9	„	Late W. Harvey, Ashburton.
Harris, W. H.	Washdyke	Wool-scouring	30	10	Second class	Size of cylinders amended.
Hawkins, Thomas	Waimate	General	8	6½ and 11½	Locomotive and traction	Late Saunders and Heuchan, Fairlie.
Holland and Son, S.	Tinwald	Owners' threshing	8	9	„	Late R. Holland, Winslow.
Holland, Hugh	„	General	10	6¾ and 11½	„	Size of cylinders amended.
Johnston, George	Waitohi	Threshing	8	9¼	„	Late Hughes and Johnston, Waitohi Flat.

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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 SOUTH DISTRICT—*continued.*						
Kirk, H. B.	Timaru	Steam-heater	30	Nil	Second class	Engine not now connected.
Knox, S. and M.	Ashburton	General	8	6½ and 11	Locomotive and traction	Late D. J. Doak, Wakanui.
„ „	„	Threshing	8	6½ and 10½	„	Size of cylinders amended.
Langley, Thomas	Acton	„	8	9	„	Late Brian O'Connor, Rakaia.
Lill, W.	Willowby	General	8	9	„	Late Fitzgerald Bros., Ashburton.
Lockhead, James C.	Rakaia	„	8	6¾ and 11¾	„	Late George Hartnell, Rakaia.
Moses, William	Willowby	Threshing	8	6 and 10	„	Size of cylinders amended.
McLeod and Beattie	Geraldine	General	9	6¾ and 11¾	„	Size of cylinders amended; late Alexander Beattie, Orari.
Oliver, J. W.	Greenstreet	Threshing	9	6 and 10½	„	Size of cylinders amended.
Saunders, G.	Fairlie	General	8	6 and 11	„	Additional.
Scannell, Michael	Ma-waro	Threshing	8	9¼	„	Size of cylinders amended.
Sheppard, L.	St. Andrew's	General	9	6¾ and 11½	„	Late Sheppard Bros., St. Andrew's.
Simpson, Thomas	Albury	„	8	6¼ and 10	„	Size of cylinders amended; late Albury Farmers' Threshing Company, Albury.
South, J. C.	Geraldine	„	8	9	„	Late Gudsell and Monaghan, Albury.
Timaru Milling Company	Timaru	Flour-mill	140	14 and 24	First class	Size of cylinders amended.
Tiny, Michael	Arundel	Chaff-cutting	6	9	Locomotive and traction	„
Wilson, Thomas	Tinwald	„	6	8	„	„
HAWKE'S BAY DISTRICT.						
Anderson, W.	South Makaretu	Sawmill	14	Two 9	Second class	Late William Andrew, South Makaretu.
Bourke, M. F.	Clive	Tannery	50	Nil	„	Late J. J. Bourke and Co., Wellington.
Carr, S.	Napier	Hauling	7	5¾ and 9	Locomotive and traction	Size of cylinders amended.
Colley, John	Gisborne	Sash and door factory	23	8½	Second class	„
Drummond Bros.	Matawai	Sawmill	16	Two 9	„	Late Tohara Sawmilling Company, Rawharoa.
Gisborne Borough Council	Gisborne	Road-roller	8	6 and 9¾	Locomotive and traction	Additional.
„	„	Hauling	6	6 and 9	„	„
„	„	„	6	5¼ and 7¼	„	Size of cylinders amended.
Green Bros.	Waipawa	„	6	5 and 9	„	„
Holt and Sons, R.	Hastings	„	7½	6 and 10½	„	Additional.
McLeod and Feierabend	Makaretu	Flax-mill	12	7 and 11	Second class	Late H. Seifert, Takapau.
Napier Borough Council	Napier	Road-roller	6	5¼ and 8½	Locomotive and traction	Additional.
New Zealand Oilfields Company (Limited)	Gisborne	Well-boring	26	Two 9 and 5	Second class	Late Frimley Canning Company, Hastings.
„ „ „	Waikarere	Oil-boring	25½	10	„	Additional.
North British and Hawke's Bay Freezing Company	The Spit, Napier	Freezing	50	12 and 22; 19 and 28	First class	Size of cylinders amended.
Orbell, E.	Napier	Hauling	8	6½ and 11¾	Locomotive and traction	Additional.
Parke, T. J.	Maharahara	Milking	6	8	„	Late Parke and Co., Maharahara.
Petrowski, O.	Waipawa	Hauling	6	8	„	Late G. McKay, Otane.
Smith, George	Gisborne	Sash and door factory	20	12	Second class	Late Kaiti Brick Company, Gisborne.
Taylor, McIntyre, and Co.	Mangaone Valley	Sawmill	10	*10½	First class	Additional.
„ „ „	„	„	10	*11¼	„	„

* These boilers are driving one shaft.

Tokomaru Sheep-farmers' Freez ng Company	Tokomaru	Freezing	107½	Two 10 and 20	,,	Size of cylinders amended.
,, ,,	,,	,,	107½	Two 10 and 20	,,	,,
,, ,,	,,	,,	107½	Two 10 and 20	,,	,,

MARLBOROUGH DISTRICT.

Alsop, J.	Blenheim	Traction-engine	6	5 and 9	Locomotive and traction	Late Glover and Alsop, Spring Creek.
Chaytor and Co.	Marshlands	Flax-mill	20	8 and 12¾	First class	Size of cylinders amended.
Christchurch Meat Company	Picton	Freezing	106	22, 12, 10½, 6, 6½, two 6, two 10, two 6, two 4½, two 3	,,	,,
,,	,,	Bye-product plant	12	12, 6, two 5, and two 7½	,,	,,
,,	,,	,,	12	Ditto	,,	,,
Marlborough Timber Company	Nydia Bay	Sawmill	72	17¼	,,	Additional.
,,	Opouri Valley	Bush-engine	29	Two 9	Second class	Size of cylinders amended.
Mills, F. F.	Spring Creek	Traction-engine	8	9	Locomotive and traction	Late John Healy, jun., Blenheim.
Ward and Sons, J. J.	Blenheim	Sash and door factory	22	7 and 11	Second class	Additional.

NELSON NORTH DISTRICT.

Anchor Foundry and Shipping Company	The Port	Engineering-works	23	9 and 7	Second class	Size of cylinders amended.
Baigent, William	East Takaka	Sawmill	14	Two 9¼	,,	Late Thomas Baigent, East Takaka.
Best Bros.	Upper Moutere	Flax-mill	12	7 and 11	,,	Additional.
Collingwood Co-operative Dairy Company	Rockville	Cheese-factory	30	7 and 11	,,	Late F. W. Falconer and Co., Rockville.
Currin, F. S.	Spring Grove	Sawmill	12	Two 8½	,,	Additional.
Golden Bay Cement Company	Tarakohe	Cement-works	219	37½, 24½, 16¼, 12, 18, and 9½	First class	Size of cylinders amended.
,,	,,	,,	219	Ditto	,,	,,
Grant, William	Puramahoi	Sawmill	18	10	Second class	,,
Hewetson, Thomas	Upper Moutere	General work	5	5½ and 9¼	Locomotive and traction	,,
Page and Whelham	Long Plain	Sawmill	14	Two $9\frac{3}{16}$	Second class	Late W. J. Reilly, Takaka.
Prouse and Saunders	Mangarakau	Locomotive	9	Two 7	Locomotive and traction	Additional.
Puponga Coal Company	Puponga	Coal-mining	40	Three 8, one 18, one 9	First class and winding	Winding-driver also required this year.
,,	,,	,,	40	Three 8, one 18, one 9	,,	,, ,,

NELSON SOUTH DISTRICT.

Blackball Coal Company	Blackball	Mining	20	Two 15, one 14, 9, and 12	First class	Size of cylinders amended.
,,	,,	,,	20	Ditto	,,	,,
,,	,,	,,	20	14	Second class	
Bowater and Bryant	Westport	Hauling	12	Two 7¼	Locomotive and traction	Additional.
Consolidated Goldfields of New Zealand (Limited)	Crushington	Mining	60	12½ and 20	First class	Size of cylinders amended.
,, ,, ,,	,,	,,	60	12½ and 20	,,	,,
,, ,, ,,	Energetic Mine	Winding and compressor	48	One 22, two 18, two 5	First class and winding	,,
,, ,, ,,	,,	Ditto	48	Ditto	,,	,,
,, ,, ,,	,,	,,	50	,,	,,	,,
,, ,, ,,	Globe Hill	Winding	85	One 24, two 16, one 6½	,,	,,
,, ,, ,,	,,	,,	85	Ditto	,,	,,

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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.
NELSON SOUTH DISTRICT—*continued.*						
New Zealand Government (State Coal-mines)	Dunollie	Mining and compressor	64	7 and 11, two 16, two 18, one 14, one 4, one 10	Exempt	Size of cylinders amended.
,, ,,	,, ...	Mining	64	Ditto	,, ...	,,
,, ,,	,, ...	,, ...	64	,, ...	,, ...	,,
,, ,,	Point Elizabeth ..	,, ...	49	Two 7 and 11, two 9, one 10, two 6, one 6	,, ...	,,
,, ,,	State Mines ..	Compressor ..	60	Two 16, two 18, 7 and 11, one 14, one 10, one 4	,, ...	,,
,, ,,	,, ..	,, ..	60	Ditto	,, ...	,,
,, ,,	,, ..	Mining	36	13 and $17\frac{1}{2}$ ..	,, ...	,,
,, ,,	,, ..	,, ...	14	7 and 11, two 10, two 8	,, ...	,,
,, ,,	Runanga ..	,, ...	55	7 and 11, two 16, two 18, one 14, one 4, one 10	,, ...	,,
,, ,,	,, ..	,, ...	49	7 and 11, 7 and 11, two 9, one 10, two 6, one 6	,, ...	,,
Point Elizabeth Coal Company	Brunner	,, ...	35	Two $8\frac{1}{2}$, two 5, two $4\frac{1}{2}$, one 11, one 10, one 5, one 4	First class	,,
,, ...	,, ...	,, ...	35	Ditto	,, ...	,,
Westport Coal Company	Denniston ..	Compressors ..	84	Three 14 and one 12	,, ...	Additional.
,, ...	,, ...	Hauling	58	10 and 16 ..	,, ...	,,
Williams, D. J.	Waimangaroa ..	Flax-mill	30	8 and $12\frac{3}{4}$ ..	,, ...	Late Taylor and McIlroy, Greymouth.
OTAGO DISTRICT.						
Brown Bros.	Mosgiel district ..	Threshing ..	6	8	Locomotive and traction	Late W. Brown, Mosgiel.
Brown Bros. and London	Abbotsford ..	Fellmongery ..	28	$11\frac{1}{2}$	Second class	Late Brown Bros., Abbotsford.
Cameron's Freehold Dredging Syndicate ..	Glenore	Gold-dredge ..	20	8 and $12\frac{3}{4}$ ..	First class	Additional.
Carrodus and Polson	Ngapara district ..	General	8	$6\frac{1}{4}$ and $10\frac{1}{2}$ ..	Locomotive and traction	Late W. Kinloch, Ngapara.
Casey, P. and W...	Dunedin	Motor-wagon ..	$4\frac{1}{2}$	$3\frac{1}{2}$ and $6\frac{1}{2}$ ..	,,	Additional.
Craig, P. and A.	Hampden district ..	Chaff-cutting ..	6	$7\frac{5}{8}$	,,	Late Otago Iron Rolling Mills Company, Dunedin.
Creighton and Reid Bros.	Kokonga	,, ..	8	9	,,	Late Creighton and Reid, Kokonga.
Crown Roller Mills Company	Dunedin	Flour-mills ..	40	$14\frac{3}{16}$	First class	Size of cylinders amended.
Donaghy and Co...	South Dunedin ..	Rope-works ..	40	16 and 26 ..	,, ...	,,
Dunedin City Corporation	Dunedin	Motor-wagon ..	6	Two $7\frac{1}{4}$	Locomotive and traction	Late Miss McDonald, Weston.
Dunedin and Roslyn Tramway Company ..	Kaikorai Valley ..	Hauling	25	15 and 26 ..	First class	Size of cylinders amended.
Fowler and Beattie	Kelso district ..	Threshing ..	8	9	Locomotive and traction	Additional.
Geddes, John	Palmerston ..	,, ..	8	9	,,	,,
Haddock and Co., H. V.	Dunedin	Sawmill	20	8 and $12\frac{3}{4}$ ..	First class	Late Advance Gold-dredging Company, Dunedin.
Hamilton Bros.	Milton district ..	General	8	9	Locomotive and traction	Late H. Hamilton, Milton.

Hamilton, Joseph	Palmerston district	Threshing	8	9	,	Additional.
Harraway and Sons, H.	Green Island	Steaming	40	16	First class	Size of cylinders amended.
Hill and Frame	Herbert district	Threshing	9	9	Locomotive and traction	Additional.
Hogg and Co.	Dunedin	Sawmill	63	Two 16	First class	,,
,,	,,	,,	63	Two 16	,,	,,
Jenkins, George D.	Kelso	Chaff-cutting	8	8½	Locomotive and traction	,,
Kean, Thomas	Kakapuaka district	Threshing	8	9	,,	Size of cylinders amended.
Kirkland, W.	Middlemarch	General hauling	6	5 and 10	,,	,,
Ledingham, Robert F.	Georgetown district	Threshing	8	6½ and 10½	,,	Late George Ledingham, Georgetown.
Leggatt and Campbell	Catlin's	Sawmill	16	Two 10	Second class	Additional.
,,	,,	,,	14	6½ and 10½	,,	Late T. Latta, Catlin's.
Leonard Bros.	Balclutha district	General	8	9⅛	Locomotive and traction	Late J. Leonard, Balclutha.
,,	,,	,,	8	9	,,	,, ,,
Loudon's Coal Company	Abbotsford	Hauling and pumping	28	8	Second class	Late Green Island Mineral Company, Green Island.
Moss, H. F.	Catlin's	Sawmill	30	16	First class	Size of cylinders amended.
Murdoch, John	Timaru	,,	25	10	Second class	Late Rockyside Brick Company, Dunedin.
Murray, Roberts, and Co.	Abbotsford	Fellmongery	20	8 and 12¾	First class	Size of cylinders amended. Late Lady Annie Gold-dredging Company, Dunedin.
Newson, Petrie, and Gunn	Warepa district	General	8	9	Locomotive and traction	Late George Brown, Warepa.
New Zealand Coal and Oil Company	Kaitangata	Hauling	70	Two 30	First class	Size of cylinders amended.
,,	,,	,,	40	Two 30	,,	Late Millburn Lime and Cement Company, Dunedin.
Otago Harbour Board	Port Chalmers	Pumping	20	6½, two 14½, and two 9½	,,	Late Otago Dock Trust, Port Chalmers.
,,	,,	,,	18	Ditto	,,	,, ,,
,,	,,	,,	18	,,	,,	,, ,,
Phoenix Company (Limited)	Dunedin	Confectionery	84	Nil	Second class	Additional.
Reid and Gray	,,	Machine-shop	116	9 and 16	First class	Size of cylinders amended.
Robinson, Charles	Berwick district	General	8	9	Locomotive and traction	Late Harris and Watts, Wedderburn.
Ross and Glendining	Dunedin	Hauling	5	Two 6¾	,,	Additional.
Ryan, M.	Waitahuna	General	8	9	,,	Late Ryan Bros., Waitahuna.
,,	,,	,,	8	9	,,	,, ,,
Sharpe Bros.	Tawanui	Sawmill	10	Two 7⅓	Second class	Late Robertson and Co., Tawanui.
,,	,,	,,	8	9½	,,	,, ,,
Sime, Alexander	Mt. Cargill, Dunedin	,,	18	9¼	,,	Late Thomas Latta, Owaka.
Simpson, Herbert	Hilderthorpe district	Threshing	8	9	Locomotive and traction	Late William Simpson, Hilderthorpe.
South Otago Freezing Company	Otanomomo	Electric power and freezing	64	23 and 12½	First class	Additional.
,,	,,	Ditto	64	23 and 12½	,,	,,
Taylor Bros.	Kokoamo district	Threshing	8	9	Locomotive and traction	Late J. A. Taylor, Duntroon.
Tough, W. A.	Milton district	General	8	9	,,	Late John Tough, Milton.
Waikouaiti Dairy Company	Waikouaiti	Dairy factory	22	6½	Second class	Additional.
Yorston, T.	Waihola district	Threshing	6	8	Locomotive and traction	,,

SOUTHLAND DISTRICT.

Allardyce, E.	Waikaka	Dredging	12	7¾ and 11½	Second class	Late Ibbotson and Party, Waikaka.
Bluff Harbour Board	Bluff	"Lobnintz" stone-breaker	16	Two 9	,,	Size of cylinders amended. Late Lady Annie Gold-dredging Company, Dunedin.
Cawthorne, W.	West Plains	Fellmongery	16	7 and 11	,,	Late E. Girdler and Sons, Waikiwi.
Denniston, John	Riversdale district	Threshing and chaff-cutting	8	9	Locomotive and traction	Additional.

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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.
SOUTHLAND DISTRICT—*continued.*						
Donnelly, R.	Wairio	Hauling	6	8	Locomotion and traction	Late John Shaw, Otautau.
Ewen and Reynolds	Dipton	General work	9½	9	,,	Additional.
Glenham Sawmill Company	Glenham	Log-hauler	17	9	Second class	Size of cylinders amended.
Hickey, M. J.	Wyndham	General	8	9⅛	Locomotive and traction	Late J. Caird, Wyndham.
Invercargill Borough Council	Invercargill	Electric tramways	84	Two 13 and 20, 9 and 14½	First class	Additional.
,,	,,	,,	84	Ditto	,,	,,
,,	,,	,,	84	,,	,,	,,
Kennedy Bros.*	Scott's Gap district	Chaff-cutting	6	7¼	Locomotive and traction	,,
Knowles, W.	Gore	,,	8	9	,,	,,
Massey, H. A.	Makarewa	Sawmill	20	Two 10	Second class	,,
Mataura Implement Works	Mataura	Implement-works	16	8	,,	Size of cylinders amended. Late Lone Star Gold-dredging Company, Dunedin.
Melvin, J.	Tokonui	Sawmill	20	11	,,	Size of cylinders amended.
Muir, J.*	Otautau district	Chaff-cutting	7½	8	Locomotive and traction	Additional.
McIntyre, J. and J.*	Long Bush district	,,	6	7¼	,,	,,
McKerrow, A.	Waimahaka district	Hauling	9	9	,,	,,
Nightcaps Coal Company	Nightcaps	Air-compressor	60	16	First class	Size of cylinders amended.
,,	,,	,,	60	16	,,	,,
Royds, C. J.	Otatara	Flax-mill	20	8 and 12¾	,,	Additional.
Seaward Downs Dairy Factory Company	Seaward Downs	Cheese-factory	20	5½	Second class	,,
Southland County Council	Southland	Hauling	6	5⅜ and 9¼	Locomotive and traction	Size of cylinders amended.
Southland Frozen Meat Company	Makarewa	Steaming-digestors	50	Two 4, 6 and 6	Second class	,,
Tobin, Edward	Brown's district	Chaff-cutting	3½	6½	Locomotive and traction	Additional.
Trapski, F.	Pukerau district	General work	7	5¾ and 9½	,,	Late Balloch Bros., Riversdale.
Tressider, H.	Waimumu district	Threshing	8	9		Late J. Tressider and Sons, Glen Dhu, Mataura.
Upper Waikawa Sawmilling Company	Upper Waikawa	Sawmill	16	8 and 13	First class	Late Niagara Sawmilling Company, Invercargill.
Wallis, R. and F.	Gore	Fellmongery	20	6, 6, and 6	Second class	Size of cylinders amended. Late Main Chance Gold-dredging Company, Gore.
Watson and Co., J. E.	Bluff	Manure-grinding	14	Two 10½	,,	Size of cylinders amended. Late William Halliday, Roslyn Bush.
Watson, T. H.	Riverton	Flax-mill	14	7¾ and 11½	,,	Late Woods and Co., Invercargill.
Wright, Stephenson, and Co.	Invercargill	Manure-works	14	8¼ and 14¼	First class	Additional.
,, ,,	,,	General	8	8½	Locomotive and traction	,,
,, ,,	Invercargill district	,,	4½	4¼ and 6⅞	,,	,,
TARANAKI DISTRICT.						
Cape Egmont Co-operative Dairy Company	Pungarehu	Cheese-factory	17	6	Second class	Size of cylinders amended.
Castlecliff Railway Company	Wanganui	Hauling	19	Two 10	Locomotive and traction	Additional.
Coastal Transport Company	New Plymouth	Carrying goods	5	4½ and 6	,,	,,
Eltham County Council	Eltham	Rolling metal	5⅛	5¼ and 8½	,,	,,
,,	,,	,,	5⅛	5¼ and 8½	,,	,,
,,	Eltham district	Road-roller	6	5¼ and 9½	,,	,,

Gonville and Castlecliff Town Board	Gonville Tramway	Hauling	15½	Two 11	,,	,,
Hatrick and Co., A.	Wanganui District	Carrying goods	5	4½ and 6	,,	,,
Hogg and Co., J.	Wanganui	Steam-wagon	6	4 and 7	,,	,,
Kaponga Co-operative Dairy Company	Kaponga	Dairy	21¾	5½	Second class	,,
Mangatoki Dairy Company	Mangatoki	Dairy factory	30	8	,,	,,
Mells Co-operative Dairy Company	Mokoia	,,	20	10	,,	,,
Midhirst Dairy Company	Stratford	,,	20	9	,,	,,
McKenna and Co., J. A.	Patea	Brickworks	22	10½	,,	Late McKenna and Mathews, Patea.
New Plymouth Borough Council	New Plymouth district	Road-roller	6	6½	Locomotive and traction	Size of cylinders amended.
New Plymouth County Council	Ditto	,,	5	4½ and 7½	,,	Additional.
Parkin, T. R.	Fitzroy district	Hauling	8	7 and 11	,,	Size of cylinders amended.
Patea Harbour Board	Patea Harbour	Dredging	23	8 and 13	First class	Additional.
Quin Bros.	Hawera	Sawmill	20	11½ and 20	,,	Size of cylinders amended.
Riverdale Co-operative Dairy Company	Inaha	Dairy factory	38	8	Second class	Additional.
Symons, T.	Carrington Road	Sawmill	8	9†	,,	,,
,,	,,	,,	14	8†	,,	,,
Symons, Thomas O.	Tariki	,,	35	Two 10½	First class	Size of cylinders amended.
Symons, T. V.	New Plymouth district	Hauling	6	4 and 7½	Locomotive and traction	Late New Plymouth Firewood Company, N.P.
Wanganui Meat Freezing Company	Castlecliff	Freezing	80	15 and 27	First class	Size of cylinders amended.
,,	,,	,,	80	15 and 27	,,	,,
Whenuakura Co-operative Dairy Company	Whenuakura	Dairy factory	20	10	Second class	Additional.

WELLINGTON DISTRICT.

Akitio Sawmilling Company	Akitio	Sawmill	25	14	Second class	Size of cylinders amended.
Allen, Isaac, jun.	Masterton	Hauling, &c.	6	6 and 10	Locomotive and traction	Additional.
Anketell, J.	,,	Threshing and chaff-cutting	6	8	,,	Late Keeling and Wynn-Williams, Masterton.
Barber and Co., W.	Petone	Steaming	40	6 and 7	Second class	Size of cylinders amended.
Bird Bros.	Manakau	Sawmill	16	9 and 9	,,	,,
Blackball Coal Company	Coal-hulk "Blackwall"	Hoisting coal	18	Four 6	,,	,,
,,	Coal-hulk "Elinor Vernon"	,,	22	Two 6, two 7	,,	,,
Broad and Ingram	Rangitane	Flax-mill	20	Two 10	,,	Additional.
,,	,,	,,	20	Two 10	,,	Size of cylinders amended. Late Wakarara Timber Company, Wakarara.
Chaplin, C. H.	Wellington	Traction	6	4 and 7	Locomotive and traction	Additional.
Christie, L. E.	,,	Sawmill	22	10¾	Second class	Size of cylinders amended. Late Humphries Bros., Wellington.
Craw Bros.	Tokomaru	Flax-mill	12	7 and 11	,,	Size of cylinders amended.
Douglas, G. K.	Levin	Sawmill	11	Two 8½	,,	,,
Gardiner and Sons, George	Nireaha	,,	23	12 5/16	,,	,,
Gardner and Yeoman	Makuri	,,	20	11 and 8	,,	,,
,,	,,	Log-hauling	10	Two 8½	,,	,,
,,	Waimiro	Sawmill	30	Two 8½	,,	,,
Gear Meat Company	Petone	Hauling	28	9½ and 18	Locomotive and traction	,,
Hutson and Co., P.	Wellington	Brickworks	38	14	Second class	Additional.

* This plant has two years' certificate. † These boilers are driving one shaft.

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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.
			WELLINGTON DISTRICT.—*continued.*			
Jones, E.	Masterton	Chaff-cutting	5	5 and 8½	Locomotive and traction	Additional.
Liggins, Joseph	Tokomaru	Flax-mill	32	16½	First class	Late Union Timber Company, Palmerston North.
Mill and Co., John	Hulk "Ganymede"	Hoisting	22	Two 8, two 8, two 6	Second class	Size of cylinders amended.
Millar's Hardwood Company	Wellington	Sawmill	18	10½	,,	Late R. Isbister and Co., Wellington.
Minton, S. B.	Carterton	Threshing, &c.	6	8	Locomotive and traction	Late Fisher and Minton, Carterton.
Mudgeway, John	Levin	Hauling	6	8	,,	Late Swainson and Bevan, Manakau.
McHattie and Brogden	Masterton	Threshing and chaff-cutting	6	8	,,	Late Keeling and Wynn-Williams, Masterton.
New Zealand Government (State Coal Department)	Hulk "Coromandel"	Hoisting coal	24	Two 7 and two 6	Exempt	Size of cylinders amended.
Nireaha Dairy Company	Nireaha	Cheese-factory	20	6	Second class	,,
Norling and Reid	Pleckville	Chaff-cutting	4	4¼ and 6¼	Locomotive and traction	,,
Odlin, C. and A.	Waikanae	Sawmill	25	12¼	Second class	,,
,,	,,	,,	25	12¼	,,	,,
,,	Wellington	,,	23	12	,,	Size of cylinders amended. Late Pukuweka Sawmilling Company, Wellington.
,,	,,	,,	33	12	,,	Ditto.
Porter, E.	Koputaroa	Flax-mill	27	12	,,	Late A. S. Patterson, Wellington.
Pulley, C. F.	Wellington	Steam-shovel	8	Two 6½	Locomotive and traction	Late Sanders Bros. Wellington.
Rathbone, T. J.	Carterton	Woodworking	19	10	Second class	Size of cylinders amended. Late Wairarapa Bacon and Freezing Company, Carterton.
Seifert, A. and L.	Shannon	Flax-mill	12	11 and 7	,,	Additional.
Seifert, George	Tokomaru	,,	47	9½ and 16	First class	Size of cylinders amended.
Shannon Land and Sawmilling Company	Shannon	Sawmill	30	13¼	Second class	Late Schmidt and Saunders, Shannon.
Te Opakete (Limited)	Kereru	Flax-mill	20	7 and 11	,,	Size of cylinders amended.
,, ,,	,,	,,	8	7 and 11	,,	,,
Thomas, T.	Brooklyn	Brickworks	33	12	,,	Late A. B. Fitchett, Brooklyn.
Toogood and Co.	Longbush	Flax-mill	28	10	,,	Size of cylinders amended. Late G. Whiteman, Admirals.
Trevor Bros.	Wellington	Hauling	6	4 and 7	Locomotive and traction	Late B. W. Powell, Wellington.
,,	,,	Brickworks	18	10¾	Second class	Late Cooper and Sons, Berhampore.
Union Steamship Company (Limited)	Hulk "Adderley"	Hoisting	34	Two 7, two 7, two 6, two 6, two 6	First class	Additional.
,, ,,	Hulk "Arawatta"	,,	21	Two 8, two 7, two 7, two 6	,,	Size of cylinders amended.
,, ,,	Hulk "Occident"	,,	46	Ditto	,,	,,
,, ,,	Hulk "Tobias"	,,	21	6, 7, and 8	Second class	,,
,, ,,	Evans Bay	Laundry	32	Two 6, two 5¼, two 5, two 4½, and 11	First class	Additional.
,, ,,	,,	,,	32	Ditto	,,	,,
Victoria Laundry Company	Wellington	,,	87	8	Second class	Size of cylinders amended. Late P. Wills, Wellington.
Wellington City Council	,,	Electric light	350	Turbines	First class	Cylinders not now connected.
,,	,,	,,	100	,,	,,	,,

,,	,,	,,	100	15 and 30	,,	Size of cylinders amended.
,,	,,	Electric trams	65	17, 24½, 37½	,,	,,
Wellington Farmers' Meat Company	Waingawa	Freezing	107	12½ and 20	,,	Additional.
Wellington Gas Company	Miramar	Gas-works	72	Three 8, two 4½, and 10	,,	,,
,,	,,	Pumping	72	Ditto	,,	,,
Wellington Meat Export Company	Ngahauranga	Freezing	60	19 and 28	,,	Size of cylinders amended.
,,	,,	Meat-preserving	124	19 and 28	,,	,,
,,	,,	Preserving-works	38	8½ and 14½	,,	,,
Westport Coal Company	Hulk "Countess of Errol"	Hoisting	7	Two 8, two 7, and two 5½	,,	,,
Whitehead, T. H.	Makerua	Flax-mill	32	12	Second class	Late Ross and Redshaw, Makerua.
,,	,,	,,	12	7 and 11	,,	Additional.

WELLINGTON NORTH DISTRICT.

Andrew, Robert C.	Sanson district	General	6	5 and 9	Locomotive and traction	Additional.
Bridge, Edward R.	Feilding district	,,	8	8½	,,	Late John Melton, Apiti.
Carter, F. J.	Ohakune	Sawmill	10	Two 9	Second class	Late Wright and Carter, Mangaweka.
Coley, George	Foxton	Flax-mill	26	10¾	,,	Late Coley Bros., Foxton.
Egmont Box Company	Taihape	Box-factory	70	Two 14¼ and 28	First class	Additional.
,,	Utiku	Hauling	12	Two 7	Locomotive and traction	,,
Eltham Box Factory	Taihape	Box-factory	70	Two 14¼	Second class	,,
Feilding Sash and Door Company	Ohakune	Sawmill	20	12	,,	,,
Gibbs and Nimmo	Near Foxton	Flax-mill	14	7 and 12	,,	Late Hennesey and Gibbs, Foxton.
,,	,,	,,	12	7 and 11	,,	Late A. J. Gibbs, Foxton,
Glen Oroua Co-operative Dairy Company	Glen Oroua	Butter-factory	37	12	,,	Additional.
Harris, Thomas A.	Raetihi	Sawmill	43	16	First class	Late B. L. Knight, Utiku.
Jensen and Co.	,,	,,	40	13	Second class	Late Gower and Grice, Ohingaiti.
Manawatu County Council	Palmerston North	Hauling	17	8 and 16	Locomotive and traction	Additional.
Matthews, Alfred A.	Feilding district	Motor-wagon	6	4 and 7	,,	Late New Zealand Farmers' Motor Company, Feilding.
Matthews, John	,,	General	6	5¼ and 9¼	,,	Size of cylinders amended.
Meyer, J. C.	Marton district	,,	8	9	,,	Size of cylinders amended. Late John Lawson, Halcombe.
Nathan and Co. (Limited), Joseph	Bunnythorpe	Dried-milk factory	150	16	First class	Late Imperial Dried Milk Company, Bunnythorpe.
,, ,, ,,	,,	,,	30	16	,,	Ditto.
National Mortgage and Agency Company	Longburn	Freezing	40	10 and 20	,,	Late Longburn Freezing Company, Longburn.
New Zealand Powell Wood Process Company (Limited)	Rangataua	Sawmill	56	16	,,	Size of cylinders amended.
Ditto	,,	,,	50	10, 8 and 12	,,	Additional.
,,	,,	Hauling	7¾	Two 7	Locomotive and traction	,,
Oroua County Council	Feilding district	Road-roller	4½	5½ and 8½	,,	,,
Pedersen and Co.	Raetihi	Log-hauling	15	Two 8½	Second class	,,
,,	,,	Sawmill	12	11*	First class	,,
,,	,,	,,	14	12*	,,	,,
Perham, Larsen, and Co.	Rangataua	,,	70	Two 13	,,	,,
Rangataua Timber Company	Horopito	,,	50	13	Second class	Late B. L. Knight, Utiku.
,,	Rangataua	,,	35	12	,,	Size of cylinders amended.
Rata Co-operative Dairy Company	Rata	Dairy	25	9 and 14	First class	Additional.

* These boilers are driving one shaft.

No. 21.—Return showing the Names of Owners of Additional Boilers and Transfers, etc.—*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.
WELLINGTON NORTH DISTRICT—*continued.*						
Seifert and Co., A.	Piako	Flax-mill	20	8⅛ and 13⅛	First class	Additional.
Taihape Dairy Company	Taihape	Dairy factory	20	6 and 12	,,	,,
Whitanui Limited	Shannon	Flax-mill	95	12 3/16 and 20⅛	,,	Size of cylinders amended.
WESTLAND DISTRICT.						
Christchurch Timber Company	Jackson's	Sawmill	20	12⅜	Second class	Additional.
Consolidated Goldfields of New Zealand (Limited)	Blackwater	Winding	48	Two 14, two 14, two 16, two 4, two 4½, one 4½, two 7	First class	,,
Davis, J.	Hokitika	Brewery	16	7	Second class	Size of cylinders amended. Late Norman Mabin, Hokitika.
Dispatch Foundry Company	Greymouth	Foundry	37	11¼ and 20	First class	Size of cylinders amended.
Dobson Stone Syndicate	Dobson	Stone-cutting	20	12¾	Second class	,,
Dominion Iron Works	Greymouth	Foundry	20	Two 9	,,	Late Greymouth Steam Laundry, Greymouth.
Foster, S.	Motueka Harbour	Dredging	25	Two 12	First class	Late Greymouth Harbour Board, Greymouth.
Grey Valley Sawmilling Company	Ngahere	Locomotive	14	Two 7	Locomotive and traction	Additional.
Hessey and Cameron	Frying-pan Creek	Dredging	25	8 and 12¾	First class	Late Antonio's Flat Gold-dredging Company, Reefton.
Ikamatua Sawmilling Company	Greymouth	Sash and door factory	24	12	Second class	Size of cylinders amended. Late North Brunner Coal Company, Greymouth.
Jack Bros.	Kotuku	Hauling	11½	Two 7½	Locomotive and traction	Additional.
Kotuku Oil Syndicate	,,	Boring	19	9	Second class	,,
Kumara Kapitea Sawmilling Company	Loopline	Sawmill	20	7 and 11¼	,,	Late Greenstone Creek Gold-dredging Company, Kumara.
Mananui Sawmilling Company	Mananui	Locomotive	10	Two 8	Locomotive and traction	Additional.
Midland Sawmilling Company	Ngahere	,,	14	Two 7	,,	Late Ngahere Sawmilling Company, Ngahere.
Morris and Co., W.	Cameron's	Sawmill	58	11 and 14	First class	Size of cylinders amended.
McIlroy, J.	Greenstone Creek	Dredging	20	7 and 11¼	Second class	Size of cylinders amended. Late Greenstone Three-mile Gold-dredging Company, Kumara.
New Zealand Government (State Coal-mines)	Runanga	Mining	20	7 and 11, two 10, two 10¼, two 8	Exempt	Size of cylinders amended.
,, ,,	Where required	Keystone-drill	4½	8	,,	Additional.
Ogilvie and Co.	Gladstone	Sawmill	49	16	First class	Size of cylinders amended.
,,	,,	Hauling	8	Two 7	Locomotive and traction	Late J. McLean and Sons, Greymouth.
Runanga Picture Company	Runanga	Dynamo	20	Two 6, two 8½	First class	Size of cylinders amended. Late T. E. Coates, Greymouth.
Stratford and Blair	Arnold Siding	Sawmill	37	13	Second class	Size of cylinders amended. Late J. McLean and Sons, Greymouth.
,,	Kaimata	,,	48	16	First class	Additional.
Stuart and Chapman	Mikonui	,,	18	11	Second class	Size of cylinders amended.
Totara Sawmilling Company	Papakamai	,,	32	12	,,	Late J. Grimmond and Co., Ross.
Westland Sawmilling Company (Limited)	Greymouth	Woodworking	14	Two 10½	,,	Additional.

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