1910. NEW ZEALAND.

INSPECTION OF MACHINERY:

ANNUAL REPORT OF THE DEPARTMENT FOR 1909-10.

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.

Inspection of Machinery Department, Wellington, 28th June, 1910.

My LORD,-

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.,

J. A. MILLAR,

Minister in Charge of the Inspection of Machinery Department.

His Excellency the 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, 27th April, 1910.

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, 1910.

I have pleasure in recording probably the best year's work yet accomplished by the Department. The whole staff has worked most loyally with this object in view, and I have to bear testimony to the zeal displayed by the officers all through the year. All the shipping-survey and inspection of vessels is practically up to date. Each year shows an increase in the number of vessels to be dealt with, and the size of the modern intercolonial liners now demands a very much closer and more lengthened and careful survey.

All the candidates offering for the examinations for marine engineers and land engine-drivers were taken up, and this branch of the work of the Department has been attended to very closely.

The work thrown on the Department by the passing of the Inspection of Machinery Amendment Act, 1908, has resulted in a large increase in the number of the inspections of steam-jacketed pans, steam-receivers, and steam-vessels used in many and varied manufactures. The danger in the use of these appliances has been clearly shown by the pressures hitherto carried on some of them. This in some cases was much in excess of the pressure warranted by the materials and scantlings of which the steam-vessels were made. Hand-sketches giving full dimensions of all steam-vessels under pressure inspected for the first time were sent in by each Inspector, and the scantlings and strength of all parts of them were carefully gone into before a pressure was given. Special rules for copper dished ends and for cast-iron structures were sent out from the Head Office for the guidance of each Inspector, in order to insure uniform practice in dealing with such appliances throughout the Dominion.

Special rules for the calculation of the nominal horse-power of Pelton wheels were also issued to each Inspector. As the horse-power of each machinery prime mover decides the amount of the fee to be charged for inspection, definite rules are necessary to enable the horse-power to be assessed.

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A considerable correspondence has taken place with the New Zealand agents of American manufacturers over the construction of locomotives, with manufacturers of British boilers, particularly of those used for motor-wagons, and also with the agents of one firm which manufactures water-tube boilers. All the correspondence has been of a very pleasant nature, and all points, so far as they have gone, have been amicably settled. Quite a number of locomotives have recently been imported into New Zealand for employment on tramways connected with sawmills. A southern engineering firm has made several in recent years, and I see nothing to prevent all of these locomotives being made in the

The pressures used for new traction-engines on roads and for engines of the portable type are going up steadily every year, each maker submitting new and revised plans to the Department for its ruling. As a rule, the pressure asked for is for another 10 lb. on the pressure granted on the former design. I can see no great use for such an increase, unless it be the desire to catch the market with an engine carrying the highest pressure. The workmanship in this type of machinery is of the highest class,

and all parts are made of the best material.

The oil-engine, the gas-engine, and the gas-producer plants are still being largely used for power purposes. Some firms in New Zealand are making very good oil-engines that do all they are built for,

and compare favourably with the imported article for finish, usefulness, and price.

I visited a great many shipowners throughout the Dominion during the year, and discussed with them the surveying of ships generally, the Board of Trade methods as set out in their books of instructions, and the methods adopted in the past by the Surveyors of Ships throughout the Dominion. As a result of these interviews the mode of procedure in dealing with the survey of steamships was somewhat modified, in order to lessen the expense to the shipowner and to fall in with times most suitable to him for the survey of his vessels. Many other minor points have been altered without at all impairing the efficiency and value of the surveys. I was met very courteously wherever I went, and it was pleasant for me to know that the Department's efforts to make ships safe for those who have to travel in them were appreciated whole-heartedly by the owners. Modern steamships are now simply filled with machinery and labour-saving devices for all purposes. The application of steam for so many purposes on ships, and the use of electric and hydraulic power, has added to the cost and to the time and expense required for the survey, to say nothing about the size of ships as compared with those of even ten years ago. On the completion of my investigations with the shipowners, special circular instructions were issued to each Surveyor of Ships on the methods to be adopted in future surveys.

During the year I was able to visit most of the district offices throughout the Dominion, and to discuss with the local Surveyors and Inspectors various points connected with their respective

districts.

BOILERS INSPECTED.

The number of boilers inspected this year total 6,208. At the end of the financial year there were still a number of boilers uninspected, but I hope to overtake the arrears next year. The districts in arrears are mostly in the North Island, some parts of which are most inaccessible unless in very fine Very little friction has arisen with steam users and owners and the Department. practice of submitting plans and specifications of a new boiler before a pressure can be granted, which has been in vogue for some years now, has tended to uniformity in the granting of pressures throughout the Dominion. It is better for the firms to submit plans before the actual building or ordering of a new boiler, as points in dispute can be discussed and modifications made to insure the pressure guaranteed, provided the workmanship is satisfactory. As pressures increase, the Department has to exercise the greatest care for the safety of employees and those living near steam-boilers carrying high pressures, for in the event of an explosion the results might be very disastrous both to life and property. Altogether 500 plans of new boilers have been submitted to the Department and dealt with during the past year. All the running machinery attached to steam-boilers was also inspected.

GOVERNMENT BOILERS AND MACHINERY.

A grand total of 146 have been examined and thoroughly inspected this year-viz., 99 boilers, 12 lifts, 16 oil-engines, 5 gas-engines, and 14 electric motors. Repairs were effected where required, and fencing to machinery in motion attended to.

Defects of Boilers and Fittings.

Defects of boilers and fittings number 1,375 this year. A number of written notices to effect repairs, and numerous oral instructions to repair boilers and renew and overhaul fittings, were given by the Inspectors on their annual visits. This year the fitting of gauge-glass protectors over the watergauge-glass mountings has been nearly completed. Most of the boilers in use now have this fitting, which should tond to lessen the risk of injury when a water-gauge glass bursts. With the high pressures which should tend to lessen the risk of injury when a water-gauge glass bursts. in use there is always a danger of the gauge-glass bursting at any moment.

The defects found in boilers were not confined to any one particular class of boilers, but were common to all classes in use. The defective fittings cover a wide range also. The owners are very willing, in almost all cases, to meet the wishes of the Department and to keep their steam plants in

good and safe working-order.

Return No. 2 gives a complete list of the defects discovered.

NEW BOILERS.

The total number of new boilers added to our registers during the year is 490, and their combined horse-power amounts to $4.524\frac{1}{2}$. Of this number, 303 were made in the Dominion, and their total horse-power is 3,190. 187 were imported, with a total horse-power of $1.334\frac{1}{2}$.

The following table shows the number and horse-power of these boilers, and the district to which they have gone :-

			Loc	al.	Impo	orted.	Tot	tal.
D.	istricŧ.	٠	Number.	Ho.se- power.	Number.	Horse- power.	Number.	Horse- power.
Auckland Auckland South Hawke's Bay Taranaki Wellington North Wellington Marlborough Nelson North Nelson South Westland Canterbury Canterbury South Otago			50 14 19 11 8 55 3 7 5 16 64 1 14 36	$\begin{array}{c} 910 \\ 188 \\ 197 \\ 132 \\ 184\frac{1}{2} \\ 389\frac{3}{4} \\ 54\frac{1}{2} \\ 48 \\ 129 \\ 339 \\ 239 \\ 16 \\ 67 \\ 296\frac{1}{4} \end{array}$	31 14 12 5 7 53 2 3 5 1 24 11 7	$ \begin{array}{c} 304\frac{1}{2} \\ 99\frac{1}{2} \\ 78 \\ 21\frac{1}{2} \\ 95 \\ 165 \\ 10\frac{1}{2} \\ 23 \\ 123 \\ 159\frac{1}{2} \\ 45 \\ 139 \end{array} $	81 28 31 16 15 108 5 10 10 17 88 12 21 48	$\begin{array}{c} 1,214\frac{1}{2}\\ 287\frac{1}{2}\\ 275\\ 153\frac{1}{2}\\ 279\frac{1}{2}\\ 554\frac{3}{4}\\ 65\\ 71\\ 252\\ 340\frac{1}{2}\\ 398\frac{1}{2}\\ 85\frac{1}{4}\\ 435\frac{1}{4}\\ \end{array}$
Southland Total	 ls	 	303	3,190	187	$1,334\frac{1}{2}$	490	$\frac{1}{4,524\frac{1}{2}}$

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

Under this heading this year there were a total of 5,767 inspections made, as follows: 1,450 gasengines, 1,552 oil-engines, 2,583 lifts and motors (including water and electric motors, &c.), and 182

steam machinery.

The fencing around lift-wells has received special attention this year, and safety tests under working-conditions have been made of all lifts both for passengers and cargo before certificates were issued. On some lifts, used for the carriage of cargo only, the attendant has been permitted to travel if sufficient protection for his safety, both overhead and around him, has been made. lift is being generally installed in place of those worked by hydraulic power in all buildings of any height where the electric current is available. Some of these electric lifts are fitted up most elaborately and, in the hands of careful attendants, are most economical. On all passenger-lifts, excepting those that work automatically, an attendant always rides on the lift and controls its movements.

FENCING OF MACHINERY.

The usual attention was given to the fencing of machinery in motion at all the works visited by the Inspectors during the year. The principal sources of danger were fly-wheels, gearing, belting, and pulleys attached to machines on floors, and all received close attention. The fitting of fast and loose pulleys on machines has been insisted on wherever practicable.

Return No. 4 gives full particulars of the guarding done.

EXAMINATION OF ENGINE-DRIVERS.

There have not been so many candidates for these examinations during the past year. Those who sat were taken up either at the set times as provided by regulation or on dates convenient to the candidates. Altogether 660 candidates sat, and out of this number 424 passed.

The different grades and classes of examinations were as follows: Extra first-class engineers, first- and second-class stationary-engine drivers, locomotive and traction engine drivers, and winding-

engine drivers connected with coal and gold mines.

engine drivers connected with coal and gold mines.

Examinations have been conducted at the following places during the year: Auckland,* Blenheim,* Christchurch,* Dunedin,* Greymouth,* Hamilton,* Havelock, Invercaigill,* Kaikoura, Masterton, Maungaturoto, Napier,* Nelson,* New Plymouth, Opotiki, Pahiatua, Palmerston North,* Reefton,* Thames, Timaru,* Wanganui,* Wellington,* and Westport.*

Returns Nos. 7 to 13, inclusive, give the detailed lists of candidates who passed these examinations together with the grades and elegans of examinations.

tions, together with the grades and classes of examination.

Amended regulations for the examination of engine-drivers came into force on the 1st May, 1909. Every candidate must now be a British subject. Applicants for locomotive and traction or winding certificates must also produce a medical certificate of fitness. The syllabus for the first-class enginedriver's certificate was revised and extended, and definite rules set out for the conduct of all examina-

Reciprocal certificates were issued to applicants who held certificates from other States as follows: Victoria, 7; New South Wales, 6; Western Australia, 1; Tasmania, 3; and Queensland, 1: total, 18.

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

The Board of Examiners are the Chief Inspector of Machinery (Chairman), the Engineer-in-Chief and the Inspecting Engineer of the Public Works Department, and the Inspecting Engineer of the Mines Department. This Board sat on seven occasions during the year, and dealt with and signed all certificates issued for engine-drivers.

ACCIDENTS.

I am glad to be again able to report that no boiler-explosion has occurred during the past year. This ought to be a convincing proof of the utility of the compulsory inspection of boilers and steam-vessels as carried out in New Zealand.

A number of accidents to employees have to be recorded, some of them proving fatal. A great number of these accidents are due to carelessness, more especially those connected with woodworking machinery. The speeds of most of the machines used in woodworking establishments are high, and an attendant manipulating these should be always alert and attentive. The guarding of saws has been specially dealt with for years; but it is impossible to take away all the risk by guarding, as in doing so the efficiency of the machine would be impaired.

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

POSTAL AND POLICE DEPARTMENTS.

I have to again thank the Postal and Police Departments for very many services rendered throughout the year in the collection of the inspection fees, and giving effect to the statutory requirements relative to the certificates required for machinery and for drivers of same.

EXAMINATION OF MARINE ENGINEERS.

The examination of marine engineers has been fully maintained during the year, and nothing has occurred to mar the efficient and smooth working of the system adopted at these examinations throughout the Dominion.

Examinations were held at Auckland,* Awanui, Christchurch,* Dunedin,* Gisborne,* Greymouth, Hamilton,* Invercargill,* Napier,* Nelson,* New Plymouth, Russell, Timaru,* Wanganui,* Wellington,* and Whangarei.

By the regulations examinations were held on certain dates at specified places, but when convenient to an Examiner a candidate, if an urgent case, is examined at a time suitable to him. This has been done in many cases at the Head Office during the year.

The nominal horse-power of a marine engine must not be less than 66 n.h.p. to provide qualifying service for a candidate for the second-class engineer's certificate, and not less than 99 n.h.p. for a candidate for the first-class engineer's certificate. The Board of Trade have a set rule for computing the minimum nominal horse-power of a steamship, but do not object to the nominal horse-power being made higher. During the year the Department wrote to several shipowners who had ships a little below the above horse-powers that could provide qualifying service for marine-engineer applicants if raised slightly. The rule for nominal horse-power as adopted by Lloyd's Registry was taken as a basis in such cases, and the nominal horse-power of several ships has been raised. These ships therefore become qualifying ones, and give marine engineers so many more opportunities for serving the qualifying time required. The shipowners kindly co-operated in the matter, and arranged for the altering of the nominal horse-power of their steamers in the cases desired.

During the year the total number of candidates who sat for examination was 297. Of this number, 70 failed. The different classes for which candidates sat were first-class marine engineer, second-class marine engineer, third-class marine engineer, river engineer, marine-engine driver, 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 payable for these examinations amounted to £268.

Return No. 14 gives the names of the successful candidates and the various grades for which they passed, the total number of applicants, fees payable, and the number of candidates who failed to pass such examination.

EXPLOSIVES.

During the year 235 permits were issued at Wellington for the carriage of explosives on ships.

SURVEYS OF STEAMSHIPS AND AUXILIARY-POWERED VESSELS.

This division of the Department's work has received close attention during the year, and at the four principal ports especially the work has been fairly heavy.

During the year the total number of vessels of the above class surveyed was 363. The fees received for these surveys amounted to £2,026.

Thirty-three of the steamers surveyed were fitted with new propeller-shafts, 9 had new sets of engines fitted, and 6 were provided with new boilers.

I have enumerated some of the details of survey of several of the ships dealt with. In very few cases, however, were vessels surveyed without repairs or renewals of some kind being done either to the hull, machinery, or equipments. During the past year a great deal of attention was given to the proposal that boilers of cargo-vessels built under the rules of Lloyd's Registry should be permitted to

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

run with pressures granted by that body in Great Britain. There is a difference in the scantlings of some part of the boilers built under Lloyd's rules and those built under the Board of Trade rules. It was eventually decided to permit the cargo-vessels having boiler certificates from Lloyd's Registry to retain their pressures.

A large number of vessels ran successful excursions, and without mishap, throughout the year, and nearly all the intercolonial steamers throughout the summer months had extra passenger accomodation fitted.

Return No. 15 gives the total number of steamers and of auxiliary-powered vessels surveyed by the Surveyors of the Department during the year. It also gives their names and registered tonnage, 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.

S.s. "Arapawa."—This new steel vessel was surveyed for the first time this year. Her principal dimensions are 120 ft. 6 in. by 22 ft. 1\frac{3}{4} in. by 8 ft. 7\frac{1}{2} in.; tonnage, gross 291.23, registered 128.37. Her machinery is of the triple-expansion type, with cylinder-diameters of 11 in., 18 in., and 31 in., and a stroke of 22 in. She was built for Wellington owners.

S.s. "Mararoa."—This vessel had 528 new common and 44 new stay-tubes fitted to her main boilers. Other portions of her main boilers were repaired also, 578 sq. ft. of new plating fitted, and several new stiffening-angles fitted to bunkers. A new thrust-shaft was fitted to main engines; a sheathing-plate by ash-shoot exhaust was fitted to the vessel's hull, and all sea-cocks were thoroughly examined.

S.s. "Mokoia."—This vessel had several plates and angles renewed close to the galley, and one plate in ship's side; one length of main steam-piping repaired, and tested by hydraulic pressure; and eighteen stays renewed in main boilers. All the rivets in the rudder were renewed, and three new pintles and bushes fitted. All the deck equipments received a very complete overhaul.

S.s. "Maheno."—This vessel was laid up for a long time to effect repairs to the high-pressure turbine engine. About 23,000 new blades were fitted to this engine, and a general overhaul was given to the other part of the vessel's machinery, including all auxiliary engines. The main steam-piping was tested by hydraulic pressure, and the three propeller-shafts were withdrawn for survey.

S.s. "Gosford."—This wooden vessel received a very extensive overhaul to hull and machinery, including a new stem. The hull below the water-line was sheathed throughout with totara, extensive repairs to the rudder were made, new crank-shaft for main engines was fitted, and general repairs to main boiler were effected.

S.s. "Goshawk."—This is a new wooden ferry-steamer built for the Devonport ferry service in Auckland. The vessel's principal dimensions are 120 ft. by 32 ft. by 10 ft.; tonnage, gross 238-7, register 121-94. The engines are of the compound type, having cylinders of 13 in. and 26 in. diameter, with stroke of 18 in. This vessel can carry 947 passengers in Auckland Harbour.

S.s. "Jane Douglas."—This vessel has been practically rebuilt. A great number of new plates were fitted to the hull, and several sheathed. A number of the reverse frames and floor-plates throughout the ship were renewed. The intercostal plates in engine-room were renewed, and extensive repairs made to the bulkheads. Gusset plates in the chain-locker and new decks were provided. The compound engines, with all fittings, and the old boiler were removed, and a new set of triple-expansion engines and a new boiler fitted.

S.s. "Kapui."—This vessel had her own machinery removed, and replaced by the machinery taken out of the s.s. "Fingal." All the main and auxiliary steam-pipes were tested, and a new propeller-shaft fitted.

S.s. "Kiritona" (twin-screw, auxiliary-powered).—This is the first survey of this vessel, which has been built of wood, in Auckland, for the New Zealand Shipping Company for cargo purposes at Napier. The principal dimensions of the vessel are 87 ft. by 24 ft. by 8 ft. 9 in.; tonnage, gross 136.49, register 75.26. The machinery consists of two sets of oil-engines, each engine being of 75 brake horse-power.

S.s. "Kurow."—This new steamer was surveyed for the first time this year. Her principal dimensions are 315 ft. by 44.6 ft. by 20.6 ft.; tonnage, gross 2,580.97, register 1,564.2. Her machinery is of the triple-expansion type, with cylinder-diameters of 22½ in., 38 in., and 62 in., with a stroke of 42 in. This vessel is used for cargo purposes.

S.s. "Loyalty."—This vessel has had the old boiler removed and a new one fitted. The new boiler was made in New Zealand. The vessel generally had a thorough overhaul to hull and machinery.

S.s. "Mana."—This vessel had a new boiler fitted on board, and a big overhaul to her machinery. The hull and ship's frames and floor-plates were thoroughly surveyed, and a number of renewals of parts made. The coal-bunkers were practically renewed. The new main steam-pipes were tested by hydraulic pressure, and the propeller-shaft drawn for examination.

S.s. "Monica."—This new vessel was built of wood, in Auckland, for Lyttelton owners. The principal dimensions of the vessel are 77 ft. by 16 ft. by 7 ft., tonnage, gross 61.84, register 29.45. The machinery is of the compound type, having cylinders of 7½ in. and 16 in. in diameter, and a stroke of 9 in. This vessel can carry a total of 276 passengers in smooth water in Lyttelton Harbour.

S.s. "Ngapuhi."—This vessel's main boiler was removed, and a new one was fitted on board. A number of necessary repairs were made to keelsons and reverse frames of hull, and all the defective plating of bunkers was renewed. Several deck-angles around casing by funnel were renewed, and one propeller-shaft drawn for survey and inspection.

P.s. "Osprey."—This vessel had a fairly extensive overhaul to her paddle-wheels and rudders, and ten of the angle-iron brackets under sponsons were renewed. Several necessary repairs were effected to main engines.

S.s. "Pateena."—The two main boilers of this vessel received a thorough overhaul. Both were turned round to have the defective portions of shell-plating underneath dealt with. After the repairs were completed a satisfactory hydraulic test of both boilers was made. Several new plates in bunkers were renewed, and some plates were sheathed where thin. A number of new rivets were put into the hull of the vessel, the main cables and the steering-gear thoroughly overhauled, and the propeller-shaft withdrawn for survey.

S.s. "Pupuke."—This new wooden vessel was built in Auckland for the new ferry service at Lake The principal dimensions of the vessel are 95 ft. by 28 ft. by 8 ft.; tonnage, gross 137.93, The machinery is of the compound type, with cylinders of 13 in. and 26 in. diameter,

and a stroke of 18 in. This vessel can carry 738 passengers in Auckland Harbour.

S.s. "Ruruhau" (auxiliary).—This vessel's hull had a very complete overhaul, all the ballast and cement being removed for purposes of examination. Several of the frames were renewed, all the hull-planking refastened, the lining inside renewed, keelson refastened, new rudder-gudgeons pro-

vided, and a new oil-engine and shafting fitted into vessel.

P.s. "Westland."—The main boiler of this vessel was found to be so bad that it had to be lifted out of the vessel to be repaired. After the necessary repairs to the boiler were effected, it was subjected to a hydraulic test, and found satisfactory. The frames of this ship, fore and aft, were renewed where necessary, the rudder repaired, the sponsons refastened, the plating of bunkers and paddle-boxes repaired and renewed where necessary, and the main and auxiliary steam-pipes tested throughout by

hydraulic pressure.
S.s. "Aupouri." -At the last survey this vessel had a considerable overhaul, consisting of extensive repairs to hull and in the engine-room and stokehold compartment, which necessitated the lifting-up of the main engines about 4 ft. to get at the work under the engine-beds. Two keel-plates and two bilge-plates were taken out, straightened, and put back; four broken floor-plates 18 ft. by § in., and three 12 ft. by $\frac{3}{8}$ in., were cut out, and new floor-plates fitted, and one new floor-plate 7 ft. by 18 in. by $\frac{1}{2}$ in. in the forward end of engine-room renewed. All the hull-plating under engines was taken out, straightened, and replaced, all the reverse frames in stokehold and engine spaces renewed, a new strengthening girder riveted to top of floors from front of boiler to after bulkhead in engine-room, and a great number of rivets in other parts of vessel renewed.

S.s. "Awaroa."—This vessel had her hull stiffened up by four new hardwood keelsons (extra) fitted from forehold under boiler to stokehold. The dimensions of these were 26 ft. by 12 in. by 7 in. Two of the old keelsons were faced with hardwood doubling-pieces 14 ft. by 7 in. by 9 in. These keelsons were fastened through every frame with Muntz-metal bolts and nuts. Several repairs were also effected to the main boiler, some machinery defects attended to in the engine-room, and the

propeller-shaft drawn for survey.

S.s. "Breeze."—This is a new vessel, and has undergone her first survey in New Zealand this year. She is of steel, and of the following dimensions: 165.4 ft. by 28.2 ft. by 11.5 ft., of 552.51 gross tons burden, and 286.18-tons register. She was built in Holland. The machinery is of the triple-expansion type, has cylinders 13 in., 21 in., and 34 in. in diameter, a stroke of 2 ft., and indicates 468-horse power. This vessel is owned by the Canterbury Steamship Company, Christchurch.

SURVEYS OF SHIPS FOR SEAWORTHINESS.

Fifty-two special surveys for seaworthiness were made during the year, and the supervision of the repairs necessary was carried out to completion in each case by the Surveyor of Ships making the survey. The repairs in some cases covered a period of several weeks. The accidents that necessitated the surveys happened to both steamers and sailing-vessels, and took place all round the coasts of New Zealand, one or two being on the high seas.

The causes for these surveys include the stranding of vessels, collision with another vessel, collision with wharves, fires, defects in fastenings in wooden hulls, defective rudders, crank-shaft fractures, loss of propeller-blades, leakage to hull caused through stress of weather, circulating-pipe fractures, main steam-pipe fractures, piston-rod breaking, partial stripping of the blades of a rotor of a turbine

Return No. 17 gives a full description of each seaworthiness survey made.

GOVERNMENT STEAMERS.

The Government steamers surveyed this year comprise the s.s. "Amokura," s.s. "Antrim," s.s. "Ben Lomond," Defence launches "A" and "W," s.s. "Hinemoa," s.s. "Janie Seddon," s.s. "Mountaineer," o.e.v. "Reremoana," s.s. "Tawera," o.e.v. "Tewhaka," and s.s. "Tutanekai"—a

Training-ship "Amokura."—This vessel had a fairly extensive overhaul to her machinery, including the withdrawal of the pistons of each cylinder of her main engines, the fitting of new neck-brasses and the turning-up of all three piston-rods for these cylinders, a complete overhaul to the slide-valves and valve gearing and to the starting-engine, new baffle-plates for all furnaces of main boilers, new sludgedoors for boilers, smoke-box door refitted, propeller-shaft sighted and propeller taken off, overhaul of hawse-pipes, repairs to rudder, and several other minor repairs. The work was carried out by a Wellington firm, and after completion a trial trip was made in the harbour, and the machinery ran to the

entire satisfaction of the Surveyor of Ships, who had supervised the repairs throughout.

S.s. "Ben Lomand."—This vessel runs on Lake Wakatipu. At the last survey the fore deck was sheathed with 2 in. planking, and repairs to the stays of the main boiler and to the smoke-box, and also to the outer-shell seams of the boiler, were made; the water-gauge mountings were renewed; the stern tube was drawn, bored out, and new propeller-shaft fitted, and the thrust-bearing was overhauled.

S.s. "Tutanekai."—This vessel received a considerable overhaul to her main engines, bunkers, and to ballast-tank No. 2. Main engines: the pistons and piston-rods of both sets of main engines were overhauled, the neck-brasses for these rods were renewed, the slide-valves were trued up and neck-brasses renewed. All drag-links were rebushed with gun-metal bushes, feed-pumps overhauled, and thrust-bearings relined. All the main shafting was relined up and propeller-shafts drawn, the starting-engines thoroughly overhauled, the electric-light engine, the ash-hoist, the steering-engine, the forced-draught engine, the ballast donkey-engine, the deck windlass and winches, were all overhauled where required, and several of their parts renewed. Several pipes were repaired in the engine-room. The funnel-apron and ventilators for engine-room and bunkers also received attention. Repairs were effected to donkey and main boilers, and both were relagged with asbestos pulp and sheet iron. No. 2 ballast-tank received a general overhaul, having fresh stays fitted to act as ties to the plating forming sides of the tank. The whole of this work was done by a Wellington firm, and to the satisfaction of the supervising Surveyor of Ships, who was appointed to act as inspector while the repairs were being effected.

ADDITIONAL STEAMERS AND VESSELS SURVEYED FOR THE FIRST TIME.

Thirty-two new steamers, and vessels fitted with oil-engines as auxiliary power, have been surveyed for the first time during the year. The names of these vessels are "A.H.B.,"* "Arapawa," "Breeze," "Catherine,"* "Clematis,"* "Fannie,"* "Gisborne,"* "Goshawk," "Hipi," "Ivy," "Kairaki," "Kapuni," "Kia Ora," "Kiritona,"* "Kurow," "Mihi Moana,"* "Monica," "Moturata,"* "Novelty," "Orete,"* "Psyche,"* "Pupuke," "Rahutai," "Ripple,"* "Southern Isle,"* "Sparrow," "Tamure,"* "Te Aroha,"* "Tofua," "Waikana," "Waimea," and "Wakaiti."* The sailing-vessels surveyed for the first time were the "Bankfields" and the "Weathersfield."

SAILING-SHIPS.

Twelve sailing-ships were surveyed during the year, and most of them had repairs effected to them. The barquetine "Ilma" received a considerable overhaul, which included the fitting of thirty angle-iron reverse bars $2\frac{1}{2}$ in. by $2\frac{1}{2}$ in. by $\frac{3}{8}$ in., and forty-two short reverse angles to carry two longitudinal stringers. These stringers were made up of double angles 3 in. by 3 in. by 3 in., and were Doubling-plates were fitted to bulwarks where required, and the pintles of rudder were 150 ft. long.

Return No. 16 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 these sailing-vessel surveys amount to £79.

DISTRICTS AND INSPECTORS.

No new appointments of Inspectors of Machinery were made during the year. Inspector Walker, of the Otago District, assisted in the Southland District for some weeks; Inspector McKenzie, of the Canterbury District, assisted in the Westland District for two months; Inspector Williamson, of the Timaru District, assisted in the Marlborough District for some weeks; Inspector Cullen, of the Palmerston North District, assisted in the Taranaki District for a month; and Inspector Mackenzie, of the Wellington District, assisted in the Auckland District for two months.

The following are the returns in detail, numbered from 1 to 19:-

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' 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, 8, 9, 10, 11, 12, and 13. Names of all persons to whom land stationary, winding, and locomotive and traction certificates of competency and service have been granted during the year. 14. List of persons who were examined and passed for marine engineers' certificates of competency.
- 15. Return of steamers and oil-engined vessels surveyed during the year.

16. Return of sailing-vessels surveyed during the year.

- 17. Return of vessels surveyed for seaworthiness, &c., during the year.
 18. Return showing sums earned or received and amount spent during the financial year for inspection of machinery, examination of engineers and engine-drivers, and survey of steamers and sailingvessels.
- 19. 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 and Land 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 31st March, 1910.

Boilers.

Class.	Not exceeding 5-horse Power.	Exceeding 5- but not exceeding 10-horse Power.	Exceeding 10-horse Power.	Total.
Stationary Portable	1,698 198	988 1,255		
Total	1,896	2,243	2,069	6,208
	Mach	inery.		
	Class.	inorg.		Number.
Hydraulic lifts	•••	•••		272
Gas-lifts			***	43
Electric lifts				233
Steam-lifts		***		44
$ m Oil\mbox{-}lifts \qquad \qquad \ldots$		•••		3
Gas, hydraulic, and elec			•	336
Water-engines, water ar	nd electric motor	s, and water-whe	els	1,341
Peltons	•••			211
Turbines	•••	***	***	100
Gas-engines		•••		1,450
Oil-engines	•••	•••		1,552
Steam machinery		•••	•••	182
To	otal			5,767
	Sumr	nary.		
Boilers		***		6,208
Machinery	•••	•••		5,767
·To	otal .			

(b.) Return showing the Fees payable for the Inspection of Boilers and Machinery, and for the Issue of Engine-drivers' Certificates during the Financial Year ended 31st March, 1910.

Fees payable—On boilers, £7,160; on machinery, £2,071; for engine-drivers' certificates issued, £387 10s.: total, £9,618 10s.

The cash actually received for boilers and machinery inspected, and paid into the Public Account, amounted to £9,406 15s. The difference is represented by unpaid fees and fines paid. The cash actually received and paid into the Public Account for engine-drivers' application fees amounted to £650 10s. This amount includes fees for certificates not yet issued.

(c.) Return showing the Number of Service and Competency Certificates issued to Winding, Locomotive, and Traction, and to Steam Stationary Engine Drivers during the Financial Year ended 31st March, 1910.

	Number of	Fees received.			Total.			
Class of Certific	Certificates issued.				Number of Certificates issued.	Fees received.		
Hydraulic winding— Competency Steam winding—			1	£ 1	s. 0	d. 0		£ s. d
Competency			11	5	10	0 .		
Competency			14	14	0	0	26	20 10
Locomotive and traction	1	İ						
Competency			47	23	10	0	•••	
Competency			109	109	0	0	156	132 10 (
Steam stationary—								
Service—First class		.	8	2	0	0		
Competency—								
Extra first class			7	. 7	0	0		
First class			83	83	0	0	•••	
Second class			35		10	0		•••
Second class			125	125	0	0	258	234 10 (
							440	£387 10 (

No. 2.—Return of Defects found on Inspection of Boilers during the Financial Year ended the 31st March, 1910.

• Descrir	ption of De	fects.			Dangerous.	Defective in	Total
					Dangerous.	Lesser Degree.	TOTAL
A number of rivets in she		•••	•••	•••		2	$_{2}$
All screwed stays in fireb		···	, • • •		2		2
Angle-iron collar on top		defective	·			2	2
Back end-plate pitted	•••	• • •	•••	• • • •	•••	1	1
Back tube-plates bulged Back tube-plate thin	•••	•••	•••		•••	2	2
Barrel of boiler wasted	•••	•••	•••	•••		$\frac{1}{2}$	1
Boilers dirty inside	•••	•••	•••	•••	••••	63	2
Bottom of firebox wasted			•••	• • •	•••	1	63 1
Bottom of shell thin		•••			3	5	8
Bottom row of tubes bad		•••	•••			2	2
Brickwork-setting defecti					1	17	$1\overline{8}$
Bulged slightly at back e	\mathbf{nd}		•••			4	4
Bulged under bottom of s	shèll		• • •		•••	4	4
Compensating-ring round		wasted	• • • •			1	1
			•••	•••	•••	12	12
Coupling-pins in longitud Cracked at back tube-pla	ınai stayı	s pad	• • •	• • • •	•••	$\begin{vmatrix} 2 & 1 \\ 2 & 1 \end{vmatrix}$	2
Cracked at back tube-pla Cracked in firebox (press	ue ura radua	 (50	•••	• • • •	•••	$\frac{2}{2}$	$\frac{2}{2}$
Cracked slightly at a nun			• • •	••••	* • •	2	2
Cracked slightly in firebox		A CA-HOIGS		••••	•••	11 4	$\begin{array}{c} 11 \\ 4 \end{array}$
Cracked under bottom of	shell			• • • •	•••	2	$\frac{4}{2}$
Cross-tubes thin		•••			•••	$\frac{2}{2}$	2
Crown of boiler wasted		•••	•••		•••	$\frac{2}{2}$	$\overset{2}{2}$
Crown of firebox bad			•••			$\bar{1}$	$\tilde{1}$
Crown of firebox badly bu			•••		2	$\bar{1}$	3
Crown of firebox slightly		• • •				3	3
Crown of firebox wasted		• • •	• • •		•••	10	10
Crown of steam-dome wa		•••	•••	• • •	•••	1	1
Eighteen tubes bad		footing	•••		••••	3	3
Eleven rivets in front end	i-piate de	rective	•••	• • • •	•••	1	1
Eleven screwed stays in f End-plate at top half defe			• • •	•••	•••	1	1
Fifty screwed stays in fire		•••	• • •		 1	1	1
Fifty-two screwed stays is				•••	1	•••	$\frac{1}{1}$
						1	1
Firebox bulged at back er	nd and cr	own leak	ing			1	1
Firebox general waste	•••		•,•		8	8	16
Firebox-sides bulged		•••	•••		•••	$\overset{\circ}{2}$	$\frac{10}{2}$
Firebox-sides thin						4	$\frac{2}{4}$
Firebox thin (pressure red			•••		,•••	3	$\overline{3}$
Firebox thin at back left-		ner				1	. 1
firebox wasted on outside		•••			•••	1	1
Five rivets in foundation-		•••	•••	•••	•••	1	1
Porty-four screwed stays		'	•••	•••		1	1
Forty-three screwed stays		•••	•••	•••	•••	1	1
Forty-two screwed stays h		•••	•••		•••	$\frac{1}{1}$	1
Forty screwed stays bad		•••	•••		•••	3	$rac{1}{3}$
Foundation-rings round be				,		7	5 7
Four stay-tubes bad						i	$\overset{'}{1}$
ourteen tubes bad	• • •	•••	•••			$\frac{1}{2}$	$\frac{1}{2}$
ront plates wasted	•••	•••	•••			$\frac{7}{4}$	$\overset{2}{4}$
ront tube-plates wasted			•••			4	$\overset{-}{4}$
Front tube-plate wasted (pressure	reduced)	• • •			1	1
		•••	• • •	•••		3	3
urnace-crowns wasted	•••	•••	•••	•••		4	4
urnaces thin at bottom urnaces thin at sides		•••	• • •			3	3
	 n etrenat	hanad	• • •	••••		. 4	4
urnaces weak; have bee alloway tubes thin	_	пенеа	•••	• • • •	•••	2	2
tanoway tubes thin teneral deterioration (pre	 ssure red		•••	•••	•••	1	106
			•••	•••	•••	$\begin{array}{c c} 106 \\ 5 \end{array}$	106
muers on crown in men	11 000 000		• • •	• • • •	•••		5
tirders on crown of firebo tirder-stays defective						9. 1	٠,
(i)			•••	,		$\frac{2}{2}$	$rac{2}{2}$
irder-stays defective	rnaces	•••	•••		•••	$egin{array}{c} 2 \ 2 \ 1 \end{array}$	$egin{array}{c} 2 \ 2 \ 1 \end{array}$

No. 2.—RETURN of DEFECTS—continued.

Description of Defe	cts.			Dangerous.	Defective in Lesser Degree.	Total
Jusset stays defective					2	2
Laminated plates in bottom of shell	1	•		•••	3	3
Laminated plate in furnace	-			•••	1	ĺ
Leaking at corners of foundation-ris	ng			•••	$\bar{1}$	1
	6	•••			3	3
ar i i i i i i	• • •	•••		• • •	12	12
or 1 1 3 1 441	•••			***	1	1
or 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					11	11
Manhole-openings in shell wasted		•••		•••	13	13
vr 11 1 3 1 1			•••	•••	34	34
Mudhole-door dogs bad				•••	3	3
ar 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					11	11
Vine rivets in front tube-plate defec	tive				1	1
T' 1 1 1 1 1		•••			1	1
One hundred and six screwed stays	bad			1		1
One longitudinal stay bad	• • •				5	5
					15	15
Pitting badly in places	•••	• • •		•••	4	4
Pitting on crown of firebox				•••	3	3
Pitting on crown of firebox (pressur	e red <mark>uc</mark>	ed)		•••	1	1
Pitting slightly internally		. 	•••	•••	14	14
``				•••	4	4
Rivets in manhole compensating-rin	ng bad			•••	1	1
Rivets in mud-drum flange defective				•••	1	1
Rivets in tube-plate defective		1.4.4		•••	1	1
	• • •				9	9
Several rivets bad in furnace		•••		•••	1	1
Several rivets bad in shell				•••	11	. 11
Several rivets in foundation-ring bac	d			•••	1	1
Several screwed stays in firebox bac	i	• • •			17	17
Several stay-nuts on firebox-crown	bad			•••	. 1	1
Several tubes bad			•••	•••	28	28
Shell wasted at circumferential sear	ns				3	3
Shell wasted at crown of boiler					1	1
Shell wasted at manhole-openings.	•••			•••	1	1
Shell wasted at mudhole-openings.	•••				82	82
Shell wasted considerably					1	1
Shell wasted externally			•••	•••	6	6
Shell wasted where blow-off cocks j				•••	7	7
Shell wasted where check-valve che				•••	2	2
Shell wasted where safety-valve che				•••	6	6
Shell wasted where stop-valve chest	is jointe	ed to b	oiler	•••	4	4
Six nuts on girder-stays bad	•••			•••	1	1
Sixteen screwed stays in firebox bac	i			•••	1	1
Sixteen tubes bad		•••	•••	•••	1	1
Sixty-two screwed stays in firebox k		• • •	•••	1		1
Stay-nuts on back tube-plate defect	ıve			•••	1	.1
	•••	• • •		•••	1	1
Cen screwed stays in firebox bad	•••			•••	$\frac{1}{2}$	1
Cen tubes bad			•••	•••	2	2
Chirteen screwed stays in firebox be	ad		•••	•••	1	1
Chirty-eight tubes bad	•••	• • •	•••	• • •	$\frac{1}{1}$	1
hirty screwed stays in firebox bad			•••	•••	1	1
hirty-six screwed stays in firebox	bad		•••	•••	1	1
hroat-plates thin	•••		•••	•••	3	3
	· · ·	•••		• • • •	1	1
	•••	•••		4	8	$\frac{12}{2}$
op tube-plates thin (pressure redu	ced)	• • •		* • •	$\frac{2}{2}$	$\frac{\cdot 2}{\cdot 2}$
lubes bad		•••		•••	90	90
ube-ends leaking	••	• • •			$\frac{1}{2}$	$\frac{2}{2}$
I	•••			8		8
Indian Talakan landarah					1	1
Tube-plates wasted	•••	•••			13	13
Tube-plates wasted (pressure reduce	ed)			•••	2	2
Twelve screwed stays in firebox bad	l	٠			2	2
				•••	2	2
I'welve tubes bad						
Twenty-eight screwed stays in fireb	ox bad				$\frac{1}{2}$	2

No. 2.—RETURN OF DEFECTS—continued.

Descr	iption of	Dangerous.	Defective in Lesser Degree.	Total.			
Twenty-one screwed sta	avs in fir	ebox bad				1	1
Twenty-six tubes bad			•••			$\tilde{1}$	$\tilde{1}$
Twenty tubes bad		•••	•••			1	$\bar{1}$
Two stay-nuts bad	611	•••			•••	$\bar{1}$	1
Uptakes bad					2	3	5
Uptakes wasted						7	7
Vertical stays wasted		•••			•••	2	2
Wasted at crown of fire			olug		•••	3	- 3
Wasted at front end of					•••	1	1
Wasted internally (pres			•••		•••	1	. 1
Wasted round bottom					***	5	5
Wasted round bottom of	of uptake					1	1
Wasted round furnace-	door	•••			•••	7	7
Totals			•••		34	854	888

DIGESTERS found to be defective on Inspection during Financial Year ended the 31st March, 1910.

Descri	ption of De	fects.		Dangerous.	Defective in Lesser Degree.	Total.
A number of rivets defec	tive		•••	 •••	, 1	1
All rivets in bottom end	bad	•••		 1		1
All rivets in top end bad				 3		3
All rivets in top end and		late bad		 $_1\cdot$		1
Crown-plates much wast		• • • •		 1		. 1
Defective seams				 	4	f 4
Eighty-nine rivets bad				 	1	1
Eighty rivets bad	•••			 • • •	2	2
Fifty rivets bad				 •••	1	1
Forty rivets bad				 • • •	1	1
Four hundred and sixty-	seven rive	ets bad		 . 1		1,
General deterioration (pr	essure re	duced)		 	1	1
New steel end fitted to r			ne	 	1	1
Nineteen rivets bad		• • •		 	1	1,
Ninety-eight rivets bad				 •••	1	1
Ninety rivets bad and se	${ m ams}$ defec	etive		 1		1
Ninety-six rivets bad				 • • • •	1	1
One hundred and seven	rivets bad			 •••	1	1
Rivets in two seams bad		•••		 1	ļ .	1
Seams defective; were re	ecaulked		• • • *;	 	2	2
Seventy rivets bad and s		ective		 . • • •	1	1
Seventy-two rivets bad			•••	 	2	2
Several rivets bad	•••			 •••	2	2
Sixty-eight rivets bad	•••	•••	•••	 •••	1	1
Sixty rivets bad			••>	 •••	1	. 1
Sixty-seven rivets bad	•••	•••	• • •	 	1	1
Thirty-eight rivets and to	op conical	l plate b	ad	 •••	1	1
Twelve rivets bad	••••	•••	• • •	 	1	1
Twenty rivets bad	•••			 •••	1	1
Two hundred and sixty r	rivets bad			 1		1
Two hundred rivets bad				 1		. 1
Vertical stays defective				 	1	1,
Totals			•••	 11	30	41

DEFECTIVE FITTINGS found on Inspection of Boilers, for which Notice was given to renew or repair during the Financial Year ended the 31st March, 1910.

- 2 Bends of main steam-pipe bad: have been renewed.
- 15 Blow-off cocks bad: have been renewed.
- 3 Blow-off cocks defective: were repaired.
- 12 Blow-off pipes bad: have been renewed.
- 1 Crank-shaft of engine fractured: has been renewed.
- 2 Feed check-valve chests and valves bad:
- were renewed.

 1 Feed check-valve chest defective: was renewed.
- 2 Feed check-valves defective: have been renewed.
- 2 Feed-pumps defective: have been repaired.

DEFECTIVE FITTINGS found on Inspection of Boilers, &c .- continued.

13 Safety-valves bad: have been renewed. 23 Ferrules fitted under spring-balance safety-1 Safety-valve defective: was put in order. valve levers. 1 Fly-wheel of engine defective: was repaired. 5 Safety-valve levers cut to correct length. 2 Safety-valve seats bad: have been renewed. 22 Fusible plugs found defective: have been re-Safety-valve spring bad: was renewed. placed. Spring-balances defective: were renewed. 138 Guards fitted to water-gauge glasses. 2 Injectors defective: have been renewed. Spring-balance defective: was repaired. 1 Main steam-pipe defective: was repaired. 32 Steam-pressure gauges defective: have been 12 Manhole-doors bad: have been renewed. 34 Mudhole-doors bad: were renewed. renewed. 2 Steam stop-valves bad: were renewed. 11 Mudhole-door studs bad: were renewed. Studs in safety-valve chest defective: were New bolts fitted to cylinder-cover. New bolts in axle-bracket. renewed. 17 Test-cocks bad: have been renewed. 10 Test-cocks defective: were repaired. New bolts in fly-wheel bracket. New cylinders fitted.New brakes fitted. 1 Traction-engine driving-gear bracket patched. 6 Traction-engines' steering-gear defective: was New brake-nut fitted. put in order. New key in fly-wheel. Valve-chest for pump defective: new one New main stop-valve fitted. fitted. New pins fitted in friction-clutch. 26 Water-gauge mountings bad: have been re-New piston-rod fitted. newed. 1 New reducing-valve fitted. 11 Water-gauge mountings defective: were repaired. 3 New tapered plugs fitted. 2 New worms fitted to steering-gear. 1 Water-gauge pipes bad: was renewed.

Total 446

No. 3.—Return of Notices given to repair Boilers during the Financial Year ended the 31st March, 1910.

		the 31st March, 1910.
Number.	Type.	Description of Repairs.
1	Cornish	Brickwork repaired.
5	,,	Themes are notated whose wested
1	,,	Crosset star remained
1	,,	Datab 2 ft by I ft wineted an outside of shall
1		TO 1 10 01 11 3 1
1	Cornish tubular	T:
1	,	Four new tubes fitted.
1	,,	Retubed.
1	, , , , , , , , , , , , , , , , , , , ,	Retubed, and patch fitted under bottom of shell.
1	Dryback marine	Brickwork repaired, and several new rivets put in shell.
2	,,	Retubed.
2	,,	Strengthening girders fitted to three furnace-rings, and defective rivets renewed in circumferential seams, also a sheathing patch fitted on shell.
2	Lancashire	
1		
1	,,	
1	Lancashire tubular	
1	"	Eight stay-nuts renewed at back end.
1	"	Eleven rivets renewed in front plate and flue.
1	",	Retubed.
1	Locomotive	Corners of foundation-ring caulked.
1	,,	Eleven new screwed stays fitted in firebox, and patch on front tube- plate.
1	,,	
1	,,	
1	,,	
1	,,	New firebox, and all new screwed stays fitted, also compensating- rings to mudhole-openings.

No. 3.—RETURN of Notices given to REPAIR BOILERS—continued.

Locomotive Patches fitted on throat-plate. Patches renewed. Retubed. Several rivets renewed in foundation-ring. Several rivets renewed in foundation-ring. Several rivets renewed. Three patches fitted in firebox. Three patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Patches in combustion-chamber extended. Retubed. Compensating-ring ring round manhole-opening reriveted. Brickwork repaired. Bulge cut out of bottom of shell, and patch riveted on. Bulge cut out of bottom of shell, and patch riveted on. Bulge cut out of bottom of shell, and new mud-leg fitted. Circumferential seams on bottom recaukled. Compensating-ring fitted round mudhole-openings. Compensating-ring fitted round mudhole-openings, and new doors fitted. Compensating-ring fitted round mudhole-opening, and new doors fitted. Compensating-ring fitted round mudhole-opening, new door fitted, and five new rivets put in shell. Retubed. Compensating-ring fitted round mudhole-opening, new door fitted, and five new rivets put in shell. Retubed. Defective portion of plate cut out of bottom of shell, and patch 43 in. by 18 in. riveted on. Eighteen new tubes fitted. Five new stay-tubes fitted. Five new tay-tubes fitted. Five new tay-tubes fitted. Five new tay-tubes fitted. Five new tay-tubes fitted. Four rivets renewed in bottom circumferential seam. Fourteen seat-tubes fitted. Retubed. Re	Number.	Туре.		Description of Repairs.
Resubed. Resubed. and new front tube-plate fitted. Soams caulked, stays rejointed, and sight-holes out. Soaws caulked representation for frebox-crown renewed. Three patches fitted in frebox. Three patches fitted in frebox, and plugs fitted. Longitudinal seams caulked. Patches in combustion-chamber extended. Resubed. Patches in combustion-chamber extended. Resubed. Compensating-ring round manhole-opening reriveted. Brickwork repaired. Bulge cut out of bottom of shell, and patch riveted on. Bulge cut out of bottom of shell, and new mud-leg fitted. Circumferential seams on bottom recaulked. Compensating-rings fitted round manhole-openings. Compensating-rings fitted round mudhole-openings. Compensating-rings fitted round mudhole-openings, and new doors fitted. Compensating-rings fitted round mudhole-opening, and new doors fitted. Compensating-ring fitted round mudhole-opening, and new doors fitted. Compensating-ring fitted round mudhole-opening, new door fitted, and five new rivets put in shell. Cracked portion cut out of bottom of shell, and patch 22 in. long riveted on. Bighteen new tubes fitted. Five new trivets put in sugaset stay. Five new stay-tubes fitted. Four rivers renewed in bottom circumferential seam. Fourteen new tubes fitted. Four new stay-tubes fitted. Four new stay-tubes fitted. Four new stay-tubes fitted. Four new stay-tubes fitted. Four rivers renewed in bottom circumferential seam. Fourteen new tubes fitted. Manhole-doors fitted and compensating-ring round manhole-opening-ring fitted. Manhole-doors fitted and compensating-ring round mudhole doors fitted. New manhole-doors fitted and compensating-ring round mudhole-opening. New stude fitted. New manhole-door fitted and compensating-ring round mudhole-opening. New stude fitted and compensating-ring to mudhole-opening. New stude fitted and compensating-ring to mudhole-opening. New stude fitte	3	Locomotive	•••	Patches fitted on throat-plate.
Remubed, and new front tube-plate fixed. Seams can lucked, stays rejointed, and sight-holes cut. Several trivets renewed in foundation-ring. Several stay-nuise of nebox-crown renewed. Manure-dryer Marine Patches fitted in firebox, and plugs fitted. Longitudinal seams caulked. Patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Patches in combustion-chamber extended. Brickwork repaired. Compensating-ring fitted round muchole-openings. Compensating-ring fitted round muchole-openings, and new doors fitted. Compensating-ring fitted round muchole-opening, and new doors fitted. Compensating-ring fitted round muchole-opening, new door fitted, and five new rivets put in shell. Cracked portion cut out of bottom of shell, and patch 22 in. long riveted on. Bighteen new tubes fitted. Five new rivets put in gusset stay. Five new stay-rubbes fitted. Five new rivets put in gusset stay. Five new stay-rubbes fitted. Four rivets renewed in bottom circumferential seam. Four rivets portion of plate cut out of bottom of shell, and riveted manulated. Four rivets portion of plate cut out of bottom of shell, and riveted manulated. Four rivets portion of plate cut out of bottom of shell, and riveted manulated. Four rivets renewed in bottom circumferential seam. Four term way-rubbes fitted. Four revision renewed in bottom of shell and new muchole doors fitted. Manhole-door spipot renewed. Manhole-door spipot renewed. New manhole-door fitted and compensating-ring round muchole-open		"		
Seams caulked, stays rejointed, and sight-holes cut.		"	• • •	
		. "		Retubed, and new front tube-plate fitted.
Several stay-nuts on firebox-crown renewed. Several tubes renewed. Several tubes renewed. Three patches fitted in firebox. Two sight-holes bored in firebox. Two sight-holes bored in firebox. Two sight-holes bored in firebox. Patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Patches fitted on shell under check-valve and blow-down cock, also leaky seams pared and caulked. Renthed. Renthed. Multitubular Multitubular Brackwork repaired. Bulge cut out of bottom of shell, and patch riveted on. Bulge cut out of bottom of shell, and new mud-leg fitted. Circumferential seams on bottom recaulked. Compensating-rings fitted round mudhole-openings. Compensating-rings fitted round mudhole-openings, and new doors fitted. Compensating-rings fitted round mudhole-openings, and new doors fitted. Compensating-ring fitted round mudhole-openings, and new doors fitted. Compensating-ring fitted round mudhole-openings, new door fitted, and five new rivets put in shell. Cracked portion cut unt of bottom of shell, and patch 22 in. long riveted on. Defective portion of plate cut out of bottom of shell, and patch 48 in. by 18 in. riveted on. Eighteen new tubes fitted. Five new rivets put in gusset stay. Five new stay-tubes fitted. Five new stay-tubes fitted. Four rivets renewed in bottom circumferential seam. Fourteen new tubes fitted. Four rivets renewed in bottom circumferential seam. Fourteen new tubes fitted. Four rivets renewed in bottom circumferential seam. Fourteen new tubes fitted. Four new stay-tubes fitted. Renthed one stage fitted and riveted to the bottom of shell, and riveted one manhole-doors fitted. New manhole-door spiger rivet		"	• • •	
		,, *	•••	Several rivets renewed in foundation-ring.
"Three patches fitted in firebox. and plugs fitted.		"	• • •	Several stay-nuts on firebox-crown renewed.
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2 " One new tube fitted. 1 " And the fitted at back end and compensating-ring to mudhole-opening. 1 " Patch fitted on back tube-plate. 1 " Patch fitted on bottom of shell under seams. 1 " Patch fitted on bottom of shell 48 in. by 18 in., and thirty-eight new		"		One new longitudinal stay put in boiler.
opening. 1		. "		One new tube fitted.
opening. 1	1	"	•••	Patch fitted at back end and compensating-ring to mudhole-
1 " Patch fitted on bottom of shell under seams. 1 Patch fitted on bottom of shell 48 in. by 18 in., and thirty-eight new	4			opening.
1 , Patch fitted on bottom of shell 48 in. by 18 in., and thirty-eight new		" '		Patch fitted on back tube-plate.
" rated fitted on pottom of shell 48 in. by 18 in., and thirty-eight new		"		rated fitted on bottom of shell under seams.
	1	<i>"</i>	••• {	Paten fitted on bottom of shell 48 in. by 18 in., and thirty-eight new tubes fitted.

No. 3.—Return of Notices given to Repair Boilers—continued.

Tumber.	Type.		Description of Repairs.
1	Multitubular		Patch fitted on front tube-plate.
3	ĺ	•••	Patches fitted on shell under main stop-valve chest.
$\overset{\mathtt{o}}{4}$	"	•••	Patches fitted on shell under safety-valve chest.
1	"		Patches on bottom of shell rejointed.
$\bar{1}$,,,		Patches renewed.
$\overline{1}$,,,		Plate cut out of bottom of shell on account of being laminated, as
	. "	,	new plate fitted.
8	,,		Retubed.
1	,,		Retubed, and additional girders fitted on crown of firebox.
1	"	•••	Retubed, and compensating-rings fitted to manhole and mudho openings.
1	, "		Retubed, and compensating-ring fitted to mudhole-opening.
1	,,		Retubed, and new shell-plate fitted in bottom.
1	,,		Several new rivets put in shell.
1	,,		Several new tubes fitted.
1	<i>"</i>		Small patch fitted on bottom of shell.
1	"		Three new rivets put in manhole compensating-ring.
1	<i>"</i>		Three new tubes put in.
1	·#		Tubes expanded, one new stay-tube and one new longitudinal staffitted.
1	"		Two new plates fitted in bottom of shell.
1	"		Two new stay-nuts fitted on longitudinal stays, and one new riv
			in mud-drum.
2 .	"		Two new tubes fitted.
1		• • •	Two patches fitted on shell, and three new longitudinal stays fitte
6	Portable	• • •	A number of new screwed stays fitted in firebox.
1	. "	• • •	All mudhole-openings fitted with compensating-rings.
1	"	• • •	All new screwed stays fitted in firebox, four new longitudinal, to
			new tubes, and compensating-ring fitted to mud-door.
1	"	• • •	All screwed stays in throat-plate and one in side of firebox r
- 1		,	newed.
2	"	• • •	Compensating-rings fitted to manhole-openings.
1	"	• • •	Compensating-ring fitted to manhole-opening, and four new screwe
10			stays in firebox.
18	" .	•••	Compensating-rings fitted to mudhole-openings.
1	"	•••	Compensating-ring fitted to mudhole-opening, and foundation-ring
0			caulked. Compensating-rings fitted to mudhole-openings, and new door
2	<i>"</i> .	•••	fitted.
$_2$		•	Compensating-rings fitted to mudhole-openings, and several ne
	"	•••	rivets put in shell.
1			Compensating-ring fitted to mudhole-opening, and several ne
1	"	•••	screwed stays put in firebox.
1			Crack in firebox chain-pinned.
î	"		Eight rivets renewed in front tube-plate.
1	"		Fifty new screwed stays fitted in firebox.
ī	, " , .		Fifty-two new screwed stays fitted in firebox.
1	"		Five new rivets put in foundation-ring.
$\overline{1}$	"		Flanged plate riveted round fire-door.
$\frac{1}{2}$."		Forty new screwed stays fitted in firebox.
$\overline{1}$	<i>"</i>		Foundation-ring repaired and three new screwed stays fitted
	"		firebox.
1			Four new mud-doors fitted.
î	<i>"</i>		Girders on crown of firebox repaired.
1	. "		New coupling-pins fitted in longitudinal stays.
1			New dog and stud fitted to mud-door.
1	"		New firebox-crown fitted.
1	" " " " " " " " " " " " " " " " " " "		New girders fitted on crown of firebox.
5	, "		New mudhole-doors fitted.
$\overset{\circ}{2}$	"		New stude fitted in mud-doors.
$\tilde{1}$	"		Nine new tubes fitted.
$\hat{1}$	"		One new longitudinal stay fitted.
$\overline{2}$			Patches fitted on crown of firebox.
$\frac{2}{2}$	<i>"</i>		Patches fitted on foundation-ring.
1	"		Patches fitted on front tube-plate.
1	" .		Patch fitted on shell under blow-off cock.
$\tilde{5}$	"	.,.	Patches fitted on sides of firebox.
1	<i>"</i>		Patches fitted in firebox, and twelve new screwed stays put in.
			Patches fitted in firebox, patch on front tube-plate, and twelve ne
1	"		

No. 3.—Return of Notices given to Repair Boilers—continued.

Number.	Type.	:	Description of Repairs.
1	Portable	•••	Patch fitted on front tube-plate, and eight new screwed stays fitted in firebox.
2	"		Patches in firebox rejointed.
12	"		Retubed.
1	"	, .	Retubed, front tube-plate reriveted, and compensating-rings fitted
1			to mudhole-openings.
1	"	•••	Retubed, new girders fitted to crown of firebox, and four compensating-rings fitted to mudhole-openings.
1	,,		Seven rivets renewed in front plate, and landings caulked.
1	"		Seventy new screwed stays fitted in firebox.
7	"	• • •	Several new screwed stays fitted in firebox.
$1 \\ 5$	"		Several new tubes put in, and patch fitted in firebox. Sight-holes bored, and tapered plugs fitted.
ĩ	"	•••	Sight-holes bored, tapered plugs fitted, and ten new screwed stays
İ			fitted in firebox.
1	"	• • •	Thirteen new screwed stays put in firebox.
$egin{array}{c c} 1 & \\ 1 & \end{array}$	<i>"</i>	•••	Thirty-four new screwed stays put in firebox.
1	"		Three mudhole-openings fitted with compensating-rings. Three new dogs fitted to mud-doors.
$_2$.#	•••	Twelve new screwed stays fitted in firebox.
. 3	"	•••	Twenty-five new screwed stays fitted in firebox.
1	· "	• • •	Twenty-six new screwed stays put in firebox, and four patches on
1			outside shell of boiler. Two girders on crown of firebox renewed.
ī	Semi-portable		Compensating-rings fitted to mudhole-openings, and manhole-door
			reriveted.
2	"	•••	Patches fitted in firebox.
1	"	•••	Patch in firebox rejointed. Three new tubes fitted.
1	Semi-tubular		Compensating-ring fitted to manhole-opening.
$\tilde{1}$	"		Furnace-crown set up, and sling stays fitted.
1	"		New plate fitted in furnace, and compensating-rings to manhole and
0			mudhole openings.
$\frac{2}{1}$	<i>y</i>		Retubed. Screwed pins fitted in each end of crack in furnace.
1	"	·	Several new screwed stays fitted in bottom of tube-plate.
4	Traction		Compensating-rings fitted to manhole-openings.
$\begin{bmatrix} 6 \\ 1 \end{bmatrix}$	"	•••	Compensating-rings fitted to mudhole-openings.
1	"		Coupling-pins in longitudinal stays renewed. Eighteen new tubes fitted.
î	"		Firebox-crown repaired.
1	<i>n</i> :	•,••	Forty-four new screwed stays fitted in firebox.
1	"		Forty-three new screwed stays fitted in firebox.
$\begin{array}{c c} 1 \\ 1 \end{array}$	"		Forty-two new screwed stays fitted in firebox. New crown fitted in firebox.
$\overset{1}{2}$	"		New firebox fitted.
1	<i>"</i>		New firebox fitted, and doubling-plate put on front of firebox.
$\frac{1}{c}$	"	• • •	New firebox fitted, and new girders on crown of firebox.
$\frac{6}{3}$	"		New firebox, retubed, and all new screwed stays fitted in firebox.
1	"		New firebox, retubed, and new front plate fitted. New firebox, retubed, new front plate, and new throat-plate fitted.
1	<i>"</i>		New front tube-plate, six new tubes, and 106 new screwed stays
			put in firebox.
$\begin{array}{c c}1\\5\end{array}$	"	•••	New tube-plate fitted in firebox.
$\frac{3}{2}$	"		Patches fitted in firebox. Patches fitted on crown of firebox.
1	"		Patches fitted on crown of firebox, and two new girder-stays fitted.
2	"		Patches in firebox renewed.
1	"	•••	Plughole in front tube-plate retapped, new tapered plug fitted, and
15	,,		six new nuts fitted on girder-stays. Retubed.
- 1	#, #		Retubed, and all new screwed stays fitted in firebox.
1	"		Retubed, and compensating-ring fitted to manhole-opening.
2	"		Retubed, and new tube-plate fitted.
1 1	"	•••	Retubed, new front tube-plate, and patch at fusible plug-hole fitted. Seven new tubes fitted.
	"		Several tubes renewed.
3	#		DOYCIAL TUDGS I SHOWEU.
$\begin{bmatrix} 3 \\ 1 \\ 1 \end{bmatrix}$	" "		Six new tubes fitted. Sixteen new screwed stays fitted in firebox.

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

Number.	Type.	Description of Repairs.
1	Traction	Sixteen new tubes fitted.
ī		Ten new tubes fitted.
î		Ten new tubes fitted, and twenty-eight new screwed stays put in
1	,,	firebox.
1		Thirty new screwed stays fitted in firebox, and fourteen new tubes put in.
2	•	Twelve new tubes fitted.
9	Vertical cross-tube	Compensating-rings fitted to mudhole-openings.
$\overset{\circ}{1}$	Vertical cross-subc	Compensating-ring fitted to mudhole-opening, and patch on shell
1	. "	under blow-off cock.
1		Four new rivets put in cross-tube.
1	"	Manhole-door repaired, and four new screwed stays put in firebox.
$\overset{1}{2}$	"	New collars fitted on crown of boiler round uptake.
1	"	New cross-tubes fitted.
1	"	New foundation-ring fitted.
1	"	New manhole-door fitted.
1	"	New mudhole-doors fitted.
1	<i>"</i>	New spigot fitted to manhole-door.
1	"	
1	"	New uptake fitted.
	"	New uptake, and patch under safety-valve chest fitted.
1	"	New uptake fitted, new cross-tubes, and patch on crown of boiler.
1	· "	Patch at bottom of shell extended, and patch fitted on crown under
		stop-valve chest.
1	"	Patch fitted in firebox.
1	· "	Patch fitted on bottom of firebox.
1	"	Patches fitted on bottom of firebox and top of uptake.
1	"	Patches fitted on shell of boiler.
2	"	Patches fitted on shell under blow-down cock.
1	"	Patches fitted on shell under blow-down cock, and compensating
		rings round mudhole-openings.
1	77 10 13	Patch fitted on shell under safety-valve chest.
1	Vertical field-tube	New tubes fitted.
4	Vertical flue	Compensating-rings fitted to mudhole-openings.
1	,,	Compensating-rings fitted to mudhole-openings, and a row of new
	the second of th	screwed stays round firebox.
1	<i>"</i>	New foundation-ring fitted.
2	,,	New mudhole-doors fitted.
2	<i>y</i>	New uptakes fitted.
1	···	New uptake, and four new vertical stays fitted.
2	••••	Patches fitted in firebox.
1	<i>u</i>	Patches fitted on shell under fire-door.
1	<i>"</i>	Patches fitted on uptake, and compensating-rings to mudhole
		openings.
6	Vertical tubular	Compensating-rings fitted round mudhole-openings.
1	,,	Eighteen new tubes fitted.
1	<i>"</i>	Four new tubes fitted.
1	,	Manhole-opening dressed out, and new door fitted.
1	,	New firebox fitted.
2	,,	One new tube fitted.
1	<i>n</i> ····	Patch fitted on shell under feed check-valve chest.
1	,,	Patch fitted round furnace-door.
22	,,	Retubed.
1	,,	Retubed, and compensating-rings fitted to mudhole-openings.
4	,,	Retubed, and new top tube-plate fitted.
1	,,	Retubed, new top tube-plate, and compensating-rings fitted round
		mudhole-openings.
. 2	,,	Several new tubes fitted.
1	,,	Several rivets in shell renewed.
1	,,	Six new tubes fitted.
2	Water-tube	Bottom row of tubes renewed.
1	,	Blister on bottom of furnace cut out, and patch fitted.
1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Five new tubes fitted.
2	,, · · · · · · · · · · · · · · · · · ·	Retubed.
$\overline{6}$	"	Several new tubes fitted.
1	" "	Top row of tubes renewed.
477	Total.	

No. 4.—RETURN of NOTICES given to FENCE or REPAIR DANGEROUS PARTS of MACHINERY, &c., during the Financial Year ended 31st March, 1910.

ımber.	Machinery.			Particulars.	
1	Air-compressing			Belting, pulleys, and machinery.	
1	Bacon-factory		• •	Fly-wheel of engine and end of shaft.	
1	D.1	• •	• •	Machinery.	
1	Bakery	• •	• •	Belting.	
1	,,	••	• •	Crank-shaft of engine and belting.	
1	Done omrabine	• •	• •	Engine.	
1	Bone-crushing	• •	• •	Belting and shafting. Belt-shifter to repair.	
1	Boot-factory	• •	••		
3	,,,	• •	••,	Driving-belts and pulleys on two machines. Fly-wheel of engine.	
$\stackrel{\circ}{1}$.	,,	• •	• •	Machinery.	
1 .	"		• •	Main driving-belt.	
1	,,	• •	• •	Side of fly-wheel and bottom of driving-belt.	
1	Box-factory	• •	• •	Fly-wheel of engine, and swinging goose-saw.	
$\dot{2}$	Dox 1actory		• •	Machinery.	
1	Brass-finishing	• •	• •	Circular saw.	,
1	Brewery		••	Fly-wheel, pulley, and engine.	
1	Brickmaking		• •	Belting.	
î	,,			Belting and machinery.	
1	,,	• •		Fly-wheel and one machine.	
1	,,	• •		Fly-wheel of engine.	
1	,,,			Fly-wheel, shafting, and belting.	
2	,,,			Machinery.	
1	Butchery			Belting.	
1	,,			Belting and fly-wheel of engine.	
1	,,			Fly-wheel, pulley, and shaft.	
1	,,			Sausage-machine and belting.	
1	Butter-factory			All machinery.	
1	,,			Belting	
1	,,		• •	Belting, wheels, and pulley.	
1	,,	• •		Churn, separator, fly-wheel, and butter-mill.	
2	, ,,	• •		Firewood-saw.	
1	,,	• •		Fly-wheel and belting.	
1	,,	••	• •	Fly-wheel of engine, main pulley, and belting.	
1	,,	• •	• •	Freezing-machine.	
1	.99	• •	• •	Loose pulley to fit	
1	,,	• •	• •	Machinery.	
1	,,	• •	• •	Main driving-belt.	k -
1 1	**	• •	• •	Water-wheel, main belting, pulley, and counters Water-wheel, water-race, churn, and countersha	
3	Chaff-cutting	* *	••	Belting.	10
1	Chan-cutting	• •	••	Belting, circular saw, and wheels.	
l l	"	• •	• •	Driving-belt, pulley, and machine.	
$\frac{1}{2}$,,	• •	• •	End of shafting.	
$\scriptscriptstyle \scriptstyle	,,	• •	••	Fly-wheel of engine.	
$\overset{1}{2}$,,	• •		Fly-wheel of engine, and belting.	
1	,,	• •	• •	Fly-wheel of engine, belting, and saw.	
1	• • • • • • • • • • • • • • • • • • • •		• •	Fly-wheel of engine, belting, and spur-gearing.	
5	,,	• •	::	Machinery.	
1	,,			Main driving-belt.	
1	* *,			Shafting to guard, and coupling to repair.	
1	,,			Water-wheel, water-race, and all machinery.	
î i	,, ,,			Wheels, shafting, belting, and circular saw.	
1	Cheese-factory			Circular saw and pulley.	
1	,,			Fly-wheel and belting.	
$_2$,,			Fly-wheel of engine	
1	,,			Machinery and firewood-saw.	
1	Clothing-factory			Fly-wheel of engine and belting.	
1	,,			Machinery.	
1	Coach-factory	• •		Circular saw and pulley.	
2	,,			Fly-wheel and belting.	
2	,,			Fly-wheels of engine.	
1	,,,			Main pulley and belting.	
1	,,			Main shafting on floor.	
1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• •		Two belts.	
1	Coal-mining		- 1	Air-shaft.	

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

Number.	Machinery.			Particulars.		
· •	Cool mining			Belting and pulley.		
1 1	Coal-mining	••	••	Shaft and motor.		
1	Concrete-mixing	• •		Engine and machinery.		
1				Machinery.		
1	,,			Mixer.		
. 1	Cordial-factory			Driving-belt and bottling-machine.		
ī	,,	• •		Engine.		
1	,,			Fly-wheel and belting.		
1	,,			Machinery.		
1 .	Creamery		٠.	Fly-wheel of engine.		
· 1	,,	• •	• •	Machinery and circular saw.		
2	,,	• •	• •	Main driving-belts.		
1	,,,	• •	• •	Pulley.		
. 1	Crushing grain	• •	• •	All machinery.		
1	,,	• •	٠.	Belt and pulley. Engine, belting, and key in fly-wheel.		
1	,,	• •	• •	Fly-wheels of engine.		
$\frac{2}{1}$,,	• •	• •	Machinery.		
1	Cycle-factory	• •	• •	End of engine-shaft.		
$rac{1}{1}$	Dairy factory	••	• •	Fly-wheel of engine.		
1				Fly-wheel of engine and churn.		
Ī	,,	• •	• •	Machinery.		
i	,,			Main pulley, churn, belting, outside of water-wheel, an		
-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			cog-wheels of butter-worker.		
1	Electric hoist			Driving-belt and pulley.		
ī	,,,			Guard to repair.		
3	,,	• •		Hatchways.		
1	,,			Hatchways and driving-belt.		
1	Electric lift			Chain-guard fitted to second-floor hatch.		
6	,,	••		Door-catches in cage repaired.		
1	,,	• •	• •	Door-opening.		
1	,,	••	• •	Fence repaired.		
1	,,	• •	• •	Girders repaired.		
1	,,	• •	• •	Hatchways.		
1	,,	••	• •	New safety-gear fitted. New safety-grips and springs fitted.		
1	,,	• •	• •	New springs fitted.		
5	,,	• •	• •	New steel-wire ropes for balance-weights fitted.		
2	,,		• •	New steel-wire ropes for cage fitted.		
$egin{array}{c} 9 \ 2 \end{array}$,,	• •	• •	New worm-wheels fitted.		
1	,,	••		Overhead joist renewed.		
1	,,			Railing fitted round well.		
$\dot{\hat{6}}$,,			Safety-grips overhauled and springs adjusted.		
i	Electric lighting			Belting.		
i	,,,	• • •		Belting and shafting.		
ĩ	,,,			End of shafting.		
1	, ,,	• •		Engine and belting.		
1	,,	••		Fly-wheel and belting.		
1	,,			Fly-wheel of engine.		
1	,,		٠.	Fly-wheel of engine, and fast and loose pulleys to fit		
1	,,,		• •	Machinery.		
7	Electric motor	• •	• •	Belting.		
1	,,	• •	• •	Live wire of 440 volts to guard.		
$\frac{2}{1}$,,	• •	• •	Motor and belting.		
1	,,, Tal	• •	• •	Pulley and belting.		
1	Elevator	•,•	• •	Wheel.		
1	Engineering	• •	• •	Belting and machinery.		
1	,,	• •	• •	Emery-wheel.		
4	Financial autting	• •	• •	Machinery. Belting.		
$rac{2}{3}$	Firewood-cutting	• •	• •	Belting and circular saw.		
	,,	••	• •	Circular saws.		
$7 \\ 1$. ,,	• •	• •	Circular saw and fly-wheel of engine.		
$\overset{1}{2}$,,	••	• •	Fly-wheel and belt-pulley.		
$\overset{z}{1}$. ""			Fly-wheel, belting, and circular saw.		
1	, ,,,	• •		Fly-wheel, belting, circular saw, and pulley.		

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

Number.	Machinery.			Particulars.		
2	Firewood-cutting			Fly-wheels of engine.		
ī				Machinery and belting.		
1	"		• • •	Top of saw-bench to renew.		
1	Flax-mill			All belting, fly-wheel, countershaft, and firewood-saw.		
${f 2}$			•	Belting.		
1	. "			Circular saw.		
i			•	Circular saw and machinery.		
ĩ				Engine, end of countershaft, and bevel-wheels.		
ĩ	**		• •	Fly-wheel and belting.		
$\overset{1}{2}$	"			Fly-wheels of engine.		
ī	,,		• •	Machinery.		
$ar{1}$,,			Machinery and belting.		
$\overline{1}$,,			Main and scutcher belting, engine, and pulley.		
$oldsymbol{\hat{2}}$,,		• •	Mill-races to cover.		
ī	,,			Scutcher mouth and shafting.		
î	,,			Scutcher-mouth reduced in width.		
î	,,			Scutcher-mouth renewed.		
î	,,		• •	Scutcher-shafting.		
ī			• •	Water-wheel.		
ī	Flock-mill			Main driving-belt.		
3	Flour-mill			Belting.		
1			• • •	Driving-belt of engine.		
1	,,			Fly-wheel and belting.		
1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	• •		Machinery, and framework supporting shafting to repai		
$\hat{1}$,,	• •	• •	Pinion-wheels on top end of shaft.		
1	,,	••	• •	Pulley on end of main shaft.		
1	, , ,	• •	• •	Woodwork supporting shafting repaired.		
i	Friction hoist	• •	• • •	Chains annealed.		
1	PHOMOR HOISE	• •	• •	Hatchways.		
1	Fruit-preserving	• •	•••	Engine and intermediate shaft.		
1		• •	• •	Engine and machinery.		
1	,,	• •	• •	Machinery.		
1	Furniture-factory	• •	• •	Bandsaw.		
1	Gas-engines	••	• •	Belting.		
15		• •		End of crank-shaft.		
$\frac{13}{2}$, ,,	• •	• •	Engines.		
1	,,	• •	• •	Engines and belting.		
10	,,	• •	• •	Engines and shafting.		
10	,,	• •	• •	Fly-wheel and belting.		
$\overset{1}{2}$,,,	• •	• •	Fly-wheels and end of shaft.		
_	,,	••	• •	Fly-wheels of engine.		
$rac{8}{2}$	***	• •	• •	Keys in fly-wheel.		
$\overset{\scriptscriptstyle\mathcal{L}}{1}$	Gas-lift		• •	New cross-beam for top of cage and new cap for		
1	Gas-III	• •	• •	bearing.		
0	\$			New steel-wire ropes.		
$\frac{2}{2}$,,	••	••	Safety-grips overhauled and adjusted.		
	,,	• •		Two doors repaired.		
1	,,	• •	*••	Two new lower guides fitted.		
1	Cog morks	• •	• •	Belting.		
1	Gas-works	• •	• •	Engine.		
1	Coored alexater	• •	• •	Belting.		
1	Geared elevator	• •	• •			
1	Company l seconds	• •	• •	Machinery. Belting.		
1	General work	•	• :	Fly-wheel of engine.		
1	***	• •				
. 1	Class aronks	• •	• •	Fly-wheel, pulley, belting, shafting, and circular saw. Machinery.		
1	Glass-works	• •	• •			
2	Gold-dredging	• . •	••	Tower, framework earrying shafting, pulleys, and spur gearing to repair.		
1				Winch-wheels.		
1	Grinding bark	• •	• •	Machinery.		
1		• •	. ••			
1	Hoisting	• •	• •	Fly-wheel and pulley.		
1	,,	• • .	• •	Fly-wheel of engine.		
1	Hydraulic crane	• •	• •	Set screws and spur-gearing. Twelve feet of new chain fitted.		
7	i in voranne crane			I TWEIVE IEED OF HEW CHAIN HOUSE.		
1 1	Try drawno orano			Twenty-six feet of new chain fitted.		

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

Number.	Machinery.			Particulars.		
-	<u> </u>					
6	Hydraulic hoist			Hatchways.		
$\frac{4}{2}$,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	• •	• •	New chains fitted.		
1	Hydraulic lift	• •	• • •	Braces fitted to guides.		
10	,,	• • •	• •	Cage repaired, four new springs, and chains annealed Chains annealed.		
10	**	• •	•••	Chain fitted in front of floor-doors.		
$\frac{1}{1}$,,	• •	•••	Fence side of well and repair two doors.		
$\frac{1}{2}$,,		• • •	Fences to repair.		
$\tilde{1}$	**	. • •	• •	Gate-locks repaired.		
1	,,	***		Guide fitted to spear-grips.		
1	' ,, : ,,			Guide for cage repaired.		
$\overline{4}$,,			Lift-wells fenced.		
1	,,			New chain fitted.		
1	2)		• •	New controlling-valve fitted.		
1				New gripper-ropes fitted.		
. 5	,,,			New leathers for rams.		
1 .	:			New rope for balance-weight.		
2	. ,,			New springs for safety-gear.		
15	,,	• •	• • •	New steel-wire ropes fitted to cage.		
3	, ,,		• •	Rails fitted round floor-openings.		
1	,,	• .•	• •	Rail fitted round platform.		
9	,,,	, ••	• •	Safety-catches overhauled and adjusted.		
. 1	,,	• • •	• •	Safety-catches adjusted and guide-bars braced.		
1	**	• •	• •	Safety-catches overhauled and new lever fitted.		
1	,,,	• •	• •	Starting-gear repaired.		
1	,,	• •	• •	Starting-pulley overhauled and covered in.		
1	>>	• •	•.•	Two slide doors repaired. Valves overhauled.		
1	,,,	• •	• •	Wire rope fenced.		
$egin{smallmatrix} 1 \ 2 \end{smallmatrix}$	Toingry	• •	• •	Belting.		
1	Joinery	• •		Driving-belt and circular saw.		
1	,,		• •	Driving-pulley.		
$ar{2}$,,		• •	Machinery.		
ī	Laundry			Fly-wheel of engine.		
1				Washing-machine.		
1	Log-hauling			Engine and wheels.		
1 .	,,			Engine-shafting.		
1	,,			Sprocket-wheel and chain.		
1	,,			Spur-gearing.		
1	Machine shop			Engine and belting.		
1	,,,			Fly-wheel, pulley, and machinery.		
1	,,,			Wheel, pulley, and belting.		
1	Malting	• •	• •	Belting.		
1	Manure-drying	• •	• •	Belting.		
1	,,	• •	• • •	Belting and machinery.		
1	Morror go nound	• •	* • •.	Side of driving-pulley.		
1	Merry-go-round	• •	• •	Engine.		
2	Milking	• •	• •	Belting. Belting and end of crank-shaft.		
1	,,	• •	• •	Belting, fly-wheel, and shafting.		
1	,,	• •		Engine and belting.		
1	,,		• •	Engine, pump, wheels, and pulley.		
1	,,	••	• •	Engine, vacuum pump, saw, and belting.		
6			• • •	Fly-wheels and belting.		
3	,,,			Fly-wheels and end of shaft.		
6	,,,			Fly-wheels of engine.		
1	,,			Fly-wheel, saw, and belting.		
6	,,,			Machinery.		
1	,,,		,.	Shafting.		
2	,,			Wheel and belting.		
1	Mincing			Engine.		
3	,,	• •		Fly-wheels and main driving-belt.		
3	,,	• •		Fly-wheels of engine.		
1	,,,	• •	• • •	Machinery.		
1	Oil-engines	• •		Belting.		
15	,,			End of crank-shaft.		

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

Number.	Machinery.	Particulars.
23	Oil-engines	Engine.
25 1		Engine and belting.
$\overset{1}{2}$		Fly-wheel and main driving-belt.
$\dot{4}$,,	Fly-wheel and pulley.
103	,,	Fly-wheels of engine.
	,,	Key in fly-wheel.
$rac{3}{2}$,,	Shafting and belting.
$\stackrel{\scriptstyle Z}{1}$	Overshot water-wheel	Framing supporting wheel to renew.
I I		Platform to erect; wheel, circular saw, and water-rac
1	,,	to guard.
0	Pelton wheel	Wheel and shafting.
$rac{2}{1}$	D' 11. f	Fly-wheel of engine.
i	D' 1'	Intermediate shaft.
1		Shafting and belting.
1	Planing-mill	All machinery.
		Engine.
1	Pottery	Fly-wheel of engine.
1	Power lift	Belting and lift-opening.
1		New door to fit on top floor.
1	,,	
1	,,	New safety-catches fitted.
1	,,	Safety-catches overhauled and adjusted.
4	Printing	Belting.
1	,,	Belting and pulley.
1	,,	Driving-wheels.
1	,,	Emery-wheel.
1	,,	Engine and machinery.
2	,,	Fly-wheel of engine.
1	,,	Key-lead and wheel.
2	,,	Machinery.
1	,,	Shafting and pulley.
1	,,	Side of driving-belt.
1	.,,	Side of driving-pulley and belting.
1	,,	Two wheels.
1	,,	Wheels and belting.
1	,,,	Wheel and set-screw.
1	Pumping	Engine and belting.
1	,,	Engine-shaft, wheel, and belting.
4	,,	Fly-wheel and belting.
4	,,	Fly-wheel of engine.
1	·,·	Fly-wheel, shafting, and belts.
2	,,	Geared wheels.
3 .	,,	Machinery.
1	,,	Pulley and belting.
1	,, ., .,	Shafting.
2	Quartz-crushing	Machinery.
1	,,	Machinery and circular saw.
1	,,	Spur-gearing, shafting, bevel-wheels, and water-race.
1	Refrigerating	End of shaft, pulley, and belting.
2	,,	Engine.
1	,,	Fly-wheel and belting.
1	,,	Fly-wheel and pulley.
1	,,	Machinery and pump.
1	,,	Main driving-belt.
1	,,	Wheels and belting.
1	Sash and door factory	Belting and circular saw.
1	,,	Belting and machinery.
2	,,	Circular saw.
1	,,	Circular saw and emery-wheels.
1	,,	Fly-wheel and belting.
$ar{2}$,,	Machinery.
1	,,, · · · ·	Main pulley and belting.
1	,,	Shafting, belting, pulley, and wheels.
$\overline{3}$	Sawmill	All belting, machinery, circular saw, and emery-whee
$\tilde{2}$,,	All machinery.
$\bar{3}$,, · · · · · · · · · · · · · · · · · ·	Belting.
ĭ	1 "	Belting and shafting; and belt-shifting gear to fit
-	,,	circular saw.

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

				Dautionland		
Number.	Machinery.			Particulars.		
	Covernill			Belt-shifting gear to fit to breaking-down and circular		
1	Sawmill	• •	• •	saws.		
1				Breaking-down saw, circular saw, and two belts.		
1	,,	••		Breast-bench, breaking-down, and firewood saws.		
6	,,,	••		Breast-bench saws.		
- ·	,,	••	• • •	Breast-bench saw, firewood-saw, and belting.		
$\frac{14}{15}$,,,	• •		Circular saws.		
	,,	• •	• •	Circular saws and belting.		
4	,,	• •	• •	Circular saws and emery-wheels.		
3	,,	• •	•••	Circular saws and engine.		
2	,,	• •	•••	Circular saws and firewood-saw.		
8	,,,	• •	• •	Circular saws, machinery, and belting.		
18	,,	• •	• •	Circular saws, side of vertical, and emery-wheels.		
1	,,	• •	• •	Countershaft.		
1	. ,,	• •	• •	Emery-wheels.		
4 .	,,	• •	• •	Emery-wheels and feed-gear pinions.		
I	,,		• •	End of crank-shaft.		
1	,,	• •	• •			
1	,,	. ••	• •	Engine and wheels.		
1	,,	• •	• •	Fly-wheel, belting, and saws.		
1 .	,,	• •	• •	Fly-wheel, main belting, circular saw, and connecting		
				rod of breaking-down saw.		
. 1	,,	• •	• •	Fly-wheel, shafting, main belting, and goose-saw.		
1	,,	• •	• •	Intermediate shafting and belting.		
1	,,	• •	• •	Main belting and Pelton wheel.		
4	,,			Main driving-belt and emery-wheels.		
3	,,			Main shafting and circular saws.		
1	,,			Main shafting, belting, and circular saws.		
1	,,		• •	Opening in floor over main shafting.		
1	,,			Pulleys, belting, and shafting; and belt-shifting ge		
				to fit to circular saw.		
1	,,			Shafting.		
1	,,			Shafting, belting, circular saw, and each side of vertic		
1	,,			Side of vertical, main belting, circular saws, and pulled		
1	,,			Stop fitted to swinging-saw.		
1	,,			Stop fitted to swinging-saw, and circular saw guarded		
1	,,			Two wheels.		
1	Saw-sharpening			Emery-wheels.		
1	Seed-cleaning			Belting.		
1	,,			Belting and pulley.		
1				Belting, machinery, and floor-opening.		
$\overline{1}$,,			Main driving-belt.		
$\overline{4}$	Shearing			Belting.		
î				Belting and pulley.		
6	<i>"</i>	• •		Emery-wheels.		
ĭ	<i>"</i>			Emery-wheels and driving-belt.		
$\overline{1}$,,			Emery-wheels and engine.		
$\hat{f 2}$,,	••		End of shafting.		
1	,,	• •	• • •	Fly-wheel and belting.		
1	,,	• •		Fly-wheel and crank-shaft.		
1	,,	• •		Fly-wheel and emery-wheels.		
	,,	• •	• •	Fly-wheel, driving-belt, and pulley.		
1 6	,,	. •	• •	Fly-wheel of engine.		
6	,,	• •	• •	Machinery.		
1	Ohan taala	• •	• •	Belting.		
$\frac{2}{1}$	Shop tools	• •		Belting and emery-wheels.		
1	,,	• •	• • •	Emony whoold		
3	,,	• •		Emery-wheels.		
1	,,	• •	• •	Emery-wheels and gearing.		
1	,,	• •	• •	End of lathe.		
2	,,	• •		Engine.		
1	,,		• •	Fly-wheel, pulley, and machinery.		
1	,,	• •		Lathe.		
1	,,			Main driving-belt, key of fly-wheel, and engine.		
1	,,	* • •		Shafting.		
1^{\cdot}	Station-work		٠	Fly-wheel of engine.		
1	Steam-hoist			Spur-gearing.		
1	Steam-lift			Cage repaired.		

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

Number.	Machinery.		Particulars.		
1	Steam-lift		Gates repaired.		
ĩ	,,	• •	New ropes for safety-grips and new eye-bolt for balance weight.		
1	Stone-crushing		Belting.		
1	,,		Belting and fly-wheel.		
1	,,		Crusher, engine, and belting.		
1	,,		Elevator-belting, wheels, and crusher.		
1	,,		Machinery.		
2	,,		Main driving-belt.		
1	,,		Main driving-belt and gearing of elevator.		
1	Tannery	• •	Fly-wheel of engine.		
-1	,,		Main belting.		
1	Threshing		Belting and firewood-saw.		
1	Tinsmith		Machinery.		
1	Tool-sharpening		Emery-wheels.		
1	Undershot water-wheel		Woodwork of wheel to renew and railing to fit.		
1	Vibratorium		Belting and set screws.		
1	Water-wheel	• •	New shaft fitted.		
1	Well-sinking		Fly-wheel of engine.		
1	Wire-working	• •	Belting and saw.		
2	Wood-working	• •	Bandsaw.		
1	,,	• •	Bandsaw and end of crank-shaft.		
1	,,	• •	Bandsaw, fly-wheel, and end of shaft.		
1	,,	• •	Bandsaw, set screws, belting, and shafting.		
4	,,		Belting.		
1	,,	• •	Belting and pulley.		
1	,,	• •	Belting, emery-wheel, and circular saw.		
7	,,	• •	Circular saws.		
1	,,	• •	Circular saws and belting.		
$\frac{1}{2}$,,	• •	Driving-pulley and belting.		
$\frac{2}{2}$,,	• •	Emery-wheels.		
$\frac{2}{1}$,,	• •	Engine.		
1	• • •	• •	Engine and belting.		
1	,,	• •	Engine, bandsaw, and teasing-machine. Engine-pulley, main belting, and end of shaft.		
1	,,	• •			
1	,,	• •	Fly-wheel and belting. Fly-wheel and emery-wheels.		
1	,,	• •	Fly-wheel and shafting.		
$\frac{1}{1}$	";	• •	Fly-wheel, bandsaw, circular saw, emery-wheels, an		
1	,,	• •	belting.		
9			Fly-wheels of engine.		
$\frac{2}{1}$,,	• •	Intermediate shaft and belting.		
1	,,		Loose pulley fitted to circular saw.		
$\overset{1}{2}$,,		Machinery.		
1	,,		Main belting, circular saw, and goose-saw.		
1	,,		Main belting, fly-wheel, and countershaft-belt.		
$\overset{1}{2}$,,	• • •	Repair fencing.		
1	"		Saw-belt and planing-machine.		
1	,,	• • •	Stop fitted to swing-saw.		
1	Wool-cleaning		Motor to fence.		
1	Wool-dumping		Belting.		
1			Belting and shafting.		
1	,,	• • • • • • • • • • • • • • • • • • • •	Fly-wheel, punching-machine, pump, and spur-gearing		
894	Total.				

No. 5.—Return of Non-fatal Accidents in connection with Machinery during the Financial Year ended the 31st March, 1910.

	Year	ended the 31s	t March, 1910.	
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.
S. Luke and Co. (Limited), Wellington	Shearing	Robert Hamilton; 22 years	6th April, 1909; thumb crushed and nail torn off	Hamilton was punching a piece of plate, and by some means got his right thumb between the shears and the plate.
P. Wills and Sons, Wellington	Shirt-ironing	Daisy Connelly; 15	14th April, 1909; fingers slightly burned	Through inattention Connelly's fingers touched the ironer.
P. and D. Duncan (Limited), Christchurch	Turning-lathe	years John Petrie; 31 years	14th April, 1909; fingers severely burnt	While polishing a pulley with the aid of a stick, Petrie's left hand was caught be- tween the rest and the lathe.
Wilson's Portland Cement Company (Limited), Warkworth	Drying and Pulverising	J. Austin; 26 years	19th April, 1909; hand injured	While engaged on his work at the machine, Austin's hand came in contact with a moving belt, the fastener of which lacerated his hand.
S. Luke and Co. (Limited), Wellington	Drilling	Wm. Looney; 18 years	19th April, 1909; finger crushed	Looney's finger was crushed through his hand slipping while working at this ma- chine. The top of finger had to be amputated.
W. Crabtree and Sons, Wellington	Wood - turning lathe	Chas. Taylor; 27 years	20th April, 1909; fingers cut	The tool Taylor was using jarred, and caused his hand to slip in between the piece of wood in the lathe and the lathe-rest.
P. Bartholomew, Weraroa	Circular saw	Cyril Bartholo- mew; 19 years	28th April, 1909; ear injured	Bartholomew was splitting a piece of timber, when it came back over the saw and struck him under the right ear.
Collins Bros. and Co. (Limited), Wellington	Electric winch	Alex. Arm- strong; 14	30th April, 1909; arm broken	Armstrong's jacket caught in a key of the winch and drew his arm in, breaking it.
D. Robertson and Co. (Limited), Wellington	Bandsaw	P. Davey; 19 years	17th May, 1909; thumb cut	Davey was cutting a piece of wood, when it slipped, causing his left thumb to come into contact with the saw.
Alex. Ross and Co., Wellington	Drilling	Walter M. Foot; 24	21st May, 1909; finger jammed	Foot's hand slipped while working the machine, and was caught in the drill.
J. Johnston and Sons (Limited), Invercargill	Bolt-screwing	Jos. Sherriff; 16 years	25th May, 1909; arm broken	While Sherriff was working the machine the left sleeve of his jacket caught on the head of the rest and drew his arm in.
Alliance Box Company (Limited), Dunedin	Grooving wood	A. Callick; 20 years	26th May, 1909; fingers cut	Callick put his hand on the cutter while engaged at his work, and had two of his fingers cut.
A. and T. Burt (Limited), Dunedin	Milling	B. Marshall; 21 years	9th June, 1909; thumb crushed	While at work at the milling machine Marshall turned to speak to another employed behind, and while thus en- gaged his right hand came
Sargood, Son, and Ewen (Limited), Dunedin	Sole-stamping	Alfred Early; 14 years	9th June, 1909; finger crushed	in contact with the pinions of the machine. Through inattention while working at the machine Early's right index-finger
C. Stade, Motueka	Threshing and chaff-cutting	Wm. Krammer; 29 years	12th June, 1909; skull fractured	got under the stamper. While engaged at the machine, the belt of the threshing- mill, owing to the drizzling rain, slipped from the pulley and struck Krammer on the
C. M. Banks (Limited), Wellington	Guillotine paper- cutter	Geo. Brown; 28 years	16th June, 1909; hand severed	head, fracturing his skull. Brown had his hand below the cutter of the machine, when a boy accidently started it causing the knife to come
W. G. Bassett, Wanganui	Sash and door buzzer	T. Clover; 24 years	18th June, 1909; top of thumb cut off and forefinger lacerated	down on his left wrist. Clover's right hand slipped and came in contact with the knives of the machine.
Aulsebrook and Co., Christchurch	Cream-mixer	Bella Craig; 21 years	10th July, 1909; finger cut	Craig's fingers came into con- tact with the beaters of the mixer while in motion.
A. and T. Burt (Limited), Dunedin	Turret-lathe	Harry Poskitt; 15 years	13th July, 1909; fingers crushed	Two of the fingers of Poskitt's right hand were caught in the lathe-rest while in mo tion.
	*	•		

No. 5.—RETURN of Non-fatal Accidents in connection with Machinery—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.
Sargood, Son, and Ewen (Limited), Dunedin	Skiver and split- lift	Geo. King; 15 years	19th July, 1909; thumb cut	King put his right thumb on rotary knife while workin
A. and T. Burt (Limited), Dunedin	R a d i a l - twist drilling	David Cathro; 22 years	27th July, 1909; hand cut	at the machine. While drilling a shaft Cathr slipped and his left han
Easson (Limited), Kil- birnie	Wood-working	Con. McGuire; 24 years	3rd August, 1909; rib broken	In trying to put a belt on a pulley with a piece of wood the wood came in contac with a spoke of the pulley rebounded, and hit McGuir
J. McAndrews and Co., Paeroa	Sash and door factory	W. Farrow; 17 years	19th August, 1909; fingers cut	on the chest. Farrow, when sawing a pice of timber, allowed his finger to come into contact with the saw, two of his finger
New Zealand Express Company (Limited), Dunedin	Tenoning	Ronald Wright; 20 years	24th August, 1909; fingers cut	being cut While Wright was working th tenoning-machine two of th fingers of his right hand cam in contact with the knive
William Swinnerton, Auckland	Wood-turning	Wm. Swinner- ton; 42 years	30th August, 1909; forefinger cut off	of the machine. Through want of care, Swinner ton placed his right hand against the circular saw while it was in motion.
G. Page and Sons, Nelson	Emery-wheel	Leonard Page; 25 years	31st August, 1909; eye injured	While Page was grinding a castor it slipped out of hi hand and jammed between the guard and the emery wheel, causing the latter to break, and a fragment of the
A. and T. Burt (Limited), Dunedin	Horizontal boring	Frank Parker; 20 years	14th September, 1909; finger crushed	emery-wheel struck him in the eye. Parker was boring at this ma chine, when the index-finge of his left hand was caugh
Alliance Box Company (Limited), Dunedin	Cross-cut saw	David Timb- lin; 28 years	20th September, 1909; Hand cut	by a cutter of the machine In working at the bench the back of Timblin's right hand
Sargood, Son, and Ewen (Limited), Dunedin	Heel-trimmer	Alfred Paine; 21 years	24th September, 1909; finger cut	came in contact with the saw Through the slipping of the boot Paine was trimming his right index-finger came
William Wolland, Wellington	Mineing	Herbert Wood; 24 years	5th October, 1909; fingers amputated	under the knife of the machine. When putting the meathrough the mincing-machine Wood's left hand came too near the worm of the machine. He lost two joints
C. and A. Odlin Timber and Hardware Com- pany (Limited), Wel- lington	Electric lift	Frank Jones; 40 years	14th October, 1909; head cut	from each of three fingers. Jones was leaning over lift well to call an assistant below, when the descending lift struck him on the back of his head, cutting him
f. Wilkie and Co. (Li- mited), Dunedin	Lithographie press	C. A. Clark; 41 years	14th October, 1909; thumb and forearm lacerated	severely. While working at the press adjusting a leather on the bearers, Clark's left hand was
Mark Silverton, Dunedin	Planing	David Winton ; 29 years	19th October, 1909; fingers amputated	caught by the rollers. Through Winton using too short a piece of timber ir the planing-machine two of the fingers of his left hand came in contact with the
V. Crabtree and Sons, Wellington	Emery-wheel	Edward Ibell; 21 years	20th October, 1909; thumb crushed	knives. Ibell was grinding the point of a rivet, which slipped and jammed the top of his thumbetween the rest and the
I. Brown and Co. (Limited), New Plymouth	Shaping	Thos. Hobson; 45 years	23rd October, 1909; fingers crushed	emery-wheel. Through inattention two of Hobson's fingers were drawn into the machine.
	Drilling	Arthur Weeds; 15 years	29th October, 1909; arm broken	into the machine. While working at the machine Weeds' arm was drawn
outhland Implement and Engineering Com- pany, Invercargill	. '		·	round the spindle of drilling- machine.

No. 5.—Return of Non-fatal Accidents in connection with Machinery—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.
Donaghy's Rope and Twine Company (Li- mited), Auckland	Carding	J. Christian; .22 years	2nd November, 1909; arm fractured	Through inattention Christian's arm was caught in the rollers of the cardingmachine.
Ikamatua Sawmill Company, Ikamatua	Saw-sharpening	Wm. Smith; 32 years	4th November, 1909; arm cut	While sharpening a saw at the sharpening - machine the emery-wheel broke, and a fragment struck Smith on the arm.
Wallace and Cooper, Timaru	Drilling	Peter McNeil; 34 years	5th November, 1909; arm broken	MeNeil was drilling holes in a joint, and, when looking to see if the drill was nearly through, his hand slipped. This caused him to fall on the spindle of the drilling-machine, when a set-screw caught the sleeve of his coat and wound his arm around the spindle.
W. G. Bassett, Wanganui	Bandsaw	Jos. Smithies; 18 years	5th November, 1909; thumb cut	Smithies' right thumb came in contact with bandsaw while it was in motion.
Golden Bed Gold-dredg- ing Company, Millers Flat	Gold-dredge	S. Neilsen; 52 years	9th November, 1909; hand amputated	In attempting to remove a stone from under the inter- mediate shaft, Neilsen's left, hand was caught between the revolving tumbler and the buckets of the dredge and severely crushed.
Aulsebrook and Co., Christehurch	Mineing	S. Feilding; 15 years	16th November, 1909; fingers amputated	After having cleaned and started the machine, Feilding was wiping out the hopper when two of the fingers of his left hand were caught in the worm of the machine.
New Zealand Paper Mills (Limited), Riverhead	Paper	A. Ziegler; 21 years	17th November, 1909; fingers crushed	Ziegler's foot slipped while working at the machine, and in trying to recover his foot- hold his right hand was caught in the rollers of the paper-machine, and the tops
A. and T. Burt (Limited), Dunedin	Polishing	Donald Mc- Donald; 24 years	18th November, 1909; thumb cut	of two fingers were crushed. In polishing a frame Mc- Donald's left thumb was caught in the machine.
S. Aburn and Sons, Dunedin	Wood-working	Roland King.; 21 years	19th November, 1909; thumb amputated	King was putting a piece of timber over the surface- planer. The timber slipped and the top of his thumb came in contact with the knives of the planing-ma- chine.
H. Brown and Co., New Plymouth	Shaping	Alfred Higgs; 28 years	20th November, 1909; thumb cut	Through inattention Higgs' thumb came in contact with the cutting tool of the shaping-machine.
Progress Mines of New Zealand Company (Li- mited), Reefton	True vanner	Thos. McAr- thur; 25 years	27th November, 1909; arm broken	McArthur was putting the traveller on the flanged pulley, when his right fore- arm was drawn in between the belt and the pulley.
Robertson and Co. (Limited), Wellington	Turning	Percy Davey; 20 years	1st December, 1909; finger cut	While engaged turning a piece of iron at the turning lathe the second finger of Davey's left hand passed between the iron and the cutting tool.
William Cawthorn, jun., Collingwood	Devil	Wm. Caw- thorn, sen.; 67 years	3rd December, 1909; arm amputated	Cawthorn attempted to clean the rollers, which were in motion, with his hand, in- stead of using the proper tool. His hand was dragged into the rollers, and his arm was so badly injured that
J. Wilkie and Co. (Limited), Dunedin	Wire-stapling	Isa Donn; 21 years	17th December, 1909; finger-nail torn off	it had to be amputated. The first finger of Donn's left hand was caught in the stapler.
Allan and Lindsay, Oamaru S. Wood, Linwood	Circular saw Hydro-extractor	Robert Kighlty; 40 years A. Rowntree; 56 years	23rd December, 1909; thumb cut 28th December, 1909; face and hand in- jured	stapier. Kighlty s right thumb came in contact with the saw. Rowntree was standing on a ladder oiling the fan, when the ladder slipped, and in falling he bruised his face and hand,

No. 5.—Return of Non-fatal Accidents in connection with Machinery—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.
S. Aburn and Sons, Duncdin	Rotary morticing	John Garland; 23 years	4th January, 1910; thumb broken and cut	Garland's left hand came into contact with the cutters of machine while he was attending to it.
Easson (Limited), Kilbirnie	Sash and door factory	George Bowles; 30 years	4th January, 1910; thumb erushed	Bowles was feeling a bearing of the engine to see if it was hot, when his thumb was crushed between the bearing and the shaft.
Kempthorne, Prosser, and Co. (Limited), Dunedin	Pill-piping	H. S. Pithie; 40 years	10th January, 1910; finger crushed	Pithie was putting the cog- wheels into gear, when the middle finger of his right hand was caught in them.
James McAndrew and Co., Paeroa	Moulding	H. Morris; 19 years	11th January, 1910; fingers injured	While adjusting pressure-board on the moulder, Morris' hand slipped and was caught by the knives of the machine, two of his fingers being torn away and
James McAndrew and Co., Paeroa	Sash and door factory	Robert Nixon ; 59 years	15th January, 1910; finger crushed	two lacerated. When turning over a piece of timber on the bench Nixon slipped and his finger was crushed.
James McLellan, Otaki	Separator	J. Lynch; 27 years	17th January, 1910; arm and body bruised	Lynch was putting a belt on the shaft-pulley, when his clothes caught in a key of the pulley, and his arm was drawn in between the belt
Onehunga Sawmilling Company, Onehunga	Swing-goose saw	S. J. F. Wilson; 17 years	19th January, 1910; top of first finger cut off	and the pulley. Wilson's arm was struck by a piece of timber while he was working at the saw, causing his hand to come into contact with the saw.
A. and T. Burt (Limited), Dunedin	Turret lathe	Colin Cargill; 16 years	21st January, 1910; thumb-nail crushed	Cargill's left thumb was caught
J. Bett and Co. (Limited), Palmerston N.	Planer	Gordon Oliver; 15 years	21st January, 1910; tip of first finger cut off	While working at the planer Oliver's hand came in contact with the knives of the machine.
S. Luke and Co. (Limited), Wellington	Screwing	F. Thompson; 19 years	5th February, 1910; head and limbs bruised	Thompson was putting the belt
J. McAndrew and Co., Paeroa	Swing saw	O. Overall; 35 years	8th February, 1910; thumb and finger cut	Overall was sawing a piece of timber with the swing saw, when his hand came into contact with the saw, causing injury to the thumb and two fingers.
A. and T. Burt (Limited), Dunedin	Plate-roller	C. Patey; 20 years	15th February, 1910; nail torn off	While working at the machine Patey's finger was caught in the rolls.
Robertson and Co. (Limited), Wellington	Lathe	W. Sullivan; 22 years	16th February, 1910; finger crushed	While employed at a lathe Sullivan's finger was caught in the moving gear, crushing the end of one finger of right hand.
P. and D. Duncan (Limited), Christchurch	Lathe	L. Fowke; 18 years	25th February, 1910; lip cut	Whilst working at a lathe a piece of wood flew out, striking Fowke on the face, cutting his lip.
J. and W. Jamieson (Limited), Auckland	Pile-driving winch	J. Innes; 26 years	2nd March, 1910; arm and leg scalded	While Innes was using a wrench on the blow-off cock, the plug of the cock blew out through the thread of the bolts being stripped, the steam scalding his arm and leg.
New Zealand Paper Mills (Limited), Mataura	Paper-making	C. H. Stevens; 15 years	3rd March, 1910; finger lacerated	Stevens was shifting rolls of paper on the machine. Another employee, who was holding an iron lever, accidentally struck Stevens on the finger with the lever, lacerating the third finger of his right hand.

No. 5.—RETURN of Non-fatal Accidents in connection with Machinery—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.
Ross and Glendinning (Limited), Roslyn	Yarn-scouring	J. Jeffrey; 16 years	5th March, 1910; fingers crushed	The employee who started the machine did not notice that Jeffrey's hand was leaning against it. The latter's hand was drawn between two of the pinions, which crushed the forefinger and cut off part of the fourth finger of
Waihi Gold-mining Company (Limited), Waihi	Locomotive	H. Hartley; 48 years	7th March, 1910; leg fractured	his left hand. Through failure to pick up the running - staff two locomotives came into collision. Hartley, who was the driver of one of them, had his leg fractured.
Parker - Lamb Timber Company (Limited), Auckland	Lathe-cutting	B. Williams; 15 years	10th March, 1910; forcarm shattered	williams was cleaning the feed- rollers with a wire nail. His hand was drawn into the rollers, the right forearm being shattered.
J. Bett and Co. (Li-	Bandsaw	J. H. Fox; 52	11th March, 1910;	Fox allowed his fingers to come
mited), Palmerston N. William Cable and Co., Kaiwarra	Shaping	D. Campbell; 20 years	fingers injured 14th March, 1910; top of finger injured	into contact with the saw. While working the machine Campbell's finger was caught in the machine
Aulsebrook and Co., Christehurch	Lozenze - dough brake	B. Telford; 17 years	lőth March, 1910; right thumb injured	in the machine. Telford was trying to wipe the dust off the rollers, when his thumb was caught between the rollers and severely injured.
Phonix Company (Limited), Dunedin	Biscuit - dough brake	F. Ashton; 18 years	15th March, 1910; hand crushed	While working at the machine Ashton's fingers were caught between the rollers, and his
George Doughty and Co., Wellington	Press	A. Thomson; 19 years	15th March, 1910; fingers cut off	right hand was crushed. A piece of leather got into the cog-wheels of the press. In attempting to get it out Thomson's fingers were caught in the gearing, and
				the fourth and fifth fingers of his right hand were cut off.
Hogg and Co. (Limited), Dunedin	Saw-bench	L. Cleghorn; 19 years	17th March, 1910; fingers cut off	Cleghorn was cleaning sawdust from under the saw with a shovel, the saw being in motion, when his hand came
				into contact with the saw, causing the loss of the third and fourth fingers of his left hand.
Waitemata Sawmill Company, Auckland	Circular saw	W. Rogers; 40 years	21st March, 1910; hand injured	When sawing a piece of timber, a piece flew off, striking Rogers' hand and cutting it
Robertson and Co. (Limited), Wellington	Drilling	A. Cairns; 16 years	24th March, 1910; finger crushed	open. Cairns was cleaning the driving- gear of the drill with a piece of waste while the machine was in motion. The waste caught in the cogs, drawing in and crushing the first
T. Waddell and Sons, Christchurch	Sand-grinding mill	N. S. Nelson; 17 years	29th March, 1910; ankle-bone broken	finger of his left hand.
S. Wood, Linwood	Hydro-extractor	S. Wood; 40 years	30th March, 1910; finger severed	in the belt and got his ankle injured. While working at the machine Wood became giddy, and, to save himself from falling, he caught hold of the ex-
A. and T. Burt (Limited), Dunedin	Turret-lathe	T. Payton; 33 years	31st March, 1910; thumb crushed	tractor whilst it was in motion, and lost one finger of his left hand. While working at the lathe Payton got his hand crushed between the rest and the lathe.

No. 6.—Return of Fatal Accidents in connection with Machinery during the Financial Year ended the 31st March, 1910.

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.
George Fraser and Sons (Limited), Auckland	Sheer-legs	J. H. L. Dobbs ; 17 years	17th April, 1909; crushed	A superheater was being raised by a set of sheer-legs. The sheer-legs overbalanced and struck the superheater, which carried away and crushed
Pringle and party, Miller's Flat	Gold-dredge	J. B. Paterson; 37 years]	3rd June, 1909; head and arm crushed	Dobbs, causing his death. Paterson was engaged oiling the tumbler-shaft while it was in motion. His right arm was caught between the crown and the spur-wheel. He was so severely injured that he died instantaneously. Strict instructions had been issued that the machinery was to be stopped for oiling.
G. W. J. Parsons, Christ- church	Grinding	A. J. Black; 38 years	28th June, 1909; head crushed and arm torn	While attempting to overhaul the machinery when in motion, Black's clothing was caught by the gearing. His head and arm were drawn in, and he was so mangled that he died a few minutes after his arrival at the hospital.
J. and G. Marris, St. Helen's	Planing	J. Spolander; 38 years	12th August, 1909;	Spolander was trying to change a belt while the machinery was in motion, when he was caught by the belt and taken round the shaft, sustaining such injuries as to cause his death a few hours later.
Kauri Timber Company (Limited), Mercury Bay	Sawmill	H. Eyre; 39 years	8th September, 1909; abdomen punctured	A piece of timber that was being sawn broke, and the broken piece was caught by the back of the saw and thrown 30 ft. It struck Eyre on the left side, caus-
Bowron Bros., Woolston	Tanning	F. Jensen; 23 years	24th September, 1909; skull fractured	ing his death in five minutes. Jensen was standing on the top of the machine replacing a belt that had slipped off a
				pulley. His clothes were caught by the revolving shaft, and he was carried round by it. His head came into contact with another
George Winder, Wellington	Electric lift	T. Donovan; 20 years	14th October, 1909; head crushed	shaft, fatally injuring him. Donovan went from the third floor through to the back of the balance-weights. When the balance-weights came down they crushed his head. He had no business to be
Red Jacks Sawmilling Company, Ngahere	Sawmill	Charles Mc- Gowan; 25 years	2nd December, 1909; head cut, and arm severed	there. McGowan was working at the bench, passing the timber through the saw. Getting too near the saw, it caught his felt hat, and drew his head on to it. He put up one arm to save himself, and it was severed near the wrist by the saw.
W. Smart, Hornby	Stone-crushing	James Steer; 55 years	28th December, 1909; arm and ribs crushed	The belt was running loose on the shaft. Steer, in at- tempting to put it right, got entangled in the belt, and was wound tightly round
J. E. Watson and Co. (Limited), Invercargill	Geared lift	James Moyle; 38 years	17th January, 1910; ribs fractured, and chest bruised	the shaft, causing his death. Moyle was unloading wool from the lift on the top flat. He must have rung the signal for the lift to be lowered before he took off the last bale. A man who was working with Moyle saw the lift descending with Moyle resting on the bales. He evidently attempted to jump off
				the lift-cage on to the plat- form of the next floor as the lift descended, and over- balanced himself, finally fall- ing down the well of the lift. He received such in- juries as to cause his death.

No. 6.—RETURN of FATAL Accidents in connection with Machinery—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.
Enterprise Gold-dredging Company (Limited), Alexandra South	Gold-dredge	P. J. Gallagher; 34 years	17th January, 1910; arm torn off, and head crushed	Gallagher was placing a lamp in position on the dredge, when he either slipped or overbalanced himself by the heaving of the dredge, and fell on the main driving-belt. He was pulled under the pulley-wheel of the engine, and killed instantaneously.
Lowburn Gold-dredging Company, Lowburn	Gold-dredge	C. A. Smith; 34 years	8th February, 1910; drowned	The buckets of the dredge got out of order. Smith was making an inspection with a lamp in one hand; with the other hand he got hold of the hanger-pin, which unfortunately broke, causing him to fall into the river.

No. 7.—Return of Hydraulic Winding-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of Person.	Class of Certificate.	Date of Issue.	No.
William Patrick Duffy	Winding, competency	1909. December 8	430

No. 8.— Return of Steam-winding-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of	f Person.			Class c	of Certificate.	Date of Issue.		No.	
		de processor relativos com					1909.		-
Frederick Harrison				Winding,	competency		May	13	407
Hugh Patterson				,,	· "		,,	13	408
Robert Crawford	• • •			"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		"	13	409
David Gillespie				. ,,	. ,,		"	13	410
Peter Melville Grant				,,	"		,,	13	411
William Hamilton				"	11		"	13	412
Robert Hannah				"	"		"	13	413
William McCord				"	"		,,	13	414
Peter Andrew Thomas	Webb			"	,,		,,	13	415
James Healy Davey				,,	,,		<i>n</i> .	13	416
Edgar Walter Dyer				,,	"		"	13	417
Robert Thomas Bruce	Mackie		,	,, .	"		"	13	418
Albert Edwin Martin				. "	"		$_{ m June}$	21	419
Michael Joseph Davitt				,,	,,		"	21	420
Alexander James Hall				,,	,,		August	13	421
John Reed				"	"		,,	13	422
David John King				,,	,,		"	13	423
Paul Adams Clifford	•••			"	"		"	13	424
Alexander Cain				"	"	•••	"	13	425
Albert Percy Williams				"	,,		,,	13	426
John Callum Hugh Mc.	Donald			"	,,		November	16	427
Percy John Bagwell				,,	"		"	16	428
George Johnstone				"	,,		"	16	429
900180 901111111111							1910.		
Isaac Simpson				"	,,		February	9	431
Thomas Roberts	•••	•••	•••	'n	"		"	9	432

No. 9.—RETURN of LOCOMOTIVE and TRACTION ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been granted from the 1st April, 1909, to the 31st March, 1910.

PETENCY have b								-		· ·
Name of I	Person.				Class of (Certific	ate.	Date of	Issue.	No.
John Boyd McGregor			••		motive npetency		traction,	1909 May). 13	2038
James Budd	• .•			Ditto		• ,•		,,,	13	2039
Archibald Neilson Harris William Stewart	• •	• •	• •	,,	• •	• •	• •	,,	$\begin{array}{c} 13 \\ 13 \end{array}$	2040 2041
William Stewart Harry Malt			• •	,,			• • • • • • • • • • • • • • • • • • • •	,, .	$\frac{13}{13}$	$\frac{2041}{2042}$
John William Hammond		• • •		,,,	• • •		•	,,	13	2043
John Scott				,,				,,	13	2044
Charles Walter Storer	• •	• •	• •	,,	• •		• •	•,,	13	2045
Cornelius Mulvihill Joseph Bagrie	• •	• •	. ••	,,	• •	• •	• •	,,	$\begin{array}{c} 13 \\ 13 \end{array}$	2046 2047
Robert John Davidson			• •	,,		• •	• •	,,	13	2048
Thomas Donohue Heenan				,,				,,,	13	2049
Robert Moffat		• •		,,	• • •			,,	13	2050
George Moffitt	• •		• •	,,	• •	• •		,,	13	2051
Arthur Ernest Brown John William Cattermole		• •	• •	,,	• •	• •		,,	13 13	2052 2053
George Henry Chadwick		••		,,				,,	13	$\frac{2054}{2054}$
John Henry Crump	•			,,				,;	13	2055
Stanley Edward Holland				,,				,,,	13	2056
William Hugh Jeffs				,,	• •		· · · ·	,,	13	2057
Alexander McKay Charles Edward Wilson		• •	• •	,,,	• •	٠٠.	• •	,,,	13 13	2058 2059
Edward Henry Young				,,				**	$\frac{13}{13}$	2060
Ronald Leslie Cameron Ba				,,					13	2061
James Caird,				,,				,,,	13	2062
John Jackson		• •	• • •	,,	• •			,,	13	2063
James Henry Johnstone	• •	• •	• •	,,	• •		• •	,,	13	2064
Vincent Holmes Lynch David Saunders		• • •	4.4	,,	• •	• •		,,	$\frac{13}{13}$	$2070 \\ 2071$
John Halliday			• •	,,				. ,,	13	2072
Ernest Henry Burbidge				,,,				,,,	13	2073
Arthur Raymond Frost	٠			,,	• •.			,,	13	2074
George Rae Percy	• •	• •	.,	,,	• •	• •	• •	,,	13	2075
Herbert Reynolds Charles Henry Foster				,,			• •	June	$\begin{array}{c} 13 \\ 21 \end{array}$	2076 2077
Arthur Thomas Hayward				,,		· ·	• •	oune ,,	$\frac{21}{21}$	2078
Hubert Gordon Litchfield				,,				,,,	$\frac{1}{21}$	2079
Patrick Timothy O'Connor				,,				,,	21	2080
William Thomas Fowler		• •	• •	,,	• •	• •		,,	$\frac{21}{21}$	2081
John Craig David Craig	• •	• •	• • •	,,	• •	• •	• •	,,	$egin{array}{c} 21 \ 21 \end{array}$	2082 2083
Arthur George Williams				,,				,,	$\begin{bmatrix} 21 \\ 21 \end{bmatrix}$	2084
Raymond Wells				,,				,,	$\frac{21}{21}$	2085
James Innes		• •		,,				,,	21	2086
Dunlop James Smith				,,	• •	. • •	• •	,,,	$\frac{21}{12}$	2087
Walter French Thomas Edward McMahon		• •	• •	,,	• •		• •	August	13 13	2088 2089
James Dowling				,,		• •	• •	,,	13	$\frac{2009}{2090}$
William Barton	• •			,,				"	13	2091
Seymour Nicholson				,,				,,	13	2092
William Reginald Hudson		• •	• •	,,				,,	13	2093
Robert Meikle Grant Charles Osborne Harrison	• •	• •	• •	,,	• •	• •	• •	,,	13	2094
Arthur Preston Burton				,,		• •		,,	$\begin{bmatrix} 13 \\ 13 \end{bmatrix}$	2095 2096
James Archibald Stringer		• • •		,,	• •			. ,,	13	2097
Thomas Samuel				,,	••			***	13	2098
Isaiah Gallagher		• •	• •	,, .	• •			,,	13	2099
John Thomas Hearn Arthur David Johnson		• •	• •	,,	• •			,,	13	2100
William John Lovett				,,			•	,,	13 13	$\frac{2101}{2102}$
Arthur John Wilson		•••		,,				,,	13	$\frac{2102}{2103}$
James Walter Patterson				,,				,,	13	2104
Robert Murray	. •		• •	**	• •			,,	13	2105
Emanuel Shepherd			• • •	5.7	. 1 1	* *	, ,	,,	13	2106

No. 9.—RETURN of LOCOMOTIVE and TRACTION ENGINE DRIVERS—continued.

Name of 1	Person.				Class of	Certific	Date of Issue.		No.	
Villiam Ritchie Robson		en en en en en en en en en en en en en e	• •		notive		traction,	1909. August	13	21
John Lawrie				Ditto	_	. ,		,,	13	21
Edward Hogan				,,				,,	13	21
Villiam Walker				,,	٠			,,	13	21
ohn Adam Whyte		• •		,,			• •	,,	13	21
harles Woodward	• •	• •		. ,,	• •		• • .	,,	13	21
Villiam David Costello	• •	• •	• •	,,	• •		• •	,,	13	21
ames Allan Johnston	٠.		• •	,,	• •	• •		,,	13 13	21
lenry George Dance leginald Curling Ouston	 	•	• •	"	• •	• •		,,	$\frac{13}{13}$	21
ernon Tennyson Tongs		•	• •	, ,,				"	13	21
ohn Morris Stevens				,,				,,,	13	21
eorge Valentine Corlet				,,,				,,,	13	21
oseph Barber				,,				November	16	21
aurence Leslie Cook				,,				٠,,	16	21
rancis Robert Nichols				,,				,,	16	21
ames Thomas Stevenson	• •			,,			• •	,,	16	21
rthur Butson Tregea	• •	• •	• •	,,	• •	• •		,,	16	$\begin{array}{ c c } 21 \\ 21 \end{array}$
rthur Henderson Birss	• •	• •	• •	,,	• •	• •		**	$\frac{16}{16}$	21
ames Clifford Iurdo Stewart	• •	• •	• •	,,	• • •			, ,,	16	21
lurdo Stewart Torman Harry Tooke	• •		• •	,,				,,,	16	21
ohn Marcus Southgate			• •	,,		• • • • • • • • • • • • • • • • • • • •		,,	16	21
Iarry Southgate				,,,				,,,	16	21
Villiam Alexander Main				,,				,,	16	21
dmund Patrick Bradley			•	,,				,,,	16	21
eorge Edward Bray				,,				,,	16	21
atrick Cairns	••			,,				,,	16	21
eorge Dorricott				,,	• •	• • •		,,	16	21
ohn Edgar Hayman				,,	• •			,,	16	21
ohn Henderson, jun.	• •	• •	• •	,,,	• •		• •	,,	$\frac{16}{16}$	21 21
dward Lee Villiam John Patterson	• •	• •	• •	,,	• •			,,	16	21
Ernest Henry Wilson	• •			,,				,,	16	21
ames Berry	• •			,,				,,	16	$\frac{1}{21}$
Subert Roland Green				,,				,,	16	$\overline{21}$
ames Daniel Bourke				,,				,,,	16	21
amuel Smith				,,				,,	16	21
heophilus Samuel Pinker				,,				,,	16	21
Villiam Angus				,,				,,	16	21
rthur Thurston		• •	• • •	,,		• • •		,,	16	21
ohn Alexander Dickson	• •	• •	• •	,,,	• •		• •	,,	16	21
Villiam John Burke	• •	• •	• •	,,	• •		. • •	,,	$\frac{16}{16}$	$\frac{21}{21}$
rchibald Campbell ames Henry Church	• •	• •		,,	• •		• •	,,	$\frac{10}{16}$	$\frac{21}{21}$
ohn Craighead			• •	,,	• •		••	,,	16	21
lerbert Horace Hadler			• •	,,	•••			, ,, 	16	21
ydney Wighall Charles J				,,,				,,	16	21
ames Maddren, jun.				,,				,,,	16	21
amuel Harvey Maddren				,,		٠		,,	16	21
Villiam Frederick Moorhe	ad			,,			••	,,	16	21
obert Thomas McMillan				,,			• •	,,	16	21
tanley Burdett Quaife	: •	• •	. ••	,,				,,,	16	21
Villiam Robert Simpson	• •	• •		,,	• •	• •	• •	,,	$\frac{16}{16}$	21
Tilliam Thin	• •		• •	,,	• •		• •	,,	$\frac{16}{16}$	$\frac{21}{21}$
aac William Thompson ranklin Tripp	• •	• • .		,,	• •	• •	• •	,,	16	$\frac{21}{21}$
ranklin Tripp ames Thomas Barnes	• •	• •	• •	,,	• •	• •	• •	,,	16	21
leorge Edwin Bowles				,,				,,	16	$\frac{21}{21}$
lenry George Daniel Burg		• •		,, ,,			• •	December	8	$\frac{21}{21}$
ouis Barrowman	5000 •••	• •		,,,				,,	8	21
ohn Dick				,,,				; ,,, ; , ,,	8	21
atrick McCarthy				,,				,,	8	21
Oavid Wilson				,,		٠.		,,	8	21
lichard John Hastedt	, ,			,,		* *	* *	,,	8	21

No. 9.—RETURN of LOCOMOTIVE and TRACTION ENGINE DRIVERS—continued.

Name of Pe	Name of Person.						Class of Certificate.					
John Sime Read				Locom	notive petenc	and v	traction,	1910. February	9	2179		
George Broadfoot Little				Ditto				,,	9	217		
Alexander Best		• •		,,				,,	9	2174		
Albert John Kingdon		• •		,,				,,	9	217		
John William Sims				,,				,,,	9	2170		
Charles Lockhart				,,				,,	9	217		
Joseph Cullimore				,,				,,	9	2178		
Robert Kelly				,,				,,	9	2179		
Peter Ralston				,,				,,,	9	2180		
James Naismith			٠.	,,				,,,	9	218		
George Webster				,,				,,	9	2182		
Leonard Kennedy				,,				,,	9	218:		
David Browning				,,				,,,	9	2184		
Anthony John Miles				,,				,,	9	218		
James Ernest McIntyre				,,				,,	9	2180		
Alexander McLaws				,,				,,,	9	2187		
Stephen Seymour Allwill				,,				,,	9	2188		
Arthur Feltham Long				,,				,,,	9	2189		
Clarence Craddock Whiteho	use			,,				,,	9	2190		
Thomas Yardley				,,				,,	9	2191		
Alfred Ernest Waller		• •		,,				,,	9	2192		
John Hardy				,,				Maréh	18	2193		
Allen Shaw				,,			••	,,	18	2194		
Harry Frank Vaughan				,,				,,,	18	219		
Edward Greenslade		• •		••	• •			,, ,,	18	2196		
George Gregory Lockington				,,				,,,	18	2197		
Albert Thomas Almond				• • • • • • • • • • • • • • • • • • • •				,,	18	$\frac{2198}{2198}$		

No. 10.—Return of Engineers to whom Extra First-class Certificates of Competency have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of F	Name of Person.						Class of Certificate.					
William Thomas Dinneen	••	• • •		1	first-class	stati	onary,	1909. June	21	57		
Gordon Charles Webb				Ditto				August	13	58		
Herbert Reynolds				,,				,,	13	59		
William Houston King	• .			,,				,,	13	60		
Ralph Stuart Connolly				,,				November	16	61		
Norman Phelps Hopkins		• •		,,				,,	16	62		
Walter Sommerville	• •	. • •		,,,		, • •	• •	February	9	63		

No. 11.—Return of First-class Stationary-engine Drivers to whom Certificates of Service have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of Po	erson.			Class of Certifi	Date of Iss	No.		
			_			1909.		
Elisha Lingard	• •,	• •		First-class'stations	ary, service	June	21	168
George Augustus Avey	•,•			,,	,,	,,	21	1682
George Duthie				,,	,,	,,	21	168:
Joseph Henry Fish				,,	,,	,,	21	168
John Cock	• •	• •	• •	,,	,,	August 1910.	13	168
Thomas William Lapwood				,,	,,	February	9	168
Arthur Ameal Lundberg				,,	,,	March	18	168
Septimus Fletcher				,,,	,,	,,	18	1688

No. 12.—Return of First-class Stationary-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of Pe	erson.			Cla	ss of	f Certificate	Date of Issue.		No.	
Villiam Boag		• •	• •	First-clas		tationary,	com-	1909. May	13	18
ames Healy Davey					у			,,	13	13
Valter Sharp		., *		,, .		•.•		,,	13	13
anley Bailey Watson				. ,,				,,	13	13
obert Gordon Holmes				,,				1,	13	1:
chibald Richardson	_••			,,				. ,,	13	13
illiam Alexander Maule I	lenderson			,, .				,,	13	1:
		• •		,, .		• •		,,	13	1
	• •	• •		,,				,,	13	1
mes Stevenson		• •	• •	,,	•	• •	• •	,,,	13	1
avid James Sherriff	• •	••	• •		•	• •		,,	13 13	1.
ordon Stuart Doig dvester John O'Sullivan	• •	• •	• •		• •		• •	٠,٠	$\frac{13}{13}$	1.
** **		• •		**	•	• •		. "	$\frac{13}{13}$	1
rnest Dennis		• •			• •	• •		,,	13	1
anley Edward Holland		• •						,,	13	1
ank Lawrence						• •		,,	13	l î
illiam Craig						•••		,,, .	13	1
n 3	••							,,	13	1
hn Peter Grace								,,	13	1
thur Harry Whitaker				!				,,	13	1
avid Edmond Porter								June	21	1
				,,				,,	21	1
				1 ,,,				,,	21	1
eorge Yardley				,,				August	13	1
ancis James Webster Po	-	• •		,,				,,	13	1
	• •	• •		,,				,,	13	1
nomas Francis Moran	• •			,,				,,	13	1
ichard Andrews	• •	• •	• •	,,,	•	• • •		,,,	13	1
nomas Conly	. • •	• •		, ,,	• • • •	• •		٠,,	13	1
Idiow Leating Daie	• •	• •	• •	,,		• •	* 1	. ,,	13	1
ohn Edwin Coomer Iwin Gordon Malcolm Fo		• • • • • • • • • • • • • • • • • • • •	• • •		• •	• •	• •	,,,	13 13	$\begin{vmatrix} 1\\1 \end{vmatrix}$
avid John King		• •	• •		• •	•	• •	. ,,	13	1
orace Edgar Herring		• •	5				• •	,,	13	1
lexander Moncur Sommer			• •			• •	• •	, ,,	13	1
ohn Lawrie	VIIIC		• •		• •		• •		13	1
onald Fraser		• •	• •	"			• •	. ,,,	13	li
fred Marshall			• •	,,		• • • • • • • • • • • • • • • • • • • •		! ','	13	1
ames Perry				1		• • • • • • • • • • • • • • • • • • • •		. ,,	13	1
hn Bell				1				,,	$\tilde{13}$	1
mes McMahon								November		1
illiam Henderson								,,	16	1
lan Hugh McLean	• •			!				12	16	1
nomas Braithwaite				1		• .•	•	,,	16	1
ugh Wood Gordon Park								, ,,	16	1
trick Cavanagh				,,				. 27	16	1
mes Elijah Webster				,,		• •		. ,,	16	1
nomas Ganley				,,			• •	. ,,	16	1
obert David Williams	• •	• • •		,,	• •	• • •		,,	16	1
arles Herbert Gentil				,,	• •	• •		,,	16	1
rcy James Green	• •	• •	• •	,,				,,	16	1
arles Nepean Kenny	• •	• •	• •	,,		• •	• •	,,	16	1
alter Aylmer Kenny		• • •	٠.	,,		• •	• •	,,	16	1
ederick William Savory	• •	• •	• •			• •		,,	16	1
	• • •	• •	• •	,,		• •	••.	,,	16	1
eorge Sefton Johnston	• •	• •	• •	17		• •	• •	• • • • • • • • • • • • • • • • • • • •	$\frac{16}{16}$	1 1
imes Maddren, jun. imuel Harvey Maddren	• •	• •		,,,	• •	• •		. ,,	16	1
ohn Morrison	• •	• •	• •		• •	• •	• • •	,,	16	1.1
orace Tippett Parry		• •	• •	,,,	•	• •		,,	16	1
illiam Earnest Suckling	• •	• •	• •		•	• •	• •	55	$\frac{16}{16}$	1
ohn Joseph Sutton		• •		,,	•	• •		,,	16	1

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

Name of Per	Name of Person.					of Certificate.	Date of Issue.		No.	
								1909.		
Stanley Victor Croft				First-cla	ss	stationary,	com-	December	8	1412
·				peten	y					
Henry George Duncan Gage				Ditto				,,	8	1413
Thomas Edward McMahon	. ,			,,				,,	8	1414
Douglas Freeman	• •	• •	. ,	,,		• •	• •	,, 1910.	8	1415
John Terence Thomson				: ,,				February	9	1416
TT 11 T 4 T7 1 1								,, ,	9	1417
Harry Aloysius Lockington				,,				,,	9	1420
Talan Charrana Dunaia				,,				,,	9	1421
Anthun Hislan				,,				,,	9	1422
David Daton Laina		• •		: //. ! ••				1 ,,	9	1423
Tamana William Milan				. 77				. "	9	1424
William Graham McKenzie				· ••				,,	9	1425
Daniel Daniersie Dale				,,					9	1426
O 1 17 1			• •	,,				,,	9	1427
Mannan John Kaller				. ,,				,,	9	1428
Talan Pain Handing									9	1429
T ! 1 VIT:11: C1 11			• •	i				,,	9	1430
/Dl D				. ".			• • •	,,	9	1431
T M				· •,•	• •	• •	• •	March	18	1432
Theodore Edward Macmaho	n n		· ·	,,		• •		,,	18	1433

No. 13.—Return of Second-class Stationary-engine Drivers to whom Certificates of Competency have been granted from the 1st April, 1909, to the 31st March, 1910.

Name of Pe	erson.		Class of Ce	Date of Is	No.		
					1909.		
Alfred Wilson	••	••	 Second-class sta petency	tionary, com-	May	13	3096
Frederick McGregor			 Ditto		. ,,	13	3097
James Culshaw			 ,,		. ,,	13	3098
James Austin			 ,, ,,		,,	, 13	3099
John Harlen			 ,,		,,	13	3100
Ernest Fergusson			 ,,		,,	13	3101
Thomas Edmund McMillan			 ,,		,,	13	3102
Oliver Cromwell Skilton			 ,,		,,	13	3103
Adolphe Trautvetter			 ,,		,,	13	3104
John Eggers			 ,, .,			13	3105
John Richard Richards			 ,,	,	, ,,,	13	3106
William David McIntosh A	nderson		 ,,		,,	13	3107
Charles Robert Watson			 ,,		,,	13	3108
Alexander Denton Carruthe	ers		 ,,		,,	13	3109
William Gwyn			 ,,		,,,	13	3110
Adam Brockie			 , , · ·		,,	13	3111
Joseph Harold Jackson			 ,,		,,	13	3112
David Alexander Henderson	n Hay		 ,,,		,,	13	3113
John Ashworth			 ,,		,,	13	3114
John Stanley Chittenden			 ,,		,,	13	3115
John Bertram Congreve			 ,,		,,	13	3116
Joseph Reginald Parker			 ,,		,,	13	3117
Robert Blackball Stewart	4.		 ,,		,,	13	3118
George Francis Stanilaus W	7att		 ,,		,,	13	3119
Francis William Henderson			 ,, , .		,,	13	3120
Ernest Edward Hawken			 ,,		! ,,	13	3121
Richard Ernest Campbelll			 ,,		,,,	13	3122
Richmond Stanley Brooke			 ,,,		,,,	13	3123
Richard Mayze			 ,,		,,	13	3124
David Bertha McLaren			 ,,		,,,	13	3125
Edgar Henry Plumb			 ,,		,,	13	3126
Leslie Dallas Evans			 ,,		,,	13	3127

No. 13.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS—continued.

Name of Person.				Class of Certificate.				Date of Issue.		No.
Nicholas Greenwell	• •			Second-class stationary, competency			1909. May 13		3128	
John Dobbie Sporle				Ditto		• •	, .	" 连	13	3129
Henry George Daikie		• •	• •	,,				June 🚁	$\frac{1}{2}$ 21	3130
Augustus Claude Coker				. ,,	• •			,,	21	3131
Robert Alexander Murray	• •	• •		,,	• •	• •	• •	August	13	3132
William Daniel Bentley	• •	• •		,,	• •	• •	• • •	,,	13	3133
Thomas William Dalco	• •	• •	• •	,,	• •	• •	• •	,,	13	3134
Alfred James Isdale	• •	• •	• •	,,	• •	• •	• •	. 55	$\frac{13}{13}$	$\frac{3135}{3136}$
Harry Holland	• •	• •	• •	,,	• •	• •	• •	,,	13	$\frac{3137}{3137}$
Thomas William Ollington Leonard Hutton	• •	• •	• •	"	• •	• •	• •	,,	13	3138
D 11 0 1	• •	• •	• •	,,,	• •	• •	• •	,,	13	3139
David Ogilvy James Alexander Archibald		• •	• •	,,	• •	• •	• •	,,	13	3140
George Adlard				,,,	• •		• •	,,	13	3141
John Cook				"				,,	13	3142
John Orr Gilmour				,,				,,	$\tilde{13}$	3143
Frederick William Poole	• •	• • •	• • •	",	• • •		• • •	,,	13	3144
Charles John McCullough				,,				,,	13	3145
James Fotheringham Chaln				,,		••		. ,,	13	3146
Alexander Milne				,,				,,	13	3147
Peter Wadsworth				,,				,,	13	3148
Martin Campbell	٠			,,		÷	• • •	,,	13	3149
Alexander Allan				,,	٠			,,	13	3150
Alfred Ernest Whye				,,				2)	13	3151
Arnold Wickliffe Judd				,,				,,	13	3152
Ernest Wilfrid Boyes				,,				,,	13	3153
Peter Cowan		, ,		,,				,,	13	3154
Charles Bernard Dent				,,	٠			,,	13	3155
Samuel Lush				,,			• •	,,	13	3156
Joseph Wallace Smith				,,	٧.	• •		1,	13	3157
Louis Charles Crequer				,,		• •	• •	,,	13	3158
Edward Grey		• •		,,		• •	••	. ,,	13	3159
Charles Edward Hunsley	• •			,,	. • •	• •		,,	13	3160
Thomas Inns	• •	• •		,,	• •		• •	,,	13	3161
Leonard Jarden	• •	• •	• • •	,,	• •	• •	• •	,,	13	3162
Albert James Hatcher	• •	• •	• •	,,	• •	• •	• •	,,,	13	3163
Thomas McAuliffe	• •	• •	• •	,,,	• •	• •	• • •	"	13	3164
Eric Herbert Penwarden	• •	• •	• •	,,	• •	• •	• •	. ,,	13	3165
William James Francis Sta		• •	• •	,,	. • •	• •	• • •	,,	13	3166
Henry Whittington	• •	• •	• •	,,	••,		• •	***	13	3167
Albert William Briscoe	• •	• •	• •	"	• •	• •		Novembe	13 r 16	$\begin{vmatrix} 3168 \\ 3169 \end{vmatrix}$
John Dalziel	• •	• •	• •	,,	• •	• •	• •		16	3170
Martin Christian Andersen	• •	• •	• •	• • • •	• •	• •	• •	,,	16	3171
Henry Alfred Nickolls Bartia Alfred Hanlon	• •	• •	• •	,,	• •	• •	• •	"	$\frac{10}{16}$	$\frac{3171}{3172}$
Bertie Alfred Hanlon Alfred Ernest Jones	• •	• •	• •	,,	• •	• •	••	,,	16	$\frac{3172}{3173}$
TO 13 O 143	• •	• •	•••	,,	• •	• •	• •	,,	16	3174
David Smith Anthony Marshall	• •	• •	• •	"	• •	• •	• •	"	16	3175
Joseph Nicholson Carson	• •			,,		• •	• •	,,	16	$\frac{3176}{3176}$
Charles Henry Cook		•		,,		• •	1	,,	16	3177
James Frederick Tidswell	• •		• •	,,	• •			,,	16	3178
Herbert Nalder		• •	• •	,,		• •	• •	,,	$\frac{16}{16}$	3179
Thomas Edward Avery			• • •	,,			• •	"	$\overline{16}$	3180
James Cheetham				,,			• •	,,	16	3181
Rowland Preedy Baker				,,				,,	16	3182
George Edwin Brooking				,,	• •	•••		. ,,	16	3183
George Ehrke				,,,			• •	,,	16	3184
Leonard Arthur Watson		• •		,,,				,,,	16	3185
Albert William Corpe				,,				, ,,	16	3186
John Moody				,,				,,	16	3187
Colin McKenzie				,,				,,,	16	3188
Alexander William Anderso				,,,		• •		,,	16	3189
				,,				,,	16	3190
Arthur Channing Buckland			•. •	,,				,,	16	3191
George Dickson				", .			• •	,,	16	1
<u> </u>				-						

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

Nan	ne of Person.			(Class o	f Certificate.		Date of Iss	1e.	No
		***		 				1909.		
Torman Rive	4:4	• • • •	· .	Second pete		stationary	, com-	November	16	31
Oavid Dewar				Ditto				,,	16	31
lfred Herbert Bond			٠.	,,				,,	16	31
ilfred Valentine Ga		• •		,,			• • •	,,	16	31
narles Henry Spinle	•	• •		,,	• •	<i>,</i> •	• •	,,	16	3]
nomas Boswell			• •	,,	• •	• •	. ••	,,	16	3
mes Campbell		• •	• •	2.2	• •		• •	,,	16	3.
mes William Smith		• •	• •	"	• •	• •	• •	,,	16	33
avid Malcolm		• •	• •	• ,,	• •	• •	• •	,,	16	3
mes Brown nomas Nylan		• •	• •	,,	• •	• •	• •	,,	$\frac{16}{16}$	33
illiam Hardman		• •	• •	,,	• •	• •	• •	"	16	3
arles Edwin Avey	• •		• •	,,	• •	• •	•	,,	16	3
hn Henry Urquhai		• • •		"	• •	• • •		"	16	3
fred Ernest Waller				,,,		•••		, , , , , , , , , , , , , , , , , , ,	16	3
bert Francis Duck				,,				,,,	16	3
alter Charles Hislo				,,,				,,	16	3
ndrew Nicolson	• • •			,,				,,	16	3
mes Blackie Queal				,,			• •	. , , , ,	16	3
obert Pearn Symon	.s	• •		,,	• •	• •		· ,,	16	3
hn Henry Neale	• •	• •		٠,,	• •	. .		,,	16	32
hn William Smith	• •	• •	••	,,	• •		• •	,,	16	3
cholas Wenmoth			• •	,,	• •	• •	• •	,,	16	3
iomas James Carro		• •	• •	,,	• •	• •		,,,	16	3
illmott Armstrong	• •	• •	• •	,,	• •	• •	• •	December	8	3
ugh Patrick Keena		• •	• •	,,,	• •	• •	• •	,,	8	33
ancis O'Flaherty hn O'Grady		• •	• •	,,	• •	• •	• •	` >>	8 8	3
ım O Grady ıgh O'Flaherty	• •	• •	• •	,,	• •	• •	• •	,,	8	3
ubert Loveland Mu			• •	"		• • • • • • • • • • • • • • • • • • • •	• •	,,	8	35
alter Bertrand Wo				"		••••		,,	8	33
illiam Cottam		• •		,,	• • •			,,	8	32
hn Thomas Doyle				,,, .				, ,,	8	3
illiam Henry Johns			• •	,,				,,	8	33
lam Cook 🍎 🗀				,,		• •		,,	8	35
nomas Rothwell		• •		,,				,,	8	32
illiam Bromley		• •		,,				,,	8	32
•								1910.		
mes Jamieson	• •	• •	• •	,,	• •			February	9	32
seph Cutler		• •	• •	,,	• •	• •		39	9	32
illiam Henry Nutsf		• •	• • •	,,	• •		••	,,	9	32
orge Wiig		• •	• •	,,	• •	• •	• •	,,	9	32
abert Balfour		• • .	• •	,,	• •	• •	• •	٠,,	9	32
onard Parker mes Petrie		. • •	• •	,,	• •	• •	• •	,,	$\frac{9}{9}$	32
mes Petrie		· • •	• • •	,,	• •	• •	• •	,,	9	32
orge Francis Scott		• •	••	,,		• •	• •	"	9	32
hn Earll Sherwood		••	• •	,,	• •	• •	• •	***	9	32
hn Flatt Spence	• •	• • •		"		• •	• • •	,,	9	32
ac Plunkett		• •		"	• •			, ,,	9	32
oyden Arthur Gray				"				"	9	32
orge Alexander Co		• •		,,				"	9	32
mes Ramsay	_			,,,				"	9	32
igh Bruce Wallace				,,				,,	9	32
bert John Windell	ourn			,,				,,	9	32
illiam Yuill				,,				,,	9	32
hn Marshall McEw	an			,,	• •			, ,,	9	32
igh Gray				,,		• •		,,	9	32
illiam Parkes		• •		,,		• •	• • •	,,	9	32
illiam Wallace		• •	• •	* ,,		• •	• •	, ,,	9	32
erre Louis Guillard		• • •	• •	. ,,	• •	• •	• •	,,	9	32
ederick Charles Pu		• •	• •	,,	• •	• • .	• •	,,	9	32
narles Willoughby I		• •	• •	,,	• •	• •	• •	Manch:	9	32
omas Fleming	• •	• •	• •	,,			• •	March	18	32

No. 14.—Return of Engineers who were examined and passed for Certificates of Competency during the Year ended the 31st March, 1910.

Name of Person.	•	Rank.	Class for which examined.	Date of Examination.
Henry George Noy		First-class engineer	Foreign trade	5, 6, 7, 8 April, 190
Percy Edmund Brewer .	-	,,,	,,	4, 5 May, ,,
Reginald Edward Smallbone		,,,	,,,	5 May, ,,
George Cunningham		,,,	,,,	3, 6 May, ,,
Amie Augustus Ragg .		,,	,,,	8, 9 June, "
Stephen Bernech		***	,,,	7, 8, 9, 12 June, "
Charles James McLean .		***	, ,,	6, 7, 8 July, ,,
Peter John Shea			,,	6, 8, 9, 10 July, "
William Walter Spargo .		,,,	,,	10, 11, 12 Aug., "
Ronquest William Carpenter				8, 9, 10 Sept., ,,
ames Allen Knowles		,,	, ,,	4, 5 October, ,,
Ernest Alfred Edgar Binns		,, 		4, 5, 6, 7 Oct., ,,
Edward Looney		.".	,,	25 November, ,,
Villiam Mowatt		,,,	,,	25 November, ,,
William Young		,,	"	25 November, ,,
ě.		,,	,,	(21 December
Laurence Keelan McMurrich	• •	,,	.22	5 January, 191
William McCracken .		, , ,	,,	6, 10 January, ,,
Robert Cochrane McCaughey	<i>.</i>	,,,	,,	14,15,16,17 Feb., ,
James Kennedy Stuart		25	,,	14,15,16,17 Feb., ,,
Thomas Aquinace Murphy		Second-class engineer	,,	7 April, 190
Robert Laurie		,,,	,,	4 May, ,,
David Wilkinson		,,,	, ,,	7, 8 June, ,,
John Peter Burns		, ,,	,,,	16, 17 June,
Arthur Ballington Daniel .		,,	22	16, 17 June, ,,
Ridley William Moody .		22	,,	30 June, 1 July, ,,
John Henry Prendeville .		**	,,	22, 23 July, ,
Lionel Stanhope Dawson .		,,,	,,	22, 23 July, ,
oseph Michael McConville.		,,,	,,	29, 30 July, ,,
vo Roydon Gilmour .		,,	,,,	2, 3 August, ,,
James Jeffries		1		10, 11 Sept., ,,
George Murdoch Wilson .		"	,,	8 November, ,,
Charles Broadley		,,	,,	15 December, ,,
Alexander Stuart Ewan .		,,,	,,	7, 8 February, 191
Alexander Lang		**	,,	7 & Fohmour
William Ohamlas Mannia		,,	,,	7 8 0 Feb
George Gordon Smith		,,	"	0 10 Feb
T. L. O		,,,	"	0 10 Feb
D 17.1		"	,,	99 Morah
II D Calman		Third-class engineer	,,	1 April, 190
		Timu-class engineer	,,	5 April,
James Graham Adair		,,,	, ,	5 April
William Farquharson Bey .		**	,,,	5 April, ,,
Peter Carnaham		,,	,,	5 April, ,,
William Herbert		,,,	5.5	5 April,
Joseph Edmond Hamer .		, ,,	,,	6 April, ,,
Bernard John O'Donoghue.		**	,,,	7 April, ,,
Robert Graham	• • •	,,	,,	13 April, ,,
Angus McDonald	• • •	,,	,,	13 April, ,,
Benjamin Dennitts Smith .	• • •	,,	,,	3 May, ,,
Ralph Stuart Connolly .		,,	,,	4 May, ,,
William Foster		,,,	,,	4 May, ,,
Norman Phelps Hopkins .		27,	,,	4 May, ,,
Villiam Houston King .		,,	,,	4 May, ,
leorge Gus Lowrie .		,,,	,,	4 May, ,
Duncan Barclay McLaren .		,,,	,,	4 May, ,
ames Oswald Penman .		,,,	,,	4 May, ,
ıllan James Rollo		,,,	,,	4 May,
Harold Mason Warner .		,,,	,,	4 May,
Iarry Williams Justin .		,,,	,,,	5 May, .
Walter Sommerville .			,,,	7 May, .
John Allan		,,,	,,,	28 May,
Thomas Fogarty				20 May
William George Reeve .		,,	"	31 Mar
Henry Rowland Ackroyd .		,,	,,	7 Tuno
LEGILLY AND HIMITAL ARCINEO YOU .		,,,	,,	7 June,

No. 14.—Return of Engineers who were examined and passed for Certificates of Competency —continued.

			—continuea.		
Name of Person.		Rank.	Class for which examined.	Date of Examination.	
			Third-class engineer	Foreign trade	7 June, 1909.
			"	,,	7 June, "
Stuart Taylor Williamson	••		,,	,,	7 June, "
		• •	2.7	,,	9 June, ,,
	• •	• •	,,,	,,	12 June, ,,
Y 1 NOTE	• •	• •	,,,	**	16, 17 June, ,,
	• •	• •	** *	,,	17 June, ,,
	• •	• •	> ?	,,	19 June, ,,
	• •	• •	••	,,	5 July, ,,
	• •	• •	15	; ,,	5 July, ,,
T Tr m.1f1	• •	• •		,,	6 July, ,,
TO 1 W. W	• •	• •	**	,,	6 July, ,, 22, 23 July, ,,
14 ' T 1' O 1.	• •	• •	"	,,	9 Amount
43	• •	• •	***	,,	9 Amount
Donald George John McKa	v	• •	• • • • • • • • • • • • • • • • • • • •	,,	9 Amonat
ANTE A COLUMN THE TERM				,,	9 Amount
John William Cunningham			- ,,	,,	2 Amount
Sydney Salvin Swan			,, ,,	,, ,,	9 Amount
William Thomas			55	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 August, ,,
John Alexander Urquhart			, , , , , , , , , , , , , , , , , , ,	,,	2 August, ,,
			**	,,	2 August, "
Charles McGhee			. ,,,	· · · · · · · · · · · · · · · · · · ·	3 August, "
Alexander Gray Watson				,,	3 August, ,,
/DL 17:33	. ,		, ,,	,,	2, 3 August, ,,
Harold Humphrey Matthew	vs		,,	,,	2, 3 August, ,,
			,,	- ,,	6 August, ,,
			,,	! ; ,,	10 August, ,,
		٠.	,,	,,,	10 August, ,,
J			,,	! ,,	1 September, ,,
	• •	• •	,,	,,	1 September, ,,
Thomas Christian Mikkelser	n	• •	;;	,,	1 September, ,,
m 1 3r.	• •		**	,,, ,	1 September, ,,
	• •	٠.	,,	,,	1 September, ,,
Norman Eric Walker	• •	• •	,,	,,,	1 September, ,,
	• •	• •	,*	· ,,	2 September, ,,
Alexander Alison	• •	٠.	,,	,,	3 September, ,, 3 September, ,,
TT t T 1. W	• •	• •	?!	"	2 Contambon
Ol O	• •	• •	**	>2	18 Santombor
Charles Scott ., John Brown	• •	• •	,,	,,	18 September, ,, 4 October, ,,
1171111 34 3371111 TO		• •	;;	2,	4 October
William Matthew Hancock		• •	,,	**	4 October
T 1 . O 1 TT 1			,,	,,	4 October
Arthur George Charles Mar			,,	*/	4 October, ,,
James Ernest Rough			,,	**	4 October, ,,
Charles Alexander Roulston	Ł		**	,,,	4 October, ,,
John Mathew Ryan .			,,	,,,	4 October, ,,
A ' 11 A			,,,	,,	19 October, ,,
Neil John McMurrich .			,,,	2,	20 October, ,,
Wilfred Arthur Binns .			,,	,,	3 November, ,,
			,,,	22	4 November, ,,
	•		,,	,,	6 November, ,,
1 .			. ,,	,,	16 November, ,,
	• •		,•	,,	6 December, ,,
		• •	,,	,,	6 December, ,,
0 1	•	٠.	,,,	,,	6 December, ,,
1 2	•		· ••	,,	13 December, ,,
			**	,,,	13 December, ,,
	•		*9	:,	13 December, ,,
Albert Victor Bettis .	•	• •	• ••	,,	4 January, 1910.
Robert Henderson Cunning		٠.	"	,,	4 January, ,,
Francis Patrick Hendron .		• •	**	,,	4 January, ,,
O ·	•	٠.	• • • •	4.	4 January,
Alfred Hedley Wright .	•	r +		24	4 January, ,,

No. 14.—Return of Engineers who were examined and passed for Certificates of Competency —continued.

		commune					
Name of Person.		Rank,		Class for whee examined		Date of Examina	tion.
Robert Harold Gurnell Harwood	•	Third-class eng	ineer	Foreign tra	\mathbf{de}	4, 5 January,	1910
Francis Onslow Morath	• • •		111001	_	•••	5 January,	22
Frank George Thomas	• •	,,		,,		6 January,	,,
Robert David Williams	• •	,,		,,		11 January,	,,
John Eric Lipscombe		,,		***		1 February,	, ,,
Cedric Kenny Onslow Graham		. ,,		,,		1, 2 February,	
Charles Gordon King		,,	1	,,		1, 2 February,	,,
John Dove		,,,		,,		2 February,	,,
Edward Harold Ambrose Furby		,,		,,		2 February,	,,
John Francis Melville Lockhead		,,		,,		2 February,	,,
Lionel Patrick McConville		,,		,,		2 February,	,,
Ernest Charles Scully		,,		,,		2 February,	,,
William Anderson		,,		,,,		7 February,	,,
Louis Charles Symes		,,		,,		7 February,	,,
Thomas William Turner		,,		,,		7 February,	,,
James Reston Wilson		,,		,,		7 February,	,,
Henry Edgar Struthers		,,		. 25		8 February,	. , , ,
Jack Dunbar Townsend		,,		,,		8 February,	. ,,
Reginald Aubrey Lewis		` ,,		,,		10 February,	,,
Charles Frederick Bell	• • .	,,		,,		7 March,	,,
Edwin Boyd		,,		,,		7 March,	,,
Alexander Albert Douglas		,,		,,		7 March,	,,
John Young Douglas		,,		, ,,		7 March,	,,
Richard Hawkings		,,,		,,		7 March,	,,
Charles Archibald Thompson	• •	,,		,,		7 March,	;;
John Stanley Wells		,,		,,		7 March,	,,
Edward Charles Roi Young		,,		,,		7 March,	,,,
William Christopher McCracken		,,		,,		8 March,	,,
William McMichael Livingston		,,,		,,,		30 March,	1000
Percival Theodore Bowden		River engineer		River trade	·	2 April,	1909
Edward Yates Bolton		,,		,,	• •	3 May,	,,
James Templar Mason	• •	,,		,,	• •	3 May,	,,
Arthur Ernest Toyer	• •	,,	• •	,,	• •	3 May,	,,
Harold Charles Binns		,,	• •	,,	• •	3, 4 August,	,,
Robert Rhind	• •	,,	• •	;,	• •	4 August, 1 September,	"
Charles Denize	• •	,,		,,	• •	1 October,	,,
George Runels Fulyerd	• •	,,	• •	,,	• •	8 October,	"
William Holman Joseph Claris	• •	,,	• •	23.		6 November,	,,
Charles Henry Harris	• •	,,	٠.	,,	• •	13 December,	"
Duncan Devenay		,,	• •	,,	• •	13 December,	,,
George Howard	• •	,,	• •	,,	• •	4 January,	1910
William Dale	• •	,,	• •	,,	• •	4 January,	
James Donaldson Robert McLeod	• •	,,	• •	,,	• •	4 January,	,,
T. 1. Thursday Dancell	• •	,,	• •	,,	• •	4 January,	"
	• •	,,	• •	",	• •	5 January,	"
Leslie William Wright John Edward Tregerthen	• •	,,	• •	,,	• •	7 February,	,,
	• •	.,,	• •	"	• •	8 March,	,,
Henry Stuart James Aymos Reynolds	• •	Marine-engine	driver	,,		5 July	1909
James Aymos Reynolds Arthur Reginald Howe Francis		First - class en (powered ve	gineer ssels	Sea-going	••	4 May,	,,
		other than st	eam)			4 35	
David Bruce Murdoch		Ditto	• •	,,	• •	4 May,	"
Aubrey Virtue		,,	• •	,,	• •	5 July,	,,
Frederick Newnham Christian		,,		,,	• •	6 July,	,,
Paul Cuthbert Graham	• •	,,	• • .	,,,	• •	1 September,	,,
George Grey Andrews		,,		,,	• •	5 November,	1010
Charles Edward Storer		,,	• •	,,	• •	4 January,	1910
Clarence Ernest Martin		,,		,,	• •	5 January,	,,
Hugh Wood Gordon Park		,,	. •	,,	• •	7 February,	7000
George Nicholls Millett	••	Second-class er (powered ve	ssels	,,	• •	1 April,	1909
O 13 O 1' IT '		other than st				4 May,	•
Oswald Gardiner Hewison	• •	Ditto .,	• •	,,	• •	4 May,	,,
James Thomas Lewis		,, y,	, .	,,	, .	T MLOLY,	"

No. 14.—Return of Engineers who were examined and passed for Certificates of Competency—continued

Name of Person.	*	Rank. Class exa				Date of Examination.		
Francis Leslie Crosbie	••	(pow	l-class e vered v e r than s	ssels	Sea-going	g	2 August, 1909.	
John Henry Allan		Ditto			,,		6 September, ,,	
Hugh Wood Gordon Park		,,			,,		4 October, ,,	
Charles Victor Thomson		,,			,,		1 December, ,,	
William Alexander Maul Henderso		,,			,,		4 January, 1910.	
Gerard Edwin Samson		,,			, , , , , , , , , , , , , , , , , , ,		4, 5 January, ,,	
Reginald Edward Jeffries Scott		,,			,,		4, 5 January, ,,	
Thomas John Wesley Mathews					,,		1 February, ,,	
John Albert Patrick Glasson	• •	Engine	er (powe		River tra	de	3 May, 1909.	
COMMITTED TO ENGLISH CHARDON	• •		ther that				,	
William John Higham		Ditto					3 May, ,,	
James Hill				• •	' ,, 	• • • • • • • • • • • • • • • • • • • •	3 May, ,,	
William George Krause		, ,,			,,	• • •	2 Morr	
John Thomas	• • •	,,		••	,,		2 Mary	
Anthony Lennan	• •	,,	• • •	••			4 Moss	
Otto Rudolph Neuman	• •	,,	• • •	• •	,,	• •	15 M	
0, 1 77 175		,,	•		,,	•	177 34	
Daniel Cillian		21	• •	• •	,,	•	91 May	
	• •	***	• • •	. • •	,,	•	94 Mar	
Thomas George Walker	• • •	"	• •	• •	,,,	• •	4 Tuno	
Joseph McCaffrey		,,			,,	• •	7 June,	
Arthur Leonard Hill	• •	"	* *		,,	• •	16 June, ,,	
Gustav Frank	• • .	,,			i	• • •	1 Combombon	
Otto Hjalmar Gustafssan	· • •	,,	• • •	• •	, ,,		1 September, ,,	
John Keller		,,			, ,,		25 September, "	
William Scoular	• •	٠,,	. ••		,,	• •	1 October, ,,	
William John Kelly		,,,			,,	• •	15 October, ,,	
Josiah Gillender		,,			٠,,	••	1 November, .,	
Florence May McKegg		,,,			,,	• •	6 December, ,,	
Reginald Shillito Tonkinson		٠,,			,,		6 December, ,,	
William Allen Smith		,,			٠,,		15 December, ,,	
Eric Francis Akersten		,,	• •		,,	• • •	4 January, 1910	
David Collins Wilson Flynne		,,			,,		4 January, ,,	
Arthur Maxwell Oliver		,,			,,	•	4 January, ,,	
Leopold Weston		,,			***		4 January, ,,	
Herbert Elvin Hewlett		, ,,			,,		5 January, ,,	
Cecil Hunter		,,			,,		6 January, ,,	
George Chapman		,,			,,		22 January, ,,	
Charles Lonie		! ',,			,,	• • •	24 March, ,,	
		13		VA -	# i			

Total number of applicants, 297. Amount of fees, £267.

Failures to pass examination: For first-class engineer, 3; second-class engineer, 9; third-class engineer, 23; river engineer, 12; marine-engine driver, 2; first-class engineer (powered vessels other than steam), 3; second-class engineer (powered vessels other than steam), 9; restricted-limits engineer (powered vessels other than steam), 9.

No. 15.—Return of Steamers and Oil-engine Vessels surveyed during the Financial Year ended 31st March, 1910, with Particulars of Tonnage, &c.

	Tons M		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.			
Name of Vessel.		ن	Hors Ster rake of of	ed of tean reign	Description of Machinery.	Screw.	Paddle
	80	iste	nall all By ver	cat er le S For			
	Gross.	Register.	Nomin of a and pov othe	n di pow trad of Stea			
dmiral	121	82	28		Compound S. condensing	Single	
dvance (Auckland)	18 10.54	12 5·45	8 15 B.H.P.	••	High pressure Oil-engine	,	٠.
H.B huriri	85	31	17		Oil-engine Compound S. condensing	"	
da	2.37	1.93	• •		,,	,	
karoa	76	29	28	96.8	TT:-1- "	"	••
bany batross (Auckland)	217·8	iiı	8 37		High pressure Compound S. condensing	Single at	
buttoss (Huomana)				''	comboning or commons	each end	
batross (Auckland)	50.2	42.5	25 B.H.P.		Oil-engine	Single	•••
exander ice	377	$\frac{184}{3}$	$\frac{72}{3\frac{1}{2}}$	327.5	Compound S. condensing High pressure	Twin Single	••
ice	28	21	10 B.H.P.		Oil-engine	" · · ·	
ntelope	18.8	14	2½ B.H.P.			,	,.
orere	$\frac{72}{263}$	49 157	$\frac{16\frac{1}{2}}{33}$. 68.2	Compound S. condensing	,	••
otea oanui	203 243	134	27 1	207	Triple-ex. S. condensing	,,	
parima	5,703	3,683	284	2,752.8	, ,	Twin	••
ahura	1,596	771.2	145	1,652	"	// ···	٠.
apawa	$291.2 \\ 17.2$	128·3 12·9	47 2 1 B.H.P.	231.4	Oil-engine "	Single	••
net	463	220	55	408.9	Triple-ex. S. condensing	Twin	
varoa	344	210	. 62	450		Single	
den Powell (2)	194 136	$\frac{92}{78.7}$	$\frac{30}{24}$	215	Compound S. condensing	"	••
roona eatrice	20	8	10	::	"	"	• • • • • • • • • • • • • • • • • • • •
ell Bird	88	52	14	::	Triple-ex. S. condensing	,	
anche	26	17.56	9		High pressure	,	••
enheim (2)	150 15	85 13	28 5 B.H.P.	206	Compound S. condensing Oil-engine	<i>"</i> ···	•••
eeze	552.5	286.18		468	Triple-ex. S. condensing	,,	
eta Tui		35.86	40 B.H.P.		Oil-engine	,,	
itannia (Bluff)	23.4	17.5	2½ B.H.P.		TT: "	,	D. 131.
ritannia (Auckland)	196·5 1,063	108·4 834	$\frac{40}{250}$	1,115.2	High pressure Triple-ex. S. condensing	Single	Paddle.
interbury (Lyttelton)	1,005		24	1,110 2	High pressure	Twin	
nterbury (Lyttelton)	292	.88	133		Compound S. condensing	,	
scade (2) therine	15·7 12·95	10·7 9·45	70 B.H.P. 30 B.H.P.		Oil-engine	"	
relmsford	12 95	79	24	61.1	Compound S. condensing	Single	
ansman	634	379	90	566	,,	,,	
ematis	17	12.8			Oil-engine	,	ייי אוני
yde bar	130 158·8	57·8	$\frac{40}{35}$		Compound S. condensing	Single	Paddle.
olleen	19.6	14.7	2½ B.H.P.		Oil-engine		
ondor	174	122	24	••	Compound S. condensing	Single at each end	, ••
orinna oromandel	$1,279 \\ 99$	820 67	$\begin{array}{c} 141 \\ 25 \end{array}$	1,066	. <i>"</i>	Single	• •
romandel	141	56.5	28	187.6	<i>"</i>	,,	
gnet	124	66	43	177.5	,,	,	
phne (Auckland)	192 189	$112.6 \\ 117$	40 36	101	"	,	••
efender (2)	35	24	.36 20	101	"	"	
olly Varden	31.4	17.4	26 B.H.P.		Oil-engine	Twin	
oto	28.5	19.4	30	×170	Compound S. condensing	Single	
redge No. 222	$\begin{smallmatrix}1,225\\941\end{smallmatrix}$	500 488	$\begin{array}{c} 120 \\ 92 \cdot 8 \end{array}$	572 681	Triple-ex. S. condensing	Twin	• •
edge No. 404	479	211	78	358.7	Compound S. condensing	,,	
ichess	308	95	81		Triple-ex. S. condensing	Single	
igle sho	219 125	138 98	70 60 B .H .P.	• •	Compound S. condensing Oil engine	Twin	Paddle.
sie (Auckland)	125 27	20.5	30 B.H.P.		On-engine	TWIE	• •
sie (Picton)	42.48	$22 \cdot 17$	11	• •	Compound S. condensing	Single	
sie Evans	7.8	5.8	20 B.H.P.	• • • • • • • • • • • • • • • • • • • •	Oil-engine	,	• •
ideavour	76	54.4	30 B.H.P. 5		Compound S. condensing	,,	••
ergy	63.73	17.9	16		"	"	
terprise (Bluff)	18.4	13.8	2½ B.H.P.		Oil-engine	,	
lin skine	$\begin{array}{c} 5.47 \\ 126 \end{array}$	$\frac{4.11}{98}$	$\frac{4}{35}$	••	Compound S. condensing	"	••
skine	120	7	20 B.H.P.		Oil-engine	"	• •
eline			8		High pressure	,	
	6.5	4.9	6.5		Compound S. condensing	,	• •
celsior	1				LATERCUITE S CONCERNS	,	
celsior	53 91.8	36 68:5	25 40 B H P	99		Twin	
celsior	$53 \\ 91.8 \\ 45$	$\frac{36}{68.5}$	40 B.H.P. 103		Oil-engine Compound S. condensing	Twin Single	

No. 15.—Return of Steamers and Oil-engine Vessels surveyed, &c.—continued.

	To	ons Me mer		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.			
Name of Vessel.				Hor: Stes ake of an S	ed of eam eigr	Description of Machinery.	Screw.	Paddle.
		70	Register.	ll Bra th	st r St For			
		Gross.	gis	nin al d we	Lic Well wde Lic Lic Lic Lic Lic Lic Lic Lic Lic Lic			
		Ψ.	P. P.	Non of po otl	Stand	•		
		<u>`</u>				0 10 1	a	
	••	$\frac{90}{13.9}$	55 10·4	30 20 B.H.P.	159.3	Compound S. condensing Oil-engine	Single	••
rro refloat		10 0		6	••	High pressure	"	•
ora		,273	838.4	180	1,194.8	Compound S. condensing	"	
	•••	132 95	94 55	50 20	••	High pressure Compound S. condensing	••	Stern whe
el mnet (Blenheim)		15	10	$\frac{20}{12}$	••	Compound 5. condensing	"	••
. (2001 000		23.6	17.7	5 B.H.P.		Oil-engine	,,	
	••	269	118	59	295	Triple-ex. S. condensing	Twin	• •
sborne rdon		67.77	37.93	12 B.H.P. 12	• •	Oil-engine	Single	• • •
		89	23	30		"	,	• •
shawk		238.7	121.9	28	••	, ,	,,	••
eyhound	••	107	83	60 B.H.P. 10	••	Oil-engine High pressure	Twin	••
(0)	1	,988	1,276	253	1,352	Compound S. condensing	Single	•••
eathcote		167	94	35	·		,	•• *
mitangi	••	323 37·55	$\frac{149}{12.56}$	$\frac{45}{11}$	237.2	Triple-ex. S. condensing	Twin	••
p i rere		48	18	16	••	Compound S. condensing	,	• • .
bsonville		32.5	22.8	15 B.H.P.		Oil engine	Single	••
lmdale	••	266	197	27 CO D II D	110.7	Compound S. condensing	,	• •
iia (Auckland)	••	224	200	60 B.H.P. 2	••	Oil-engine High pressure	,	••
ila (Wellington) ila (Wellington)		127	69	$2\overline{5}$	120.6	Compound S. condensing	"	••
vercargill		223	123	41	196.6	"	, ,	
iaca	••	17.7	13.2	9	••	"	,	
ne	::	27	20·3	20 B.H.P.	•••	Oil-engine	,	
ne Douglas		95	74	22	71	Compound S. condensing	<i>"</i>	
D.O	•••	129	88	28	••		<i>"</i>	
hn Anderson hn Townley	::	52	36 85	20 39		"	Twin	
nn Towntey		184	147	60 B.H.P.		Oil-engine	,,	
hu (Auckland)		55	26.5	24 B.H.P.	• •	Gamman 3 G 1	,,	••
hu (Napier)		181·9 44·95	$\frac{99}{24.36}$	40 24 B.H.P.	238.9	Compound S. condensing Oil-engine	Single Twin	• •
siaia sipara (2)		30	- -	3.8		Compound S. condensing	Single	••
ripatiki		53	19.8	9.5		Triple-ex. S. condensing	,,	
iraki		462.4	181.7 $1,218$	$\frac{91.6}{200}$	582·8 908	,,	Twin Single	••
itangata ituna (Auckland)	:: 1	,981	6	10 B.H.P.		Oil-engine	" ··	
ituna (Dunedin)	1	,976	1,246	200	1,133.7	Triple-ex. S. condensing	<i>"</i> ···	
ımona		,425	903	$\begin{array}{c} 117 \\ 20 \end{array}$	747 134·7	Compound S. condensing	l "	••
inieri ipiti		202 242	115 113	20 35	207.5	"	"	
ipid		58.21	29.81	30		"	"	
apuni	•••	188.4	96.54		166.3	, , , , , , , , , , , , , , , , , , , ,	"	
roro	••		51	17 5	•	High pressure	"	
wau (Auckland)		99	52·7	20		Compound S. condensing	,,	
ennedy		226	131	38·9	205.2	"	Twin	
okeno		$\begin{array}{c} 37 \\ 342 \end{array}$	$\frac{18}{203}$	14 B.H.P. 43	•••	Oil-engine	Single Single at	•••
estrel	••	UTA	200	. 		Compound of condensing	each end) ••
a Ora			8.5	3		m · 1 ~ ~ "	Single	
ni	ļ	.,122	702	130	697	Triple-ex. S. condensing	" . ••	
ripaka ritona		132·7 136·4	74·5 75·26	20 75 B.H.P.	96	Compound S. condensing Oil-engine	Twin	
ttawa		,246	707	120	723.6	Triple-ex. S. condensing	Single	
wi				3 .		High pressure	,,	
oi	1	123 ,993	53 1,194	$\begin{array}{c} 32 \\ 260 \end{array}$	1,193.3	Compound S. condensing Triple-ex. S. condensing	Twin Single	• • •
omata oonya		,090	662	115	742 6		" ··	
opu			18	13		High pressure	<i>"</i>	Paddle.
oroi		170	1 5/1	9·2 313	1 449.1	Triple-ex. S. condensing	"	• •
oromiko otare	2	$\begin{bmatrix} 2,479 \\ 141 \end{bmatrix}$	$\substack{1,541\\79}$	20	1,448·1 105	Compound S. condensing	"	
otiti		58	42	14		,,	,	
otuku		,053	662	112	731.8	Triple-ex. S. condensing	,	•••
ıaka	2	$\begin{array}{c} 45 \ 2,580 \end{array}$	$\frac{33}{1,564}$	90 B.H.P. 333	1,124	Oil-engine Triple-ex. S. condensing	"	.:
urow ady Barkly	2	55	39	20	87.3	Compound S. condensing	"	
auderdale		,668	1,071	155	744.6	Triple-ex. S. condensing	"	
ena		••	••	5	••	High pressure	,	
ittle Jack omen (2)	::		6	$\frac{1\frac{1}{2}}{6}$		Compound S. condensing	"	· :
oyalty		100.6	24	35	66.2	"	,	
yttelton		207	24	80	1	"	1	Paddle.

No. 15.—Return of Steamers and Oil-Engine Vessels surveyed, &c.—continued.

	ment	sure-	se-pow amshij Hors Shij Steam.	Hors Hom ners at n - goin		·	
Name of Vessel.	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.
Iagic Iaheno (Dunedin)	93 35	58·3 24	60 B.H.P. 90 B.H.P.		Oil-engine	Twin	••
Iaheno (Dunedin)	5,282 3 203·1	94.5	600 39	6,188	Turbines Compound S. condensing	Triple Single	
Iahuta	$\begin{bmatrix} 29 \\ 3,393 \\ 134 \end{bmatrix}$,888 76·6	$10\frac{3}{4}$ 490 25	3,431 137	Triple-ex. S. condensing Compound S. condensing	"	••
Iana (Westport)	$\begin{bmatrix} 196 \\ 2,060 \\ 122 \end{bmatrix}$	50·5 1,288 77·5	$\begin{array}{c} 90 \\ 220 \\ 24 \end{array}$	1,675·5 144·3	Quadruple ex. S. conden. Compound S. condensing	Single	Paddle.
Ianchester	882	366	160	1110	Triple-ex. S. condensing	Twin at each end	•••
Iangaiti Iangapapa Ianuka	164 4,505	87 2,783	$\begin{array}{c} 6 \\ 28 \\ 357 \end{array}$	182 4,382·9	High pressure	Single " Twin	••
Ianukau	65 117	45 94	30 5½		Compound S. condensing High pre-sure	Single	Stern whe
Iaori Iapourika	1,202	718 718	130 530	5,859 1,131 3,694·9	Turbines Triple-ex. S. condensing	Triple Single	••
fascotte (Auckland) Iascotte (Wanganui)		••	$\begin{matrix} 5 \\ 12 \end{matrix}$	••	High pressure	"	
Iatarere Iatuku Iavis	• • •		1·7 4 4 1	••	Compound S. condensing High pressure	"	••
Iay Howard Iere Mere	64	55	45 B.H.P. 3	••	Oil-engine High pressure	"	
Ierlin Iihi Moana Ioa	24·28 188	18·2 95	5 B. H .P.	 145·5	Compound S. condensing Oil-engine Compound S. condensing	"	••
oana oerangi	$7.8 \\ 24 \\ 61.8$	$\begin{array}{c} 5.8 \\ 15 \\ 29.4 \end{array}$	27½ B.H.P.	••	High pressure Oil engine	"	•••
Ionica Ioturata Ioturoa	24.4	12.5	20 25 B.H.P. 10	••	Oil-engine	"	
foura fullogh furiel	2,026 1 69 58·9	$\begin{array}{c} 1,247 \\ 46 \\ 15.5 \end{array}$	275 15 18	1,828.4	Triple-ex. S. condensing High pressure Compound S. condensing	Twin Single	
furihiku	558 9·4	368 7·1	70 6 B.H.P.	552 	Triple-ex. S. condensing Oil-engine	Twin Single	
apier atone aumai	$70.8 \\ 72 \\ 47$	48 49 28.6	$\begin{array}{c} 30 \\ 24 \\ 12 \end{array}$	92	Compound S. condensing	"	••
avua lever Despair	2,929	.,812	$\begin{array}{c} 221 \\ 1_{\frac{1}{2}} \end{array}$	2,094	Triple-ex. S. condensing High pressure	Twin . Single	
gabere gapuhi gatiawa	1,090 691 451	556 299 220	118 160 55	720·4 697 400·3	Triple-ex. S. condensing	Twin	••
ile iobe	43.5	7·58	$\frac{20}{3\frac{1}{2}}$	32	Compound S. condensing High pressure	Single	•••
ina ora Niven (2) orval	166 56·5	56·6 50	4 35 20 B.H.P.	204	Compound S. condensing Triple-ex. S. condensing Oil-engine	"	••
ovelty	$\begin{array}{c} \mathbf{199 \cdot 7} \\ 114 \end{array}$	98·5 73	11 30	80	Compound S. condensing	" ···	
hura ngarue nslow	23	34 10 16	25 35 B.H.P. 14	••	Quadruple-ex. S. conden. Oil-engine	Twin Single Twin	
pawa poutia (2)	110	64	18 5	68.5	High pressure	Single	
rete rewa sprey	118·1 59 219	91·78 37 138	60 B.H.P. 17 70	••	Oil-engine Compound S. condensing	"	Paddle.
tunui aeroa	15·3 91	$\begin{array}{c} 11 \ 5 \\ 46 \end{array}$	35 B.H.P. 25	70.8	Oil-engine	Single	
ania ateena earl (Kaipara)	$1,212 \\ 14$	34 550 9	11 250 6	1,944 	High pressure	"	•••
elican	$\frac{161}{24}$	1 18	57 40 B.H.P.	291.7	Triple-ex. S. condensing Oil-engine	Twin Single	
etone hantom ilot (Napier)	708 44 30	388 18 10	82 11 13	540 	Triple-ex. S. condensing Compound S. condensing	"	
ilot (Wellington)	39 81·1	$\begin{array}{c} 26 \\ 27.6 \end{array}$	15 13·5	••	Triple-ex. S. condensing Compound S. condensing	,,	
itoitoi (Waitara) 🛛	$\begin{array}{c} 72.5 \\ 81 \end{array}$	19 29	15 40	271	· · · · · · · · · · · · · · · · · · ·	,	

No. 15 —RETURN of STEAMERS and OIL-ENGINE VESSELS SURVEYED, &c.—continued.

	Tons M me		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.	· ·		
Name of Vessel.			forse Stea ake of an S	ed I of eam reign	Description of Machinery.	Screw.	Paddle.
1 - 1	si.	ster	all ll Br Br er	sat sr e St Fo men			
	Gróss.	Register.	Nominal of all and B power other ti	ndic powe trade of Stea			
ortare	11.34	8.5	15 B.H.P.		Oil-engine	Single	
resto syche	10.29	8.35	3 20 B.H.P.	• •	Compound S. condensing Oil-engine	,,	••
sycne ukaki	1,444	917	110	687.1	Quadruple-ex. S. conden.	,,	::
upuke	137.9	68.2	28	••	Compound S. condensing	Twin	
urau	51	38	18	007	, ,	g." . · ·	•••
utiki ueen of Beauty	408 20·7	$\begin{array}{c} 157 \\ 9\cdot 4 \end{array}$	60 35 B.H.P.	321	Oil-engine	Single	•••
ueen of the South	197	121	40	198.3	Compound S. condensing	,,	
ahutai	18:35	12.48	4			,,	
akanoa akiura	$2,246 \ 17.8$	$\substack{1,393\\13\cdot4}$	200 10 B.H.P.	917	Triple-ex. S. condensing Oil-engine	"	•••
akiura arawa	1,071	460	140	979	Triple-ex. S. condensing	Twin	
eliance			24		High pressure		Stern whee
egulus (2)	584.1	227.2	150	668.4	Compound S. condensing	Twin	••
esult	28 358	18 144	10 95	449	Triple-ex. S. condensing	Single Twin	:•
ipple (Auckland)		144	5 B.H.P.		Oil-engine	Single	· · ·
ipple (Lyttelton)	412	187	80	214.4	Triple-ex. S. condensing	,,	
ita	40	17	11		Compound S. condensing	"	
iwaka ob Roy	31 105·8	$\frac{19}{43.6}$	10·5 19	100.3	"	,	• •
osamond	721	462	90	450.7	",	"	
osetta	12.8	9.6	5 B.H.P.		Oil-engine	,,	
othesay	18.5	8	$egin{array}{c} 4\cdot 5 \ 2\cdot 5 \end{array}$		Compound S. condensing	,	
otoiti (Auckland) otoiti (Dunedin)	1,158	629	104	1,145 3	Triple-ex. S. condensing	Twin	• •
otokohu	14.6	11	8		Compound S. condensing	Single	
otorua	7.6	5.7	25 B.H.P.		Oil-engine	<i>"</i> . · · ·	
ubi Seddon uru (Auckland)	528	$\frac{348}{11}$	- 80 10	• •	Triple-ex. S. condensing	Twin	• •
uru (Auckland)	31 158	57	50	230	Compound S. condensing	Single.	
uruhau	21.4	16	12 B.H.P.		Oil-engine	,	
ally	28.6	14.2		• •		,	
avaii (2)	55 14	31 10	16 10 B.H.P.	•••	Compound S. condensing Oil-engine	4	• •
ettler	16.6	8.3	7	::	Ordinary condensing	,,	l ::
hamrock	109	60	120 B.H.P.		Oil-engine	Twin	
ir William Wallace	44	30	20	• •	Compound S. condensing	Single	• •
onoma outhern Cross	682	403	$13 \\ 117$	561.3	High pressure Triple-ex. S. condensing	"	••
outhern Isle	83.4	58.9	28 B.H.P.		Oil-engine	Twin	
parrow			$1\frac{1}{2}$	• • •	Compound S. condensing	Single	
peedwell quall	368	30 133	$\frac{3\overline{2}}{60}$	256	High-pressure Compound S. condensing	Single	Stern whee
quali	268	155	90	266	Compound S. condensing	Single	••
terling	96	26	39	221	"	,	
torm	405	185	70	212	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	"	
tormbird	$\frac{217}{167}$	$\frac{129}{94}$	40 35	216	. "	"	••
umner unbeam	9.4	7.5	5 B.H.P.		Oil-engine "	.,	
wan (Auckland)	5	3.8	$1\frac{1}{2}$		Compound S. condensing	,,	••
wan (Wellington)	23.7	16.1	10	• •	TT: .1. "	,,	• • •
ylph ainui	128	59·8	$\begin{array}{c} 8 \\ 24 \end{array}$	149	High pressure Compound S. condensing	"	• •
ainui	77	57	25	149	High pressure	"	Paddle.
akapuna (Dunedin)	1,036	472	165	1,413.9	Compound S. condensing	Single	••
alune	2,086	1,370	255	1862.5	Triple-ex. S. condensing	// · · ·	••
amure	15·29 189	9.5 109	10 B.H.P. 70		Oil-engine	Twin	•••
angihua	31	20	15		Ordinary condensing	Single	• • •
aniwha		16	16			,,	
arakihi arawera	0.009	1 960	$\frac{4}{250}$	1 494.7	High pressure	"	• • •
arawera arewai	22.8	$1,269 \\ 11.4$	250 11	1,434.7	Compound S. condensing	,	• •
asman (2)	178.5		38	210.3	,,	Twin	::
awera (Auckland)			8		High pressure	Single	
awera (Gisborne)	52 106:1	44 56.0	40 B.H.P.	••	Oil-engine	Twin.	••
e Aroha e Awhina	106·1 220	56·9 1·5			Triple-ex. S. condensing	Twin	••
erawhiti	259.8			846	Triple-ex. b. condensing	Single	· · ·
heresa Ward	194	9	95	448	,,	,,	
histle	96	77	90 B.H.P.	••	Oil-engine	Twin	••
homas King	98 4,345	$\frac{70}{2,634}$	16 354	3,264	High pressure Triple-ex. S. condensing	Single Twin	••
'ogo	1,040	2,001	14	3,204	Compound S. condensing	# ··	i
longariro	20	4	8.2		,,	Single	
Traveller Tuakau	••		$\frac{7\frac{3}{4}}{2}$	•••	High programs		••
uakau	•••	••	Z	•••	High pressure	,,	• • •

No. 15.—Return of Steamers and Oil-Engine Vessels surveyed, &c.—continued.

	Tons M		urse-power eamships e Horse- f Ships	Horse- Home- mers and gn - going only.			
Name of Vessel.	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
uatea	112	58	28	230	Compound S. condensing	Single	•
u Atu	40	30	60 B.H.P.		Oil-engine	Twin	
ii		20	$6\frac{1}{2}$		High pressure	Single	• • •
airangi	124.4	71.8	$22\frac{1}{2}$		Triple-ex. S. condensing	m	
ana (Gisborne)		•• .	14	•.•	Compound S. condensing	Twin Single	• •
ına (Kaipara)	26.6	19.9	3 <u>1</u> 2 <u>1</u> B.H.P.	4	High pressure Oil-engine	1 ~ .	• •
e Waipounamu	200		$3\frac{1}{2}$		High pressure	<i>"</i>	• • • • • • • • • • • • • • • • • • • •
ariance	25.1	18.8	2½ B.H.P.		Oil-engine	,,	
esper (2)	46.6	19.7	32 B.H.P.		,,	Twin	
ictoria	149	92	40		High pressure		Paddle.
ictory	33	17	16 B.H.P.		Oil-engine	Twin	
iolet	11	8.2				Single	
ivid	21	6	13	••	Compound S. condensing	,,	••
aiapu	67	57	15 B.H.P.	1.050.5	Oil-engine Triple-ex. S. condensing	,	• •
aihora	$\frac{4,637}{153.8}$	$\frac{2,993}{66}$	$\begin{array}{c} 410 \\ \mathbf{23\frac{1}{2}} \end{array}$	1,952.5	Compound S. condensing	Twin	• •
aikana aikare	3,070	1,901	229	2,441.5	Triple ex. S. condensing	Single	
aikato	0,010	1,001	4	2,111.0	High pressure	, and	
aimarie (Auckland)	245	159	48		Compound S. condensing	Twin	
aimarie (Wanganui)	80	53	20		High pressure		Paddle.
aimea	454.4	206.8	100	601	Triple-ex. S. condensing	Twin	• • •
aione	70	48	80			,,	
aiora			5		Compound S. condensing	Single	••
Zaiotahi	278	167	56	364.6	. "	Twin	• •
/airau	143.2	59.2	- 20 25	129	Tiel magazza	Single	Paddle.
Vairere	60 99	$\frac{41}{49}$	25	143	High pressure Compound S. condensing	Single	radule.
Vairoa (Auckland) Vairoa (Nelson)	69.8		20	54	Compound 5. condensing	1 -	
Vairoa (Nelson)	090		-5		"	,,	
Zaitangi (Auckland)	171	34	66	350		Twin	
/aitangi (Matakohe)	45	30	60		, ,	Single	
Zaitohi	24	18	10		,,	"	
Vaiwera (Auckland)		[6		. "	,,	
Vaiwera (Henley)			16 B.H.P.		Oil-engine	,,	••
Zaiwiri	:: 0		$7\frac{3}{4}$	• • •	Compound S. condensing	,, ···	• •
Zakaiti	19.6	14.7	34 B.H.P. 10		Oil engine	Twin Single	
Vakapai Vakatere	441	157	140	• •	Compound S. condensing	_	Paddle.
/akatere /akatu	157	95	30	149		Single	Ladule.
Janaka	2,421	1,572	280	1,006.5	Triple-ex. S. condensing	" · ·	
aterlily	25 6	18.1	10 B.H.P.		Oil-engine	,,	
ave	39.8	28.8	38 B.H.P.			,	
averley	156	93	25	105	Compound S. condensing	Twin	
eka (Auckland)	127	86	27		,,	Single	• • •
eka (Napier)	89	52	. 20	129.6	,,	"	D- 2 11
Testland	152	8.4		401.9	"	Cinala	Paddle.
hakapara	010	140	$\frac{2\frac{1}{4}}{100}$	600.7	"	Single	•••
hakarire	819	449	120	629.7	"	Twin Single	•••
Thati Tootton	151	 89 6	$1\frac{3}{4}$	111	"	1 "	
ootton oung Bungaree	80.5	1.6		153.4	"	,	
ingara	218.8		14	80	, , , , , , , , , , , , , , , , , , , ,	Twin	
	1 4100	00		1 50	//	1 - ***	

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

No. 16.—Return of Sailing-Vessels surveyed during the Financial Year ended the 31st March, 1910, with Particulars of Tonnage, &c.

					Tons Mea	surement.		
	Name of	Vessel,			Gross.	Register.	Description.	Times surveyed
Bankfiel ds					859	785	Barque	1
Dartford					1,327	1,274	Ship	1
Janymede					26.2	19.9	Schooner	1
lma						318	Barquentine	1
Jessie Craig					680	634	Barque	1
Tessie Nicol					92.8	92.8	Schooner	1
Joseph Craig					751	694	Barque	1
Kereru					123.7	99.7	Ketch	1
Rona					678	617.6	Barque	1
St. Kilda					197.8	189	Schooner	1
Weathersfield		••			1,111	1,047	Barque	1
Ysabel		•••	•• .		148.5	148.5	Schooner	1

The "Bankfields" and the "Weathersfield" have been surveyed for the first time.

No. 17.—Return of Vessels surveyed for Seaworthiness, &c., from the 1st April, 1909, to the 31st March, 1910.

Date			
of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1909. February 20, 21, 22, 24, 25, and 26; March 2, 5, 16, 23, 26, 29, and 31; April 5, 13, 15, 20, 23, 24 and 30	S.s. Ulimaroa	Dunedin and Lyttelton	On the 20th February as this vessel was proceeding up Otago Harbour, during a voyage from Lyttelton to Dunedin, she grounded between Quarantine and Goat Islands, remaining fast for about three minutes. The vessel was moving slowly whilst passing between the islands, and the grounding was attributed to the strong ebb tide, setting her over into shallow water. The engines were reversed, and the vessel came off and proceeded to Dunedin, where a survey was made. It was found she had sustained considerable damage to the hull under Nos. 2, 3, 4, and 5 ballast-tanks. A diver went down and succeeded in stopping the leaks
			from the outside, sufficiently to allow of the ballast being pumped out. The leaks were then covered over with oakum and tallow, and shored from the tank-tops, the whole being then cemented over. These temporary repairs enabled the vessel to proceed to Lyttelton, where she was docked. A further examination of the hull was then made. It was found she had received considerable damage to her plating on the port side, through coming in contact with the rocky bottom. Twenty-two of the plates were dented and cracked, sixty-five of the floor-plates and angle frames buckled, and the lower portions of three bulkheads buckled. This necessitated the following repairs being done: In the A or garboard strake three plates were cut out and replaced in position, and one plate straightened in its place. In the B strake two plates were
			cut out and renewed, eight plates were cut out, straightened, and replaced in position. In the C strake four plates were cut out, straightened, and replaced in position, and one plate straightened in position. In the D strake one plate was straightened in position. In No. 2 tank, the margin plate and angle bar were straightened in position, seventeen floor-plates and angles were straightened in position, the bottom of the after bulkhead straightened and new angle bar fitted. In No. 3 tank, six floor-plates and angle bars
			were straightened in position, and fifteen floor-plates and the lower part of after bulkhead cut out and renewed. In No. 4 tank, twenty-three floor-plates and angle bars and the lower part of after bulkhead were cut out and renewed. In No. 5 tank, four floor-plates and angle bars were cut out and renewed. The sizes of the hull-plates varied from 18 ft. to 19 ft. 9 in. in length, and from 3 ft. to 5 ft. 6 in. in width, by $\frac{9}{16}$ in. and $\frac{5}{8}$ in. thick; the floor-plates, from 7 ft. to 9 ft. 6 in. in length, and 3 ft. 7 in.
March 26; April 5, 6	"Storm	Lyttelton	wide, by $\frac{7}{16}$ in. and $\frac{5}{8}$ in. thick; the angle frames being $3\frac{1}{2}$ in. by $3\frac{1}{2}$ in. by $\frac{7}{16}$ in. On the night of the 25th March, on a voyage from Lyttelton to Wanganui, and when about thirty miles from Lyttelton
			Heads, this vessel came into collision with the s.s. "Wakatu," and received some damage to the stern. The vessel returned to Lyttelton, where a survey was made. It was found necessary to renew three hull-plates on the starboard quarter, one under the deck in the after tank, and the bulwarks had to be straightened.
April 2	" Warrimoo	Wellington	On the 31st March, on a voyage from Dunedin to Sydney, and when just inside Otago Heads, the master had to run his vessel into the bank to avoid running down the Harbour Board's dredge. The bank had a sandy bottom, and the vessel floated off the same day as the tide rose, having received no damage to her hull by grounding.
			The dredge, however, in passing, grazed along the port side of the vessel, bulging two of the plates in her side abreast of No. 2 hatch. As the frames and riveting were not damaged the vessel was found to be seaworthy, and was permitted to proceed on her voyage.
April 7, 8	Kassa (barque)	Oamaru	This vessel's certificate having expired, she was surveyed for seaworthiness, and a permit granted for her to clear from New Zealand in continuation of her voyage to Sydney.
April 22	S.s. Maheno	Wellington	Whilst this vessel was on a voyage from Lyttelton to Wellington on the 21st April, at 10 p.m., and when about forty miles north of Lyttelton, a ring in the after gland
			of the H.P. turbine broke. It overrode the shaft, causing the shaft to spring and the vanes to touch each other. On arrival at Wellington a new gland and ring was fitted, the bent vanes straightened, and the worst ones removed.
April 24	,, Rakaia	Wellington	This vessel was lying at the Glasgow Wharf, Wellington. The s.s. "Gertie," which had just arrived from Foxton, collided with her, whilst berthing at the head of the Glasgow
		·	Wharf. A strong wind was blowing at the time, which caused the "Gertie" to slew round, and her anchor-fluke
	* 2.*		came in contact with the hull of the "Rakaia," on the port side, making a small hole in the way of the foremast and about the load water-line. A patch 2 ft. 3 in. by
			3 ft. by $\frac{1}{3}$ in. was fitted outside over the hole and secured by $\frac{6}{3}$ in. countersunk screws. This made the vessel quite seaworthy.

No. 17.—Return of Vessels surveyed for Seaworthiness—continued.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1909.	,		
April 19; May 25	S.s. Mararoa	Lyttelton	On the 18th April, on a voyage from Wellington to Lyttelton, this vessel's thrust-bearing was found to be running hot.
may 25			On arrival in Lyttelton an examination of the shaft and
			bearing was made. It was then found that the shaft was badly fractured. The defective shaft was taken out and
			the vessel laid up in Lyttelton, until a new shaft was forged.
* .			This was made and finished at Port Chalmers, and afterwards fitted in position on board the vessel.
April 29;	St. Kilda (bar-	Wanganui .	On the 17th April this vessel arrived inside the Wanganui
May 5	quentine)		Bar from Hobart. She was taken in tow by one of the Wanganui Meat-freezing Company's twin-screw oil-engine
			vessels, which was unable to swing the "St. Kilda" quickly
			enough in the channel, consequently she ran into the South Spit, remaining on the sand-bank until the 22nd
			April. She then floated off as the tides were making, and
			part of her cargo of timber had been discharged. The vessel was then towed to the wharf by a tug-boat. A
			survey was made, and the following repairs were found
			necessary: Four new iron stanchions and new rail fitted on poop-deck on the starboard side, new cast iron bracket
			fitted to windlass, some broken cement in the bottom of
April 30;	Weathersfield	Wanganui .	vessel amidships removed and recemented. This vessel was on a voyage from Wellington to Suva on the
May 14	(barque)	, wanganar	25th April. She encountered heavy weather, and, when
			off Otaki, was carried close to the Hokio Beach. The vessel was anchored at once, remaining there until taken
		·	in tow by the tug "Terawhiti," which was sent to her
		-	assistance. The vessel was then towed back to Wellington. A survey was made, and the following repairs were
			found necessary: A patch 14 in. by 14 in. by \frac{1}{4} in. was
			riveted over a hole in the hull-plating, which had been made by the fluke of the anchor; the steering-gear wheel
			was renewed; a new anchor-stock was fitted to port anchor,
			and a new shackle for anchor; and some sails which had been blown away were replaced by new ones.
May 26, 27	S.s. Storm	Lyttelton .	On the 26th May, it was reported that the crank-shaft of the
			main engines of this vessel had been bent on the previous day, during the voyage from Picton to Lyttelton. The
			shaft was taken out of the vessel, put in the lathe and
T 7 0	Weatton	Lyttolton	tested, when it was found to be satisfactory. On the 2nd June, at 5.45 p.m., whilst on a voyage from
June 7, 8	,, Wootton	Lyttelton .	Kaiapoi to Wanganui, and when about thirty miles from
			the latter port, the low-pressure connecting-rod broke The piston being now free was dashed against the cylinder
			cover, breaking it. The machinery being disabled, the
			vessel was put under sail. About 8 p.m. she was taken in tow by the s.s. "Blenheim," and headed for Wellington
			A fresh north-west breeze was blowing at the time, and this
			increased to a gale with heavy sea. At 6.30 a.m. of the 3rd June the "Blenheim" cast off the tow-line, signalling
			that she was short of coal. The vessel was then about
			ten miles off Cape Palliser. She was put before the wind
			under canvas, making about 7 knots an hour. The engine room staff succeeded about 6 p.m. in getting the high
			pressure engine to work, enabling the vessel to proceed
			under her own steam and sail, arriving safely at Lyttelton at 5 p.m. on the 4th June. A new connecting rod and new
			cylinder-cover were made and fitted, enabling the vesse
June 9	" Rob Roy	Wellington .	to resume her voyage. On the 9th June, at 2.45 p.m., when on a voyage from Wel
			lington to Havelock, whilst passing Point Jerningham
			Wellington Harbour, the vessel grounded, having gone to close in to the point. She remained there until 3.25 p.m.
			when she came off with the assistance of the tug "Natone,"
			and returned to the wharf. An examination of the vesse was made. She was found to have received no damage
	et an	T. 1:	and was allowed to proceed on her voyage.
June 25, 26	,, Thyra	Dunedin	. This vessel was on a voyage from Bunbury, Western Australia, to Port Chalmers. At 9.25 a.m. of the 23rd June
	,		whilst passing Deborah Bay, the vessel grounded. Sh
			remained aground until 5 p.m. of the same day, and wa then refloated by means of her own engines and th
			assistance of a tug. An examination of the vessel wa
June 26	,, Kiripaka	Lyttelton	made, when it was found she had received no damage. On the 12th June, whilst this vessel was on a voyage from
June #0	,, 1111		Wellington to Patea, it was found there was a slight leak i
			the forehold, close to the stem. The vessel had encountered heavy weather, and the butts of the hull-planking wer
			working. On the return voyage the vessel went on t
	* .	1	Lyttelton, where she was placed on the slip. About 8 for of the stem was renewed, and twelve new fastenings fittee
	1	1	
			in the planking forward. This made the vessel quite sea

No. 17.—RETURN of VESSELS SURVEYED for SEAWORTHINESS—continued.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1909.			
June 29; July 27	S.s. Duco	Wellington	This vessel was surveyed during alterations necessary for converting her into a fishing vessel. The equipments necessary, owing to the change from a river steamer to a
July 10	" Petone	Wellington	foreign-going steamer, were also inspected. On the 6th July, whilst on a voyage from Greymouth to Napier, this vessel lost one of her propeller-blades. After discharging her cargo at Napier she came on to Wellington, was put on the Patent Slip, and the propeller and shaft drawn. Upon an examination being made of the shaft, a serious defect was found in it. This necessitated a new
Iul., 0, 00, 00	0 7		one being made as well as a new propeller. These were placed in position and the vessel proceeded on her voyage.
July 8, 20, 23	O.e.v. Kaeo	Auckland	This vessel was on a voyage from Gisborne to Auckland, when she fell in with very heavy weather. It was found necessary to beach her at 10 a.m. on the 10th July, in a sheltered place in Tokomaru Bay. The weed we do not a 10 a.m.
			place in Tokomaru Bay. The vessel was floated off again on the 26th July, and she proceeded to Auckland, where she was docked and surveyed. The damage sustained by grounding was made good, and included repairs to keel, a considerable amount of caulking to hull-planking, and the
July 26	S.s. Maori	Wellington .	During a voyage of this vessel on the 26th July, from Lyttelton to Wellington, a flaw was discovered in the neck of one length of her main steam-pipe. On arrival at Wellington the pipe was taken on shore, the flance rebrayed and the
July 26	,, Himitangi	Wellington .	pipe, after repairs, tested to 300 lb. hydraulic pressure before being placed in position. On the 17th July this vessel arrived at the Foxton Bar from Greymouth, and on attempting to cross she grounded,
			there being insufficient water on the bar. She remained there until the 24th July, and, after jettisoning most of her cargo of coals, was got off by means of heaving on hawsers, and the use of her own engines. After discharging the remainder of her cargo the vessel sailed for Wellington
			It was found necessary to renew about a hundred rivets in the keel-plate, under the after end of the forehold and stokehold, also a few in the stern-post. This made the
July 27, 29	,, Rakiura	Dunedin	River on a voyage to Dunedin, she grounded, remaining fast until the 23rd June, when she was got off with the
•		•	assistance of her own engines. The vessel was also supposed to have touched the ground after having passed the Beacon Rock on her way out. On arrival at Dunedin the vessel was docked and a survey made. The damage was found to consist of two small cracks in the garboard strake-plating on the starboard side just forward of
July 30, 31	"Kotare	Dunedin	was riveted over the damaged part, and the broken cement renewed.
			About 11 p.m. on the 29th July, when proceeding up the Victoria Channel off Ravensbourne, on a voyage from Stewart Island to Dunedin, this vessel collided with the s.s. "Pukaki." The bulwarks, covering-board, shear strake-plank, and belting of the "Kotare" were fractured and the port rigging carried away. All the damage was
August 2	" Apanui	Auckland	made good and new rigging fitted. On the 1st August, as this vessel was berthing at No. 3 Jetty, Auckland, on the completion of her voyage from Awanui to Auckland, her anchor caught a fender-pile of the wharf, breaking the anchor and starting six rivets in the hull
Anarat 9	W		putting the vessel ahead instead of astern. A new anchor was put on board and the six rivets were renewed.
August 3	,, Wootton	Lyttelton	This vessel was lying alongside the wharf at Lyttelton on the 1st August, when it was noticed that she was leaking. On an examination being made, it was found the circulating.
Sept. 8, 11	" Jane Douglas	Nelson	pump discharge-pipe had broken between the skin of the ship and the outer planking. The pipe was taken off and replaced by a stronger one. On the 11th July, as this vessel was leaving Okarito for Hokitika, she went ashore on the north side of the en-
	•		trance, carried away the tiller, damaged the stern-post, buckled the engine-room bulkhead, dented the hull-plating, and started a number of rivets. Temporary repairs were effected, and the vessel was launched across the spit into the Okarito Lagoon on the 24th August, and proceeded to Nelson for repairs. All the defective rivets and plates were renewed, the stern-post and rudder re-
7—I	I, 15 _A ,		paired, and two strong stanchions fitted under the deck on the forehold, making the vessel seaworthy.

No. 17.—Return of Vessels surveyed for Seaworthiness—continued.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1909. September 11	S.s. Paparoa	Port Chalmers	This vessel was on a voyage from the Bluff to Port Chalmers on the 11th September, when she grounded on a sandspit
			at the entrance to Otago Heads, remaining aground from 6.50 a.m. to 9.15 p.m. She came off by means of her own engines and the assistance of the tug "Plucky." A survey of the vessel was made, when she was found to have
۵			received no damage.
September 23	,, Kiripaka	Wellington	On the 21st September, as this vessel was crossing the Patea Bar on a voyage from that port to Wellington, she was struck by two heavy seas, which damaged her hull, causing the vessel to leak. On arrival at Wellington she was placed on the Patent Slip and a survey made. The keelson under the centre of forehatch, two deck-beams at the forward end of hatch, and one side stringer and plank on the
			starboard bow were found to be fractured, also a number of butts of the hull-planking started. A 10 in. by 5 in. by 31 ft. ironbark beam was bolted on either side of the keelson and through the keel of the vessel. Nine new
			fastenings were put into sister keelsons; one new iron- bark bilge-stringer 14 in. by 4 in. by 17 ft. was fitted; two new deck-beams and one new plank were fitted on starboard bilge, and all defective seams and butts were
October 18	" Tainui	Port Chalmers	caulked. At 7.30 p.m. on the 7th September, when about eight hundred miles north of Cape Town, on a voyage from London to Wellington, the port propeller was supposed to have
			struck some floating wreckage. One blade was broken off at the flange, and also six of the studs securing blade to
		•	the boss. The vessel was docked at Port Chalmers, and new studs and one new blade were fitted. Several rivets
	· '		were renewed in each of the after web-frames in way of port propeller-shaft spectacle, and a number of rivets in rudder.
Oct. 26 and 27	"Kotare	Bluff	During a voyage from Dunedin to Invercargill on the 26th October the forward web of the after crank broke, when off Slope Point. The after web of the same crank had been
			fractured on a previous occasion, and strengthened by fitting a heavy wrought-iron strap round it. This strap was removed and fitted to the broken web, thus enabling the vessel to continue her voyage under reduced power.
			On arrival at the Bluff a new strap was made and fitted to the fractured web.
October 29	., Wairoa	Auckland	As this vessel was lying alongside the Queen Street Wharf. Auckland, on the 19th October, a fire was discovered in the lamp-locker about 10 p.m., which destroyed all the ship's lanthorns and the door of the locker before being extinguished. Several copper pipes in the engine-room
			were also found to be defective. All the damaged parts
October 29; Nov. 1	" Holmdale •	Wellington	were made good. On the 29th October, on a voyage from Greymouth to Lyttelton, and when about a mile from Wellington Heads, the propeller shaft broke at the large part of taper, the pro-
			peller being lost. Sail was set, and the vessel was enabled to sail into Wellington Harbour. She was placed on the Patent Slip, where a new propeller and shaft were fitted.
November 5	O.e.v. Uta	Wellington	At 3.30 p.m. of the 4th November, as this vessel was assisting to turn the s.s. "Taimui" in Wellington Harbour, the exhaust valve and spindle of her engines broke, disabling the vessel. A new valve and spindle were fitted. The remainder of the machinery, on examination, was found
November 19	S.s. Takapuna	Wellington	to have received no damage. Whilst on a voyage from Picton to Nelson, on the 18th November at about 2 a.m., the vessel grazed Walker Rock at the entrance to Queen Charlotte Sound. The weathe at the time was very thick and she was unable to pick up
			the Beacon. As the vessel appeared to have received no damage, she continued on her voyage to Nelson. On he
			return to Wellington a survey of the vessel internally wa made, and a diver examined the outside of the hull, the vessel being affoat. She was found to have sustained no
Nov. 20, 22, 24, 25	" Taviuni	Westport .	damage at all. This vessel was surveyed for seaworthiness in order that sh might be allowed to make the voyage from Westport t Port Chalmers in tow of the tug "Terawhiti." The hul
			was found to be perfectly watertight. The necessary equipments were put on board, including a suit of sails and provisions sufficient for about two months, and also
November 29	" Mapourika	Wellington .	crew. This vessel was on a voyage from Westport to Nelson on the 27th November, and when entering Nelson Harbour she took the ground. She remained aground forty-one minutes
			and floated again as the tide made. All the tanks wer sounded and an examination made. The vessel was found to have sustained no damage.

No. 17.—Return of Vessels surveyed for Seaworthiness—continued.

Date of Survey.	Name of Vessel.	Where surveyed.	Nature of Casualty, &c.
1909. Nov. 19, 30	S.s. Warrimoo	Dunedin .	On the 15th November, when this vessel was lying at th
·		•	Dunedin wharf, a fire broke out amongst the cargo in the forehold, just forward of the forehatch under the deck. It is supposed that the fire was caused by spontaneous combustion. The firemen's and seamen's quarters, and the forepart of the steerage accommodation were damaged.
			The damage to these places was made good. Severa landings in hull-plating were recaulked and a portion of the sparring in the forehold renewed, which made the vesser sparring in the forehold renewed.
November 30	" Koonya	Dunedin .	quite seaworthy. This vessel was on a voyage from Dunedin to Oamaru on the 29th November, and, whilst proceeding down Otago Har bour, was suddenly enveloped in a fog. While steaming dead slow, her stern took the ground in the vicinity of Quarantine Island at 9.6 p.m., remaining fast until 3.35 a.m. next day. She came off as the tide made, with the assist ance of her own engines. The vessel was placed in dook when it was found on examination there was one dent in the hull-plating on starboard side and two dents in the
			hull-plating on the port side in the forepeak tank. Re pairs were effected to the plating where necessary, a numbe of rivets were renewed, and several of the landings were
October 30; November 6	Aramoho (sailing-vessel)	Wanganui .	caulked. This made the vessel seaworthy. The wooden ketch "Aramoho" was built at Wanganui sommine years ago, and was intended for a twin-screw lighter. The lighter was laid up after being launched, the machinery and boiler not being placed on board. After being rigged as a ketch, she was surveyed for seaworthiness in order that she might proceed to Gisborne. The vessel was
December 15	S.s. Nairnshire	Auckland .	caulked and repaired where necessary, and the requisite equipments were put on board. On the 11th December, whilst this vessel was on a voyage from Sydney to Auckland, a fire broke out in No. 2 'tween decks. It had started amongst several crates which were
			packed with hay and straw, and was probably caused by spontaneous combustion. After the fire was extinguished an examination of the hold was made. The insulation in No. 2 'tween-decks was found to be damaged. On arriva at Auckland this was repaired, and the vessel found to have received no other damage.
October 8; December 20	,, Rakaia	Dunedin .	On the 30th September, whilst proceeding up the channe in Otago Harbour, this vessel took the ground forward a Logan's Point. The vessel was got off this bank only to go on another on the south side of the channel. She re mained aground from 4.45 p.m. of the 30th Septembe till 3 a.m. next day, when she came off with the use of her
December 29	" Aparima	Auckland .	engines and the assistance of a tug-boat. An examination was made of the vessel, when she was found to have sustained no damage. Whilst this vessel was passing Three Isles, Torres Straits, or the 18th December, on a voyage from Calcutta to Auckland she went aground during very thick weather. The vesse was got off by means of a kedge-anchor and her own engines, having been aground from 2.53 a.m. till 1.15 p.m. On arrival at Auckland an internal examination was made
1910.			of the vessel, and a diver was employed to examine the outside of the hull. The vessel was found to have sus tained no damage.
January 13	., Aotea		This vessel, which trades on the Wairoa River at Kaipara, was surveyed for some defects in her fastenings and floor frames and for propeller-shaft examination.
January 17, 20, 24, and 27,	,, Aparima	Dunedin .	This vessel was surveyed at Dunedin, and a further examina tion made of her hull, when it was found that the comen in thirteen spaces on the starboard side and twelve space on the port side in No. 1 ballast-tank was displaced. Al
January 31; February 1	"Gertie	Wellington	the broken cement was taken out and the spaces recemented. On the 26th January, on a voyage from Greymouth to Foxton, after crossing the Manawatu Bar, this vesses tuck on a sand-bank in the river and remained fast. At attempt was made to tow her off by the s.s. "Kennedy"
			and the use of her own engines. This, however, failed, a the tide was falling. An anchor with a long length of wire cable was then put out, and when the tide rose the vesse was hove off by means of this and her own engines, about 9 p.m. the same day. When going astern off the sand
•		·	bank the rudder-head was considerably twisted. On arrival at the Foxton Wharf this was temporarily repaired to enable the vessel to proceed to Wellington. The rudde was then unshipped, straightened, thoroughly repaired, and
February 10	" Himitangi	Wellington	replaced in position. On the 28th January, on a voyage from Greymouth t Foxton, when crossing the bar at 10.50 a.m. this vesse took the ground, remaining fast until 10.15 p.m. of th
22			29th, when she was got off by means of kedge-anchors and the use of her own engines. A survey was made on arriva

No. 17.—Return of Vessels surveyed for Seaworthiness—continued.

Date of Survey.	Name of Vessel.	Where surveyed	đ.	Nature of Casualty, &c.
1910.				
February 16	Ganymede (barque)	Auekland	••	Some members of the crew stated that this vessel touched reef in Surprise Island Lagoon on the 4th January. Surveyor visited the vessel, made an inspection, and
				found that no damage had been sustained. The maste
February 16	S.s. Wairoa	Auckland	•••	also stated the vessel did not touch anything. On the 24th October, 1909, at the commencement of a voyag from Ngunguru to Auckland, and whilst inside Ngunguru Harbour, the vessel went aground. She was loaded at th
				time, and evidently rested on top of a rock. She was go off on the following day by means of her own engines On a survey being made, it was found that five frames and
·	•			one plank in the bottom of the vessel were broken amid ships and the bottom set up. The frames were put back into position, and check pieces fitted on either side where
				fractured, and a 12 in. by 6 in. hardwood stringer fitted ove the damaged frames, and the whole well bolted together and
February 22, 23, and 28	"Kini	Wellington		other damage made good, making the vessel seaworthy. This vessel was leaving the Railway Wharf, Wellington, fo Greymouth on the 19th instant, and when being slewed
				round ber rudder fouled the wharf, twisting the rudder head. The rudder was unshipped, a new head welded on new pintles fitted, and repairs to plating effected, and the
February 28	,, Lady Barkly	Nelson		rudder then replaced in position on board. On the 22nd instant this vessel was on a voyage from Awarou to Nelson, and when about thirty miles from Nelson the
				low-pressure crank-web broke. When the vessel was a Awaroa the propeller struck a submerged object and thi might have been the cause of the broken crank-web
				Temporary repairs were made, enabling the vessel to proceed to Nelson at a reduced speed, where permanen repairs to the crank were effected.
March 12	,, Manaroa	Wellington	•••	During a voyage from Motueka to Wellington on the 8th March, about 11 p.m., this vessel was going into Waikawa (French Pass), and when rounding the reef, with the
		· •		engines going half speed, she struck the outer edge of it The vessel proceeded to French Pass, where she anchored at 1 a.m. of the 9th. Soundings of the holds were taken
				and the vessel was found to have made no water. She lef at 5.30 a.m. for Wellington. On arrival she was placed or the Patent Slip for an examination. It was found that she had sustained damage to her planking on the starboard bilge. The defective planking was renewed and a new
March 16, 18	" John Anderson	Lyttelton	••	stringer stiffening-beam fitted, making the vessel seaworthy On the 15th March this vessel was on a voyage from Little Akaroa to Lyttelton, when she touched some submerged
				object off Long Lookout Point, damaging the propeller so that it would not clear the rudder-post. The vessel was anchored, and later in the day was towed into Lyttelton
				by the s.s. "Cygnet." On a survey being made it was found that the propeller-shaft was bent, also one of the blades, and the paint scrubbed off the hull in three places. The propeller shaft and blade were straightened and the
March 22	"Storm	Dunedin	٠.	shoe under aperture re-riveted. At 1.35 a.m. of the 13th instant, as this vessel was entering the Bluff Harbour, on a voyage from Dunedin, and during
				a westerly gale with flood-tide and heavy rain-squall, she collided with the top red beacon, breaking two of her propeller-blades. On the vessel's return to Port Chalmers
March 23	"Kiripaka	Wellington		she was docked and a new propeller and shaft fitted. On the 16th March this vessel was in ballast trim on a voyage from Wanganui to Wellington. After crossing the bar.
		•		she was struck by a heavy sea under the stern. This carried away two of the propeller-blades. She continued her voyage with the remaining blade and the assistance
			1	of her sails. On arrival at Wellington the vessel was placed on the Patent Slip, and a new propeller fitted.

No. 18.—Return showing the Revenue from the Inspection of Machinery Department (including the Examination of Marine Engineers and Land-engine 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 and Land-engine Drivers and Survey of Steamers and Sailing-ships), during the Financial Year ended the 31st March, 1910.

Receipts.	£	в.	d.	Expenditure.		£	s.	d.
Inspection of boilers and machinery (less				Salaries		8,174		
refunds)	9,406	15	0	Advertising, books, &c		22		
Certificates of land-engine drivers (less re-				Office furniture, &c		38	10	0
funds)	650	10	0	Collection of inspection-fees		150	0	0
Survey of steamers (including auxiliary-				Office equipment and requisites		52	6	5
powered vessels)	2,026	0	0	Postage and telegrams		272	14	7
Survey of sailing-ships	79	0	0	Rent, cleaning offices, fuel, and light		267	5	7
Survey of vessels for seaworthiness	223	0	0	Telephones		76	19	2
Examination of marine engineers (less re-				Travelling-expenses (less credits)		2,446	7	10
funds)	271	10	0	Contingencies			i	
				· ·				
£	12,656	15	0	•	£	11,517	2	7

No. 19.—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 Bo	Where Boiler used.		Purposes for which used.	Horse- power of Boiler.	Diameter of Cylinders of Engine, in Inches.	Class of Driver required.	Additional Bollers; Names of late Owners of Transferred Bollers; and also showing where Size; &c., of Cylinders are now amended.
					AUCKLAND DISTRICT	DISTRI	CT.	•	
Adams, J., and Co Allen, W	: :	Auckland Dargaville	• •	: :	Bacon-factory Sawmill	88	$8\frac{1}{2}$ and 14	First class	Number of cylinders amended. Tate .I. Allen Dargaville
Auckland City Council	:	Anekland .	:	:	Box-factory Destructor	116	10 13 and 99	Wiret olase	Additional *** ********************************
Analyland Elizateia Manuscas Communica	: :	Freeman's Bay.	ay	: :	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	115	10	Second class	Size of cylinder amended.
Auckland raceing trainway company	: :	Auckland	: :	: :	Electric traction	123	184, 27, and 384	First class	Size of cylinders amended.
Auckland Farmers' Freezing Company	:	Westfield	: :	: :	Freezing	26	19 and 28, 10 and 8		Additional.
Auckland Harbour Board	::	Auckland Calliope Dock	; ;	::	Harbour-work Hoisting	50	Two 8_4 14 and 14	Second class First class	Late Ferro-concrete Company, Auckland. No cylinders last year.
Avondale Brick and Pottery Company	:	Avondale	:	:	Priolemonies	34	14 and 14		Additional.
Batty, Jos	: :	Drury	::	: :	Chaffcutting	⊋∞	Compound, $6\frac{1}{2}$ and $10\frac{1}{2}$	Locomotive and	Size of cylinder amended. Size of cylinders amended.
Bellamy, S	:	Waitoa	:	:	Sawmill	07	141	traction First class	Size of cylinder amended; late H. J. Henn,
Bond Bros Browne, S. J	::	Devonport Mangawai	: :	: :	Sawmill Hauling logs	£3 ∞	12 7 and 11	Second class Locomotive and	Waitoa. Additional. Size of cylinders amended.
Carder Bros	:	Ponsonby	:	:	Tile-works	88 8	112	traction Second class	Additional.
Chambers, volly, and equi	:	ror sale	:	:	Tone ··· and	3	NI	:	Late Mathleen Gold-mining Company, Coromandel.
Colonial Sugar-refining Company	::	Chelsea	::	::	"Sugar-refining	190 190	11, 181, 12, 14, 16, and	First class	Ditto. Number of cylinders amended.
:	:	ŧ	:	:		168	Ditto	• •	Number and size of cylinders amended.
	:		:	:	:	168	Two 24	•	Number of cylinders amended.
	: :	£ £	: :	: :	: :		Two 24	: :	
	:	: :	:	:		33	Two 24	: :	,
: :	:	\$ 1	:	:	•	 	Two 24	:	*
	: :		::	: :	: :	32	Two 24	: :	n :
Comrie and Madill	: :	Pukekohe	:	: :	., General work	 	Two 24	I.ocomotive and	Additional ""
Charletter Commence						. 6	P1 (traction.	
Duder, R. and R	: :	Devonport	: :	::	Sawmun 7. Brickmaking	3 B	14	Second class	
Faithful, McCennel, and Co	:	Puriri	: :	:	Log-hauler	8	Two 8	: :	**
Ferguson Mining and Smelting Syndicate	:	Waiomio	:	:	Smelting	55	13 and 16	First class	Number of cylinders amended.
Hewell, Robert ". Finlavson Bros.	: : :	Paeroa	:::	:::	Sawmill	95 25	15 and 16 13 Wil	Second class	Late Forest and Clark, Paeroa.
	:	0	,	:		ì	7771		Tare tradit Timber Company, Auckland.

No. 19.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-drivers—continued.

Additional Boilers; Names of late Owners of Transferred Boilers; and also showing where Size, &c., of Cylinders are now amended.	Additional. Late W. Craig, Tuakau. Additional.	Engine not now connected. Number of cylinders amended. Size of cylinder amended. Size of cylinder amended. Late Mitchelson Timber Company, Auckland. Number of cylinders amended.	Additional. Number of cylinders amended. Additional. Number and size of cylinders amended. Additional.	". Late New Zealand Timber Company, Koutu. Additional. Late New Zealand Timber Company, Koutu. Number of cylinders amended. Size of cylinder amended. Number of cylinders amended.	Size of cylinders amended. Additional. Late Hall and Co., Kamo. Size of cylinder amended. Late Mander and Bradley, Puhipuhi. Size of cylinder amended. Additional. Size of cylinders amended.	Additional. Size of cylinders amended.
Class of Driver required.	First class Locomotive and traction First class	Second class First class Locomotive and traction Ditto Second class	First class and winding First class and winding First class	Second class First class Locomotive and	Ditto Second class First class First class First class " First class " " "	
Diameter of Cylinders of Engine, in Inches.	ntinned. 18 and 13 $7\frac{1}{2}$ 17 17	Nil 13½ and 14 Two 6½ 5½ Two 6 6½	$8\frac{3}{4}$ and $14\frac{3}{4}$ Two 10 and one 20 20 Two 20 16	16 16 16 14 16 20 14 ³ / ₃ 20 Two 6	Two 64 Two 66 Two 94 10- 12 12 Two 12 9 14, 204, and 30 14, 204, and 30 17, and 30	17 and 34 17 and 34 16, and 32 • 16 and 24
Horse- power of Boiler.	$\begin{array}{c c} \text{ICT} - co \\ 20 \\ 6\frac{3}{4} \\ \\ 28 \\ \\ 27 \\ \end{array}$	252 9 9 23 5 9 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16 25 25 50 50 50	11 22 25 25 25 25 25 25 25 25 25 25 25 25	98 177 107 107	14 16 96
Purposes for which used.	AUCKLAND DISTRICT—continued Dredging 20 1 Hauling timber $6\frac{3}{4}$ Sawmill 28	Steaming Sawmill Hauling logs Locomotive Steaming and wool-	scouring Flaxmill Pumping and winding ing Pumping Sawmill		Log-hauling Rlaxmill Sawmill Butter-factory Dynamo	Cement-works
Where Boiler used.	Thames Waimuku Oropi	Tauranga Tangowahine Hikurangi Kaimaumau Awakino Richmond	Rangitaike River Coromandel Auckland Great Barrier Island	Koutu Te Kopuru Ta mgowahine	Hore Hore " Opua Mareretu Auckland Puhi Puhi Maungatapere Karangahake	Invertigation
Name of Owner.	Foreshore Dredging Company Frost, E. C	Gamman, G. A., and Co	Horne, A. J. W. Kaponga Gold-mining Company Kauri Timber Company	King, G. E.	Lamb, R. S., and Co. Lane, H., and Son Levesey, J. W. Manders and O'Brien Maungatapere Dairy Company New Zealand Crown Mines Gold-mining Company	New Zealand Paper-mills Company

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Size of cylinders amended. Number and size of cylinders amended.	Additional. Late Karekare Sawmill Company, Auckland.	Size of cylinder amended. Late Adam Madill, Tuakau.	Size of cylinder amended; late W. Allen	Dargavine. Size of cylinders amended.	Additional.	Number and size of cylinders amended.	2 2	Additional.	2	Size of cylinders amended.	Winnbow of ordindone amondad	Author of cyminers amended.				Number and size of cylinders amended.			••		Sing of oxlinder emended	Size of cyninger anichaea.	Size of cylinders amended. Late Waihi Gold-mining Syndicate, Waihi.	Size of cylinders amended.		Additional.	Size of cylinders amended. Additional.
First class	Second class	Locomotive and	Second class	:	Locomotive and	First class	: :	Second class	First class	Winding	Dinot ologo		Ditto		•	: :			:	::	bas oxitomoso I	traction	First class Winding	First class	:	Locomotive and	First class
16 and 24 Compound, two 16 and	14 Two 11	144 888 888	12	Two 8 and 15	${ m Two~9}rac{9}{2}$	and	185 and 34 185 and 34	and 10	12 and 20, 15 and 30,	124 and 20 Two 114 and two 94	Two 114 and two 94	15 and 30, and two 12	Ditto	:	"	60 and 110, 35 and 70,	two 12, two 18, one	14, Iour 8, 6 and 10, compound, 14 and 30	Ditto		: : : : : : : : : : : : : : : : : : : :	Α	21, 12, and 14 Two 10	Two 10 11 and 22	11 and 22	Two 8	17½ and 29½ 14 and 28
96	86 51	9	30	22	16	95	95	95 21	54	70	5 7	£1	49	64	æ 8	56		i	145	2 88 6 88	88 °	Ö	0 . 0.	83 G	90	91	70
::	::	::	:	:	:	r,	::	::	:	shaft		ft.	vind-	:	:	ding,	ress-		:	: :	•	:	: :	::	:	:	: :
Cement-works Flour-mill	For sale Sawmill	Stone-crushing	Sawmill	Tannery	Hauling	Mining machinery	2 2	Dairy "	Battery	Winding, No. 2 shaft	Dumming and mind	ing, No. 5 shaft	Pumping and wind	nig Ditto		Pumping, win	and air-compress-	50 H	Ditto	: :	ono.	v arrious	Crushing Winding	Mining	•	Hauling	Cement-works
::	::	::	:	:	:	:	: :	::	:	:	:	:	:	:	:	: :			:	: :	:	:	: :	::	:	:	; ;
	::	··	:	:	:	:	: :	::,	:	:	:	:	:	:	:	: :			:	: :	:	:	::	::	:	:	: •
Limestone Island Auckland	" Karekare	Rawene Pukekohe district	Dargaville	Onehunga	Takapuna	Karangahake	2 2	Thames Valley	Waihi	:	:		:	;		: :		-	:	: :	Weilring	W &IKIIIO	Waihi	::	:	Naumai	Warkworth ",
::	·::	::	:	:	:	Á	: :	::	:	:	:	:	:	:	:	: :			:	: :	:	:	::	::	:	:	: :
New Zealand Portland Cement Company Northern Roller Mills	Northern Timber Company Rayner, Dr	Rawene Sawmilling Company Strongman, J.	Sundberg and Anderson	Suttie Bros	Takapuna Tramways Company (Limited)	Talisman Consolidated Gold-mining Company	3 3	í Dairy Compan	Waihi Gold-mining Company			:	:	:	:	ः : : :				D 1			Waihi consolidated Gold-mining Company	Waihi Paeroa Gold extraction Company	Waihi Paeroa Gold-mining Company	White Pine Timber Company	Wilson's Portland Cement Company

No. 19.—Return showing the Names of Owners of App.

Name of Owner.		Where Boiler used.	iler used.	Purposes for which used.	Horse- ed. 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, &c., of Cylinders are now amended.
				AUCKLAND SO	SOUTH DISTRICT	RICT.		
Austin, O. E. Bartholomew Timber Company	: :	Te Aroha Near Rotorua	::	Flax-mill Hauling logs	$\begin{array}{c c} & 25 \\ \hline & 19_{\overline{2}} \\ \end{array}$	$^{11}_{\rm Two~111}$	Second class Locomotive and	Late Otway Bros., Waihou. Additional.
Gardner and Sons	::::	Manunui ",	::	Traction	17	$\frac{\text{Two } 8_2^4}{\text{Two } 7}$	traction Second class Locomotive and	Late Punga Punga Timber Company, Manunui. Late Punga Punga Timber Company, Tau-
Henn, H. J	: :	,, Waitoa	: :	Sawmill		17	traction First class	marunui. Ditto. Additional
Northern Timber Company Ongarue Sawmilling Company Roc, A. W	:::	Taupiri Ongarue Mamaku		Log-hauling Traction		Two 9 Two 8½ Two 6	Second class Locomotive and	Late, J. Bennett, Ongarue. Additional.
Roper and Winger Steele, W. Taringamutu Totara Sawmiling Company		Taumarunui Mamaku Taringamutu Taumarunui	:::	Sawmill Hanling	32	9 18 12 <u>3</u> Two 10	traction Second class	Number of cylinders amended. Additional.
Sawmilling Co Company	: ::	Huntly		Sawmill Air-compressor		13 Two 9	traction Second class	". Size of cylinders amended. Late Taupiri Extended Coal Company, Huntly.
	: :		: :	Traction Winding		Two 8, two 9, and two	Locomotive and traction First class and	Additional. Number of cylinders amended.
Thomas Vallan Consometing Daims 1 and 1.		". Taupiri West	:::	: : : : : : : : : : : : : : : : : : : :	30	18 180 20 Two 9	Ditto Winding	Late Taupiri West Coal Company, Auckland. Late Taupiri West Coal Company, Hundy.
Whitechurch Bros	sociation	Manawaru Waituna	: :	Butter-factory Flax-mill	16	9 Two 8_{2}^{1}	Second class	Late Manawaru Co-operative Dairy Company, Aratiatia. Additional.
Alston. E. A.		Christehnreh		CANTERBURY	Y DISTRICT.	icit.	1	
Anderson's (Limited) Andrews, J. C. Aulsebrook and Co.		Lyttelton Waikuku Christchurch Springston		Engineers' shop Twine-making Confectionery General	: ::::	$7 \text{ and } 11\frac{1}{2}$ 12 and 21 8\frac{1}{2} \text{ and } 12\frac{2}{3}	Execution Second class First class Locomotive and	Additional. Size of cylinders amended. Late Henry Page, Springston.
Boag, J., jun. Bowron Bros. """ """ """ """ """ """ """ """ """		Brookside Woolston "	::::	Tannery	20 20 17 17	6½ and 10 18 18 18	traction Ditto First class "	Size of cylinders amended. Number and size of cylinders amended.
	:	Christenaren	:	Flaning-mill	200	2	Second class	Late W. Scott, Christchurch.

	ers amended.							ers amended.						de d.			ers amended	ded.				leton.	T T T T T T T T T T T T T T T T T T T	ers amended.				Hororata.		Hororata.					ded.				; late Scott Bros.,	ייי
	Number and size of cylinders amended.	•	£		•	*	Size of cylinders amended.	Number and size of cylinders amended.					: 1	Number of cylinders amended.	Size of cylinders amended.	Additional	Number and size of evlinders amended	Number of cylinders amended.		2	66	Late George Oakley, Templeton.	Winnipon on a river of miles and miles	Number and size of cynna	Additional.			Late Jones and Patterson, Hororata.	Late W. Gerard, Snowden.	Late Jones and Patterson, Hororata	Additional.	. 44			Number of cylinders amended.		A 3 3242	Audioman.	Size of cylinders amended; late Scott Bros.,	Number of evlinders amended
			•		:	:	:	Three first class				2		Second class	First class	traction	Second class	First class		:		Locomotive and	traction Second class	Decount class	Locomotive and	traction			••	Spoon place	eggpto princeso	Locomotive and	traction	First class	33	:		traction	First class	Second class
	9½ and 16	9. 14% and 25. 9.114	and 25, 8 and 14, 10	and 17	Ditto	TWO 9, 144 and 25, 8	12 and 22	, two 12,	two 19, 3, 13, and 16	3. two 8.	12	Ditto	:		12, 9, and 7	TMC	-	16 and 30, 10 and 18,	L5 and 27	···		43 and 6	o Pone	6 8 and 81	6, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9, 9,	61 and 103	64 and 11	. 9 <u>1</u>	6 and 10	o≱ and 10 94	3	6½ and 11	Ī	9 and 14, 9 and 14	Two 133	Two 133	Two 134		12 and 21	Two 7
	36 9	8 4			⊋£		30	-	**************************************			103	208	42.5	ð r	•	20			- - - - -	88	4	75	e e	oc .	x	00	œ	oo o	x) x	oo	œ	O	. 2	15	15	9	2	28	20
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	Manure, &c.	Freezing	0		:	:	Brickmaking	Electricity				:	*.	Dairy	Gasworks	8	Pumping	and	rating electricity	· · · ·		Road wagon	Engineers' tools	Steam-hammers	General	-	: :	:	:	Sawmill	:	General		Electric light	Pumping		Hanling		Rope and	Brewing
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The state of the s	anterbury Frozen Meat Company				2	•	Christchurch Brick Company	2 Caristenaren Caty Council					£ 4	Christohurch Cas Company	ON SHEET CHANGE	•		Christchurch Meat Company	:			Creed, W. R.	Duncan, P. and D.		Flower, F. H.	Gibbs, H.	Harrison, H.	Jones, Truman	*	Langesen, W. E.	*	Lemmon Bros.	Lyford, F.	—		2	: :			Manning and Co.

FICATED ENGINE-DRIVERS-continued.	فالتوسية بالمسائد المسائدة والإنجاج بالمسائدة والمسائدة
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AS AND TRANSFERS which require to be in Charge, of CE	والمسائد والتعارف والمسائد والمسائد والمسائد والمسائد والمسائد والمسائد والمسائد والمسائد والمسائد
BOILE	
No. 19.—RETURN, showing the NAMES of OWNERS, OF ADDITIONAL	

Name of Owner.		Where Boller used	ler used.	Purposes &	Purposes for which used.	Horse- power of Boiler.	Diameter of Cylinders of Engine, in Inches.	Class of Driver required.	Additional Boilens; Names of late Owners or Transferred Bollens; and also showing where Size, &c., of Cylinders are now amended.
				CANTERBURY		DISTRICT—continued.	ntinued.		
Mathews, Mrs. B.	:	Rangiora	:	General	:	∞	. . .	Locomotive and	Addittional.
Wills and Cullen	:	Greendale	:		:	01	7 and 11	Ditto	Late J. W. McCrostie, Greendale.
Montgomery, H.	:	Southbridge Kaianoi	:	General	: : ao	တတ	9 64 and 104	: :	Late W. D. Doubleday, Kaiapoi.
McKay, A.	: :	Kirwee	: :	Chaffcutting	ing	9	, 00	:	Late J. Calder, Halkett.
McLaren, W. A., and Co.	:	Christchurch	:	General	· : ·	90 0	$6\frac{1}{4}$ and $10\frac{3}{4}$:	Additional.
McLaren and Co	:	Kangiora Hornby	:	Freezing stones	stones	တ္တ	13 and 25 18 and 29	First class	Number of cylinders amended.
New Zealand Produce and Provision Company	mpany	Belfast	: :	Soap-works	iks : :	17	6	Second class	Late Oleo and General Produce Company of
Pitcaithly and Co	:	Halswell	:	Hauling	:	9 0	6 ² / ₄ and 11	Locomotive and	Size of cylinders amended.
Pulley, P. J.	:	North Loburn	:	General	:	œ	86 84	traction Ditto	Late Pulley and Feather, North Loburn.
Pulley and Feather	:	•	:		:	α ο	95°	:	Size of cylinder amended; late R. Bailey.
Smith, Hay	:	Clarkville	:		:		6 and 10½		Size of cylinders amended.
Smith and Smith	:	Christehureh	:	Koad-work General		4 oc	42 and 7	: :	Addutonal. Late D. Crump. Springston.
Union Steamship Company of New Zealand (Ltd.)	and (Ltd.)	Lyttelton	: :	Heisting	: : : : <u>:</u>	22.5	5 and 5	Second class	Number and size of cylinders amended.
Vangioni and Walker	:	Akaroa	:	brokmaking			and 11;	:	Additional
				CANTERBURY	BURY SOUTH		DISTRICT.		
Adams, S. J. Anderson, W. and D.	::	Waimate Methyen	::	Sawmill General	::	16	$9\frac{94}{4}$ 6 and 10	Second class Locomotive and	Size of cylinder amended. Late J. T. Kilworth, Methven.
Andrews, Matthew	:	Pleasant Point	:		:	∞ ç	6 <u>4</u> and 11	Ditto	Additional.
Ashburton Woollen-mills	::	ASHOULTOIL	: :	w comen	: :	8 8	,	seein ninoon	might not not a volunced
Bell, W. H.	:	Tinwald		Chaffeutting	ting	20	63 and 11	Locomotive and	Size of cylinders amended.
Buckingham, R. J.	:	Waimate	:	General	:	- 0	7 00 0	Ditto	Additional.
Canterbury Farmers' Co-operative Association Canterbury Frozen Meat Company	nation	Ilmaru Fairfield	: :	Freezing	: :	. 99 160	9, 14, and 25	First class	Number of cylinders amended.
Clark, W. J.	:	Levels	:	General	:	00	$6\frac{1}{2}$ and 11	Locomotive and	Late Reid and Gray, Timaru.
Crothers, D. H.	:	Ashburton	:		:	60 0	6g and 10g	Ditto	Late H. J. Crothers, Ashburton.
Dan, Edwin	: :	Wakanui	::	. .	: :	0 00	64 and 11	: :	Additional.
Douglas, J.	:	Rakaia	:		:	1-0	ගෙට	:	Size of cylinder amended.
Farm Steam-power Company Frost, L.	: :	V almate Ligmore	::	. .	: :	o oc	6 and 10	: :	Size of cylinders amended; late J. Burgess,
-						•••	•		they near

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Late Wigley and Thornley, Timaru.	Late Thomas Ward, Fairview. Size of evilinder amended	Additional	Late Hawkins Bros., Waimate.	Size of ordinders amended	Late D. Cameron, Methyen.	Size of cylinders amended.	Late Ross and McClintock, Waimate.	Size of cylinders amended	Additional	Number and size of cylinders amended; late	John Chinnery, Tinwald.	Size of ording amonded	Tate T Lancley Ashburton	Late John Pearce, Rakaia.	Size of cylinder amended.	Late Stewart and Baxter, Rakaia.	Late G. Thompson, Lyndhurst.	Additional.	Late James Wilson, Allandale.		Total Andrew and Description (Balances)	Engine not now connected.	Size of cylinder amended.		Late M. F. Bourke. Namer.		Mumber and size of artinders amended . lets	Alpha Sawmill Company, Gisborne.	Ä	1.1314:000	Late Gardner and Clark Gishorne	Additional.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Adaltonal.	Late Ferro-concrete Company, Napier.		Late E. Orbell, Takapan.	Late W. Ramsay, Twyford.	Late McLeod and Seifert, Takapau.
Locomotive and	Ditto	: :	:	:	: :	:				:		:		: :	:	:	:	:	:		Contraction of the contraction o	seein niinaa		Locomotive and	Second class	Locomotive and	Second class	· company	Locomotive and	traction	First class	COMPTO ACTUA	Locomotive and	traction	Second class	Second class	First class	Locomotive and	Ditto	Second class
6½ and 11	ගේ	5 62 and 114		o o o	108	$6\frac{1}{5}$ and $10\frac{1}{5}$	ဘစ်	64 and 104	5 6 6	90		7 and 112	2€ auu 4€ 9	64 and 104	6		6	64 and 11	æ.		Thurs of	N.C.	12	₹*	ŢŢ.	- 86°	133	æ	10	t	141	10 and 14	∞	01 8 44 01	Nil 10	Two 84	153	63 and 113	, xx	7 and 11
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General	Pile-driving		Choffensting	Chancut Linux	Threshing	General	:	Threshing		General		Throabing.	General		:	:	Threshing	General	:	HAWKE'S BAY DISTRICT.	Sorranill	Steaming	Brewery	Threshing	Wool-washing	Hauling	Sawmill		General	Steeming	Brickworks	Sawmill	Hauling	Tonne	Rubber-works	Pile-driving	Sawmill	Hauling	General	Flax-mill
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Timeru	Temuka Waimate	Rakaia	Waimate	Timer	Ashburton	· · · · · ·	Waimate	Willowby	Pleasant Point	Ashburton		Outon.	Rakaia	Ashburton	Temuka	Rakaia	Lyndhurst	Levels	Fairlie		Someth Motorogy	Gisborne	*	, Ormond	Clive	Near Takapau	Gishorne		Te Mahanga	. Phimlor	Kaiti	Te Karaka	Kaikora North	Monday	Hastings	Tokomaru Bay	Henley	Waipukurau	Twyford	Takapan
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Gaiger and Alexander	Hall, E., and Son Hardwick, W.	Harrison, H.	Bawkins, T. Kellahan J	Kellahan. W	Knox, S. and M.		Moorhead John	Moses, William	McCormick, Lachlan	McThennery, James	Ma Interna	Nomish B	O'Connor, Brian	Rainey, T.	Sheppard and Douglas	Stewart, Arthur	Thompson Bros.	Tozer, Frederick	Wilson, John I., and Co.		Andrew William	Barry, D.		Benson, Henry	Bourke, J. J., and Company	Bowring and Cattermote	Colly, John		Douglas, W. J., and A. F.	Frimley Canning Company	Gardner, C. F.	Hall, F.	McKay, G	Namior Horbonn Board	New Zealand Leather-rubber Company.	New Zealand Shipping Company	Peddle, S. W.	Phillips, R	Russell and Ramsay	Seifert, H

Maine 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 Bollers; Names of late Owners of Transferred Bollers; and also showing where Size, &c., of Cylinders are now amended.
			HAWKE'S BAY DIST	TRICT-	DISTRICT—continued.		
Smith, D. J.	:	Tokomaru Bay	Hauling	9	Two 54	e and	Additional.
Tohara Sawmilling Company Waiapu County Council	::	Rakauroa Tokomaru Bay	Sawmill Hauling	16	Two 9 Two 54	traction Second class Locomotive and	Late W. L. Wilkinson, Rakauroa. Additional.
Whitehead, T. H	:	Takapau	Flax-mill	12	7 and 11	traction Second class	Late McLeod and Seifert, Takapau.
			MARLBOROUGH DISTRICT.	DISTRI	CT.		
Baker and Freath		Seddon	General	9	$6 \text{ and } 10\frac{1}{2}$	e and	Late F. S. Barnes, Seddon.
Bary, A	::	Tuamarina Flaxbourne	Brickmaking Traction-engine and	25.4	103 63	traction Second class Locomotive and	Additional. Late A. J. Litchfield, Blenheim.
Brownlee and Company	:	Ronga Valley	chaffcutting Bush engine	20	Two 83	traction Second class	Size of evlinders amended.
	:	:	:	15	Two 8g	:	66
Christehurch Meat Company	: :	Pioton	Freezing-works	223	120 g	• • •	Number of cylinders amended.
	::	: :	Freezing	106		First class	Number and size of cylinders amended.
					$6\frac{1}{2}$, two 6, two 10, two 6, two $4\frac{1}{2}$, and		
•	:	•	By-product plant	12	two 3 12, two 5, two $7\frac{1}{2}$, and	:	\$
•	:	:	:	12			*
Fowler, W. T.	::	Wairau Valley	General	908	12 and 22 8	Locomotive and	Number of cylinders amended. Late F. S. Barnes, Seddon.
Ham, Robert	:	Blenheim and Awatere tricts	dis- Traction engine, threshing and	o o	6	traction Ditto	Late Edward Ham, Blenheim.
Marlhorongh Timber Comneny		Wadie Bev	utting		Two A1		A.3.3325.00.03
Charles to the state of the sta		Opouri Valley	Sawmill	25.62		First class	Late Opouri Timber Company, Christchurch.
Patchett. John		Blenheim district	Traction-engine and	·	9	traction	Additional
Fr. C. M. Ha					of the second		Authorities.
EIRC, W. L., and L.	:	•	chaffcutting		o and 10	:	Size of cylinders amended.
	::		General work Traction-engine and	900	6 and 10 § 7 and 11	* *	Additional.
			general work			•	

											•	6	1									H	-15a	•
	Size of cylinders amended; ate Alpine Gold.	dredging Company, Blenhe Size of cylinders amended.				Late E. S. Senior, Upper Tadmor.	Late H. Baigent, Nelson.	Size of cylinders amended.	Number of cylinders amended.	Size of cylinders amended.	Number of cylinders amended.		ł		Number of cylinders amended. Additional.	". Number of cylinders amended.	Additional.	Late E. Lockington, Reefton. Size of cylinders amended. Late Mosunito Gold-dredeino Commany. Mos.	quito Creek. Number of cylinders amended. Late Al Gold-dredging Syndicate. Caples.		Niversity and are at 12, 1	runner and size of cylinders amended; late Point Elizabeth Coal Company, Brunner.	Number of cylinders amended. Number and size of cylinders amended. Additional.	
	First class	Locomotive and	Ditto Second class	Locomotive and traction		Locomotive and	traction Second class	:	::	:	First class	traction Second class			First class	First class Winding	Locomotive and	Ditto Second class	First class Second class	:	Exempt	:	First class	
continued.	8 and $12\frac{1}{2}$	$6\frac{1}{2}$ and 10	$6rac{5}{2}$ and $10rac{1}{2}$	$6\frac{1}{2}$	ICT.	G	Two 94	Two 8, and 5	Two 8, and 5 Two 8, two 4	123	$16\frac{1}{4}$ and two 6	101		.cr.	Two 15, and one $14\frac{1}{4}$	Two 14 and one 12	1 wo 14 and one 12 $6\frac{3}{4}$, and $11\frac{1}{2}$	$\begin{array}{c} 10 \\ \text{Two } 8\frac{5}{8} \\ \text{Nil} \end{array}$	7, 11, and 8 7 and $\frac{11}{4}$	Two 91	$9\frac{9}{4}$ 14 and 12 Two 18 two 16 one 7	and 11, and one 5 Two 10, one 7 and 11	15, 10, and 6½ Two 14¼ 14¼	
'RICT.	20	00	35 s	4	DISTF	∞	14	20	20 24	30	45	20		ISTR 1	23.20	200	ာ လ	8 12 16	88	16	4 % 8 %	9	00 19 8	
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MARLBOROUGH DISTRICTcontinued.	Sawmill	Traction-engine	General work Sawmill	Traction	NELSON NORTH DISTRICT.	Traction-engine	Portable engine	Air-compressing and exhausting gas	Ditto Boiling down	Sash and door fac-	Sawmill Traction-engine, &c.	Sawmill		NELSON SOUTH DISTRICT	Coal-mining Pumping	Winding	Traction-engine	Smelting Gold-mining	Sawmill Air-compressor	Sawmill	Air-compressor Idle	•	Main haulage Fan	
M	:	:	: :	:		:	•	:	::	:	::	:			::	: :	ton :	:	::	:	: : :	:	:::	
	Wakamarina	Blenheim	on	ion		mor	East Takaka	·· uo	:: :	·· uo	Mangarakau Takaka	Aniseed Valley			Blackball Sergeant's Hill Westnort	Blackwater Mines	Progress Battery, Reefton	:	Karamea Keep-it-Dark Mine	Blackball	Point Elizabeth	· .	Seddonville Soldiers' Creek, Paparoa	
		Bler	Picton	Seddon		Tadmor	East	Nelson	Stoke	Nelson	Mangara Takaka	Anis			Serg Wes	Blac	Prog	Reefton	Kara	Blac	Poin		Sedd	
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	Smart, F. A.	Smart Bros.	Smith, G. A.	Smowden Dros.	5 _A	Anglesey, William, jun.	Baigent, Thomas	Nelson City Council	Nelson Freezing Company	Robertson Bros.	Saunders and Prouse	The Copper-development Company			Blackball Coal Company Bowater and Bryan	Consolidated Goldfields of New Zealand (Limited)			Karamea Sawmilling Company Keep-it-Dark Gold-mining Company	Long and Daley	New Zealand Government State Coal-mines	•	Paparoa Coal Company	

No. 19.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-drivers—continued.

Name of Owner.			Where Bo	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; &c., of Cylinders are now amended.
	•.				NE	NELSON SOUTH DIST	FRICT-	DISTRICT—continued.		
Point Elizabeth Coal Company		filo s	Brunnerton	•	: -	Coal-mining	35	One 12, one $13\frac{1}{4}$, two 8, and one $7\frac{4}{4}$	First class	Number of cylinders amended.
Sigley, Joseph	::	: :	Fern Flat	::	។ : :	Idle	35 30	Ditto 7 and 11	Second class	Late Fern Flat Gold-dredging Company, Fern
Taylor and McHroy	•	:	Buller River	:	:	Dredge	99	8 and 123	First class	Flat. Late New Mokoia Gold-dredging Company,
Westport Coal Company	ζ:	:	Denniston	:	:	Main haulage and electric lighting	84	Two 18, one 16, two 12. four 7. Feight 6.		Greymouth. Number and size of cylinders amended.
:	:	:		:	:	Ditto	84	one 5, and one 8	•	
	:	:	•	:	:		2 2	:		
	: :	: :	Kiwi "	::	::	Air-compressing and	20	Three 14½ and two 12	::	Number of cylinders amended.
	::	::	Mine Creek	::	::	Ditto Air-compressor, fan, and dynamo	50	Three $14\frac{1}{2}$ and two 12 Four $14\frac{1}{2}$, one 20, one 61, and one 13	66	Additional. "
Westport Harbour Board	::	::	Cape Foulwind	::	::	Ditto Locomotive	30	Ditto Two 105	Locomotive and	8
						OTAGO DISTRICT.	RICT.	3	NEW COLOUR	
Aliandale Coal Company Barewood Gold-mining Company	::	::	Pukeviti Barewood	::	; :	Hauling and pumping Pumping and wind-	20.20	9 and 14 Two 12	First class Winding	Size of cylinders amended.
"	:	:		:	:	Auxiliary pumping	16	Two 12	:	*
Buchanan, W	:	:	Beaumont	:	:	General hauling	00	6½ and 10¼	Locomotive and	Additional.
Clark Bros	::	::	Maheno Kokonga	::	::	Hauling Threshing and chaff.	∞ ∞	$5\frac{2}{4}$ and $9\frac{2}{4}$	Ditto	Size of cylinders amended. Late J. H. Mitchell, Studholme Junction.
Donaldson, W. and G.	:	:	Golden Point	:	<u>:</u>	cutting Quartz-crushing	14	61 and 11	Second class	Late W. and J. Donaldson, Golden Point.
Dunedin Hospital Dunedin and Kaikorai Tramway Company Glenham Sawmilling Company	 Company 	: : : :	Mount Angliey Dunedin Kaikorai Glenham	::::	::::	Laundry and heating Hauling	56 84 9	1 and 11 $\frac{7}{7}$ 16 and 14 $\frac{1}{2}$ Two 8 $\frac{1}{2}$	". First class Second class	Late Lovell's Flat Coal Company, "unedin. Size of cylinders amended. Size of cylinders amended; late John Young,
Gormack, J.	:	:	Clinton	. :	:	General hauling	00	o	Locomotive and	Makarewa. Late Gormack and Main, Clinton.
Graham, T. A. Green Island Mineral Company Gwynne, W.	:::	:::	Allanton Abbotsford Houipapa	:::	:::	Threshing Hauling and pumping Sawmill	8 28 18	9 8 10	Ditto Second class	Late D. Millar, Maungatua. Additional. Number and size of cylinders amended.

										63										H.	—-1	l5а.
Engine not now connected. Additional.	Late J. Gibson, Palmerston. Late Jenkins Bros., Kelso.	Late W. G. Johnstone, Oamaru.	Size of cylinder amended.	Additional. Size of cylinder amended; late Ashburn Hall	Company, Waikari. Additional.	Size of cylinder amended. Late Gormack and Main Truvercarcill	Additional. Size of cylinders amended.	Additional."	Rhoine not now connected	Late John Bailey, Burnside.	Late W. Newbigging, Moneymore.	Size of cylinders amended.	Additional. Number and size of cylinders amended.		Number of cylinders amended.	Late Rapson Bros., Kakanui.	Size of cylinders amended.	Number of cylinders amended.	Late Sharp Bros., Dunedin.	Late Gordon Gold-dredging Company, Dun-	edin. Late Alexander Sutherland, Te Houka.	Late Walsh and Morrison, Bushey.
Second class Locomotive and	Ditto Second class Locomotive and	Ditto	Second class	::	Locomotive and	Ditto	First class	Locomotive and	traction Ditto Second class	* * *	 Locomotive and	traction Winding	rirst class	:	Second class	Locomotive and	First class	Locomotive and	Second class	First class	Locomotive and	traction Ditto
Nil 4½ and 6½	$\begin{array}{c} 6\frac{1}{2}\\ \text{Two 10}\\ 9\end{array}$	ō	1 6	$\begin{array}{c} 9\frac{1}{2}\\ 10 \end{array}$	$6\frac{1}{2}$ and 11	.	$\frac{9}{100}$ Two 13, and one 15	Two 13 and one 15 9	3 ænd 5 Nil	Nil 84 7 and 114	6	Two 8	Two $9\frac{1}{2}$, two $14\frac{1}{2}$, and one $6\frac{1}{4}$	Ditto	101	91	18	1 € 30	∞	94 and 17	9	₹ 8
5	41 30 6	00	18	18	œ	00 00	16	16	4 02	ន្តន្ត	x	16	28	818	62	∞	10	7	30	20	rO .	œ
::	:::	:	, and	::	:	: :	:::	chaff.	: :	:: :	:	ng	::	:	: :	:	:	:	:	:	chaff.	:
Steaming Hauling	Chaffoutting Hauling Chaffoutting	Threshing	Dairy factory	Ditto Sawmill	General hauling		Threshing Hauling	Threshing and chaff-	eutting Hauling Soap-works	Pottery-works . Pine and tile works	Threshing	Fan and winding	naumg Pumping		Laundry	Threshing	Flour-mill	Threshing	Brewery	Air-compressor	Threshing and chaff-	cutting Threshing]
:, :	:::	:	:	::	:	::	:::	::	: :	:::	:	:	::	:	: :	:	:	:	:	:	:	:
::	strict 	:	:	::	:	: :	::	strict	::	:::	:	:	::	:	iley	:	:	:	:	:	:	:
Burnside "	Maungatua district Inch Valley Kelso	Georgetown	Kahikatea	* *	Balclutha	Waiwera South	Duntroon Mornington	Awamangu district	Totara Dunedin	Abbotsford Benhar	Moneymore	Kaitangata	Port Chalmers	*	North-east Valley	Ngapara	Waikouaiti	North Taieri	Dunedin	Port Chalmers	Te Houka	Shag Point
::	:::	:	:	::	:	::	::	::	::	:::	:	:	::	•	: :		:	:	:	:	:	;
::	:::	:	:	::	:	::	::	::	::	:::	:	:	::	:	::	:	:	:	:	:	:	:
Harraway and Company	Heenan, T. D. Inch Valley Lime-kilns Jenkins, George	Johnstone, George	Kahikatea Sawmilling Company		Leonard Bros.	Leonard, J Main, J. A	Mannix Bros. Mornington Tramway Company	Murray, Alexander	McDonald, Miss Sophia McLeod Bros	McPhee, J. O McSkimming, P., and Sons	Newbigging Bros	New Zealand Coal and Oil Company	Otago Dock Trust "		Otago Steam Laundry Company	Saunders, James	Shand, R	Smellie Bros	Speight and Company	Stevenson and Cook	Sutherland and Company	Weish, T

No. 19.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-Drivers—continued.

Name of Owner.			Where Boiler used.		Purposes for which used.	Horse- power of Boiler.	Diameter of Cylinders of Engine, in Inches.	Class of Driver required.	Additional Boilers: Names of iste Owners of Transferred Boilers; and also showing where Size; &c., of Cylinders are now amended.
					SOUTHLAND DISTRICT.	ISTRIC			
Aitken, John		:	Wendon Valley	<u>.</u>	Chaffcutting	7		Locomotive and	Late G. Aitken, East Gore.
Ballock, Robert	:	:	Riversdale district	<u>:</u>	Threshing and chaff-	∞	G	traction Ditto	Late Ballock Bros. Riversdale
Bichan, George			Waterm		cutting		i C		THE PROPERTY OF THE PROPERTY.
Bloomfield, H.	::	: :	Cattle Flat	4 ::	ıax-mılı	91 91	$\frac{10\$}{7}$ and $\frac{11\$}{2}$	Second class	Size of cylinder amended. Late B. S. Black and Co. Balfour
Droad, Sman, and Company	:	·	Washoeka	≖ :	Hauling	12	Two 71	Locomotive and	Additional.
Burk, William	:	:	Winton	ن :	General	œ	6	traction Ditto	•
Butler, J. F. Caird. J.	:	:	Morton Mains	H 0	Threshing	စ္	90		Late B. Reid, Orepuki.
Cody, P., jun.	1 1	: :	Riversdale	ğΗ ::	Threshing and chaff-	: 20 00	8 and 13 9	First class Locomotive and	Late Riverview Gold-dredging Company, Gore. Additional.
Croshie B			Wandham	. E	cutting			traction	
Edendale Dairy Factory	: :	: :	Wyndnam Edendale	∺ <i>⊆</i>	Inreshing	∞ ç	ග ා	Ditto	Late R. and D. Crosbie, Wyndham.
French, Walter	:	:	Waikaka district	15 	Chaffeutting and	ှိ ထ	စ တွ	Second class Locomotive and	Additional. Size of evlinder amended: late Currie Bros
Glenham Sawmilling Company	:	:	Glenham	- ŏž	threshing Sawmill	20	Two 10	traction Second class	Gore.
Gutschlag. William			Com distant) (COORT CIGORS	Authologian
	:	-	dole district	9 	rnresning	20	o .	Locomotive and	Late J. Stewart, Gore.
Kura Gold-dredging Company	:	:	Muddy Creek	ජ 	Gold-dredge	20	83 and 123	One first class	Size of cylinders amended.
K-lo William					;			and two second	
Tyle, Willam	:	4	Warkaia	Ħ -	Hauling coal	∞	Two 5	Winding	Size of cylinders amended; late J. Hughes,
Macalister, James	:	:	Otantaa	ਹ -	Chaffcutting	43	693	Locomotive and	Waikaia. Late J. R. Healy and Son, Winton.
Maslin, D. W.	:	:	Waikaka district	F:	Threshing	9	s	traction Ditto	Late George Aitken. Gore.
	: :	: :	Grove Bush	eg	Sawmill	52°	Two 14	First class	Number of cylinders amended.
Mataura Collieries Company	:	-	Mataura	Ħ	Hauling on incline	162	7 and $11\frac{2}{4}$	Winding	Additional. Late Waimumu Venture Gold-dredging Com-
Moore, James, and Sons	:	:	Longwood	Sa	Sawmill	55	Two 10	Second class	pany, Mataura.
McCallum and Company	:	:	Stormont Labour			25	151	First class	Size of cylinder amended.
McCartney, James	::	: :	Gore district	. :	Threshing	2 <u>1</u> ∞	Two 82	Second class Locomotive and	Additional. Late George Stevenson, Gove
McDonald, Peter	:		Dinton		General work	C		traction	
McGeorge's Freehold Gold-dredging Company, No. 3	ompany, N		Waikaka Valley		Gold-dredge	 	9 9 and 14	One first class	Additional.
						-		and two second	
McFherson, A. and D.	.	-	Scott's Gap	 SS	Sawmill	20	Two 10	Second class	

								69								1.	1-	15A.
Late John Denniston, Riversdale.	Late Mataura Paper-mills Company, Mataura. Additional. Size of cylinders amended.		Additional. Late Sutherland and Co., Edendale. Late C. Coombes, Winton.		Late Watson Bros. and Harrington, Orepuki. Late Ibbotson and Co., East Gore. Late Davidson's Freehold Gold-dredging Company. Wajkaka.	ĽŘĽ		Late Mills and Rothery, Rahotu. Late T. L. Joll, Okaiawa. Additional.	Late Wilkes and McDonald, Waverley.	Additional. Late W. W. Herbert, New Plymouth. Additional. Number of evlinders amended - late Taranaki	Co-operative Bacon Company, Fitzroy. Late C. E. Rogers, Bell Block.	Late Waverley Co-operative Dairy Company,	Aramoho. Additional.					Late Armstrong Bros., Akitio. Late W. and T. Burt, Whiteman's Valley. Late Anderson and Jones, Upper Hutt.
Locomotive and	traction Second class Three second	class One first class and two second	class Second class Locomotive and	traction Three second	class Second class Two second class One first class and two second	class Second class Locomotive and traction		Second class	Locomotive and	traction Ditto Second class	Locomotive and	traction Second class	Locomotive and	traction First class		::		Second class
8	13 5 7 and 11‡	8 and 13	$7 \ { m and} \ 13 rac{9}{16} \ { m Two} \ 8 rac{1}{2} \ 9$	7½ and 11	Two 10 7 and 111 8 and 122	72 and 112 8	r:	$\begin{array}{c} 11\\ 61\\ 9\end{array}$	5½ and 7½	Compound 6 and 10 Compound 4 and $7\frac{1}{2}$	5‡ and 9‡	∞	Two 10	Compound 12 and 28,	Ditto		ICT.	$\begin{array}{c} 14\\13\\ \text{Two } 8\frac{3}{4} \end{array}$
9	35 20 16	8	41 41 8	91	20 20 20	14 26 6	STRICI	25 21 16	9	808	છ	30	10	08	88	118	DISTR	25 37 14
:	::::	•	and	:		 b n s	KI DIS	cheese	:	::::	haff-	:	:	:	: :	:	MOLE	:::
General work	Paper-mills Smelting-works Gold-dredge	Gold-dredge	Engineer's shop Sawmill Ploughing	threshing Gold-dredge	Sawmill Gold-dredge	Flax-mill Cheese-factory Chaffcutting threshing	TARANAKI DISTRICT	Sawmill Cheese-factory Dairy and c	General	Hauling General Bacon-factory	Threshing and chaff-	cutting Dairy factory	Hoisting stones	Freezing	::	:	WELLINGTON DISTRICT	Sawmill , ,
:	:::	;		:	:::	: : :		:::	:	: : : :	:	:	:	:	::	_ ;		:::
Clinton district	Mataura Orepuki Waikaka Valley	Waimurau	Invercargill Gorge Road, Edendale Winton	Waikaka Valley	Waimini East Chatton Willowbank	Riverton Bush Wyndham Waihola		Opunake Otakeho Manutahi	Waverley district,	Kapuni district New Plymouth district Fitzroy district Fitzroy	New Plymouth ⁷	Aramoho	Castlecliff Breakwater	Castlecliff	::	:		Akitio Whiteman's Valley Akatarawa
:	 mpany	;	111	:	::::			:::	:	::::	:	:	;	;	: ;	:		:::
Newson and Petrie	New Zealand Paper-mills Company New Zealand Smelting Company (Limited) Patterson's Freehold No. 1 Gold-dredging Company	Royal Venture Gold-dredging Company	Southland Engineering Company Sutherland and Lopdale Sutton, Joseph	Turnbull, John	Watson and Harrington Watt and party Willowbank Gold-dredging Company	Woods and Co Wyndham Dairy Factory Yorston, Thomas		Bartle, H. M. Joll, T. L., Co-operative Darry Company Manutahi Co-operative Dairy Company	McDonald, Alexander G	McNeil, Peter New Plymouth Firewood Company Parkin, T. and R. Taranaki Bacon-factory	Thom, John	Wanganui Dairy Company	Wanganui Harbour Board	Wanganui Meat-freezing Company				Akitio Timber Company Alexander Bros. Benge, H.

No. 19.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-Drivers—continued.

Additional Bollers: Names of late Owners of Transferred Bollers; and also showing where Size; &c., of Cylinders are now amended.)	Number of cylinders amended.	Size of cylinders amended: late Wellington			Late C. E. Jones, Matarawa, Additional	Number and size of cylinders amended.	Additional. Enemie not now connected	Late Tokomaru Flaxmilling Company, Toko-				Size of cylinder amended. Additional.	Size of cylinder amended.	*	Additional.	Size of cylinders amended. Late Norman Campbell, Waikanae.		Late Otaki Manakau Dairy Company. Otaki.	Late C. Hall and Bust, Kaiparoro.	Number of cylinders amended. Late Halley and Ewing, Wellington.	Size of evlinders amended.	Late W. Hamer, Foxton.	Size of cylinder amended.	Additional. Size of cylinder amended.
Class of Driver required.		Second class	First class	Locomotive and	traction	Ditto Second class	66	First class			traction Second class	Locomotive and	Second class Locomotive and	Second class	Exempt	: :	Second class	Locomotive and	traction Second class	:	::	::	: :	: :	First class Second class
Diameter of Cylinders of Engine, in Inches.	DISTRICT—continued.	Two 7	$11\frac{1}{2}$ 7 and 13	54 and 84	a - C	× <u>~</u>	13	17 and 34 Nil	7 and 11	$6\frac{1}{2}$ and $10\frac{3}{4}$			$11\frac{1}{2}$ 4 and 6\frac{1}{2}		6 Two 124	4 and 7	5 and 8_{2}	$\frac{12}{6 \text{ and } 10\frac{1}{2}}$	\$ 8	Two 81	12\$ 12	12 Two 84	12 1 84 and 16	111	20 8 1
Horse- power of Boiler.	'RICT-	18	3 9	9	٠	23°	8	5 23 20 23	20	30	14	72	18	87	2 22	9	. 25 - 25	80	17	22 8	38	£ 41	85 74	14	19
Purposes for which used.	WELLINGTON DIST	Hoisting	Sawmill Engineers' shop	Hauling, &c	ò	Sawmill	: :	Freezing	Flax-mill	Hauling	Stone-crushing	Hauling	Butter-factory Hauling	Flax-mill.	Soap-works Electric light	Hauling	Sawmill	Hauling	Butter-factory	Sawmill		Chaffcutting	Flax-mill	Sawmill	Flax-mill
Where Boller used.		Hulk "Blackball"	Carterton Kaiwarra	Masterton		Carterton Nireaha	Pukehinau	Petone	Papakiri	Foxton Karori	Kohatu	:	Levin Ngahauranga 🌃	Koputarua	Kaiwarra Mahanga Bav	Wellington	Reikorangi	Martinborough	Otaki	Kaiparoro	Weimigrou	Manakau	Shannon	Mangamahoe	Wellington Koputarua
Name of Owner.		Blackball Coal Company	Cable, William, and Co	Ewington, J. C.	1.34	Gardiner. George, and Sons	Gardner and Yeoman	Gear Meat Company (Limited)	Gibbs, Albert J	Green Flax Dressing Company Karori Borough Council	Kohatu Quarry Company	:	Levin Co-operative Dairy Company Mace and Nicholson	McDonald and Bevan	Newton, John New Zealand Government Defence Department	New Zealand Government State Coal Department	Odlin, C. and A	Orbell, J	Otaki Dairy Company	Parker and Co	Pukuweka Sawmilling Company (Limited)	Ransfield, R	Ross and Redshaw	Sheath, F. A.	Stewart Timber Company Swainson and Bevan

			*					ζ								•						
Number of cylinders amended.	Number and size of cylinders amended.	Number of cylinders amended.	Additional. Size of cylinders amended.	Number of cylinders amended. Number and size of cylinders amended.	Size of cylinders amended.	Engine not now connected. Number of cylinders amended.	Size of cylinders amended. Additional.	Engine not now connected. Number and size of cylinders amended.		Late Cooley and Bock, Foxton. Late E. Pawson and Co., Ohakune. Size of cylinder amended.	Late Mexander Drookie, Iurakina.	Late Fernam, Larsen, and Co., Cerku. Additional.	Additional.	", Size of cylinders amended.	Additional. Late J. Genmell, Oroua Bridge. Size of cylinders amended.	Additional. Late G. Wood, Feilding.	Size of cylinders amended.	Additional.		Size of evlinder amended.	Additional. Size of cylinder amended.	Size of cylinders amended.
Second class		:	First class	: :	:	First class	Locomotive and	fraction Second class		Second class	traction	Second class	Locomotive and	First class Locomotive and	traction Second class Locomotive and	traction First class Locomotive and	traction Exempt	Second class	Locomotive and	traction Second class	First class Locomotive and	traction Ditto
Two 6, two 6, two 6,	and two 7 Two 6, two 6, two 6,	Two 6, two 7, two 8,	and two 10 Centrifugal pumps 17, 24½, and 37½	17, 24½, and 37½ 7, 8, and 10	17, 24½, and 37½	15 and 30	19 and 28 Two 11	Nil 8	NORTH DISTRICT.	$\frac{\text{Two } 8\frac{1}{2}}{14}$	6 J	14 NS	1000 Two	$\begin{array}{c} 20 \\ \mathrm{Two} \ 9 \end{array}$	7 and 12 7 and 11 5 and 8	$9\frac{1}{2}$ and 16	$8\frac{1}{4}$ and $12\frac{3}{4}$	14 and 23	$16 ext{Two } 6rac{1}{2}$	7 and 11 12	16	5 <u>‡</u> and 9
21	20	46	25.	130	35	140	60 16 <u>4</u>	35	SIG HJ	21 88 82 ×	9	988	223	$\frac{45}{22\frac{1}{2}}$	41 21 8	8 33	12	57	56 81	12	တ္က ဗ	7
:	:	:	::	::	:	: :	::	::		:::	•	::	::		:::	::	:	:	::	::	::	:
Hoisting	:	:	Salvage Electric trams	Electric light	Power-station	Pumping	Kefrigerating Hauling	Meat-preserving Laundry	WELLINGTON	Flax-mill Sawmill Flax-mill General	Sawmill	Tdle	Hauling	Sawmill Hauling	Flax-mill	Flour-mills General	Idle	Hemp process	Sawmill	Flax-mill Sawmill	General	:
:	:	:	::	::	:	: :	::	::		:::	:	: :	::	::	:::	::	:	:	::	::	::	:
Hulk " Arawata"	Hulk" Dilpussund"	Hulk "Occident"	On New Zealand coasts Wellington	::	:	: :	Ngahauranga	Wellington		Foxton Ohakune Oroua Bridge Palmerston district	Ohakune			Ohakune East	Foxton Motoa Rata	Palmerston North Apiti district	Mangaonoho	Foxton	Rangataua Turangarere	Rangitane	Waitangi Karere	Marton district
I (L.td.)			:	: :	:	: :	::	::		::::	: :	: : :	: :	::	:::	::	Depart-	s Com-	::	::	::	:
Zealand			· :	::	:	: :	::	::		::::	: :	: : :	: :	::	:::	::	Vorks	product	::	::	::	:
of New	•		:	::	:	::	omparry	:			: :	:::	: :	::	:::	::	Public V	and By-	::	::	::	:
Union Steamship Company of New Zealand (Ltd.) Hulk "Arawata"	•		Wellington City Council	8 8	Wellington Gas Company	Wellington Harbour Board	Wenington Meat Export Company	Wills, P. ".	-	Abraham, King, and Co. Anderson, Sons, and Co. (Limited) Broad and Reeves Cairnoress, David	Carter, F. J.	Goldfinch and Co			Hennessy and Gibbs Keepa Hihira Lawson, John	Manawatu Flour-mills Melton, John	New Zealand Government Public Works Depart-	New Zealand Hemp Process and By-products Com-	Perham, Larsen, and Co. Quin Bros	Seifert, Louis Smith and Donald	Syme, George Tanner, Robert	Warring, Joseph

No. 19.—Return showing the Names of Owners of Additional Boilers and Transfers which require to be in Charge of Certificated Engine-Drivers-continued.

Name of Owner.			Where Boller used.	nsed.	Purpos	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; &c., of Cyfinders are now amended.	1011.
						WESTLAND DISTRICT.	DIST	RICT.				
Baxter Bros	::	::	Ho Ho	::	Sawmill "	: [[]		43	16½	First class	Size of cylinder amended. Late Tyneside Proprietary Company, Brun-	
:	:	:	Otira Line	:	. Locol	Locomotive .	:	15	6 owT.	Locomotive and	neron. Number and size of cylinders amended.	
Butler, 0 Butler Bros	::	::	Gladstone's Siding Ruatapu	:: ლი.	Sawmill Bush en	Sawmill Bush engine		20 16	Two 94/4 Two 8	Second class	Late Ewan McGregor, Mangaonoho.	
	:	:	· .	:	. Sawmill	aili		43	Three 16	First class	Additional.	
	::	: :		: :		::		£3 £3	Three 16 Three 16	::		
	::	: :		: :	. Dri	Driving erecting		25	Three 16 Two 8 and two 5	Second class	Number and size of cylinders amended; late	
					pla	plant)				Tyneside Proprietary Coal Company, Brun-	
Cunningham, Gilbert	:	:	Slab Hut Creek		. Dredge	eg		20	7 and 114	:	nervon. Late Shah Hut Creek Gold-dredging Company, Slah Hut Creek.	
Dispatch Foundry	:	:	Greymouth .	•	Shop			37	11 and 20	First class	Additional Stone Commune Communith	
Lobson Stone Syndicate Erickson, G	::	: :	Dobson Ahaura	: : : .	. General	ırk :	::	S 00	6 and 10	Locomotive and	Additional.	
Flowery Creek Sawmilling Company		:	Stafford	:	. Sawmill	Ilia		32	18	traction First class	Number and size of cylinders amended; late	
											Tyneside Froprietary Coar Company, Tyneside.	
Greymouth Harbour Board	:	:	Greymouth	•	. Hauling	•		6	Two 7	Locomotive and	Additional.	
Karoro Brick Company	•:	:	Karoro		. Brick	Brickmaking .	:	15	84 and 113	First class	Size of cylinders amended; late Morris and Roberts, Mananui	
Mananui Sawmilling Company Meharry and O'Malley New Trafalgar Gold-dredging Company		:::	Mananui Kanieri Nelson Creek		Sawmill Dredge	:::		60 20 20	$\begin{array}{c} \text{Two 1I} \\ \text{Two 8}_{\frac{3}{4}} \\ \text{Nil} \end{array}$	Second class	Late Morris and Roberts, Mananui. Late A. Meharry, Hokitika. Late Trafalgar Gold-dredging Company, Nelson	
North Brunner Coal Company Red Jacks Sawnilling Company	:::	:::	Brunner Stillwater Ngahere		Coal-mir	Coal-mines		$\begin{array}{c c} 24 & \\ 61 & \\ 87 \\ \end{array}$	8_{16}^{7} and 12_{4}^{3} , and 12_{16}^{5}	First class Second class	Additional. Number and size of cylinders amended; late	
Russell, R	:	:	Greymouth	•	. Stea	Steam-laundry	<u> </u>	50	Two 9		Number of cylinders amended is late Tyneside Decominders Commons Tyneside	
Stewart and Chapman	:	:	Rimu	•	. Bush	Bush locomotive	•	25	Two $6\frac{1}{2}$	Locomotive and	Number of cylinders amended.	
Stratford and Blair Westland Brick Company	::	::	Paroa Greymouth	::	. Haul	Hauling logs Brickmaking	::	20 16	Two $8\frac{3}{4}$ 7 and $11\frac{1}{4}$	Ditto Second class	Size of cylinders amended. Additional.	

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