

1902.
NEW ZEALAND.

INSPECTION OF MACHINERY:

ANNUAL REPORT OF THE DEPARTMENT FOR 1901-2.

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

The CHIEF INSPECTOR of MACHINERY to the Hon. the MINISTER of MARINE.

SIR,—

Inspection of Machinery Department, Wellington, 20th May, 1902.

I have the honour to submit herewith the annual report on the operations of the Inspection of Machinery Department for the twelve months which ended on the 31st March, 1902.

I have, &c.,

ROBERT DUNCAN,

The Hon. W. Hall-Jones, Minister of Marine.

Chief Inspector of Machinery.

REPORT.

LAND MACHINERY.

This includes the examination of all land steam-boilers and the machinery driven by steam by these boilers; also the machinery driven by all power other than steam, excepting the machinery driven by hand-power. All parts of the colony have been visited by the Inspectors of the Department, and a thorough inspection made of all machinery there.

Boilers.

During the year 4,379 steam-boilers were examined, the boilers being empty and all parts made accessible for the inspection; and in numerous cases a second visit was made when under steam, to examine all parts under steam conditions. The work connected with this branch of the Department is unpleasant, but one of the most important. Numbers of the boilers in the colony are getting old, and have to be reduced in pressure and very carefully examined. No accident to life or limb has been reported in connection with boilers during this year. It should be apparent to the general public the desirableness and usefulness of having practical examinations—for the safety of themselves, of employers and employees, and of property—by experienced men from time to time.

The tendency of late years has been to increase the pressure in all new boilers where old ones have been discarded, and the danger that may be incurred through explosion has therefore increased owing to the higher pressure. This applies more especially to water-tube and locomotive type of boilers, where the water in the boilers and over the heating-surfaces is limited, and where, if anything was going wrong with feeding arrangements, overheating would of necessity follow, with plate-bulging and explosion. Pressures in these boilers have increased quite 25 per cent. of late years.

The introduction of qualified engine-drivers to take charge of steam plants has given satisfaction all round, and should tend to minimise the risk of explosion, and also help to reduce the expenditure in upkeep and attention. It is as much to the advantage of the employer in a small way of business as it is to the company or firm owning large plants to have his engine-drivers thoroughly competent and able to cope with the efficient maintenance of his boilers and machinery, the value of which can only be kept up by such efficient maintenance. Yet, it seems, the view is entertained in some quarters that it is better to have those in charge of machinery who cannot but be (to those qualified to judge) less than efficient, in preference to those who, other things being equal, have at least higher claims to efficiency. The apparent cause of this seems to lie in a false economy, founded on the assumption that the less training a man undergoes the cheaper he will be, a fallacy that obviously need not be discussed.

The boiler certificates issued during the year show an increase of 744 over the number issued last year.

Government Boilers and Machinery.

Beyond the annual inspection of Government boilers, for which no fee is charged by the Department, a number of plans and specifications for new boilers, pumping appliances, and machinery appliances for asylums have been attended to, and the machinery connected with the Defence Department has received attention.

Defects in Boilers and Fittings.

A great number of defects were discovered during the year, the total being 475. In some cases boilers have been seriously impaired through using feed-water, in time of drought, from a supply that had become impure. Steam-users should in these cases be most particular, more especially if there happens to be any saline matter in solution. Boilers fed with this water quickly scale, and overheating of the plates, leaky tubes and joints follow as a natural consequence.

New Boilers.

A large number of new boilers has been added to our books, principally used for gold-dredging and dairying purposes. The total number added amounts to 427, representing a total horse-power of 6,291. Of this number, 255 were imported, and 172 made in the colony.

It is gratifying to be able to compliment the builders of boilers in New Zealand on the very excellent workmanship they now turn out. Before manufacture a plan of each boiler is submitted to the local Inspector of Machinery for his remarks and information, and the construction is carefully watched by him during manufacture, and then tested by hydraulic pressure on completion, in his presence, by standard gauge. The days of punched holes and rough riveting is a thing of the past for this class of work, and there is no need for any one wanting a boiler to go outside the colony for its manufacture. Numbers of the engineering establishments have hydraulic appliances for riveting, and the very heaviest work can now be undertaken.

Lifts and Water-driven Machinery.

One hundred and twenty-seven hydraulic lifts, thirty-nine lifts driven by gas, steam, and electricity, sixty-seven gas and hydraulic hoists and electric motors, 227 water-driven machinery, 461 gas-engines, seventy-two oil-engines, and thirty-one steam machinery were inspected during the year, making a total of 1,024, or 422 in excess of the number inspected last year. The repairs were fairly evenly distributed over the colony for this class of motive power, and amongst general repairs the renewing of ropes in hydraulic lifts, the annealing of chains, and general overhaul of safety-catch gears in cages formed the most important.

Fencing of Machinery.

In the appended table No. 4 is set out some examples of the notices which have been given to fence all classes of machinery throughout the colony. I find that owners of machinery are exceedingly pleased to have the advice of practical Inspectors in this matter, so that the dangers arising to employees may be lessened. It is difficult to protect all parts of machinery in factories without impairing the efficiency of the machine, but where moving machinery appears to be a menace to an employee's safety in any part of a factory used as a thoroughfare all parts are ordered to be specially well guarded. The majority of accidents, where, say, a hand or a finger is crushed, mostly arise from the employee becoming careless through constant practice and use of the machine rather than from the want of protection. All employers, however, should instruct employees not to wear loose clothing or aprons, and, in the case of girls, the hair should be worn in a net and not loosely. Several accidents have occurred in New Zealand clearly demonstrating the above, and employees cannot be too careful, especially where speeds are high.

Uncertificated Steam-users.

It has been necessary to maintain prosecutions against several owners of boilers and machinery for working same without the necessary certificates; but it has now become so generally known that these certificates must be taken up that the prosecutions are decreasing in number, though the steam-users do not take the full advantage they should do of lifting their certificates within the month given them, by which they obtain a very considerable concession. The failure to do this gives a great deal of extra trouble to the Department.

EXAMINATION OF ENGINE-DRIVERS AND EXTRA FIRST-CLASS ENGINEERS.

The work connected with this branch of the Department is constantly increasing, and, as examinations have to be held all over the colony, much loss of time that used to be employed at practical inspection-work occurs. There have been four fixed examinations held at each of the centres—viz., Auckland, Wellington, Christchurch, Dunedin, and Invercargill—each of which has extended over several days. There have also been examinations held at Alexandra South (2), Blenheim (1), Cromwell (2), Clyde (3), Dannevirke (3), Feilding (1), Gore (2), Greymouth (2), Gisborne (2), Hastings (1), Hawera (1), Hokitika (2), Lawrence (2), Marton (1), Masterton (2), Napier (4), Nelson (2), New Plymouth (2), Oamaru (1), Palmerston North (2), Queenstown (1), Reefton (2), Roxburgh (2), Stratford (1), Timaru (1), Thames (2), Wanganui (2), Westport (2). In each case the examination has occupied some days, and there has been the time spent in going to and from many of the places specially.

Where a number of applications have been received from any district, examinations have been held at a central place to suit the candidates. In the centres, where a sufficient number of applications have been received, intermediate examinations have been held.

A great number of candidates have passed a capital examination, and it is gratifying to find an improvement in the theoretical as well as the practical part of their calling. There is no situation in life in which knowledge derived from books and similar sources may not be made subservient to our interests or conducive to our enjoyments, and if only a beginning is made by a candidate for these examinations he may acquire a taste for self-improvement that will be of value both to himself and to the community in which he lives.

The extra first-class engineer's certificate has not as yet tempted many, but this can be accounted for partly by the stiffness of the examination; but it had to be made a difficult examination to give the certificate a standing.

Six passed for extra first-class engineer, 119 passed for first-class engine-driver, and 386 passed for second-class engine-driver. In service certificates, 685 first-class engine-drivers and 386 second-class engine-drivers were granted.

The time within which application may be made for the granting of service certificates has been extended, by the Inspection of Machinery Act of last session, to the 1st day of January, 1903. The clerical work attached to the granting of these, and the passing of applicants' papers, both for service and competency, and the issue of certificates afterwards, still makes a large increase to our office-work.

ACCIDENTS.

I regret to have to report several accidents with machinery, some of which proved fatal, a description of which will be found in Tables Nos. 5 and 6. It is difficult to prevent all accidents; but, taking the amount of machinery in use, the high speeds very often used, and the number of those employed, the number of these accidents is very small.

DISTRICTS AND INSPECTORS.

Mr. Blackwood resigned from the Service in the Auckland District. Mr. George McGregor, appointed on 28th June, 1901, filled the vacancy. Mr. Matthew Sharp was appointed on 1st February, 1902, and will be stationed in Otago.

I have pleasure in testifying to the good and faithful work done all round by the Inspectors, often under arduous conditions in the country, with bad roads and journeys to places almost inaccessible. The expense sometimes incurred does not warrant the inspection; but very often, in these remote places, there is more need for the inspection, as the machinery is often found in bad condition through want of the needful repair, which has not been made owing to the plant being so far away from any engineer's shop. At the present time the Auckland, Marlborough, and Nelson North and South Districts are the furthest in arrear, and our present staff is quite inadequate to deal with the ever-increasing work. It is against the law to work any steam-boiler without a certificate, and I consider it imperative that other two Inspectors should be appointed if the work is to be satisfactorily done.

The permanent stationing of an Inspector at Invercargill has been found a great convenience to the public and a saving to the Department, and, it being the centre of a rising agricultural district, machinery is very much used in connection with harvesting and dairying operations, and steam appliances are also being extensively used. Offices should, in my opinion, be opened, say, at Timaru and Nelson in the near future, to save the long journeys which now have to be made from the present district centres; and it would also be a great convenience to the shipping community and to applicants for examinations to have an officer on the spot.

POSTAL AND POLICE AUTHORITIES.

The postal and police authorities have again rendered very valuable assistance, the former promptly returning schedules of fees showing whether owners had paid or not, thus enabling us to deal at once with defaulters; and the latter for their work connected with the non-lifting of boiler certificates, and prosecutions arising therefrom and of persons driving engines or in charge of boilers without holding the proper certificates.

MARINE ENGINEERS' EXAMINATIONS.

During the year examinations for certificates of competency for chief marine engineers, second- and third-class marine engineers, river engineers, and marine-engine drivers, also for first- and second-class sea-going and for extended-river-limits engineers of powered vessels other than steam, have been held at Auckland, Gisborne, Napier, New Plymouth, Nelson, Westport, Greymouth, Blenheim, Christchurch, Timaru, Dunedin, and Invercargill. In each of the centres three examinations were held during the year.

Table No. 16 gives a list of 188 applicants for examination during the year ending the 31st March, 1902, with the different classes of certificates for which they applied to be examined—viz., seven first-class engineers, nineteen second-class engineers, ninety-six third-class engineers, thirty-five river engineers, twenty-one marine-engine drivers, four first-class engineers for powered vessels other than steam, three second-class engineers for powered vessels other than steam, three engineers for powered vessels other than steam within restricted limits. The fees received in respect of such applications amounted to £188.

The regulations for marine engineers' examination, to be issued shortly, have been revised, and now embrace all the new points of the new edition of the Board of Trade rules. The most notable departure is that the time served on watch as third engineer with a second-class certificate

is qualifying-time for chief. The Board of Trade have raised shop service one year, which follows our lead in New Zealand, but does not go quite far enough. A number of new elementary questions are introduced, dealing with hydraulic, freezing, and electrical machinery, which is very necessary for present-day requirements, seeing that so many modern steamers are fitted with all these latest appliances.

SURVEY OF STEAMERS.

All the work in connection with this branch of the Department has been kept up to date, and the supervision of repairs after survey has been subjected to the closest attention at the various ports. The Surveyors have also inspected vessels on several occasions between annual survey dates, at docking-times, to have a look at the hulls, and to see that the boats and equipments have been kept up to standard.

GOVERNMENT STEAMERS.

Plans and specifications for structural additions and renewals have been made for the C.G. steamers "Hinemoa," "Ellen Ballance," and "Tutanekai," and for minor repairs to several other Government vessels. The alterations to the "Hinemoa" comprise a complete new deck, new steel bulkhead at fore end of the saloon, new chart-house and bridge, new steering-gear steel house aft, electric-light installation, and general overhaul of machinery and rudder.

The annual surveys of the steamers "Tutanekai," "Hinemoa," "Ellen Ballance," "Gordon," and the torpedo-boats have also been made.

AUXILIARY MACHINERY.

Steamer surveys now take much longer, owing to the increase in the auxiliary machinery, and the appliances for saving fuel and economizing perishable stores. The responsibilities of the chief engineer of a steamer have also increased, both in the cargo and in the passenger lines, through the introduction of these scientific appliances, and it rests largely with him whether or not the ship will turn out a commercial success.

MISHAPS.

The usual mishaps have occurred to steamers, such as broken shafts, defective steam-pipes, &c. The set periodical times for shaft-sighting and steam-pipe-testing are rigidly enforced, and owners now see the necessity for it. Although the loss of time in docking for shaft-inspection may seem a monetary loss, it is better to have the flaw discovered in dock than to have the steamer disabled by it at sea. The s.s. "Monowai," of the Union Steamship Company of New Zealand, was drifting about for several days between Tasmania and New Zealand, the propeller-boss having given way. It is thought that the propeller had struck some floating wreckage, as the vessel was docked at Melbourne a short time before the mishap occurred, and at that time the propeller was carefully examined.

INCREASE AND IMPROVEMENTS IN STEAMERS.

The steam shipping has increased during the year, every new steamer having an additional improvement for the comfort of the traveller, some of the late additions to the fleet of the Union Steamship Company of New Zealand being very complete in this respect.

SURVEY OF STEAMERS RETURN.

Table No. 17 gives returns of steamers surveyed in New Zealand during the year ended 31st March, 1902, including the names of steamers, tons register, horse-power, nature of machinery and propeller.

The number of steamers surveyed was 279, and the number of surveys made was 288. The fees payable in respect of such surveys amounted to £1,494.

RETURNS.

Appended are the returns in detail, numbered from 1 to 18.

(1.) Number and class of boilers inspected and fees payable on these, the machinery inspected and the fees payable thereon, 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), (13), (14), (15). Names of all persons to whom land stationary certificates of service and competency have been granted during the year.

(16.) List of applicants for marine engineers' certificates, with fees paid, during the year.

(17.) Return as to vessels surveyed during the year.

(18.) Return showing sums earned or received and amount expended during the financial year for inspection of machinery, examination of engineers and engine-drivers, and survey of steamers.

ROBERT DUNCAN,

Chief Inspector of Machinery, Principal Engineer-Surveyor, and
Chief Examiner of Engineers and Engine-drivers.

RETURNS.

No. 1.

(a.) RETURN showing NUMBER of LAND BOILERS and MACHINERY INSPECTED for which CERTIFICATES are issued, for the Financial Year ended 31st March, 1902.

Boilers—

Stationary—Five-horse power and under, 981; 10-horse power and over 5-horse power, 595; over 10-horse power, 1,194; digesters, 223: total, 2,993.

Portable—Five-horse power and under, 143; 10-horse power and over 5-horse power, 1,049; over 10-horse power, 194: total, 1,386.

Machinery—

Hydraulic lifts, 127; gas lifts, 17; gas and water lifts, 8; oil lifts, 4; electric lifts, 7; steam and water lifts, 3; gas and hydraulic hoists and electric motors, 67; water engines, water motors, and water wheels, 118; Peltons, 56; turbines, 53; gas engines, 461; oil engines, 72; steam machinery, 31: total, 1,024.

Grand total, 5,403.

(b.) RETURN showing FEES PAYABLE for the INSPECTION of BOILERS and MACHINERY and for the ISSUE of ENGINE-DRIVERS' CERTIFICATES during the Financial Year ended 31st March, 1902.

Fees payable.—On boilers, £4,906 10s.; on machinery, £141 17s. 6d.; for engine-drivers' certificates issued, £543 5s.: total, £5,591 12s. 6d. Government boilers and lifts inspected, but not charged for, represent the further sum of £20.

(c.) RETURN showing NUMBER of SERVICE and COMPETENCY CERTIFICATES ISSUED to WINDING-, TRACTION-, and LOCOMOTIVE-ENGINE DRIVERS, and to STEAM-STATIONARY-ENGINE DRIVERS, during the Financial Year ended 31st March, 1902.

Steam winding: Service 1, fees 2s. 6d.; competency 27, fees £13 10s.: total fees, £13 12s. 6d.

Traction and locomotive: Service 14, fees £1 15s.; competency 152, fees £76: total fees £77 15s.

Steam stationary: Service—First class 685, fees £85 12s. 6d.; second class 386, fees £48 5s.: total service, 1,071; total fees, £133 17s. 6d. Competency—Extra first class, fees £6; first class, fees £119; second class 386, fees £193: total competency, 511; total fees, £318.

Summary of certificates issued: Service—Steam winding, 1; traction and locomotive, 14; stationary, 1,071: total service, 1,086; total fees, £135 15s. Competency—Steam winding, 27; traction and locomotive, 152; stationary, 511: total competency, 690; total fees, £407 10s.

Totals: Steam winding certificates, 28; fees, £13 12s. 6d. Traction and locomotive certificates, 166; fees, £77 15s. Stationary certificates, 1,582; fees, £451 17s. 6d. Total certificates, 1,776; total fees, £543 5s.

The cash actually received and paid into the Public Account for drivers' fees amounts to £599 13s. 6d. for the financial year ended 31st March, 1902. This includes fees for certificates not yet issued.

No. 2.—RETURN of DEFECTS found on INSPECTION of BOILERS during the Financial Year ended 31st March, 1902.

Four hundred and seven defects were found out, forty-eight of which were dangerous. Sixty-eight defective fittings were found on inspection, of which two were dangerous.

No. 3.—RETURN of NOTICES given to REPAIR BOILERS during the Financial Year ended 31st March, 1902.

Three hundred and ninety-three notices were given to repair boilers, and include boilers of the following types: Cornish, Lancashire, marine, portable, multitubular, semiportable, semitubular, traction, vertical flue, and water-tube.

No. 4.—RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY, &c., during the Financial Year ended 31st March, 1902.

One hundred and forty-six notices were given to fence dangerous parts of machinery, and included fly-wheels, gearing, spindles, emery-wheels, driving-belts, ends of shafts, scutchers, and pulleys.

Examples of Notices given.

To protect main driving-belt, three lengths of shaft, and fly-wheel, and vacuum pump. (At Pelton water-wheel of crushing plant at gold-mine.)

To fence belting. (Seed-cleaning gas-engine.)

To fence winding-engine and main driving-belt, first counter-shaft and pulleys, also platform from which shafting is reached, shafting in battery-room and opening in floor of same, also shafting and fans in fan-room. (At machinery of freezing-works.)

To fence fly-wheel of the engine, the pulleys and gearing of the washing-machine, the gearing that projects into passage, also the pulleys and gearing of the mangle. (Machinery in a hospital.)

No. 5.—RETURN of ACCIDENTS (not Fatal) in connection with Machinery during the Financial Year ended 31st March, 1902.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Nature of Accident, and Date.	Cause of Accident, and Remarks.
Union Timber Company, Midhurst	Saw-bench ..	T. Foster; aged 29	Four fingers severely cut; 3rd April, 1901	Put his hand back on the saw. Had four fingers amputated.
John Calder, Halkett	Traction-engine and threshing-machine	John Calder; aged 26	Right forearm crushed and hand severed; 5th April, 1901	Loose sleeve of jumper caught in driving-gear.
W. Cable and Co., Wellington	Electric engine ..	O. Wilson; aged 37	Arm crushed; 10th April, 1901	Put hand on crank-pin while engine was working, instead of stopping engine.
A. Clark and Sons, Wellington	Hydraulic lift ..	P. Murdoch; aged 14	Cut on upper lip and bruised at back of head; 11th April, 1901	Put his head inside cage after signalling all clear, thus getting jammed against guard-rail.
Webster and Co., Christchurch	Stacking-machine in tannery	J. Hayward; aged 18	Bruised finger; 18th April, 1901	Held on to barrel after it had caught. Carelessness.
Walter Hill, Christchurch	Wool-scouring machine	J. Charlesworth; aged 18	Bruised hand; 15th May, 1901	Lifting up spring roller, his hand caught.
John Anderson, Canterbury Foundry, Christchurch	Iron-sawing machine	J. Sheehan; aged 19	Fingers severely cut & bruised; 16th May, 1901	Right hand caught in bevel wheel while steadying a piece of iron.
P. and D. Duncan, Christchurch	Repairing machinery	W. Manchlin; aged 63	Fingers crushed; 29th May, 1901	Caught between two cog-wheels. Very slight.
T. N. Horsley and Co., Christchurch	Pottery-factory ..	W. Hosking; aged 15	Cut across forehead; 11th June, 1901	While he was feeding a pug-mill an elevator-belt jerked a shovel out of his hand and dashed it in his face.
Robertson and Co., Wellington	Boilermaker's forge	J. Patterson; aged 28	Crushed foot; 17th June, 1901	While removing an iron bracket from the forge it dropped on his foot.
H. C. Gibbons, Wellington	Gas-lift	G. Matterson; aged 56	Leg broken and bruised; 24th June, 1901	He was altering the gripping-gear, and the cage dropped. He was in the employ of Mr. Seagar, and was repairing the lift.
A. and T. Burt, Dunedin	Lifting-tackle ..	H. Capon; aged 35	Two fingers crushed; 3rd August, 1901	A casting slipped while being lifted on to the machine.
A. and T. Burt, Dunedin	Riveting-machine ..	C. Forno; aged 16	Struck on face by lever of machinery	Forno was walking under the lever of the machine.
Lucas Bros., Christchurch	Foundry shafting, pulley, and belt	M. Morley; aged 19	Fracture of right forearm; 2nd September, 1901	Adjusting belt on pulley while in motion.
J. McGregor and Co., Dunedin	Steam-hammer ..	W. Courrie; aged 24	Flesh-wound over eyelid; 13th September, 1901	Cutting off a piece of steel.
Otago Central Foundry (Limited), Alexandra	Drilling-machine ..	A. Larson; aged 16	Top taken off finger; 20th September, 1901	Cleaning cog-wheels while machine was in motion.
Massey Bros., Auckland	Boilermakers' shop	W. McKay; aged 23	Cut hand; 23rd September, 1901	Fall of piece of boiler-plate.
Skelton, Frostick, and Co., Christchurch	Leather-press ..	Frederick Hobbs; aged 28	Forefinger cut off; 28th September, 1901	Carelessness.
Tiratu Sawmilling Company, Dannevirke	Sawmill	A. I. Tocker; aged 40	Bruised leg; 8th October, 1901	Carelessness.
C. Methven and Co., Dunedin	Engineers' shop ..	A. Connor; aged 20	Abrasions of arm; 16th October, 1901	Came into contact with an emery-wheel while carrying a ladder.
W. Cable and Co., Wellington	Circular-saw ..	A. Beecroft; aged 19	Top of finger taken off; 28th October, 1901	Carelessness in use of saw.
Isaac Coates, Hamilton	Flax-machine (scutch, &c.)	Thomas Kelly; aged 18	Arm taken off; 5th November, 1901	Arm became entangled in hank, and was drawn into mouth of machine.
J. McGregor and Co., Dunedin	Shearing-machine ..	A. Henderson; aged 19	Hand cut; 8th November, 1901	Drew his hand along the edge of plate he was cutting.
W. Cable and Co., Wellington	Emery-wheel ..	J. McKay; aged 18	Fingers of right hand split; 16th November, 1901	His hand slipped while grinding elevator-shoes. Only a slight injury.
James Macalister, Invercargill	Circular-saw ..	James Aitken; aged 16	Thumb taken off and two fingers cut; 26th November, 1901	The block of wood that he was sawing slipped.
W. Cable and Co., Wellington	Punching-machine	J. Burns; aged 20	Top of finger taken off; 26th November, 1901	Carelessness of Burns.

No. 5.—RETURN of ACCIDENTS not Fatal—*continued.*

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Nature of Accident, and Date.	Cause of Accident and Remarks.
Southland Implement and Engineering Company A. and T. Burt, Dunedin	Drilling-machine ..	J. Gould; aged 18	Wound in hand; 7th December, 1901	Drilling holes in plate without holding down.
	Coppersmith's curving-rollers	J. Ovens; aged 15	Right hand and left arm bruised; 3rd January, 1902	Accidental. Returned to work 21st April, 1902.
P. and D. Duncan, Ashburton	Traction-engine ..	Richard Williams; aged 27	Crushed finger badly; 11th January, 1902	While assisting in repair of engine king-bolt fell on his finger.
A. and T. Burt, Dunedin	Lathe	Robert Essex; aged 16	Finger twisted; 28th January, 1902	Caught in lathe.
New Zealand Government Railways, Petone	Radial drilling-machine	G. Brundell; aged 17	Finger cut off; 4th February, 1902	Fingers caught in cog-wheels while cleaning machine when in motion.
E. A. Moore, Waikiki	Saw-bench ..	F. Best; aged 27	Thumb partly cut off; 20th February, 1902	Crosscutting rabbit-boxes.
Aulsebrook and Co., Christchurch	Biscuit-cutting machine	T. French; aged 19	Right hand cut and crushed; 24th February, 1902	In stopping the machine to clear cutters of dough he did not put off belt properly; the machine started, and cutters came down on his hand.
Aulsebrook and Co., Christchurch	Biscuit cutting machine	James Coombs; aged 19	Crushed foot; 25th February, 1902	Flesh-wound. Accidentally put foot between working arm of skip-motion and frame of biscuit-cutting machine.
W. J. A. Dutch, Wellington	Lathe, with back gear	George Cowan; aged 16	Finger slightly crushed; 1st March, 1902	Fingers caught in cogs of back gear through hand slipping.
Beaney and Sons, Auckland	Lathe	D. Stricket, aged 25	Top taken off finger; 23rd March, 1902	Want of care.
J. McGregor and Co., Dunedin	Drilling-machine ..	W. Strang; aged 35	Arm injured; 26th March, 1902	Sleeve of shirt got caught with drill.
The Crown Iron Works Company, Christchurch	Hydraulic press ..	Frank Large; aged 20	Fingers bruised; October, 1901	A die dropped when being placed in the machine.
H. E. Shacklock (Limited), Dunedin	Lift	William Hambleton; aged 62	Broken ankle; 6th March, 1902	Was employed overhauling the lift, and allowed it to run down.
Masefield and Co., Auckland	Emery-wheel ..	E. Pengelly; aged 17	Arm cut; 31st July, 1901	Carelessness. Away from work two weeks and a half.

No. 6.—RETURN of ACCIDENTS which proved Fatal in connection with Machinery during the Financial Year ended 31st March, 1902.

Name and Address of Owner.	Description of Machinery.	Name of Person injured.	Nature of Accident, and Date.	Cause of Accident, and Remarks.
Cluett and Potts, Toko, Taranaki	Sawmill	John Ball; aged 21	Instantaneous death; 1st April, 1901	Caught in belt of vertical saw. No one saw the accident.
Kauri Timber Company, Te Kopuru, Northern Wairoa	Circular-saw bench	A. H. West; aged 24	Arm broken and internal injuries; 19th August, 1901	Piece of timber coming over the drag-saw struck deceased. His duties did not require him to be behind the saw.
Wakamarina Golden Point Dredging Company, Blenheim	Dredging machinery	M. M. Elliott; aged 32	Fracture of arm and dislocation of spine; 5th September, 1901	Clothing of deceased caught round shaft while he was going to oil the friction-straps.
Teviot Gold-dredging Company, Otago	Driving-shaft of elevator on dredge	A. C. Cormack; aged 22	Arm fractured and chest badly crushed; 22nd September, 1901	Slipped on gangway, and, catching hold of shaft to save himself, was drawn round it.
Robert Gibbons, Kopu, Thames	Sawmill at Topuni..	Robert Walker; aged 48	Instantaneous death; 23rd September, 1901	Deceased was standing between the driving-shaft and pulley, pulling belt round the bottom of the pulley, when his hand got taken round the pulley.
C. Myers and Sons, Waikiki	Brick making-machine	John Sheddon; aged 38	2nd November, 1901	Deceased was oiling the cog-wheels of a pug-mill with a spoon. The spoon dropped, and as he reached over to pick it up his necktie caught and he was drawn into the winding-drum.
Wright, Stephenson, and Co. Dunedin	Manure-mixing machinery	John Wright, aged 34	Caught in shafting; 18th November, 1901	Through the elevator becoming choked, the belt was thrown off. Deceased attempted to replace the belt, and in doing so mounted a ladder which leaned against the beam from which the shaft was suspended. Either his arm caught in the shaft or the ladder broke, for he was drawn round the shaft, the legs being dashed against the beam overhead.

No. 7.—RETURN of STEAM-WINDING-ENGINE DRIVER to whom CERTIFICATE of SERVICE has been GRANTED from 1st April, 1901, to 31st March, 1902.

No. : 44. Name of Person : James Martin. Date of Issue : 17th February, 1902.

No. 8.—RETURN of STEAM-WINDING-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1901.
208. William Henry Spence	May 27	222. John Donnelly	Nov. 13
209. Frederick James Leggo	" 27	223. Alfred Hibbes Long	" 13
210. Clarence Skellern	" 27	224. Norman McGruer	" 13
211. William Craighead	July 3		1902.
212. James Loudon Wilson	Aug. 29	225. Elisha Lingard	Feb. 17
213. Angus Theodore Young	" 29	226. Henry Duncan Goldsworthy	" 17
214. Robert William Dundas	" 29	227. James Kinloch	" 17
215. Thomas Murdoch	" 29	228. Robert Gerald Ralph	" 17
216. Harry Hubert Foster	" 29	229. George Shearer Harvey	" 17
217. Harry Finlayson	Oct. 19	230. Thomas Johnson	" 17
218. Patrick Cotter	Nov. 13	231. Edwin Richard Mitchell	" 17
219. James Fitness	" 13	232. Henry Richard Cowan	" 17
220. Patrick Nolan	" 13	233. William Muir	Mar. 27
221. Robert Pearce Carter	" 13	234. William Henry Warburton	" 27

No. 9.—RETURN of TRACTION- and LOCOMOTIVE-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1901.
524. Valentine Joyce	May 27	532. Eustace Cleary	Dec. 19
525. Daniel Braniff	Aug. 29		1902.
526. Frederick Giblin	" 29	533. Weir McMorran	Feb. 17
527. Robert Garden	Oct. 19	534. Isaac Uden	" 17
528. Archibald Black Sinclair	" 19	535. Richard James Murphy	" 17
529. Frank Wilson Pope	Nov. 13	536. William Bailey	" 17
530. Ralph Elder	" 13	537. Walter Lewis	Mar. 27
531. John McPherson	Dec. 19		

No. 10.—RETURN of TRACTION- and LOCOMOTIVE-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1901.
588. Robinson Clough	April 22	632. Joseph Dickinson Wilson	Aug. 29
589. Robert Ferguson Campbell	" 22	633. James Stewart Lawrie	" 29
590. William Bishell	May 27	634. John McDowell	" 29
591. Walter James Faire	" 27	635. Thomas Taylor	" 29
592. Major Flavell	" 27	636. William James Dellow	" 29
593. Denis O'Loughlin	" 27	637. John Laurence Gormack	" 29
594. Frank Stephen Stocker	" 27	638. James Scott	" 29
595. John Smith	" 27	639. Edward Ryan	" 29
596. Thomas Gilder	" 27	640. John Henry Walker	Oct. 19
597. Robert Thomas Theodore Davis	" 27	641. Duncan McDonald	" 19
598. Henry Brennan Kerr	" 27	642. William Walker Foster	" 19
599. William Herbert Sterling	" 27	643. Hugh McDowell	" 19
600. John Thomas Clifford Booth	" 27	644. David Thomson	" 19
601. John Henry Carrodus	" 27	645. James Purdie	" 19
602. Arthur Dandy	" 27	646. William Gillbanks	" 19
603. John McMaster	" 27	647. William Downes	" 19
604. William Suter	" 27	648. John Richard Martin	" 19
605. James Andrew Berryman	" 27	649. John McDonnell, jun.	" 19
606. Edgar Harding	July 3	650. Alexander McDonald	Nov. 13
607. Alexander Beattie	Aug. 29	651. Isaac Allen, jun.	" 13
608. Einar Erickson	" 29	652. Nathaniel Dixon	" 13
609. Frank Ernest Powdrell	" 29	653. Albert Edwin Coleman	" 13
610. James Dyson	" 29	654. David Martin Martin	" 13
611. John Johnson	" 29	655. Thomas James Ward	" 13
612. Robert B-nnie Paul	" 29	656. David Clark, jun.	" 13
613. James William McCrostie	" 29	657. Alexander Spence	" 13
614. Patrick McNeill	" 29	658. William Hazlett	" 13
615. Charles Trounce	" 29	659. William John Oliver Anderson Irwin	" 13
616. John Watson	" 29	660. James Clark	" 13
617. Richard Ward	" 29	661. Isaac Smith	" 13
618. Thomas Rainey	" 29	662. William Hamilton	" 13
619. John Mehrtens	" 29	663. Walter Cobourne	" 13
620. Thomas Christopher Christensen	" 29	664. John Fallowfield Appleyard	" 13
621. William Atkinson	" 29	665. George Ernest Barnes	" 13
622. James Nelson Laurie	" 29	666. Arthur Ernest Clark	" 13
623. George Smith Sutton	" 29	667. James Henderson	" 13
624. Adam Fleck	" 29	668. John McVeigh	" 13
625. James Waters	" 29	669. Brian O'Connor	" 13
626. William Henry Melvin	" 29	670. James Quigley	" 13
627. John Marshall	" 29	671. Harry Aldridge Robinson	" 13
628. John Robertson Jack	" 29	672. Ernest Streeter	" 13
629. Joseph Dunn	" 29	673. William Tutty	" 13
630. Arthur Cumming	" 29	674. Guy George	" 13
631. John Morris Willetts	" 29	675. Hugh Robert Crossan	" 13

No. 10.—RETURN of TRACTION- and LOCOMOTIVE-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1901, to 31st March, 1902—*continued.*

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1902.
676. Alexander Marshall	Nov. 13	708. Arthur William Bennison	Feb. 17
677. Thomas Jenkins	" 13	709. John Hamilton	" 17
678. Patrick Joseph Hanley	" 13	710. David John Smith-Leathem	" 17
679. Thomas Ford	" 13	711. William McClure	" 17
680. William Currie	" 13	712. William Quigley	" 17
681. James Brown	" 13	713. George Shipley	" 17
682. Frank Bycroft Keall	" 13	714. Thomas John Stewart	" 17
683. Robert Robinson	" 13	715. William Thomas	" 17
684. James Saunders	" 13	716. George Willis	" 17
685. James Steel	" 13	717. David Milne	" 17
686. James Robert Tait	" 13	718. Alfred Hide	" 17
687. Robert Whytock	" 13	719. James Hamilton Taylor	" 17
688. James Craig	" 13	720. William Skene Jenkins	" 17
689. William James Ayton	" 13	721. John William Gunn	" 17
690. Robert Reynolds	" 13	722. David Gillespie	" 17
691. John Albert George Starnes	" 13	723. Charles Moncrief Canning	" 17
692. Henry Bainbridge	" 13	724. Frederick George Mullenger	" 17
693. Robert Dickson	" 13	725. John Brown	" 17
694. Robert Hardie Henry	Dec. 19	726. William Graham	" 17
695. James Skinner	" 19	727. Alexander Robert Leonard	" 17
696. George Hector Matthews	" 19	728. Elias Henry Nankivell	" 17
697. William Eggleton	" 19	729. George Sidney Norman	" 17
698. Norman Edward Gifford	" 19	730. John King	" 17
699. Joseph Henry James Bowater	" 19	731. James Kelly	Mar. 27
700. George Frederick Wright	" 19	732. James William Fairlie	" 27
701. Alfred Allen Matthews	" 19	733. Joseph O'Connell	" 27
702. Robert Frost	" 19	734. Franz Ertl	" 27
703. Albert Lawson	" 19	735. Frank William James Chapman	" 27
704. George Kingdon Martin	" 19	736. Richard Osnewell Speed	" 27
	1902.	737. Joseph George Garrett	" 27
705. Robert Kerr	Feb. 17	738. William Hugh Chambers	" 27
706. Richard Thomas Webb	" 17	739. Ambrose George Jackson	" 27
707. George Thomas Barker	" 17		

No. 11.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue 1901.
795. Herbert Thomas Balfour	April 22	842. Frederick Audley	April 22
796. William Goodwin	" 22	843. Hugh Sargeant Barrett	" 22
797. Hans Christian Hansen	" 22	844. James Boswell	" 22
798. William Peter Kirkwood	" 22	845. Robert William Dundas	" 22
799. Robert Lindsay	" 22	846. Alfred John Durham	" 22
800. Lawrence Lord	" 22	847. Robert Hetherington	" 22
801. Joseph George Morris	" 22	848. Gilbert Paterson Blue	" 22
802. Thomas McMurtie	" 22	849. John Downey	" 22
803. Henry McCarthy	" 22	850. Charles Hannigan	" 22
804. Richard Crawford McQuade	" 22	851. James Howlison	" 22
805. Robert Nicol	" 22	852. Francis Kitto	" 22
806. William Joseph Roebeck	" 22	853. Alexander Hunter McKenzie	" 22
807. Isaac James Wilson	" 22	854. John Osborne	" 22
808. Conrad Henry Haub	" 22	855. George Sinclair	" 22
809. Timothy McMahon	" 22	856. John Tough	" 22
810. Charles Herbert Smith	" 22	857. George Henry Brocklehurst	May 27
811. James Strachan	" 22	858. James Charleston	" 27
812. Edric Thompson	" 22	859. James Coleman	" 27
813. Robert Troy	" 22	860. Joseph Henry Coupe	" 27
814. John Warner	" 22	861. Ernest Edward Gamman	" 27
815. John Wright	" 22	862. Charles Hollings	" 27
816. George Kidd Askin	" 22	863. David Hunter	" 27
817. Joseph Wontner Brown	" 22	864. Peter Jenkins	" 27
818. Thomas Samuel Presswell	" 22	865. Charles Milne	" 27
819. Richard Evernden	" 22	866. William McKirdy	" 27
820. Alexander Sinclair Gillanders	" 22	867. Thomas Briggs Ramsden	May 27
821. John William Gordon	" 22	868. James Roy, jun.	" 27
822. Robert Helson	" 22	869. James Patrick Ryan	" 27
823. William Hughes	" 22	870. John Fife Semple	" 27
824. Ben Johnson	" 22	871. Alfred George Skilton	" 27
825. William Carl Nicholson	" 22	872. Mark Turnbull Thompson	" 27
826. William Paul	" 22	873. Daniel Wilson	" 27
827. Alexander Perry	" 22	874. Thomas Grundy	" 27
828. Charles Weaver	" 22	875. William Copeland McCallum	" 27
829. Patrick McDuff	" 22	876. Richard Newell	" 27
830. George James Fergusson Clark	" 22	877. Thomas Urry	" 27
831. Thomas Blong	" 22	878. Francis Edward Vibert, sen.	" 27
832. Joseph Donaldson	" 22	879. Edwin James Bradnam	" 27
833. Andrew Less Hayward	" 22	880. James Davies	" 27
834. William Parsons	" 22	881. Frederick John Foote	" 27
835. John Stewart	" 22	882. Charles Ramsay	" 27
836. William Lockwood Mitchell	" 22	883. Alexander White	" 27
837. Abel Dickinson	" 22	884. Andrew Young	" 27
838. Arthur Ruff	" 22	885. Francis Henderson	" 27
839. Herbert Scott Molineaux	" 22	886. Charles Johnson	" 27
840. James Henry Havelock Speedy	" 22	887. Francis James Roche	" 27
841. John Stewart	" 22	888. William Duncan Campbell	" 27

No. 11.—RETURN OF FIRST-CLASS STATIONARY-ENGINE DRIVERS—SERVICE—*continued.*

No. and Name of Person.	Date of Issue.	No. and Name of Person.	Date of Issue.
	1901.		1901.
889. James Craig	May 27	980. John McClure	Aug. 29
890. Stephen Kelly	" 27	981. William Henry Gore	" 29
891. John Francis Kitto	" 27	982. James Lincoln	" 29
892. John Moyle	" 27	983. James Robson	" 29
893. William Renshaw	" 27	984. George Ernest Inger	" 29
894. Walter Wright	" 27	985. William Freeman	" 29
895. Halcombe Munse Young	" 27	986. Arthur James Elliiston	" 29
896. George Beattie	" 27	987. Alexander Davidson	" 29
897. George Lindsay	" 27	988. William Thomas Moyle	" 29
898. Murdoch Mackintosh	" 27	989. Robert John McFarlane	" 29
899. Edward Williams	" 27	990. Frederick William Pope	" 29
900. William Highet	" 27	991. Wallace John Massey	" 29
901. George Henry Burrows	" 27	992. Alexander Cowan	" 29
902. Gilbert Cunningham	" 27	993. Lewis Griffin	" 29
903. William Henry Sinclair	" 27	994. Frederick Heslin	" 29
904. John Mair Walker	" 27	995. Peter George Kelly	" 29
905. William Whiterod	" 27	996. Thomas Edwin Kilworth	" 29
906. Walter Randolph Meyer	" 27	997. William Park Maxwell	" 29
907. William Roy	" 27	998. John Read	" 29
908. David Chalmers	July 3	999. Arthur Bernard Beale	" 29
909. George Christie	" 3	1000. Edward Chapman	" 29
910. James Foster	" 3	1001. Thomas Michael O'Rourke	" 29
911. Adam Hambleton	" 3	1002. Horace George Minett Priestley	" 29
912. Thomas Harris Harrison	" 3	1003. John Leak	" 29
913. William Holmes	" 3	1004. Albert George Eagle	" 29
914. Alfred Edward Hughes	" 3	1005. Edwin Stanford Hibbard	" 29
915. Andrew Marshall	" 3	1006. William Joseph Ross	" 29
916. Thomas Maxwell Milligan	" 3	1007. George Scobbie	" 29
917. John Moffat	" 3	1008. Thomas Herbert Bezar	" 29
918. Henry John Moffitt	" 3	1009. Henry Smith McNicoll	" 29
919. Robert Watson McIntosh	" 3	1010. John Wiseman	" 29
920. William Frederick McLeod	" 3	1011. Thomas James Barnes	" 29
921. Walter Joseph Newton	" 3	1012. James Healey	" 29
922. William Henry Smart	" 3	1013. Willie Hodge	" 29
923. Archibald Speir	" 3	1014. George Pannell	" 29
924. Henry Richard Stewart	" 3	1015. Thomas Smith	" 29
925. Robert Thompson	" 3	1016. William Peter Daly	" 29
926. John Thornley	" 3	1017. Franz Ertl	" 29
927. Thomas Henry Ufton	" 3	1018. Robert Forsyth	" 29
928. Robert Vause	" 3	1019. William Garbutt	" 29
929. Benjamin Williams	" 3	1020. Thomas Joseph Hallinan	" 29
930. William Henry Butler	" 3	1021. George Albert Lishman	" 29
931. Joseph Noble	" 3	1022. Joseph Marriott	" 29
932. Joseph Proud	" 3	1023. Frank Percy Moren	" 29
933. Robert Campbell	" 3	1024. George McCluskey	" 29
934. Michael McGinnis	" 3	1025. Charles McQueen, jun.	" 29
935. Matthew Godfrey Baker	" 3	1026. John Marius Neilson	" 29
936. Joe Beverley	" 3	1027. James O'Neill	" 29
937. Peter Busbridge	" 3	1028. John Vincent Riesterer	" 29
938. Thomas Daly	" 3	1029. David Kinnear Smith	" 29
939. William James Duthie	" 3	1030. Robert Smith	" 29
940. James Fryer	" 3	1031. James Newton	" 29
941. Edward Thomas Kennedy	" 3	1032. William Todd	" 29
942. Robert Mann	" 3	1033. John Henry Letcher	" 29
943. George Arthur Meier	" 3	1034. Henry James Hansen	" 29
944. Luke Martin Moore	" 3	1035. Michael Stephen O'Malley	" 29
945. John McGregor	" 3	1036. Thomas Henry Bushell	" 29
946. Arthur Charles McLean	" 3	1037. William Williams	" 29
947. James Nichol	" 3	1038. Matthew Guy	" 29
948. George Darroch Pulham	" 3	1039. William Morgan	" 29
949. Frederick William Soppet	" 3	1040. Robert Ross	" 29
950. Robert Chapman	" 3	1041. Robert Ross	" 29
952. William Henry Elmore	" 3	1042. Simon William Wilson	" 29
954. Ernest William Lawrie	" 3	1043. Arthur Cometti	Oct. 19
955. James Rowe	" 3	1044. James Durward	" 19
956. John Hislop	" 3	1045. William King	" 19
957. John Paterson	" 3	1046. William Slater	" 19
958. Andrew Watson	" 3	1047. James Steer	" 19
959. George Bennet	Aug. 29	1048. John Walker Vaughan	" 19
960. Arthur Irvine	" 29	1049. Charles Edward Vercoe	" 19
961. Peter Findlay McKay	" 29	1050. William Clark	" 19
962. Hugh Nixon	" 29	1051. James Black	" 19
963. John Henry Nodwell	" 29	1052. John Thomas Casey	" 19
964. Anthony Parker	" 29	1053. William Gribben Baird	" 19
965. Samuel Plimley	" 29	1054. George Leonard Gregg	" 19
966. John James Porch	" 29	1055. Samuel Dawson Hanna	" 19
967. Matthew Poultnay	" 29	1056. Thomas Keen	" 19
968. John Sampson	" 29	1057. Robert Taylor Millar	" 19
969. Richard Skellern	" 29	1058. George Washington Moore	" 19
970. William Henry Smith	" 29	1059. William Murray	" 19
971. James Hull	" 29	1060. Allan Smith McIntosh	" 19
972. John Walter Duggan	" 29	1061. William Noble	" 19
973. David Rankin Sheriff Galbraith	" 29	1062. Sydney Martin Pocock	" 19
974. James Spriggens	" 29	1063. William Smart	" 19
975. Robert Black	" 29	1064. Arthur George Tatton	" 19
976. John Bradshaw	" 29	1065. Horace Tomkies	" 19
977. Robert Macdonald	" 29	1066. Charles White	" 19
978. Alfred James Craddock	" 29	1067. Charles Bennet	" 19
979. George Erickson	" 29	1068. Joseph Hawkey Bunt	" 19

No. 11.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS—SERVICE—*continued.*

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1901.
1069. Robert Fimister	Oct. 19	1158. James Alexander Warnock ..	Nov. 13
1070. William Hurrell	" 19	1159. Frederick William Ziplinsky ..	" 13
1071. John Methers	" 19	1160. Ernest Biggin	" 13
1072. Archibald McNeil	" 19	1161. James Bristow Howard	" 13
1073. Robert Sanders	" 19	1162. Peter Smellie	" 13
1074. John Walsh	" 19	1163. Edward Bell	" 13
1075. William James Watson	" 19	1164. James Bain Auld	" 13
1076. Patrick Alfred Westcott	" 19	1165. Archibald Cox	" 13
1077. Michael Moore	" 19	1166. Maurice Henry McCraw	" 13
1078. James Sinclair	" 19	1167. Walter Wilby	" 13
1079. John Edward Manson	" 19	1168. David Blackadder	Dec. 19
1080. John James Watterson	" 19	1169. Francis Henry Brown	" 19
1081. James Bennet	" 19	1170. James Davidson	" 19
1082. Angus Kennedy	" 19	1171. James Purse Gamble	" 19
1083. Charles Milne	" 19	1172. Claude Campbell Hall Gibbons ..	" 19
1084. Frank Wilson Pope	" 19	1173. James Edmond Goodall	" 19
1085. Henry Schaumann	" 19	1174. Norman Henderson	" 19
1086. William Henry Scott	" 19	1175. John James Jackson	" 19
1087. Robert Smith	" 19	1176. Michael Johnston	" 19
1088. James Joseph Walsh	" 19	1177. John McKenzie	" 19
1089. George Thomas Smith	" 19	1178. James Nisbet	" 19
1090. Edward Lamb	" 19	1179. Daniel Parker	" 19
1091. Robert Cashman	" 19	1180. Frederick Fitzgerald Resta	" 19
1092. Thomas Barton	" 19	1181. William Scott Riddell	" 19
1093. George Leopold Hyde	" 19	1182. Walter Percy Stevens	" 19
1094. Clement Peech	" 19	1183. Arthur Gretton Tomkies	" 19
1095. Albert John Riches	" 19	1184. Manson Theodore West	" 19
1096. Thomas Wall	" 19	1185. James Hewitt	" 19
1097. Archibald Murray	" 19	1186. Arthur Walker Stuckey	" 19
1098. John Jackson Musicks	" 19	1187. Ernest Tirarau Walker	" 19
1099. Henry William Barnes, jun. ..	" 19	1188. Henry George Bruce	" 19
1100. William Griffiths, sen.	" 19	1189. Robert Young Clow	" 19
1101. Thomas Maxwell	" 19	1190. Austin Felix Dugdale	" 19
1102. William Carr	" 19	1191. Robert Gilchrist Forrester	" 19
1103. Thomas Doney	" 19	1192. Henry Smith Hall	" 19
1104. William Parr	" 19	1193. Charles Frederick Johnston	" 19
1105. John William Fowler	" 19	1194. Hilary Quertier	" 19
1106. Alfred Dowden Hamilton	" 19	1195. David Caithness	" 19
1107. William Jones	" 19	1196. Henry Brown	" 19
1108. James Ledingham	" 19	1197. Harry Crowther	" 19
1109. Robert Rae	" 19	1198. Hugh Pughe Jones	" 19
1110. Clarence Skellern	" 19	1199. Alexander McGruer	" 19
1111. William Coulson	" 19	1200. Richard Mackay	" 19
1112. John Best	" 19	1201. George Walker McLay	" 19
1113. Levi Collier	" 19	1202. John Watts Wallace	" 19
1114. James Giffen	" 19	1203. William Thomas Stevens	" 19
1115. John Henderson	" 19	1204. James Brown	" 19
1116. James Lisle	" 19	1205. William Francis Humphreys	" 19
1117. John Black	Nov. 13	1206. William Weir	" 19
1118. John Watson Coulson	" 13	1207. Amos Clegg	" 19
1119. William Cummock	" 13	1208. John Haig	" 19
1120. Alfred Harraway	" 13	1209. John William Perriam	" 19
1121. Hamilton Hay	" 13	1210. Charles Henry Carter	" 19
1122. George Jones	" 13	1211. William James Crozier	" 19
1123. Samuel Milbank	" 13	1212. Edward Durston	" 19
1124. George Orlando Oldham	" 13	1213. Charles Hornby	" 19
1125. Charles Philip	" 13	1214. Julius Porritt	" 19
1126. William Poppelwell	" 13	1215. Henry Williamson	" 19
1127. George Robb	" 13	1216. John Andrew Johnson	" 19
1128. William Benjamin Walters	" 13	1217. Alexander Allan	" 19
1129. George Williams	" 13	1218. George Robert Holmes	" 19
1130. Charles Edgar Neville Woodman ..	" 13	1219. Patrick Meshan	" 19
1131. James Affleck	" 13	1220. Benjamin McPherson	" 19
1132. William Richard Border	" 13	1221. James Wilkes	" 19
1133. John Elliott Christmas	" 13	1222. John Morrison	" 19
1134. Samuel Coard	" 13	1223. Noah Morgan Harry	" 19
1135. Henry Coutts	" 13	1224. William Herous	" 19
1136. Alexander McQueen	" 13	1225. Francis Scott	" 19
1137. Henry Rollinson	" 13	1226. James Smith	" 19
1138. James Henry Collett	" 13	1227. Matthew James Woodward	" 19
1139. Robert Davidson	" 13	1228. James Baird	" 19
1140. William Griffiths	" 13	1229. George Clarkson	" 19
1141. William Llewellyn	" 13	1230. Martin Edward George Richard Lock	" 19
1142. Edward Mervyn Vickerman	" 13	1231. John Benjamin Morris	" 19
1143. William John Maddren	" 13	1232. Henry Simmonds	" 19
1144. Francis Williams	" 13	1233. Charles Spain	" 19
1145. Duncan Bringans	" 13	1234. Johnson Thomas	" 19
1146. Joseph Benoit Bourgois	" 13	1235. Trevor Samuel Atkinson	" 19
1147. Albert Cederman	" 13	1236. Michael Donoghue	" 19
1148. Thomas Henry Gourley	" 13	1237. Benjamin Burgess	" 19
1149. William Gilbert Mouat	" 13	1238. David Mochan	" 19
1150. Thomas Plummer Clarke	" 13	1239. John William Rawcastle	" 19
1151. Henry Gray	" 13	1240. David Davies	" 19
1152. Thomas McVicker	" 13	1241. John Bulliff Bennett	" 19
1153. Thomas Bringans	" 13	1242. Thomas Stuart Gurr	" 19
1154. Gavin Dickson	" 13	1243. Frederick Ernest Allen	" 19
1155. George Fisher	" 13	1244. Alexander Allen	" 19
1156. Dugald McGregor	" 13		1902.
1157. Frederick J. Stratford	" 13	1245. Alfred Alsop	Feb. 17

No. 11.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS—SERVICE—*continued.*

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
1246. William Brunsdon	Feb. 17	1314. Henry Richard Cowan	Feb. 17
1247. Alfred Clode, jun.	" 17	1315. Samuel Cooper	" 17
1248. Thomas Lee	" 17	1316. John William Trevibhick	" 17
1249. James Martin	" 17	1317. Louis Lawrence Anderson	" 17
1250. Angus McGarvick	" 17	1318. William Bainbridge	" 17
1251. Robert Riordan	" 17	1319. Edward Hayes	" 17
1252. John Abern	" 17	1320. David McLeod Nicolson	" 17
1253. William John Barlow	" 17	1321. James Bryce	" 17
1254. John Dempster, jun.	" 17	1322. William Joseph Legg	" 17
1255. Charles Frederick Partington	" 17	1323. Thomas Steele	" 17
1256. Edgar Sainsbury	" 17	1324. Frederick John George Brown	" 17
1257. John Henry Adams	" 17	1325. Bernard Cull	" 17
1258. Philip Michael French	" 17	1326. Henry Wallace Gifford	" 17
1259. Charles Head	" 17	1327. Chris. Jenkins	" 17
1260. Charles Kemp	" 17	1328. William Jonathan Lightfoot	" 17
1261. Patrick Regan	" 17	1329. William Walter Macfarlane	" 17
1262. John Robert Lawrence	" 17	1330. Archibald Walter Titley	" 17
1263. Charles Henry Eustace	" 17	1331. Samuel Carey Brown	" 17
1264. John Christopher Chapman	" 17	1332. Henry Ruscoe	" 17
1265. Thomas Saundry Leggs	" 17	1333. Rees Williams	" 17
1266. John McKenzie	" 17	1334. Thomas Duncan Campbell	" 17
1267. James McNeil	" 17	1335. Major Hooper Clark, jun.	" 17
1268. Cuthbert Priest	" 17	1336. George Oates	" 17
1269. Isaac Smale	" 17	1337. John Scobie Ritchie	" 17
1270. Albert John Warring	" 17	1338. David Shand	" 17
1271. Arthur George Rich Williams	" 17	1339. William Annan	" 17
1272. James Joseph Coulter	" 17	1340. William Jackson Edmond	" 17
1273. James Leslie Chalmers	" 17	1341. William Whitelaw	" 17
1274. Charles Edward Knight	" 17	1342. George James Lamont Gurr	Mar. 27
1275. Edward Benson	" 17	1343. John McLroy	" 27
1276. Thomas Arthur Graham	" 17	1344. Henry Campbell Greene	" 27
1277. William Robertson	" 17	1345. Thomas Basil Stewart	" 27
1278. William David Lindsay McLean	" 17	1346. James Morrison	" 27
1279. Richard Ivey	" 17	1347. John Campbell	" 27
1280. George Alfred Friers	" 17	1348. Peter John Sloane	" 27
1281. Edwin Lovell Grigg	" 17	1349. Edward Biddle	" 27
1282. Patrick Keegan	" 17	1350. Thomas Glenn	" 27
1283. Hugh Barton Murray	" 17	1351. Oliver Johnson	" 27
1284. James McClymont	" 17	1352. William Milne	" 27
1285. Thomas Francis O'Sullivan	" 17	1353. Henry Moncrieff	" 27
1286. John Whitehouse	" 17	1354. William Nisbet	" 27
1287. Henry Thomas Clare	" 17	1355. Joseph William Crofts	" 27
1288. Edward George McDougall	" 17	1356. Iver Austad	" 27
1289. William Monroe Watt	" 17	1357. Alexander Beain	" 27
1290. George Annand	" 17	1358. Alexander Feathers	" 27
1291. William Ashley	" 17	1359. Robert Alexander McLeod	" 27
1292. George Forbes, jun.	" 17	1360. Carl Hansen	" 27
1293. Harry Adams	" 17	1361. Charles Stubbs	" 27
1294. Robert Campbell	" 17	1362. George Campbell	" 27
1295. Alfred Carter, jun.	" 17	1363. James Slator	" 27
1296. Warrant Wilson Carter	" 17	1364. Alexander Jordan	" 27
1297. Joseph Simpson Clout	" 17	1365. James Archibald Macdonald	" 27
1298. James Collins	" 17	1366. William Richard Gibson	" 27
1299. Louis Morel	" 17	1367. Allan McDonald	" 27
1300. John MacLaren	" 17	1368. John William Jenkins	" 27
1301. Frederick Arthur Palmer	" 17	1369. Philip Brennan	" 27
1302. Charles Edward Passmore	" 17	1370. John Carroll	" 27
1303. James Richmond	" 17	1371. Thomas Chapman	" 27
1304. George Scoles	" 17	1372. Jonathan Griffin	" 27
1305. Robert Scott	" 17	1373. George Frederick Jones	" 27
1306. John Francis Smither	" 17	1374. Duncan McCallum	" 27
1307. Thomas Sneyd	" 17	1375. Duncan McLean	" 27
1308. Malcolm Turner	" 17	1376. William Sandilands	" 27
1309. Andrew Anderson Wallace	" 17	1377. John Richardson Crallan	" 27
1310. George Patterson	" 17	1378. Donald Sutherland	" 27
1311. Joseph Harden	" 17	1379. Richard Vicars	" 27
1312. Edward George Child	" 17	1380. Walter Burnside	" 27
1313. Charles Harrod	" 17	1381. William Holt	" 27

No. 12.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue. 1901.	No. and Name of Person.	Date of Issue. 1901.
395. Charles Hollings	April 22	408. Richard Green	April 22
396. Frank Hunter	" 22	409. William Holmes	" 22
397. Thomas More	" 22	410. Hector Bruce McAra	" 22
398. Keith Stewart McKinna	" 22	411. Robert Wright	" 22
399. Edward Wenmouth	" 22	412. Patrick Weaver	" 22
400. George Mills	" 22	413. Hugh Robertson	" 22
401. Thomas Clark	" 22	414. George Henry Gibson	" 22
402. William John Inglis	" 22	415. Patrick McSkimming, jun.	" 22
403. Robert Watson McIntosh	" 22	416. Hugh Heeney	" 22
404. Henry George Woods	" 22	417. Rutland William Hunt	" 22
405. Alexander Melville Wilson	" 22	418. Thomas Michael Killery	" 22
406. George Frederick Armstrong	" 22	419. William Ross	" 22
407. Alexander Johnston	" 22	420. Neils Christian Konrad Shon.. ..	" 22

No. 12.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS—SERVICE—continued.

No. and Name of Person.	Date of Issue.	No. and Name of Person.	Date of Issue.
	1901.		1901.
421. Thomas Hayes	April 22	510. George Burton	Oct. 19
422. Charles Henry Broome	May 27	511. Thomas Ganley	" 19
423. Harvey Burr	" 27	512. George Moon, jun.	" 19
424. Peter Creagh	" 27	513. Frederick Moore	" 19
425. Andrew Ronaldson Cunningham	" 27	514. James McCorkindale	" 19
426. David Dunwoodie	" 27	515. George Robert Beecroft	" 19
427. Thomas M. Ellis	" 27	516. William Beecroft	" 19
428. William Thomas Tonkin Fleming	" 27	517. Alfred Kelsey Codlin	" 19
429. Christopher Inkster	" 27	518. John Thomas Dowd	" 19
430. Joseph James	" 27	519. James Drysdale	" 19
431. William Henry Kent	" 27	520. Charles Sydney Alfred Maddock	" 19
432. Joseph Moyna	" 27	521. Francis John Le Marquand	" 19
433. George Rodda	" 27	522. William Marstin	" 19
434. William Rodgers	" 27	523. John Murray	" 19
435. Thomas Scoular	" 27	524. Charles Henry Sampson	" 19
436. Job Stanley	" 27	525. Alexander Young	" 19
437. Arthur W. Sutcliffe	" 27	526. Percival Calvert Knight Young	" 19
438. William Thomas	" 27	527. Alfred Bacon	" 19
439. Andrew Robert Chisholm	" 27	528. Peter Brewin	" 19
440. William Griffiths	" 27	529. Charles Bryan	" 19
441. Theophilus George Love	" 27	530. James Frederick Cornish	" 19
442. George Jones	" 27	531. Tom Fessey	" 19
443. Joseph William Percy Newsome	" 27	532. Frederick Johnson	" 19
444. James Albert Wakelin	" 27	533. John Kelman	" 19
445. John Rodgers	" 27	534. John William Lemme	" 19
446. Charles Harrod	" 27	535. George Stewart	" 19
447. John H. Hunter	" 27	536. David Patrick Stuart	" 19
448. Hugh Henry Watson	" 27	537. John Russell Young	" 19
449. Gavin Weir	" 27	538. Charles Otway Langham	" 19
450. Alexander McDonald	" 27	539. Charles William Baker	" 19
451. James Bissell	" 27	540. Thomas Lane	" 19
452. George Boswell	" 27	541. Henry Mitchell	" 19
453. Robert Callaway	" 27	542. John McQuilkin	" 19
454. Edward Hughes	" 27	543. Arthur Watson	" 19
455. Robert Johnson	" 27	544. Henry August Wick, jun.	" 19
456. Alexander Pryde, jun.	" 27	545. Harry Shelmerville Leicester	" 19
457. Alfred Robert Richardson	" 27	546. William Stewart Hennah	" 19
458. Charles A-spray	" 27	547. Osmond Butler	" 19
459. William Charles Brown	July 3	548. Adam William Maclarn	" 19
460. Harry Butcher	" 3	549. Thomas Marr	" 19
461. Rice Owen Clark	" 3	550. Thomas Rolton	" 19
462. Alexander Govan	" 3	551. William Weir	" 19
463. James Kinahan	" 3	552. John Foster Batey	" 19
464. Donald McDonald	" 3	553. William James Telfer Ayson	" 19
465. William Linney	" 3	554. Thomas Homewood	" 19
466. Simon Neilson	" 3	555. John Andrew Johnson	" 19
467. Daniel Braniff	" 3	556. Nathan Greaves	" 19
468. Thomas Summerton	" 3	557. Kenneth Hutchison Trail	" 19
469. William Joseph Berrill	" 3	558. Lewis Herbert Trevena	" 19
470. James William Hamilton	" 3	559. Charles Curno	" 19
471. Alexander McLellan	" 3	560. Francis Glancy	" 19
472. William Thomas Tomlinson	" 3	561. Oscar Olsen	" 19
473. Charles Hornby	" 3	562. Victor Louis Longuet	" 19
474. Patrick Madigan	" 3	563. Robert Alexander Dickie	" 19
475. Joseph Burnett Collie	" 3	564. Robert Aldworth	Nov. 13
476. William Stevens	Aug. 29	565. Daniel Davey	" 13
477. John Aitken Allender	" 29	566. Harry Jewiss	" 13
478. William Fraser Bell	" 29	567. William James Boyce	" 13
479. Walter Walsh	" 29	568. Joseph Simpson Clout	" 13
480. Frederick James Sanger Henderson	" 29	569. Francis William Falconer	" 13
481. Hugh Nelson	" 29	570. David Hamilton	" 13
482. Thomas Milner Gunnell Trengrove	" 29	571. Thomas Moyle	" 13
483. William Henry Wensor	" 29	572. Sydney Parsons	" 13
484. William Mummery	" 29	573. Dugald Campbell Smith	" 13
485. Adam Clarke Girven, jun.	" 29	574. Richard Henry Naylor	" 13
486. James Fairley	" 29	575. Alfred Woldon Stringer	" 13
487. Charles Boyd	" 29	576. John Young Hannay	" 13
488. William Alexander Doran	" 29	577. Charles Henry Fleming	" 13
489. John Ambrose Ralph	" 29	578. John Grant Draever	" 13
490. William Owen	" 29	579. Robert Frederick Hinton Aldworth	" 13
491. Walter George	" 29	580. Alexander Macandrew Howison	" 13
492. James Hamilton	" 29	581. Nicolai Jacob Nilsen	" 13
493. James Alexander Maffeu	" 29	582. George Austin Barker	" 13
494. Walter Rennie	" 29	583. Walter Lewis Child	Dec. 19
495. Hugh Ferry-whelr Meikle	" 29	584. Albert Hassall	" 19
496. Edwin Mitchell	" 29	585. John Butler	" 19
497. Alexander McLeod	" 29	586. Frederick Histed	" 19
498. George Edward Terry Tuck	" 29	587. George Kitt	" 19
499. William John Wick	" 29	588. William Frederick Rankin	" 19
500. Stephen Maher	" 29	589. William James Robertson	" 19
501. John Powell Payton	" 29	590. Edwin Thomas Roe	" 19
502. John Crichton	" 29	591. Nicholas Rowe	" 19
503. Thomas Bell	" 29	592. Thomas Rowe	" 19
504. William Simpson	" 29	593. William Rowe	" 19
505. William George French	" 29	594. Alfred Rutland Seccombe	" 19
506. John Chapman	" 29	595. Arthur Smith	" 19
507. Michael Matthews	" 29	596. George Smith	" 19
508. Donald Noble Bissett	" 29	597. William Walker Walls	" 19
509. Peter Curtin	" 29	598. Christopher Walsh	" 19

NO. 12.—RETURN OF SECOND-CLASS STATIONARY-ENGINE DRIVERS—SERVICE—*continued.*

No. and Name of Person.	Date of Issue.		No. and Name of Person.	Date of Issue.	
	1901.			1902.	
599. Arthur Eldridge Philpott	Dec.	19	643. Robert McDonald	Feb.	17
600. Alfred Ansell	"	19	644. Thomas Henry Wilson	"	17
601. Charles Ward Slymon	"	19	645. Cornelius James Billington	"	17
602. Archibald Newitt	"	19	646. Charles Suttie	"	17
603. Peter James Hughes	"	19	647. Albert Edward Braund	"	17
604. Frederick Kiernan	"	19	648. Thomas Chapman	"	17
605. Charles Francis John Biggs	"	19	649. William David Crysell	"	17
606. Charles Foster	"	19	650. John Nicholson Taylor	"	17
607. Robert Taylor	"	19	651. Cecil Strange Haggitt	"	17
608. Allan Freshan Bremner	"	19	652. James Bishop Orr	"	17
609. Archibald Ellis	"	19	653. Laurence Henry Gordon	"	17
610. Robert Reginald Owen Masefield	"	19	654. Alexander Burns	"	17
611. Nicholas Gillson March	"	19	655. Lewis Frederick Coleman	"	17
612. Robert Ross McDonald	"	19	656. William McCorkindale	"	17
613. John Patrick Fuller	"	19	657. John Percy	"	17
614. John Mains	"	19	658. Alexander Eagleton	"	17
615. Thomas Bustin	"	19	659. Walter Saunders	"	17
616. James Miller	"	19	660. Rice Owen Clark, jun.	"	17
617. James Brewin	"	19	661. John Edward Taylor	"	17
618. Alexander Robbie	"	19	662. Gilbert Fraser Hurray	"	17
619. John Alexander Wilson	"	19	663. John Webster	"	17
620. Frederick Cooper Leary	"	19	664. Carl Minge	"	17
621. Edward Benjamin Youngman	"	19	665. William Edwards	"	17
622. Joseph Burns	"	19	666. John McKinnon	"	17
623. Harry Paterson	"	19	667. George Clough	"	17
624. John Dawson	"	19	668. John Madden	"	17
			669. Percival Robert Parker	"	17
			670. Colin Brown	"	17
625. Ralph Andrews	Feb.	17	671. Joseph McDonald	"	17
626. William Brown	"	17	672. Herbert Stubbington	"	17
627. Charles Benjamin Gaby	"	17	673. David Thomas Hope	Mar.	27
628. Walter Henry Leslie	"	17	674. Robert George Carter	"	27
629. Albert Richard James Melvin	"	17	675. Albert Edward Friend	"	27
630. George William Mirk	"	17	676. James Geraghty	"	27
631. Douglas Campbell Waldie	"	17	677. Edward Jensen	"	27
632. Thomas Wearne	"	17	678. Daniel Martin Coughlan	"	27
633. Patrick O'Connor	"	17	679. George Larking	"	27
634. John Hulse	"	17	680. Edwin Albert Frederick Bevan	"	27
635. Joseph Riggers	"	17	681. Sidney Jeffery	"	27
636. Ethelbert Croucher	"	17	682. John McCroskie	"	27
637. Hayes Croucher	"	17	683. John Henry William Woltersdorf	"	27
638. John Martin Croucher	"	17	684. Thomas Norrie Horsley	"	27
639. Ernest John William Hauley	"	17	686. James Hobbs	"	27
640. William Henry Collis	"	17	687. James Cockburn	"	27
641. William Charles Mayne	"	17			
642. James McAnulty	"	17			

NO. 13.—RETURN OF EXTRA FIRST-CLASS STATIONARY-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED FROM 1ST APRIL, 1901, TO 31ST MARCH, 1902.

No. and Name of Person.	Date of Issue.		No. and Name of Person.	Date of Issue.	
	1901.			1902.	
6. Ernest Herbert Hobday	May	27	10. John Clarkson Phillips Maynard	Feb.	17
7. Henry Wilson Roy	Aug.	29	11. James Wilson Bower	"	17
8. Frank Slade	Oct.	19			
9. George Thomas Slade	Dec.	19			

NO. 14.—RETURN OF FIRST-CLASS STATIONARY-ENGINE DRIVERS TO WHOM CERTIFICATES OF COMPETENCY HAVE BEEN GRANTED FROM 1ST APRIL, 1901, TO 31ST MARCH, 1902.

No. and Name of Person.	Date of Issue.		No. and Name of Person.	Date of Issue.	
	1901.			1901.	
43. Albert Edward Brown	April	22	68. Arthur Rennie Watson	Aug.	29
44. Charles Flavell	May	27	69. Charles John Styche	"	29
45. Oscar Edward Owles	"	27	70. Charles James Ash	"	29
46. James Alexander Henderson	"	27	71. Lionel Otho Nugent Abbott	"	29
47. Robert Archibald Denniston	"	27	72. Thomas Nelson Henry	"	29
48. John Benson Cartsburn Watt	"	27	73. Robert Murray	"	29
49. James Young Kelly	"	27	74. Henry Mills Stowe Seon	"	29
50. Harold Rochfort	"	27	75. Edwin Harvey Tremain	"	29
51. Francis Smith	July	3	76. James Atkinson Floyd	"	29
52. Henry Edmund Judd	"	3	77. Franz Roering	"	29
53. Arthur Willie Walter Hodge	"	3	78. Norman Mahon Jervis	"	29
54. Herbert Samuel Derbridge	Aug.	29	79. Arthur Burton	"	29
55. Frederick Dalgety Sutherland	"	29	80. Robert Henderson	"	29
56. William Lowrie Gray	"	29	81. John Nicol	"	29
57. Matthew Osborne	"	29	82. Albert Edward Shirley	"	29
58. Joseph Preddy	"	29	83. James McDougall	"	29
59. Joseph Hopkirk	"	29	84. John Haxton Thomson Stark	"	29
60. George Matthew Humphreys	"	29	85. Herbert Christian	"	29
61. Henry McIntyre	"	29	86. Thomas Gilooly	"	29
62. Ralph Sneyd Smith	"	29	87. Harry Finlayson	Oct.	19
63. Herbert Alfred Blatch	"	29	88. Harry Freethy	"	19
64. John Peddie	"	29	89. William Earnshaw	"	19
65. George Robert Pirie	"	29	90. George Richard Hale	"	19
66. Andrew Farquharson Ridland	"	29	91. Edwin Barlow	"	19
67. Thomas Stuart Storrar	"	29	92. Ernest Augustus McConnell	"	19

No. 14.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS—COMPETENCY—*continued.*

No. and Name of Person.	Date of Issue.	No. and Name of Person.	Date of Issue.
	1901.		1902.
93. Edwin Exell	Nov. 13	127. Robert John Murray	Feb. 17
94. Alexander John Black	" 13	128. Charles Clarke	" 17
95. Maxwell Devenish Meares	" 13	129. Duncan McGregor	" 17
96. William Morris	" 13	130. John Heath Johnston	" 17
97. Percival Harry Adams	" 13	131. Alexander Riddell	" 17
98. John Barrow	" 13	132. Thomas Smith	" 17
99. Henry John Beck	" 13	133. John Dawson	" 17
100. Nathan Farmer	" 13	134. Thomas William Felton	" 17
101. Joseph Fowell	" 13	135. Robert Parr	" 17
102. Ebenezer William Hamilton	" 13	136. Edwin Metherell	" 17
103. Robert Hardie Henry	" 13	137. Allan Galt	" 17
104. William Jacobsen	" 13	138. Allan Mair Jackson	" 17
105. John Goodall Jarrett	" 13	139. Frank Carey Bates	" 17
106. Frank Bycroft Keal	" 13	140. Norman James Ronaldson	" 17
107. John Thomas Lowden	" 13	141. Frank John Edward Smallbone	" 17
108. Edgar Ernest O'Daniels	" 13	142. Edward Sutherland Robson	" 17
109. James Sawle	" 13	143. John Denniston Smith	" 17
110. John Scott	" 13	144. Thomas Henry Davidson, jun.	" 17
111. Edward Tully	" 13	145. William Hutchinson Dennison	" 17
112. Archie Edward Bruce Ward	" 13	146. Henry William Bobin	" 17
113. William Henry Woodward	" 13	147. George Hunter	" 17
114. James Somerville Don	" 13	148. John McLean	" 17
115. John Miller	" 13	149. Percy Wilfred Moss	Mar. 27
116. George Edgar	" 13	150. Francis Albert Smith	" 27
117. Herbert Henry Evans	" 13	151. Daniel Forno	" 27
118. Archibald Benjamin Badmin Percy	" 13	152. Robert Henry Kelly	" 27
119. Bruce Charles Goudie	Dec. 19	153. Arthur Seldon Pike	" 27
120. James Richardson	" 19	154. Andrew Campbell	" 27
121. William Bray O'Brien	" 19	155. David Henderson	" 27
122. Llewellyn George Denton James	" 19	156. Samuel Robinson	" 27
	1902.	157. Charles Henry Kellett	" 27
123. Frederick Openshaw Baker	Feb. 17	158. Arthur Edwin Coleman	" 27
124. John Ernest Denton	" 17	159. Frank Meilish	" 27
125. William Collett	" 17	160. George Rodgers	" 27
126. John Clarkson Phillips Maynard	" 17	161. George William Searles	" 27

No. 15.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1901, to 31st March, 1902.

No. and Name of Person.	Date of Issue.	No. and Name of Person.	Date of Issue.
	1901.		1901.
202. John Doras	April 22	248. James Joseph Mohan	July 3
203. John William Thompson	" 22	249. John Graham Quinn	" 3
204. Wilson Hagen	" 22	250. Herbert George Hool	" 3
205. Joseph Barker Snasdell	" 22	251. John Cameron	" 3
206. James Aikman	May 27	252. William Downie	" 3
207. James Wilson Bruce	" 27	253. Frank Clerkin	" 3
208. Arthur Samuel Carr	" 27	254. William Herbert Thompson	" 3
209. Robert Zechariah Davis	" 27	255. Michael Moye	" 3
210. Alexander Merrie	" 27	256. Donald John McDonald	" 3
211. Charles Joseph Morgan	" 27	257. John Joseph Turnbull	" 3
212. Levi James	" 27	258. James Stevenson	Aug. 29
213. Robert Leeming	" 27	259. John Booth	" 29
214. James Henry Garlick	" 27	260. William Walters McCabe	" 29
215. William Aitchison	" 27	261. Alexander Robert McNeil	" 29
216. William Cromar	" 27	262. Colin Campbell Algie	" 29
217. Alfred Richard Jones	" 27	263. Robertson Brown	" 29
218. George Riordan	" 27	264. Walter Humphrey Ray	" 29
219. James Robb	" 27	265. Thomas Lloyd	" 29
220. Ralph Sneyd Smith	" 27	266. John James Thompson	" 29
221. Ernest Reginald Sprague	" 27	267. Victor John Joseph Bice	" 29
222. George Murray	" 27	268. Thomas Palmer	" 29
223. Alexander Fraser	" 27	269. James Kinnaird	" 29
224. Alfred Davies Wragge	" 27	270. Edward Andersen Laurvig	" 29
225. Stanley Foster	" 27	271. Charles Henry Wellman	" 29
226. George Shearer Harvey	" 27	272. George Plank	" 29
227. Charles Henry Smythe	" 27	273. Henry Dearing	" 29
228. Thomas Sneyd	" 27	274. Samuel Price Evans	" 29
229. John Gay Butterworth	" 27	275. Edward Morgan	" 29
230. John Louis Ching	" 27	276. Robert Faire	" 29
231. William Frederick Pellew	" 27	277. Gerald Irvine Lowe	" 29
232. Preston Henry Hulton Harold Webber	" 27	278. William Charles Stokes	" 29
233. Norman Henderson	" 27	279. Francis Richard Metherell	" 29
234. Harry Edgerton	" 27	280. Thomas Nelson Rawlinson	" 29
235. Charles William Feilen	" 27	281. Joseph William Jamison	" 29
236. James Nickoles Mutch	" 27	282. John Therckleson	" 29
237. Frank Bosworth Taylor	" 27	283. Esau Lee	" 29
238. John McVean Walker	" 27	284. William Harris	" 29
239. William Young	" 27	285. Rufus Lee	" 29
240. William Birkmyre Young	" 27	286. James McDonald	" 29
241. Alexander Milne Dawson	" 27	287. Harry Shaw	" 29
242. Thomas Henry Burrell	July 3	288. Paul Benjamin Wilton	" 29
243. William Thomas Chappell	" 3	289. Donald Fraser	" 29
244. Philip George Bowater	" 3	290. Emil Johannes Johanson	" 29
245. Albert Samuel Brugh	" 3	291. Robert Young Clow	" 29
246. John Joseph Corr	" 3	292. William James Larcombe	" 29
247. William James Garrett	" 3	293. Henry Richard Davis	" 29

No. 15.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS—COMPETENCY—continued.

No. and Name of Person.	Date of Issue, 1901.	No. and Name of Person.	Date of Issue, 1901.
294. George Lindsay	Aug. 29	383. Thomas Frederick Bryan	Nov. 13
295. Rodger Meldrum	" 29	384. Robert Boyd Wilson	" 13
296. Nathaniel Todd	" 29	385. William Barr Reid	" 13
297. George Woods	" 29	386. Ernest Vallance	" 13
298. Thomas Joseph Boyle	" 29	387. John Gottfried Dudeck	" 13
299. William Johnston	" 29	388. Arthur John Richard Worm	" 13
300. John Duncan	" 29	389. John Thornton Godfrey Collas	" 13
301. Thomas McNeill	" 29	390. Thomas Maxwell Ford	" 13
302. Samuel McTaggart	" 29	391. Arthur Jones	" 13
303. Henry William Lambton Pascoe	" 29	392. Joseph Hill	" 13
304. James John Rapsey	" 29	393. William Maxwell Lawson	" 13
305. Edward George Silk	" 29	394. Edwin Charles Paul	" 13
306. George Kay	" 29	395. John McDonald	" 13
307. William John Stevenson	" 29	396. Arthur McCrystall	" 13
308. Robert Howorth	" 29	397. Nathaniel Stafford	" 13
309. Richard Osnwell Speed	" 29	398. James McErlean	" 13
310. Robert Bregmen	" 29	399. Archibald Craig	" 13
311. William Brentnall, jun.	" 29	400. William McDonald	" 13
312. Frank Brewin	" 29	401. Samuel Learmont	" 13
313. Hugh Brown	" 29	402. Charles Sedley Benn	" 13
314. Stanley Howard Empson	" 29	403. John Cheyne McLellan	" 13
315. George Beath Fisher	" 29	404. Frederick John Hamer	" 13
316. John Gaddis	" 29	405. Robert Robertson	" 13
317. Frank Holmes	" 29	406. Alexander Ritch	" 13
318. William Innes	" 29	407. Robert George Foster	" 13
319. St. Clair Nathaniel Henry Macdonald	" 29	408. James Hogarth Small	" 13
320. Arthur Morgan	" 29	409. Herbert Davidson Taylor	" 13
321. Robert Tudor Pownall	" 29	410. William Dickson	" 13
322. John Sutherland Sinclair	" 29	411. Peter McOnie McLay	" 13
323. William Thomas Bloy	" 29	412. Peter Walker	" 13
324. Alexander George Morris	" 29	413. John Patterson	" 13
325. John Gray	" 29	414. James Currie	" 13
326. Richard Jones	" 29	415. John Bain	" 13
327. Thomas Stout Macgregor	" 29	416. Archibald Grubb Drummond	" 13
328. Robert Aitken McLay	" 29	417. Robert Findlay	" 13
329. Horace Pope	" 29	418. James Barclay Kirkland	" 13
330. John Lumsden Robb	" 29	419. William Donald McKay	" 13
331. William Thomas Mitchell	" 29	420. Andrew McNeil	" 13
332. John Joseph Green	" 29	421. Robert William Moffitt	" 13
333. Walter Murdock Matheson	" 29	422. Louis Eugene Nees	" 13
334. Angus Neil Matheson	" 29	423. Fred Albert Oddie	" 13
335. Denis Pont	" 29	424. George Schluter	" 13
336. David Tucker	" 29	425. Thomas Stewart Spencer	" 13
337. John William Gibbons	" 29	426. William Wurr	" 13
338. Frederick Mathias Jacobsen	" 29	427. William McAra	" 13
339. William Sasse	" 29	428. Edward Grange	" 13
340. William Howie Kilgour	" 29	429. Jonathan Griffin	" 13
341. John Allan McEachen	" 29	430. Neil McDonald	" 13
342. William Harrison	" 29	431. Frank Joseph Rambaud	" 13
343. George Henry Paul	" 29	432. David Smith	" 13
344. Edward Callaghan	" 29	433. Norman Morris Russell	" 13
345. Valentine Morris	" 29	434. Edwin Smallman	" 13
346. James Pollock	" 29	435. William Thompson	" 13
347. Charles Daniel Brent	" 29	436. William Wallace	" 13
348. John Jelly Halliday	" 29	437. Frederick Walter Robinson	" 13
349. Charles Cyril Sanders	" 29	438. John Henry McKenzie	Dec. 19
350. Hume Raitt	" 29	439. John Tobeck	" 19
351. John Moffat Cameron	" 29	440. John Jolly	" 19
352. Robert Marshall Ray	" 29	441. Robert Scott	" 19
353. Francis Raper	" 29	442. Percival Joseph Burt	" 19
354. John James Vincent	Oct. 19	443. Harold John Fowler	" 19
355. Martin Elliott	" 19	444. Frederick Charles Edwards	" 19
356. Jacob Alfred Jacobsen	" 19	445. Charley Cresswell Beattie	" 19
357. Otto Sasse	" 19	446. Augustus George Hicks	" 19
358. Alfred James Pritchard	" 19	447. Alexander Allison	" 19
359. Alfred Edwin Hunt	" 19	448. Gavin Wallace	" 19
360. James Henry Naylor	" 19	449. Charles Ernest Stock	" 19
361. George Henry Perry	" 19	450. Michael Walshe	" 19
362. Frank White	" 19	451. William Frederick Henry Sturm	" 19
363. Allan Henry Thompson	" 19		1902.
364. Ernest Schafer	" 19	452. William McDowell	Feb. 17
365. Henry James Bright	" 19	453. Albert William Upjohn	" 17
366. William James Lodge	" 19	454. Charles Robert Burridge Upjohn	" 17
367. George William Coates	Nov. 13	455. Thomas Minehan	" 17
368. Charles Ernest Henry Boys	" 13	456. Thomas Joseph Barrett	" 17
369. George Hollier	" 13	457. Albert Bissell	" 17
370. Henry David Moss	" 13	458. Herbert John Buckland	" 17
371. James Mathieson	" 13	459. Stuart Henry Graham Ferris	" 17
372. John Roddan	" 13	460. John McBean	" 17
373. George Hedges	" 13	461. Frederick William Orams	" 17
374. William James Dickens	" 13	462. Peter Dafforn	" 17
375. Richard Lyons Roe	" 13	463. Henry Charles Richards	" 17
376. William Bird	" 13	464. Thomas Patrick Walshe	" 17
377. Thomas Morgan	" 13	465. Edwin Browne	" 17
378. Frederick Sunkel	" 13	466. William Finlayson	" 17
379. John Sidney Shrimpton	" 13	467. Thomas Patrick Keating	" 17
380. John Alexander Stewart Aitken	" 13	468. Bendix Hallenstein Kerr	" 17
381. James Goode McLivrick	" 13	469. Francis Reuben Fenton	" 17
382. James Smellie	" 13	470. Robert Lalor	" 17

No. 15.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS—COMPETENCY.—*continued.*

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
471. William Herbert Robinson	Feb. 17	530. George Lucas Nelson	Feb. 17
472. John Martin Francis Rogers	" 17	531. Robert Williams	" 17
473. William Cormack	" 17	532. James Wilson Robertson	" 17
474. Ernest Wilson	" 17	533. William Richards	" 17
475. Frank Wylde	" 17	534. Thomas Lloyd	" 17
476. Frederick Cullmann	" 17	535. Matthew McLeod	" 17
477. Patrick Freeburn Keenan	" 17	536. George Brand	" 17
478. George Grant McAlpine	" 17	537. James Hogan	" 17
479. George Gofton	" 17	538. Henry Goddard	" 17
480. Patrick O'Donnell	" 17	539. Henry Steele	Mar. 27
481. Alfred Oscar Cook	" 17	540. Frederick Elmers	" 27
482. William John Atherton	" 17	541. Sydney Hewetson	" 27
483. Fergus Ferguson Macleod	" 17	542. Ralph Clark Moyle	" 27
484. John McAulay	" 17	543. John Kay	" 27
485. Herbert Gibbie	" 17	544. Joseph Hunter	" 27
486. John Charles Ray	" 17	545. John Richard Dalton	" 27
487. Arthur John Hewetson	" 17	546. John Stuart MacRae	" 27
488. Marriet Harry Jamieson	" 17	547. Matthew Hendy	" 27
489. George Owler	" 17	548. Patrick O'Connor	" 27
490. William James Petherick	" 17	549. Thomas Reese Sneddon	" 27
491. George Edgar Tomlinson	" 17	550. William O'Brien	" 27
492. John Thomas Nicol Work	" 17	551. John James Bardsley	" 27
493. Archibald Ellis	" 17	552. John Joseph Enright	" 27
494. Thomas Mackie Robertson	" 17	553. Frank William Jeffreys	" 27
495. Charles Palmer Horne	" 17	554. James Kirker	" 27
496. Frederick Joseph Sydney Ellis	" 17	555. John Robertson Melvin	" 27
497. William Barnett	" 17	556. Frederick Clarke McCabe	" 27
498. Ernest George Alford	" 17	557. John Edmund McCabe	" 27
499. Alfred Anderson	" 17	558. Edward Robert Simpson	" 27
500. Henry John Fozakerlay Burrowes	" 17	559. Francis Woodhouse	" 27
501. John Currie	" 17	560. Francis Falconer	" 27
502. John Griffin, jun.	" 17	561. James Cormack	" 27
503. George Kay	" 17	562. Robert James Kirkwood	" 27
504. Alexander Murdoch	" 17	563. Wallace Carr	" 27
505. William Smith	" 17	564. George Craib Lawrence	" 27
506. William Robert Young	" 17	565. James Halbert Matthews	" 27
507. John Laidlaw Woodward	" 17	566. Thomas McMullan	" 27
508. Herbert Marshall	" 17	567. Lewis Deans Ritchie	" 27
509. James McKay	" 17	568. Arthur Robbins	" 27
510. George Christmas	" 17	569. James Leopold von Haast	" 27
511. William Christmas	" 17	570. Simon Weatherall	" 27
512. James Martin	" 17	571. Francis Alfred Wells	" 27
513. Henry Hayes	" 17	572. George Scott Slater	" 27
514. Michael James Collins	" 17	573. Thomas James Doolan	" 27
515. Frederick Mendoza	" 17	574. William Henry Spain	" 27
516. Hugh Mackie	" 17	575. James Nicholson	" 27
517. Charles Eugene McGill	" 17	576. Raymond Fitzmaurice	" 27
518. George Watt, jun.	" 17	577. Henry Spencer	" 27
519. James Watt	" 17	578. James Moye	" 27
520. William Gibson Young	" 17	579. Percy Nicolson	" 27
521. William Bain	" 17	580. John Findlay	" 27
522. Hugh Cameron	" 17	581. William John Ure	" 27
523. John Archibald Campbell	" 17	582. Thomas Bell	" 27
524. John Mearns Davidson	" 17	583. William Graham Royse	" 27
525. Frank Marshall	" 17	584. John Knight	" 27
526. Edward Nicholas Mills	" 17	585. George Sykes	" 27
527. Henry Neil Mills, jun.	" 17	586. John George Williams	" 27
528. William Samson Mills	" 17	587. Henry Whyte	" 27
529. Alexander Davidson Macgregor	" 17		

No. 16.—LIST of APPLICANTS for EXAMINATION for MARINE CERTIFICATES for the Year ending 31st March, 1902.

First-class Engineer.—H. Raymond, H. Raymond, F. C. Jacobs, J. A. Glasgow, T. Rogerson, R. W. Wallace, A. Coad.

Second-class Engineer.—W. J. White, W. J. White, E. S. Pyke, W. J. Sutton, J. Glover, S. H. Luke, F. L. Peterson, J. Glover, F. L. Peterson, H. L. Ziman, J. J. H. Wishart, F. Henry, D. Chalmers, J. Lisle, W. W. Luke, J. W. Townsend, J. Glover, D. Robertson, W. W. Luke.

Third-class Engineer.—T. Drummond, J. Richardson, K. M. Finlayson, M. Scott, W. H. Judd, J. Ballantyne, J. G. Lockie, A. C. Baird, R. E. Lindsay, A. Burton, S. Beale, A. Suter, D. Duncan, R. S. Fleming, P. A. Coote, H. S. Derbidge, W. M. Aimers, E. Turley, G. R. Hale, C. H. M. Deschler, A. C. Harrap, G. J. Stitt, H. J. Rogers, T. M. Finlayson, T. S. Harper, A. E. B. Ward, A. M. Swhan, A. McCallum, J. Robinson, J. Buglass, H. Cocks, P. H. Macdonald, A. H. Hunter, M. Scott, C. J. Styche, D. Turner, H. Neilsen, J. J. Jack, H. V. Johansen, W. Fairweather, A. McKenzie, A. Smaill, H. V. Johansen, W. D. Morrison, F. B. Keall, W. Earnshaw, A. D. Ensor, W. Fairweather, W. L. Mitchell, M. D. Meares, T. D. Barker, A. J. Killip, G. M. Humphreys, L. J. Stinson, J. Miller, G. Edgar, H. J. Beck, J. B. McNaught, E. H. Noy, W. G. Sandes, A. Smaill, A. McCallum, C. Turner, E. Robson, H. Kirkland, J. Johnson, J. G. Jarrett, F. C. Davys, J. S. Don, D. Turner, J. F. Doull, J. Y. Alexander, T. J. Atchison, R. L. Maclean, J. H. Johnston, W. Waters, H. Kemp, J. Thompson, F. S. Marchant, J. McLean, J. A. Macdonald, A. E. Coleman,

J. H. H. Speedy, J. E. Denton, A. McCallum, G. Rodgers, R. C. Aitken, V. Barrett, F. Mellish, E. G. McDougall, C. T. Swanell, W. McFarlane, G. Forbes, W. R. Waters, W. G. Sandes, A. R. Watson.

River Engineer.—G. Plank, J. McPherson, W. Innes, W. R. Paltridge, H. G. Hool, G. Poppelwell, B. Whiteford, A. B. B. Percy, P. W. Moss, H. A. Norgrove, C. H. Kellett, J. A. Johnsen, W. S. Hennah, J. Atkins, R. Perry, T. H. Bezar, G. H. Reston, G. Sinclair, H. Brown, G. E. Hill, F. H. Bulford, A. Nixon, A. Nixon, J. Cox, C. O. Marklund, P. E. Firth, G. Thomas, R. Murray, E. A. McConnell, E. J. Ryan, M. F. Hardinge, E. A. Meyenberg, T. H. Bezar, W. J. Evans, W. T. Gilmour.

Marine-engine Driver.—C. H. Smythe, G. H. Reston, H. A. Butter, C. W. White, A. Marychurch, W. B. Lindsay, H. S. Hall, A. Keane, W. Peacock, E. Hodgson, F. Audley, A. E. Meikle, W. Ragg, F. Hocking, St. C. N. H. Macdonald, H. E. Sutton, W. McFarlane, W. Stevenson, E. McSweeney, A. E. Meikle, W. C. Williams.

First-class Engineer, Powered Vessels other than Steam.—J. S. Kelly, G. Tee, T. H. Barwell, D. E. E. Giles.

Second-class Engineer, Powered Vessels other than Steam.—A. E. S. Foster, T. H. Barwell, W. B. Jones.

Restricted-limits Engineer, Powered Vessels other than Steam.—G. S. Robb, J. Reid, K. O. Numan.

The total fees received amounted to £188.

No. 17.—RETURN of VESSELS SURVEYED during the Financial Year ended 31st March, 1902, with PARTICULARS of TONNAGE, &c.

Name of Vessel.	Tons Measurement.		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 Steamers only.	Description of Machinery.	Screw.	Paddle.
	Gross.	Register.					
Admiral ..	121	82	28	..	Compound S. condensing	Single..	..
Advance (Hokitika) ..	..	..	1	..	High pressure ..	" ..	..
Advance (Auckland) ..	..	..	8	..	" ..	" ..	..
Ahuriri ..	85	31	17	..	Compound S. condensing	" ..	..
Akaroa ..	76	43	28	144	" ..	" ..	..
Alert (Thames) ..	..	..	6	..	Condensing ..	" ..	..
Alert (Auckland) ..	..	..	1½	..	High pressure ..	" ..	..
Antrim ..	60	35	17	..	Condensing ..	" ..	..
Aorere ..	72	49	16½	66·8	Compound S. condensing	" ..	..
Aotea (Auckland) ..	111	89	15 B.H.P.	..	Oil-engine ..	" ..	..
Aotea (Kaipara) ..	263	157	33	..	Compound S. condensing	" ..	..
Aotea (Wanganui) ..	..	57	16	..	High pressure ..	" ..	Paddle.
Awaroa ..	..	..	3	..	" ..	" ..	Stern wheel.
Awarua (Blenheim) ..	..	..	3	..	" ..	Single..	..
Awarua (Auckland) ..	159	100	32	207	Condensing ..	" ..	Paddle.
Beatrice ..	..	8	10	..	Compound S. condensing	Single..	..
Bella ..	19	12	12	..	High pressure ..	" ..	..
Ben Lomond ..	46	33	15	..	Compound S. condensing	" ..	..
Birkenhead ..	87	55	20	..	High pressure ..	" ..	Paddle.
Blanche ..	26	18	9	..	" ..	Single..	..
Britannia ..	136	108	40	..	" ..	" ..	Paddle.
Canterbury ..	..	..	24	..	High pressure ..	Twin ..	..
Chelmsford ..	103	70	24	61	Compound S. condensing	Single..	..
Clansman ..	591	336	90	527	" ..	" ..	..
Clara ..	..	..	2½	..	High pressure ..	" ..	..
Clematis ..	..	5	8	..	Compound S. condensing	" ..	..
Clyde ..	130	..	40	..	" ..	" ..	Stern wheel.
Comet ..	..	..	2½	..	High pressure ..	Single..	..
Corinna ..	1,279	820	141	898	Compound S. condensing	" ..	..
Coromandel ..	99	67	25	..	" ..	" ..	..
Countess ..	..	84	28	..	" ..	" ..	..
Countess of Ranfurly ..	198	153	30 B.H.P.	..	Oil-engine ..	" ..	..
Cygnets ..	124	66	43	170	Compound S. condensing	" ..	..
Despatch (Bluff) ..	35	24	20	..	" ..	" ..	..
Despatch (Mokau) ..	..	..	6	..	High pressure ..	" ..	..
Dingadee ..	640	393	80	439	Compound S. condensing	Twin ..	..
Dolly Varden ..	31	24	30 B.H.P.	..	Oil-engine ..	Single..	..
Dotu ..	28	19	13	..	Compound S. condensing	" ..	..
Duchess ..	308	62	81	..	Triple expansion	" ..	..
Duco ..	130	26	60	..	" ..	" ..	..
Durham ..	99	53	24	..	Compound S. condensing	" ..	..
Eagle ..	219	138	70	..	" ..	" ..	Paddle.
Edina ..	..	4	6	..	High pressure ..	Single..	..
Effort ..	21	13	12	..	" ..	" ..	Paddle.
Eliza ..	..	..	3	..	" ..	Single..	..
Elsie ..	20	15	10	..	" ..	" ..	..
Elsie Evans ..	8	6	20 B.H.P.	..	Oil-engine ..	" ..	..
Endon ..	..	..	5	..	Compound S. condensing	" ..	..
Energy ..	53	15	16	..	" ..	" ..	..
Erin ..	..	..	4	..	High pressure ..	" ..	..
Ethel J. ..	29	20	16	..	Triple expansion	" ..	..
Express ..	53	36	25	100	Compound S. condensing	" ..	..

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

No. 17.—RETURN of VESSELS SURVEYED, &c.—*continued.*

Name of Vessel.	Tons Measurement.		Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-made Steamers and of Foreign Steamers only.	Description of Machinery.	Screw.	Paddle.
	Gross.	Register.					
Fanny	90	55	30	160	Compound S. condensing	Single..	..
Fingal	34	22	9 $\frac{1}{2}$	48	"	" ..	..
Florence .. .. .	..	..	3 $\frac{1}{2}$	..	High pressure .. ..	" ..	..
Freetrader .. .. .	..	94	30	..	"	" ..	Stern wheel.
Gairloch	373	211	85	561	Compound S. condensing	Twin ..	..
Gannett	10	..	12	..	High pressure	Single..	..
Gertie (2)	262	100	59	413	Triple expansion	Twin ..	..
Glennelg	288	156	75	331	Compound S. condensing	Single..	..
Goldfinch .. .. .	..	..	10	..	"	" ..	..
Gretchen .. .. .	..	..	1 $\frac{1}{2}$	..	High pressure .. ..	" ..	..
Greyhound	107	83	50 B.H.P.	..	Oil-engine .. ..	" ..	..
Hamurana .. .. .	..	..	10	..	High pressure	Twin ..	..
Hauptiri	700	475	88	527	Compound S. condensing	Single..	..
Hauroto	1,988	1,276	253	1,181	"	" ..	..
Hawea	1,757	1,114	104	857	Triple expansion .. ..	" ..	..
Heathcote	167	94	35	..	Compound S. condensing	" ..	..
Herald	573	370	85	459	"	" ..	..
Hercules (Auckland) ..	58	51	36 B.H.P.	..	Oil-engine .. ..	" ..	..
Himitangi	323	149	45	248	Triple expansion	Single..	..
Hinemoa (C.G.S.) ..	542	282	150	620	Compound S. condensing	" ..	..
Hinemoa (Auckland) ..	..	..	6 $\frac{1}{2}$	..	High pressure .. ..	" ..	..
Hirere .. .. .	..	32	16	..	Compound S. condensing	Twin ..	..
Huia (Auckland) ..	204	196	6 B.H.P.	..	Oil-engine	Single..	..
Huia (Wellington) ..	133	69	23	160	Compound S. condensing	" ..	..
Huria .. .. .	..	..	10 B.H.P.	..	Oil-engine .. ..	" ..	..
Ida	18	12	10	..	High pressure .. ..	" ..	..
Invercargill	223	123	50	376	Compound S. condensing	" ..	..
Irene .. .. .	..	..	2 $\frac{1}{2}$	..	High pressure .. ..	" ..	..
Itbaca .. .. .	..	7	9	..	Compound S. condensing	" ..	..
Jane Douglas	95	74	22	70	"	" ..	..
Janet Nicoll	780	496	90	471	"	" ..	..
J.D.O.	129	88	28	..	"	" ..	..
John Anderson	52	36	20	..	"	" ..	..
John Townley .. .. .	..	85	40	180	"	Twin ..	..
Kahu	175	99	40	212	"	Single..	..
Kaipara .. .. .	..	..	4	..	"	" ..	..
Kanieri	202	115	20	160	"	" ..	..
Kapanui	110	75	32	..	"	" ..	..
Katikati	37	26	9	..	"	" ..	..
Kawaitiri (2) .. .. .	..	..	2 $\frac{1}{2}$	..	High pressure .. ..	" ..	..
Kawau	99	53	20	..	Compound S. condensing	" ..	..
Kia Ora .. .. .	..	..	24	..	High pressure	" ..	Stern wheel.
Kilmorey .. .. .	..	..	1 $\frac{1}{2}$	..	"	Single..	..
Kini	1,122	702	130	680	Triple expansion .. ..	" ..	..
Kiripaka	105	75	24	100	Compound S. condensing	" ..	..
Koonya	1,090	663	115	730	Triple expansion .. ..	" ..	..
Kopu .. .. .	..	18	13	..	High pressure	" ..	Paddle.
Kopuru	40	28	20	..	Compound S. condensing	Single..	..
Koputai	153	5	120	441	"	" ..	Paddle.
Kotiti	58	42	14	..	"	Single..	..
Kotuku	1,054	662	112	613	Triple expansion .. ..	" ..	..
Kuaka	45	33	90 B.H.P.	..	Oil-engine .. ..	" ..	..
Lena .. .. .	..	..	5	..	High pressure .. ..	" ..	..
Lily (2)	34	20	12	..	Compound S. condensing	Twin ..	..
Little George .. .. .	..	4	4	..	High pressure	Single..	..
Louie	19	9	9	..	"	" ..	..
Loyalty	101	68	32	..	Compound S. condensing	" ..	..
Lyttelton (tug)	190	39	80	..	"	" ..	Paddle.
Lyttelton (launch) ..	..	..	14	..	High pressure	Twin ..	..
Mahuta	29	13	10 $\frac{1}{2}$	..	Compound S. condensing	Single..	..
Maharora .. .. .	..	45	13	..	High pressure .. ..	" ..	..
Mana (Westport) (2) ..	196	50	90	460	Compound S. condensing	" ..	Paddle.
Mana (Wellington) ..	99	77	25	141	"	Single..	..
Manapouri (2)	2,060	1,288	220	1,600	"	" ..	..
Manaroa	122	77	24	178	"	" ..	..
Manchester .. .. .	..	366	160	..	"	" ..	..
Manukau	65	45	20	..	"	" ..	..
Manuwai	107	75	25	..	High pressure	" ..	Stern wheel.
Maori (Auckland) ..	25	17	8	..	"	Single..	..
Mapourika	1,203	718	130	1,247	Triple expansion .. ..	" ..	..
Mararoa	2,598	1,380	530	3,537	"	" ..	..
Matuku .. .. .	..	..	4	..	High pressure .. ..	" ..	..
May .. .. .	..	..	3	..	"	" ..	..
Mere Mere (2) .. .. .	..	..	3	..	"	" ..	..
Minnie Casey	74	48	20	..	Compound S. condensing	" ..	..
Miranda .. .. .	..	..	4	..	High pressure .. ..	" ..	..
Moa	188	95	33	153	Compound S. condensing	" ..	..
Moerangi	15	14	27 $\frac{1}{2}$ B.H.P.	..	Oil-engine .. ..	" ..	..
Mokoia	3,502	2,154	255	3,501	Triple expansion .. ..	" ..	..

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

No. 17.—RETURN of VESSELS SURVEYED, &c.—continued.

Name of Vessel.	Tons Measurement.		Nominal Horse-power of all Steamships and Brake Horse-power of Ships other than Steam.	Indicated Horse-power of Home-made Steamers and of Foreign Steamers only.	Description of Machinery.	Screw.	Paddle.
	Gross.	Register.					
Moss Rose .. .. .	..	..	6	..	High pressure	Single ..	..
Motara .. .. .	..	..	4	..	" .. ..	" ..	..
Moturoa .. .. .	..	10	10	..	" .. ..	" ..	..
Mountaineer	109	66	50	..	Compound S. condensing	..	Paddle.
Moura	2,026	1,247	275	1,925	Triple expansion	Twin ..	..
Muritai	224	133	45	210	Compound S. condensing	Single ..	..
Muritai (Horeke) .. .. .	..	..	8	..	High-pressure .. ..	" ..	..
Napier	70	48	30	62	Compound S. condensing	" ..	..
Nautilus (2)	41	29	18	65	" .. ..	" ..	..
Ngaru	13	10	16 B.H.P.	..	Oil-engine .. ..	" ..	..
Ngapuhi	691	299	160	1,340	Triple expansion	Twin ..	..
Ngunguru	80	54	17	69	Compound S. condensing	Single ..	..
Nina .. .. .	..	..	2½	..	High-pressure .. ..	" ..	..
Noko	19	15	9	..	" .. ..	" ..	..
No. 222	1,225	500	120	483	Compound S. condensing	Twin ..	..
Ohinemuri	114	73	26	130	"	Single ..	..
Ohuru .. .. .	..	20	14	..	Quadruple expansion ..	Twin ..	..
Omapere	601	352	80	505	Compound S. condensing	Single ..	..
Onslow	23	16	14	..	"	Twin ..	..
Opawa	110	64	18	73	"	Single ..	..
Opuatia .. .. .	..	..	5	..	High pressure .. ..	" ..	..
Oreti (2)	219	117	50	162	Compound S. condensing	" ..	..
Orewa	59	37	17	..	" .. ..	" ..	..
Osprey	219	138	70	..	" .. ..	..	Paddle.
Ovalau	1,229	766	103	673	Quadruple expansion ..	Single ..	..
Paeroa	91	46	15	67	Compound S. condensing	" ..	..
Paiaka	14	10	9	..	High pressure .. ..	" ..	..
Pania	40	27	11	45	Compound S. condensing	" ..	..
Paroera	650	355	71	428	Triple expansion	" ..	..
Pearl .. .. .	..	9	6	..	High pressure .. ..	" ..	..
Pelorus	25	18	12	..	" .. ..	" ..	..
Petone	708	388	82	544	Triple expansion	" ..	..
Phoenix	8	6	5	..	High pressure .. ..	" ..	..
Pilot	31	11	13	65	Compound S. condensing	" ..	..
Piraki .. .. .	..	10	4	..	High pressure .. ..	" ..	..
Planet	23	13	8	..	" .. ..	" ..	..
Plucky	81	29	40	262	Compound S. condensing	" ..	..
Poherua	1,174	749	128	686	Triple expansion	" ..	..
Presto .. .. .	..	..	3	..	High pressure .. ..	" ..	..
Progress .. .. .	..	200	50	144	Compound S. condensing	" ..	..
Pukaki	1,444	917	110	622	Quadruple expansion ..	" ..	..
Queen of South	197	121	40	220	Compound S. condensing	" ..	..
Rakanoa	2,246	1,393	200	843	Triple expansion	" ..	..
Result (Napier)	28	18	10	..	Compound S. condensing	" ..	..
Result (Tauranga) .. .. .	..	..	4	..	High pressure .. ..	" ..	..
Rimu	358	144	95	398	Triple expansion	Twin ..	..
Ringarooma	1,096	622	300	1,200	Compound S. condensing	Single ..	..
Rita	40	22	11	55	" .. ..	" ..	..
Rob Roy	95	34	16	..	" .. ..	" ..	..
Rosamond	721	462	90	411	" .. ..	" ..	..
Rose Casey (2)	132	99	35	..	" .. ..	" ..	..
Rotokino	2,004	1,263	135	929	Quadruple expansion ..	" ..	..
Rotokuhu	15	11	8 B.H.P.	..	Oil-engine .. ..	" ..	..
Rotomahana (Auckland)	183	139	50	265	Compound S. condensing	" ..	..
Rotomahana (Dunedin)	1,763	915	450	2,445	" .. ..	" ..	..
Rotoiti	1,159	630	104	1,127	Triple expansion	Twin ..	..
Rotorua	926	576	176	957	Compound S. condensing	Single ..	..
Savaii	55	31	16	..	" .. ..	" ..	..
Seagull .. .. .	..	..	6	..	High pressure .. ..	" ..	..
Snark .. .. .	..	12	10	..	" .. ..	" ..	..
Sonoma .. .. .	..	..	13	..	" .. ..	" ..	..
Southern Cross (Lond'n)	291	205	20	116	Compound S. condensing	" ..	..
Stella	268	157	90	183	" .. ..	" ..	..
Sterling	97	26	39	238	" .. ..	" ..	..
Stormbird	217	137	40	226	" .. ..	" ..	..
Sumner	167	94	35	..	" .. ..	" ..	..
Swan	24	16	8	..	" .. ..	" ..	..
Sylph .. .. .	..	5	8	..	High pressure .. ..	" ..	..
Taieri	1,668	1,071	155	742	Triple expansion	" ..	..
Tainui	80	46	20	..	High pressure	" ..	Paddle.
Takapuna (Auckland)	77	57	25	..	" .. ..	" ..	..
Takapuna (Dunedin)	930	472	265	1,221	Compound S. condensing	Single ..	..
Talune	2,000	1,370	255	1,842	Triple expansion	" ..	..
Tangaroa	189	109	70	..	Compound S. condensing	Twin ..	..
Taniwha (Auckland)	263	191	40	254	" .. ..	" ..	..
Taniwha (Timaru) .. .. .	..	16	16	..	High pressure	Single ..	..
Tarawera	2,003	1,268	250	1,543	Compound S. condensing	" ..	..

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

No. 17.—RETURN OF VESSELS SURVEYED, &c.—*continued.*

Name of Vessel.	Tons Measurement.		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 Steamers only.	Description of Machinery.	Screw.	Paddle.
	Gross.	Register.					
Tarewai	10	7	6	..	High pressure	Single..	..
Taviuni	1,465	910	135	1,025	Quadruple expansion ..	" ..	..
Tawera (Gisborne) ..	52	44	40 B.H.P.	..	Oil-engine .. .. .	" ..	..
Tawera (Lake Te Anau)	..	..	14	..	Compound S. condensing	" ..	..
Te Anau	1,652	1,028	250	1,249	" .. .. .	" ..	..
Te Kapu	92	50	25	113	" .. .. .	" ..	..
Terranora	349	199	94	232	"	" ..	Paddle.
Theodore .. .. .	..	35	25	..	" .. .. .	" ..	..
Theresa Ward	195	9	95	399	Triple expansion	Single..	..
Thistle	96	77	90 B.H.P.	..	Oil-engine .. .. .	" ..	..
Thomas King	98	70	16	..	High pressure .. .. .	" ..	..
Timaru	479	211	78	324	Compound S. condensing	Twin ..	..
Titiroa .. .. .	..	..	3	..	High pressure	Single..	..
Tokatea .. .. .	..	5	16 B.H.P.	..	Oil-engine .. .. .	" ..	..
Tongariro (Auckland) ..	92	62	25	..	High pressure	" ..	Paddle.
Tongariro (Lake Taupo)	..	..	8	..	"	Single..	..
Toroa	388	174	91	482	Triple expansion .. ..	" ..	..
Tuakau .. .. .	..	..	2	..	High pressure .. .. .	" ..	..
Tuariki .. .. .	..	..	8 B.H.P.	..	Oil-engine	Twin ..	..
Tui .. .. .	..	..	6½	..	High pressure	Single..	..
Tuna (Gisborne) .. ..	..	..	14	..	Compound S. condensing	Twin ..	..
Tuna (Kaipara) .. .. .	..	..	3½	..	"	Single..	..
Tutanekai (C.G.S.) ..	811	412	205	1,145	Triple expansion	Twin ..	..
Upolu	1,140	692	120	733	Quadruple expansion ..	Single..	..
Vaite	106	98	30 B.H.P.	..	Oil-engine .. .. .	" ..	..
Victory .. .. .	..	..	4	..	High pressure .. .. .	" ..	..
Vivid	21	6	13	..	" .. .. .	" ..	..
Waahi .. .. .	..	..	5	..	" .. .. .	" ..	..
Waiapu	66	61	15 B.H.P.	..	Oil-engine .. .. .	" ..	..
Waihi	92	63	20	172	Compound S. condensing	" ..	..
Waihora	2,008	1,269	250	1,509	" .. .. .	" ..	..
Waikare	3,071	1,901	229	2,352	Triple expansion .. ..	" ..	..
Waikato .. .. .	..	..	4	..	High pressure .. .. .	" ..	..
Waimana	151	107	18	100	Quadruple expansion ..	Twin ..	..
Waimarie	245	159	48	206	Compound S. condensing	" ..	..
Wainui	661	411	95	626	"	Single..	..
Waione	57½	43	40	..	Triple expansion	Twin ..	..
Waiotahi	278	167	56	399	Compound S. condensing	" ..	..
Waipa .. .. .	..	..	1½	..	High pressure	Single..	..
Waipori	1,919	1,229	180	862	Triple expansion .. ..	" ..	..
Wairere (Wanganui) ..	..	27	80	..	High pressure	" ..	Paddle.
Waitangi (Auckland) ..	171	34	62	368	Compound S. condensing	Twin ..	..
Waitangi (Kaipara) ..	45	31	15	..	"	Single..	..
Waitara .. .. .	..	..	12	..	High pressure .. .. .	" ..	..
Waitoa	38	27	16	..	" .. .. .	" ..	..
Waiwera (Dunedin) ..	..	..	7	..	" .. .. .	" ..	..
Waiwera (Lyttelton) ..	..	..	8	..	Compound S. condensing	" ..	..
Waiwera (Kaipara) ..	..	..	6	..	" .. .. .	" ..	..
Waiwiri (Auckland) ..	..	..	7½	..	" .. .. .	" ..	..
Wakatere	441	157	140	698	"	" ..	Paddle.
Wakatu	157	95	23	156	"	Single..	..
Wanaka	2,421	1,572	230	1,241	Triple expansion .. ..	" ..	..
Warkworth	25	23	10 B.H.P.	..	Oil-engine .. .. .	" ..	..
Warrimoo	3,529	2,076	490	3,701	Triple expansion .. ..	" ..	..
Waverley	156	93	25	108	Compound S. condensing	Twin ..	..
Weka (Napier)	89	52	20	75	"	Single..	..
Weka (Auckland)	127	86	27	..	"	Twin ..	..
Wellington (Auckland)	382	279	80	514	"	Single..	..
Westland	133	35	60	297	"	" ..	Paddle.
Whakapara .. .. .	..	..	2½	..	"	Single..	..
Whangape	2,931	1,900	280	1,052	Triple expansion .. ..	" ..	..
Winona .. .. .	..	19	8	..	Compound S. condensing	" ..	..
Zephyr .. .. .	..	8	14	..	High pressure .. .. .	" ..	..

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

No. 18. — RETURN showing the REVENUE RECEIVED from the INSPECTION of MACHINERY DEPARTMENT (including the Examination of Engineers and Engine-drivers, and the Amount earned by the Survey of Steamers) during the Financial Year ended 31st March, 1902.

	£	s.	d.
Received under Inspection of Machinery Act	5,373	1	2
Fees for survey of steamers for the year earned	1,494	0	0
Received for examinations of marine engineers	188	0	0
Received for certificates for land drivers	599	13	6
	<hr/>		
	£7,654	14	8
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RETURN showing the ORDINARY EXPENDITURE of the INSPECTION of MACHINERY DEPARTMENT (including Examination of Engineers and Engine-drivers and Survey of Steamers) during the Financial Year ended 31st March, 1902.

	£	s.	d.
Salaries	4,218	6	3
Travelling-expenses	2,083	0	1
Rent, cleaning offices, and fuel	247	9	10
Contingencies	592	1	10
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	£7,140	18	0
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