

1903.
NEW ZEALAND.

INSPECTION OF MACHINERY:

ANNUAL REPORT OF THE DEPARTMENT FOR 1902-3.

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

The Hon. the MINISTER of MARINE to His Excellency the GOVERNOR.

Inspection of Machinery Department,

MY LORD,—

Wellington, 31st July, 1903.

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

I have, &c.,

His Excellency the

WM. HALL-JONES,

Right Hon. the Earl of Ranfurly,

Minister of Marine.

Governor of New Zealand.

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

Inspection of Machinery Department,

SIR,—

Queen's Chambers, Wellington, 20th May, 1903.

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 the 31st March, 1903:—

BOILERS.

During the financial year 4,463 steam-boilers were inspected, and all the machinery driven by these boilers was examined at the same time. This shows a slight increase on former years, but numbers do not always represent the increase of work, as much longer journeys have now to be made in the back portions of the various districts.

This branch of the Department is, with the exception of some parts of the Auckland District, practically up to date, and I can bear testimony to the zeal displayed by all the officers in the performance of their arduous and varied duties.

Accident to Life and Limb connected with Boilers.

No accident occurred in New Zealand during the year whereby injury was caused to life or limb through a boiler explosion. This Department can congratulate itself on the result of another year free from accidents.

Owing to the high pressures now in use, the greatest possible care has been taken, and strict instructions are given to each Inspector to particularly satisfy himself in all cases. In some cases where brick flues are used the work is not of a very pleasant nature, but dampness in brickwork oftentimes leads to serious deterioration of the plate resting on the damp portion of the brickwork.

The only questions taken into consideration when granting a certificate for a boiler are, whether the boiler is safe for the intended working-pressure (no matter whether it is a high or a low one), and also whether the conditions under which the boiler is being worked are safe, more especially as regards the feed-water, as, if the latter is not attended to, serious defects may arise through pitting of the plates, and scale-formation on them. Defects also often occur through getting up steam too quickly from cold water, since some parts of the boiler are more readily heated than others, and unless great care is exercised, and sufficient time taken, unequal heating is bound to take place. It is equally injurious to blow off all the steam suddenly, empty the boilers, and open the dampers. The cooling influence operates much more rapidly upon the boiler itself than upon the brickwork seating. The better plan is not to blow off the steam, but to let the steam and water cool down, and then empty the boiler.

The certificates for boilers issued during the year total 4,463, being an increase of eighty-four on the number issued last year.

Government Boilers and Machinery.

All the boilers at Government institutions throughout the colony have been examined, and the new boiler installation designed by this Department for the Seacliff Asylum has now been in use for some time, and has been giving satisfactory results.

Defects in Boilers and Fittings.

These defects amounted to 388, and include defects in steam-gauges, water-gauges, blow-off connections, cracked and bulged plates, defective joints, leaky seams, &c. Some were serious, and if neglected would no doubt have caused trouble and accident. Owners, more especially in remote districts, are glad to have advice on these matters when the Inspector comes round, and all information is willingly given, and advice as to the best and least expensive way to remedy the defect.

New Boilers.

The total number added to our list is 483, and totals 6,746-horse power. Of this number, 217 were made in the colony, and 266 were imported. A very large installation has been put in the power-house of the Auckland Tramway Company, Auckland, the whole of the machinery and boilers being imported. The boilers are of the Babcock and Wilcox pattern, water-tube, and are fitted with all up-to-date appliances.

The boiler-work done in the colony is now of a very high order, and most of the engineering firms have adopted the latest appliances to minimise labour and to insure a well-finished article. All the makers of imported boilers have now, with very few exceptions, adopted our standard of strength required for a given pressure, and very little friction has arisen through pressures given. The only safe rule is to adopt the very best, and make it compulsory and uniform both to local manufacturers and to manufacturers from abroad. This system, I consider, has tended to our immunity from accident in the past, and should not be departed from in the future.

Lifts, Gas- and Water-driven Machinery.

Under this heading 209 hydraulic lifts, sixty-three lifts driven by gas, steam, and electricity, eighty-eight gas and hydraulic hoists and electric motors, 341 water-driven machinery, 584 gas-engines, and 133 oil-engines were inspected during the year, making a total of 1,418.

A considerable amount of fencing was required to make the motors and machinery driven by them safe for those in attendance, and also a number of new ropes and chains were fitted and repairs effected generally.

Fencing of Machinery.

A large number of written and verbal notices were issued to machinery owners to fence unguarded machinery, and little difficulty has been found in making all comply with the wishes of the Inspectors.

EXAMINATION OF ENGINE-DRIVERS.

The examination for this class of certificate has now become a very important and ever-increasing branch of the Department. No service certificates are now issued (except under section 45 of the Act of 1902), so that all applicants must come up for examination; and, New Zealand being such a scattered colony, it has been necessary to hold examinations at numerous places. It is gratifying to know, however, that up to the present there are no arrears in this branch of the service, and that all demands have been met.

Candidates generally show up much better in the oral examination, and this examination brings out the fact very clearly that the standard of knowledge connected with the engine and boiler work of the engine-driver is increasing, and that he has been reading up from standard works on the subject. This knowledge should be available to his employer and make the engine-driver something more than a mere machine: it should lend an interest to every branch of his work, and should help him to perform more efficiently his many duties with economy to his employer and with more satisfaction to himself.

There have been four examinations held at Auckland, Wellington, Christchurch, Dunedin, Invercargill, Timaru, and Nelson, extending over several days. Examinations have also been held at Gisborne, Hawera, New Plymouth, Stratford, Palmerston North, Napier, Dannevirke, Blenheim, Westport, Greymouth, Reefton, Hokitika, Kumara, Lawrence, Roxburgh, Alexandra South, Cromwell, and Clyde. Altogether 685 candidates passed these examinations successfully—seven extra first stationary, 148 first stationary, 357 second stationary, 147 traction and locomotive, and twenty-six winding-engine drivers.

ACCIDENTS.

Forty-nine accidents to life and limb connected with machinery have been reported to me. In Tables Nos. 5 and 6 are set out the names and ages of the persons injured, and cause of accident in each case. Table No. 5 shows the non-fatal accidents, and Table No. 6 shows the fatal accidents.

DISTRICTS AND INSPECTORS.

Two new district offices have been opened, one at Nelson and the other at Timaru, and both have been found to be most useful as centres, and have saved the expense of making long journeys from Wellington and Christchurch. Mr. McVicar, of the Canterbury District, was transferred to Nelson; and Mr. Williamson, who had been stationed for a short time in Canterbury, took charge of the Timaru office.

Mr. George Croll, who was the senior Inspector of Canterbury, retired on the 30th July, 1902, after twenty-six and a half years' service. He has borne an excellent character, both for ability and courteousness, combined with firmness, and during his long period of service no boiler explosion has occurred in his district. This speaks for the care and thoroughness of his work and method. His place has been filled by Mr. Carman, from Wellington.

Two new appointments have been made, Mr. W. R. Douglas and Mr. N. D. Hood. They are at the present time both assisting in the Wellington District.

Offices should, in the near future, be opened at Wanganui and Napier, to save the long journeys now made from Wellington. Napier is now becoming a fairly busy shipping port, and numerous journeys have to be made to cope with the survey of steamers there, owing to the shipping facilities being limited.

POSTAL AND POLICE AUTHORITIES.

This Department is much indebted to the Postal and Police authorities, who have rendered valuable assistance with reference to the boiler and machinery certificates.

“INSPECTION OF MACHINERY ACT, 1902.”

By this Act the previous Inspection of Machinery Act of 1882 and the amending Acts of 1894, 1896, 1898, 1900, and 1901 were consolidated, and the principal sections were re-enacted. The provisions affecting boilers and machinery are practically the same, but it would be well for every steam-user to make himself thoroughly cognisant of the clauses of the Act.

MARINE ENGINEERS' EXAMINATIONS.

The examinations have been held in alternate centres throughout the year, and at the following places away from headquarters: Gisborne, New Plymouth, Wanganui, Napier, Blenheim, Westport, and Greymouth.

Every year shows a marked improvement in the work of candidates who present themselves, and this is notably the case with the third-class applicants, who are again very numerous. All the Examiners bear witness to the faithful reading of the young engineers from the workshop in matters pertaining to marine engineering, which is brought out very clearly in the oral examination held at these examinations. It is very gratifying to the Department to have such material to deal with, and, seeing so many of the promising boys take to engineering in the colony, no doubt this industry will be well able to hold its own as the colony gets more advanced.

Table No. 17 gives a list of the successful candidates, and the various grades in which they passed, also the total number of applicants, the total fees payable, and the number who failed.

During the year new regulations were compiled by me, which are now in conformity with the Board of Trade Regulations as far as they could be made for New Zealand. New additional elementary questions have been added, containing questions on electric-light installations, comprising all the different points about the dynamo, and defects that might arise with the whole installation, as might be found on board ship. Questions have also been added connected with hydraulic installations, feed-heaters, filters, refrigerating machinery, comprising cold air, ammonia, &c. All these subjects show that the education of the modern marine engineer must be a very varied one; and where, say, at freezing-works and electric-light installations on shore, a separate staff is employed, the engineer on a steamer must be master of all these different classes of machinery when placed under his charge in the ship. Every day adds to his duties, and the Admiralties of both Great Britain and America are waking up to the importance of placing the engineers in their navies on a much better footing.

SURVEY OF SHIPS.

The work of this branch of the Department has been well kept up, and, with the exception of one or two of the outlying districts in Auckland, the surveys are practically up to date. At the ports of Auckland, Wellington, and Dunedin, special attention has been given to hulls and equipments of steamers, numerous surprise visits having been paid to steamers to examine their boats and equipments, but, as a rule, very little to find fault with has been discovered. This speaks volumes for the care and attention paid to these important matters of a ship's equipments which tend to the safety of the travelling public.

SURVEY FOR SEAWORTHINESS.

Twenty-four special surveys for seaworthiness were made during the year, comprising cases of grounding, collision, &c., a detailed list of which is given in Table 19. In some of these cases where grounding took place on a fairly soft bottom, a diver was employed for the external examination of the hull, but in any case of doubt docking was insisted on, so that a thorough examination could be made. These investigations have been made at all hours, and the judgment displayed by surveyors has been very clearly shown in numbers of cases. The shipowners generally are always glad to have the tried opinion of the officers of our Department in these times of disaster, and they on their part have facilitated our work very much by help generously given on many occasions. The fees earned by such surveys amount to £74 8s.

GOVERNMENT STEAMERS.

The following Government steamers were surveyed during the year—viz., the s.s. “Hinemoa,” “Tutanekai,” “Janie Seddon,” “Lady Roberts,” “Nile,” “Gordon” (before sale), and the several torpedo boats, &c.

EXCURSION STEAMERS.

Seventy-five steamer excursions were allowed, representing the carriage of 26,017 passengers, and no trouble has arisen at any time throughout the year with any of these trips. These excursions have been scattered all over New Zealand, and are much appreciated by the public.

NEW STEAMERS.

Thirty-three steamers have been added to our books during the year, and comprise some very fine vessels, notably the "Aparima," and "Moeraki." The first one is a fine specimen of the modern cargo-boat with limited passenger accommodation, and the latter an up-to-date passenger steamer. The names of these vessels are as follows: "Anna," "Aotea," "Aparima," "Balmain," "Claymore," "Emina Sims," "Gosford," "Gypsy," "Huia," "Kapiti," "Kapui," "Karoro," "Kotahi," "Lily," "Little Jack," "Mahuta," "Mascotte," "May Howard," "Meremere," "Moeraki," "Mokau," "Nambucca," "Narcissus," "Nene," "Parera," "Phantom," "Ruru," "Tarakihi," "Tasman," "Tuiwiki," "Wave," "Whati," and "Yho."

SURVEY OF STEAMERS RETURN.

Table No. 18 gives a return of steamers surveyed in New Zealand during the year ended the 31st March, 1903, including the names of steamers, tons register, horse-power, nature of machinery, and propeller.

The number of steamers surveyed was 238, the number of surveys made being 257. The fees payable in respect of such surveys amounted to £1,588 10s.

RETURNS.

Appended are the returns in detail, numbered from 1 to 20.

(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), and (16). Names of all persons to whom land stationary certificates of service and competency have been granted during the year.

(17.) List of persons passed for marine engineers' certificates, with fees paid, during the year.

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

(19.) Return of vessels surveyed for seaworthiness, &c., during the year.

(20.) Return showing sums earned or received and amount 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 of Steamers, and
Chief Examiner of Marine Engineers and Land Engine-drivers.

RETURNS.

No. 1.

(a.) RETURN showing the NUMBER of LAND STATIONARY BOILERS and MACHINERY INSPECTED for which CERTIFICATES are issued, for the Financial Year ended 31st March, 1903.

Boilers—

Stationary—Five-horse power and under, 995 ; 10-horse power and over 5-horse power, 634 ; over 10-horse power, 1,237 ; digesters, 220 : total, 3,086.

Portable—Five-horse power and under, 147 ; 10-horse power and over 5-horse power, 1,035 ; over 10-horse power, 195 : total, 1,377 : total boilers, 4,463.

Machinery—

Hydraulic lifts, 209 ; gas lifts, 41 ; gas and water lifts, 5 ; electric lifts, 17 ; gas and hydraulic hoists and electric motors, 88 ; water engines, water motors, and water wheels, 117 ; peltons, 51 ; turbines, 173 ; gas engines, 584 ; oil engines, 133 : total machinery, 1,418.

Grand total, 5,881.

(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, 1903.

Fees payable—On boilers, £5,014 10s. ; on machinery, £205 17s. 6d. : total, £5,220 7s. 6d. ; for engine-drivers' certificates issued, £456 5s. : total, £5,676 12s. 6d. Government boilers and lifts inspected, but not charged, represent the further sum of £30.

The cash actually received for fees for boilers and machinery and paid into the Public Account amounted to £5,329 5s. The difference is caused by boiler-owners paying late fees ; and the cash actually received and paid into the Public Account for engine-drivers' application fees amounted to £631 0s. 6d. for the financial year ended 31st March, 1903. This amount includes fees for certificates not yet issued.

(c.) RETURN showing the NUMBER of SERVICE and COMPETENCY CERTIFICATES ISSUED to WINDING and TRACTION and LOCOMOTIVE ENGINE-DRIVERS, and to STEAM-STATIONARY-ENGINE DRIVERS, during the FINANCIAL YEAR ended 31st March, 1903.

Steam winding: Service 3, fees 7s. 6d. ; competency 26, fees, £13 : total fees, £13 7s. 6d.

Traction and locomotive: Service 8, fees £1 ; competency 147, fees £73 10s. : total fees, £74 10s.

Steam stationary: Service—First class 176, fees £22 ; second class 101, fees £12 12s. 6d. ; restricted second 2, fees 5s. : total service, 279 ; total fees, £34 17s. 6d. Competency—Extra first class 7, fees £7 ; first class 148, fees £148 ; second class 357, fees £178 10s. : total competency, 512 ; fees, £333 10s. : total fees, £368 7s. 6d.

Summary of certificates issued: Service—Steam winding, 3 : traction and locomotive, 8 ; stationary, 279 : total, 290 ; total fees, service, £36 5s. Competency—Steam winding, 26 ; traction and locomotive, 147 ; stationary, 512 : total, 685 ; total fees, competency, £420.

Totals : Steam winding certificates, 29 ; fees, £13 7s. 6d. Traction and locomotive certificates, 155 ; fees, £74 10s. Stationary certificates, 791 ; fees, £368 7s. 6d. Total certificates, 975 ; total fees, £456 5s.

No. 2.—RETURN of DEFECTS found on inspection of boilers during the Financial Year ended 31st March, 1903.

Three hundred and eighty-eight defects were found out, of which forty-two were dangerous. Seventy-five defective fittings were found on inspection, of which five were dangerous.

No. 3.—RETURN of NOTICES given to REPAIR BOILERS during the Financial Year ended 31st March, 1903.

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

No. 4.—RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY, &c., during the Financial Year ended 31st March, 1903.

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

Examples of Notices given.

Compensating ring round sludge-door in fire-box, also sludge-door in smoke-box to be made good. (Sawmill.)

Driving-belts of both engines, and circular saw to be securely fenced, and loose pulley fitted to saw. (Sawmill.)

Steel-wire rope for hoist to be renewed. (Grocers' hoist.)

Machinery to be securely fenced by substantial fencing as pointed out.

A stud to be fitted in the top part of the framework of the lower doorway. (Butcher's.)

Machinery to be securely fenced by substantial fencing as pointed out when inspecting, also new and substantial lips, say, 9 in. by 3 in., to be fitted in the scutcher with an opening of not more than 1½ in. (Flaxmill.)

No. 5.—RETURN of ACCIDENTS (not Fatal) in connection with Machinery during the Financial Year ending 31st March, 1903.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Date and Nature of Accident.	Cause of Accident, and Remarks.
Satherley Bros., Appley Aulsebrook and Co., Christchurch	Chaff-cutter .. Cocoa-nibbing machine	George Neuman; aged 29 Charles Savage; aged 14	12th April, 1902: hand taken off 14th April, 1902: ends of second and third fingers on left hand crushed	Hand caught by a string, which drew it through the rollers. Tips of fingers were caught in mitre-wheels.
Robertson and Co., Phoenix Foundry, Wellington	Planing-machine ..	E. Rothe; aged 17	30th April, 1902: crushed tip of left-hand fore-finger	Allowed finger to rest on end of steam-chest, which was caught by tool.
W. Cable and Co., Foundry, Wellington	Overhead travelling-crane	H. Evans; aged 16	10th May, 1902: thumb on right hand crushed	Thumb caught in cogs of travelling-crane through carelessness.
W. Cable and Co., Foundry, Wellington	Winch	W. Johnston; aged 17	28th May, 1902: cut forehead	Struck on forehead by handle of winch through carelessness.
John Overend, Rolleston Street, Wellington	Brick-making-machine	Alexander Miller; aged 26	5th June, 1902: arm injured	Arm caught in cog-wheels of brick-machine.
Island Block Gold-dredging Company, Miller's Flat	Steam-winch ..	Harold Williams; aged 24	5th July, 1902: crushed foot	Standing on winch when stopped to free stern-line. Enough steam was left to cause engines to make several revolutions. Foot drawn in between cog-wheels.
Robertson and Co., Phoenix Foundry, Wellington	Turning-lathe ..	C. S. Newson aged 24	15th July, 1902: thumb on right hand crushed	Putting hand inside cylinder while boring and being caught by tool.
S. Luke and Co., Engineers, Wellington	Lathe	Foster Maynard; aged 18	14th August, 1902: finger caught by tool and top of finger taken off	His having accidentally set the lathe in motion.
Consolidated Gold-fields of New Zealand (Limited), Wealth of Nations Mine, Reefton	Cyanide-works ..	Errington Castle; aged 19	28th August, 1902: fracture of both bones of the arm below elbow, break above elbow, and thigh broken	Making short-cut across shaft of tailings-wheel. Long overcoat caught in coupling and wound him round the shaft.
Timpany Bros., Sawmillers, Invercargill	Hauling-engine ..	Michael Dooley; aged 22	6th September, 1902: foot crushed	Carelessness in placing his foot on sole-plate of engine, which was struck by crank.
Aulsebrook and Co., Christchurch	Starch-buck ..	George Henry Roseberry Wright; aged 18	11th September, 1902: thumb on right hand crushed	Neglected to stop chain when clearing away starch. Thumb caught between chain and wheel.
Griffin and Sons (Limited), Confectioners, Nelson	Lift	John Chapman; aged 51	15th September, 1902: injury to head	Lift well fenced, but overbalanced reaching over well and fell over. Caused through his own carelessness.
Mahinapua Saw-milling Company, Lake Mahinapua	Sawmill	Richard Thos. Webb; aged 54	17th September, 1902: injury in groin	Piece of wood flew off saw and struck Webb in groin.
John Hammett, 63, Selwyn Street, Addington	Circular-saw ..	William Sykes; aged 22	17th September, 1902: two fingers cut off	Hand slipped off piece of wood he was cutting on to saw.
Herbert Gardiner, Irwell	Water-wheel ..	John Edwards; aged 23	19th September, 1902: left arm torn off above elbow	Well protected. Edwards went inside and laid over shaft while wheel in motion to pick up chain in the water, and his clothes became entangled.
Premier Gold-dredging Company, Buller River	Stationary engine ..	Thomas Powick; aged 59	20th September, 1902: two fingers taken off and one crushed	Cleaning engine. End of waste caught in cogs and drew in hand.
Prince of Wales' Dredging Company, Ross	Dredge	William Murray; aged 24	25th September, 1902: crushed foot	Placed foot on frame of winch, when drum, slowly revolving, caught his foot.
W. Collingwood, Kaimata, Inglewood	Chaff-cutter ..	W. Collingwood; aged 55	6th October, 1902: right hand cut off.	Put hand on feed-box while looking around, and got hand in press.
Robertson and Co., Phoenix Foundry, Wellington	Lifting-tackle ..	J. Prenderville; aged 18	7th October, 1902: top of little finger on left hand crushed	Tackle slipping, and he did not notice that his hand was in danger.
Greenstone Creek Gold-dredging Company, <i>via</i> Kumara	Dredge	T. Reynolds; aged 38	9th October, 1902: face cut	Repairing bucket pin, when an iron bar slipped and caught Reynolds on the face.

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

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Date and Nature of Accident.	Cause of Accident, and Remarks.
Stratford, Blair, and Co., Saw-millers, Grey-mouth	Steam-winch ..	William Corkill; aged 40	23rd October, 1902: right thumb crushed	Hand caught in winch-cogs.
James Macalister, Invercargill	Emery-wheel ..	D. W. Hursthouse; aged 24	24th October, 1902: top of thumb ground off	Holding washers in his hands instead of in tongs.
W. Cable and Co., Foundry, Wellington	Lathe	R. Priddey; aged 19	1st November, 1902: top of finger taken off	Carelessness.
S. Luke and Co., Engineers, Wellington	Drilling-machine ..	N. A. McLean; aged 18	20th November, 1902: finger crushed and amputated from first joint	Wiping cog-wheels of machine in motion unknown to fireman.
W. Cable and Co., Foundry, Wellington	Lathe	R. Flint, jun.; aged 19	3rd December, 1902: top of finger crushed	Carelessness.
Bowron and Butcher, Flaxmill, Tuhara	Stripper	Nepia Peta; aged 21	22nd December, 1902: left elbow wounded	Cover of stripper fell on elbow and cut it.
L. E. Avery, Spring Grove, Nelson	Planing-machine ..	Leonard Fowler; aged 31	6th January, 1903: loss of arm	Accidentally placed his hand on the knives.
Prouse Bros., Timber-merchants, Wellington	Moulding-machine	David Chapman; aged 16	7th January, 1903: belt breaking	Belt-fastener struck Chapman on cheek; flesh wound only.
Aulsebrook and Co., Christchurch	Caramel-machine ..	Edith Rogerson; aged 20	12th January, 1903: crushed and cut right hand	Reaching over machine with left hand while right hand was feeding the dough into the machine; right hand caught between the rollers.
Strand Bros., Builders, Lower Hutt	Planing-machine ..	Edwin Spilman	13th January, 1903: loss of three fingers	Lost his balance, and put out his hand to prevent falling; his hand was caught in the knives.
Waihi Gold-mining Company, Waihi	Filter-press ..	A. Stroom, aged 36; and B. Connell, aged 40	21st January, 1903: three fingers crushed each	Working filter-press. Fingers crushed between spur and pinion of closing-gear, though warned not to put their hands on wheel.
Chapman, O'Neil, and Co., Saw-millers, Waitaha	Breaking-down bench	D. Stewart; aged 28	21st January, 1903: cut on small finger right hand	Hands slipped on to saw.
W. Cable and Co., Foundry, Wellington	Drilling-machine ..	H. Hutcheson; aged 21	28th January, 1903: flesh taken off fingers	Whilst drilling a flange the flange slipped, and his fingers were caught. Carelessness.
J. K. Christenson, Butter-factory, Rookville	Force-pump ..	George Rowe; aged 17	20th February, 1903: arm broken	Trying to pull off belt while in motion. Sleeve caught, and arm was drawn in between belt and pulley.
W. Cable and Co., Foundry, Wellington	Emery stone ..	J. Smith; aged 17	24th February, 1903: nail taken off finger	Carelessness.
Griffin and Sons (Limited), Biscuit, &c., Manufacturers, Nelson	Dough-roller ..	George Ruff; aged 22	24th February, 1903: hand crushed slightly	Hand drawn into rollers.
Aulsebrook and Co., Christchurch	Chocolate-refiner ..	Alfred George Linn; aged 22	26th February, 1903: fore-finger left hand crushed in cog-wheels and amputated at second joint	Taking tin from under right-hand side of machine with left hand instead of right hand.
A. H. Webb, Builder, Montreal Street, Sydenham	Surface-planer ..	William Webb; aged 19	26th February, 1903: two fingers left hand cut off, second finger at middle, third at first joint	Planing-wood slipped, and took his fingers on to knife.
Waimumu Gold-dredging Company (Limited), Dunedin	Dredge	W. White; aged 29	8th March, 1903: scalded face, neck, hands, and one foot	Taking off manhole-door of boiler before pressure was gone.

No. 6.—RETURN of ACCIDENTS which proved Fatal in connection with Machinery during the Financial Year ended 31st March, 1903.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Date and Nature of Accident.	Cause of Accident, and Remarks.
A. Wilson and A. Morris, Mayfield	Threshing-mill ..	Arthur Frisby; aged 22	2nd April, 1902	Leaning against wheel just before it was started.
Excelsior Gold-dredging Company, Dunedin	Winch ..	James Cummings; aged 27	2nd May, 1902: winch broke, and fragment of pinion struck deceased on head	Breaking of intermediate pinion on winch.
J. C. Dender, Port Butcher, Palmerston North	Gas-engine ..	Conrad Dender aged 5	10th June, 1902: fracture of skull	Caught by clothes on shaft of fly-wheel.
Champion Gold-mining Company (Limited), Beaumont	Steam-dredge ..	William Frederick Bishop; aged 31	20th June, 1902: right arm, with flesh and muscles of chest, torn off, and scalp wound	Clothes caught by a stud alongside the bevel pinion that drives the screen and pulled in.
Golden Glen Gold-dredging Company, Roxburgh	Gold-dredge ..	Peter Muller; age 24	30th October, 1902: right leg cut off at knee, and the other broken at ankle	Log breaking under ladder upon which it was resting, deceased caught in coils of ladder which he was coiling.
Tiratu Sawmills Company, Dannevirke	Planing-machine ..	Frederick Cook; aged 32	18th November, 1902: carried round shaft	Apron caught on intermediate shaft going up a ladder, where he had no right.
Clayton and Co., Gisborne	Grindstone ..	David Curtain; aged 50	7th January, 1903: arm torn off, and internal injuries	Handling belt while in motion; drawn round shafting.
J. A. McLachlan, crushing-plant, Greenhills, Otago	Intermediate shaft	Ernest Rissetto; aged 39	31st January, 1903: drawn round shaft	Trying to put belt on while in motion against orders.
Riddle Bros., Flaxmill, Waimahaka	Intermediate shaft	Henry Smith; aged 57	26th February, 1903: whirled round shaft, striking joists, and then thrown down	Shifting belt while in motion loosely clothed.

No. 7.—RETURN of STEAM-WINDING-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue.
45. John Hayes ..	December 5, 1902.
46. William Stirling McDonald
47. Bernard William Shea ..	March 31, 1903.

No. 8.—RETURN of STEAM-WINDING-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue.	No. and Name of Person.	Date of Issue.
	1902.		1902.
235. Melbourne Parry ..	May 24	249. John Rodden ..	Dec. 5
236. Henry Smith ..	" 24	250. Albert Ernest Brown ..	" 5
237. William George Mutton ..	" 24	251. Joseph Bolitho ..	" 5
238. Alfred George Strong..	" 24	252. Henry Brennan Kerr ..	" 5
239. Patrick Joseph McCarthy ..	" 24	253. William Skinner Strongman ..	" 5
240. Patrick Meehan ..	Aug. 25	254. Frederick James Tattley ..	" 5
241. William Brentnall, jun. ..	" 25		1903.
242. Matthew Jensen ..	" 25	255. James Harrison ..	Mar. 31
243. Arthur Henry Ellis ..	" 25	256. Daniel Crawford ..	" 31
244. James Edward Morilleau ..	" 25	257. Alfred Henry Trembath ..	" 31
245. Richard Edmond Verran ..	" 25	258. Walter Cressy ..	" 31
246. William John Atherton ..	Dec. 5	259. John Findlay ..	" 31
247. John Meehan ..	" 5	260. Herbert Gebbie ..	" 31
248. Michael Moye ..	" 5		

No. 9.—RETURN of TRACTION and LOCOMOTIVE-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
538. John Darlington Asbury ..	May 24	542. Charles Henriek John Schroder ..	Aug. 25
539. Arthur Stewart ..	" 24	543. George Herbert Mends ..	Dec. 5
540. James Dunsmuir ..	July 17	544. Angus McGarvick ..	" 5
541. Charles Edward Trickett ..	" 17	545. Henry Hamilton ..	" 5

No. 10.—RETURN of TRACTION and LOCOMOTIVE-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
740. Robert Simmers, jun. ..	May 24	814. Thomas Duncan McLachlan ..	Dec. 5
741. James Nicol McColl ..	" 24	815. Alfred John Smith ..	" 5
742. Thomas Stevenson, jun. ..	" 24	816. Robert Beattie ..	" 5
743. William John Coburn ..	" 24	817. Michael Dermondy ..	" 5
744. Jacob Walter Manning ..	" 24	818. John Howe ..	" 5
745. Edwin James Brogden ..	" 24	819. John Michael Scannell ..	" 5
746. Albert Henry Kimber ..	" 24	820. James Thomas ..	" 5
747. John Charles Lee ..	" 24	821. Robert George Paul ..	" 5
748. Andrew Swanston, jun. ..	" 24	822. Thomas Walsh ..	" 5
749. Robert Drury ..	" 24	823. William Wood Biddick ..	" 5
750. Charles Bradley ..	" 24	824. William Hamilton ..	" 5
751. Augustus Stevens Hicks ..	" 24	825. James Francis Kearney ..	" 5
752. Alexander Leslie ..	" 24	826. Hugh Robert Ledgerwood ..	" 5
753. William McDowell ..	" 24	827. William March ..	" 5
754. William Robertson ..	" 24	828. William Meharry ..	" 5
755. Edward Turley ..	" 24	829. Leonard Herbert Philpott ..	" 5
756. James Hogan ..	" 24	830. Henry Planta Todd ..	" 5
757. Alfred Craig ..	" 24	831. Alfred Alexander Wilson ..	" 5
758. Charles Herbert Bycroft ..	" 24	832. Henry William Zimmerman ..	" 5
759. Henry Hurley ..	" 24	833. Hilary Francis Maindonald ..	" 5
760. Richard Lyons Roe ..	" 24	834. Patrick Burke ..	" 5
761. Arthur Edward Harold Freeth ..	July 17	835. John Cooper ..	" 5
762. Hanibal Thomas ..	" 17	836. Archibald Edwards ..	" 5
763. Andrew Fitzgerald ..	" 17	837. David Frew ..	" 5
764. John Ivanhoe Hayman ..	" 17	838. John King ..	" 5
765. George Arthur Ryde ..	" 17	839. Angus Neil Matheson ..	" 5
766. William Speirs ..	" 17	840. Albert Richard James Melvin ..	" 5
767. James Manchester ..	" 17	841. Roderick McDonald ..	" 5
768. Henry Caleb Kilgour ..	" 17	842. James King McIntosh ..	" 5
769. Edward Michael Quinn ..	" 17	843. Alexander McKay ..	" 5
770. James Douglas Falconer ..	Aug. 25	844. Hugh McKay ..	" 5
771. Gilbert McKay ..	" 25	845. James Proudfoot ..	" 5
772. Norman George Green ..	" 25	846. James Hay Steel ..	" 5
773. James Greenaway ..	" 25	847. Peter Abernethy ..	" 5
774. Edward Jasper Levett ..	" 25	848. James Henry Craig ..	" 5
775. Frank Newman Dixon ..	" 25	849. William Kay ..	" 5
776. James Henry Naylor ..	" 25	850. Henry John Charles King ..	" 5
777. John Henry Timms ..	" 25	851. David Henry Madill ..	" 5
778. John Anderson ..	" 25		1903.
779. Stephen Thompson ..	" 25	852. Herbert Dutton Powdrell ..	Mar. 31
780. William Williams ..	" 25	853. James Leander Poulter ..	" 31
781. Leonard Thomas Woodfield ..	" 25	854. Percy Edge ..	" 31
782. James Walker Strachan ..	" 25	855. Albert Hadley ..	" 31
783. Andrew Albert Morris ..	" 25	856. William Thomas Sadd ..	" 31
784. Reginald Cameron ..	" 25	857. William Reginald Sadgrove ..	" 31
785. Robert Geddes ..	" 25	858. William Lewis Luxford ..	" 31
786. Duncan Turner McPhedran ..	" 25	859. William Robert Aicken ..	" 31
787. Frederick James Wooffindin ..	" 25	860. Douglas Henry Shortcliffe Booth ..	" 31
788. Walter Henry Batchelor ..	" 25	861. James Bowring ..	" 31
789. Samuel Robinson ..	" 25	862. John Carson ..	" 31
790. William Henry Collis ..	" 25	863. Thomas William Griffin ..	" 31
791. George David Nairn Glover ..	" 25	864. David Ledgerwood ..	" 31
792. Kennard Richers Snowden ..	" 25	865. John Winter ..	" 31
793. John Aitken ..	" 25	866. Frederick Holland ..	" 31
794. George Victor Cross ..	" 25	867. William Bruce ..	" 31
795. Diederick Gerken ..	" 25	868. John Talbot Byers ..	" 31
796. Alexander Rankin Jenkins ..	" 25	869. John Fowler, jun. ..	" 31
797. Alexander McKinnon ..	" 25	870. Andrew Frame ..	" 31
798. Henry Payne ..	" 25	871. Patrick Ledingham ..	" 31
799. William Robertson ..	" 25	872. William Forbes ..	" 31
800. Thomas Neil ..	" 25	873. Richard Bunton ..	" 31
801. James Patrick Ryan ..	" 25	874. David William Maslin ..	" 31
802. Robert Wylie ..	" 25	875. Robert Watson McIntosh ..	" 31
803. William John Ledgerwood ..	Dec. 5	876. James Hart Smith ..	" 31
804. Gilbert Huston ..	" 5	877. Louis Walker ..	" 31
805. Thomas Henry Love ..	" 5	878. James Ritchie Williams ..	" 31
806. Esau Lee ..	" 5	879. Charles Leslie Grant ..	" 31
807. John Ruff ..	" 5	880. Philip John Dare ..	" 31
808. John Smith ..	" 5	881. Edward Thorneycroft Frost ..	" 31
809. Edward Williams ..	" 5	882. Charles Alexander Brown Stewart ..	" 31
810. Ernest Bezar ..	" 5	883. Roby Brighthouse ..	" 31
811. William James Lewis ..	" 5	884. Robert Henry Witt ..	" 31
812. William McLeod Ross ..	" 5	885. John Cuff ..	" 31
813. Michael Healey ..	" 5	886. William George McDonald ..	" 31

No. 11.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
1382. Walter Woodgrove Platt ..	May 24	1471. Roland Thomas White ..	Aug. 25
1383. Alexander Louden ..	" 24	1472. John Gowans ..	Dec. 5
1384. George Paradise Nash ..	" 24	1473. Wallace Greenhalgh ..	" 5
1385. James George Olson ..	" 24	1474. John Hayes ..	" 5
1386. Ole Anderson ..	" 24	1475. Francis Henry ..	" 5
1387. Horatio Dixon ..	" 24	1476. Hugh Munro ..	" 5
1388. Richard William Girven ..	" 24	1477. Donald McIntosh ..	" 5
1389. Arthur Lambert Dowden ..	" 24	1478. Richard Page ..	" 5
1390. Arthur Harman ..	" 24	1479. John Samuel Robertson ..	" 5
1391. Henry Reade Hodding ..	" 24	1480. James Whyte ..	" 5
1392. Frank Lewis Harrison ..	" 24	1481. Alexander Coutts ..	" 5
1393. William Delahoyde ..	" 24	1482. Henry Dustin ..	" 5
1394. James Grimwood ..	" 24	1483. William Rowley Entwistle ..	" 5
1395. Edward Francis Kelly ..	" 24	1484. Hugh Faulds ..	" 5
1396. Peter McLennan ..	" 24	1485. Robert Flint ..	" 5
1397. William Frederick Rankin ..	" 24	1486. Augustus Stevens Hicks ..	" 5
1398. John Symon ..	" 24	1487. Gordon Hughan ..	" 5
1399. Charles Albert Thiede ..	" 24	1488. James Hunter ..	" 5
1400. Frank Oldham White ..	" 24	1489. Michael John Mulholland ..	" 5
1401. John Thow ..	" 24	1490. Robert Robertson ..	" 5
1402. James Graeme Adair ..	" 24	1491. James Roy ..	" 5
1403. George Anderson ..	" 24	1492. Andrew Wynd ..	" 5
1404. John Charles Theyers ..	" 24	1493. William Bringans ..	" 5
1405. Hugh Blaikie Ross Crozier ..	" 24	1494. John Buchanan ..	" 5
1406. William Cowan Jamieson ..	" 24	1495. William James Dickens ..	" 5
1407. Walter Ernest Potts ..	" 24	1496. David Hepburn ..	" 5
1408. John Telford ..	" 24	1497. Edward Hughes ..	" 5
1409. Peter Wilson ..	" 24	1498. Joshua Mallett ..	" 5
1410. Alexander Richard McNeil ..	" 24	1499. Frederick William Meikle ..	" 5
1411. Thomas Andrew Simpson ..	" 24	1500. John Harold Moody ..	" 5
1412. Thomas Hartley ..	" 24	1501. John Ovens ..	" 5
1413. Sidney Charles Fache ..	" 24	1502. Charles Treaton Price ..	" 5
1414. Charles George Langham ..	" 24	1503. William Shiel ..	" 5
1415. William Henry Hughes ..	" 24	1504. Edwin Mugford Stentiford ..	" 5
1416. Charles Alexander Hudson ..	" 24	1505. Joseph Bradcock ..	" 5
1417. William David Jones ..	" 24	1506. Harry Howard Gould ..	" 5
1418. George Guild ..	" 24	1507. Sydney Richards ..	" 5
1419. Woolsey Allen, jun. ..	July 17	1508. Thomas George Smith ..	" 5
1420. John Austin ..	" 17	1509. Otto Wassberg ..	" 5
1421. William Thomas Barnsdale ..	" 17	1510. Edward John Hill ..	" 5
1422. Francis Falconer ..	" 17	1511. Herbert Douglas Knight ..	" 5
1423. Edward Holland ..	" 17	1512. Andrew Ernest Kusabs ..	" 5
1424. James Christie Knowles ..	" 17	1513. Robert David Gilmour Smith ..	" 5
1425. Francis William Mowatt ..	" 17	1514. Frank Robert Brown ..	" 5
1426. William Henry Rodgers ..	" 17	1515. John Scholes ..	" 5
1427. George Wallace ..	" 17	1516. Edward Albert Williams ..	" 5
1428. William West ..	" 17	1517. Turnwell de Pringle Turner ..	" 5
1429. Edward White ..	" 17	1518. Frank John Junker ..	" 5
1430. James Dunsmuir ..	" 17	1519. John McCormick ..	" 5
1431. Frederick Hill ..	" 17	1520. Michael O'Halloran ..	" 5
1432. Jonas Nordloff ..	" 17	1521. Joshua Harris ..	" 5
1433. Herbert Arthur Boddington ..	" 17	1522. Francis Jones ..	" 5
1434. Edward Canavan ..	" 17	1523. John Martin Nicolas Frater ..	" 5
1435. Eugene Joseph Draffin ..	" 17	1524. Michael Langan ..	" 5
1436. August Anton Lanppe ..	" 17	1525. Adolphus John Park ..	" 5
1437. Stephen W. sterman ..	" 17	1526. Andrew Provan ..	" 5
1438. James Brown ..	" 17	1527. Charles Tills ..	" 5
1439. Alfred John Morrow ..	" 17	1528. Edward Hall Watson ..	" 5
1440. Donald Anderson Whyte ..	" 17	1529. Edward Austin ..	" 5
1441. James Brown ..	" 17	1530. Percy Arthur Nield ..	" 5
1442. Edward Caspar ..	" 17	1531. George Plank ..	" 5
1443. John Jelly Halliday ..	" 17	1532. John Morgan ..	" 5
1444. Alexander Campbell Perkins ..	" 17	1533. John Luck ..	" 5
1445. John Alexander Wilson ..	" 17		1903.
1446. Ewen McGregor ..	" 17	1534. George Alfred King Ansell ..	Mar. 31
1447. Cornelius Stubbs ..	" 17	1535. Nicolai Jacob Nilsen ..	" 31
1448. John William Proctor ..	" 17	1536. Peter Rentoul ..	" 31
1449. Arthur Nathaniel Elliott ..	" 17	1537. Jacob Eckhoff Simmers ..	" 31
1450. Hector McKenzie ..	" 17	1538. John Vickerstaff ..	" 31
1451. Robert Archibald Crook ..	" 17	1539. George Parker ..	" 31
1452. John Fraser ..	Aug. 25	1540. Hugh Rooney ..	" 31
1453. Ralph Nield ..	" 25	1541. Samuel Edgar Fraser ..	" 31
1454. Sidney Smith ..	" 25	1542. Henry Hartley ..	" 31
1455. William White ..	" 25	1543. John O'Donohue ..	" 31
1456. John Walker ..	" 25	1544. Norman Kenneth Sligo ..	" 31
1457. Hugh Nelson ..	" 25	1545. Richard Williams ..	" 31
1458. Bernard Olof Anderson ..	" 25	1546. John Brokenshire ..	" 31
1459. Ewen Butler ..	" 25	1547. Robert Ross McDonald ..	" 31
1460. Alonzo Thomas Deer ..	" 25	1548. Arthur Bishop ..	" 31
1461. George Easterbrook, jun. ..	" 25	1549. Joseph Henry George Davis ..	" 31
1462. William Kitto, sen. ..	" 25	1550. Joseph Barlow Copeland ..	" 31
1463. Henry William Hales ..	" 25	1551. William Langley Montague ..	" 31
1464. John Moodie ..	" 25	1552. John Hume ..	" 31
1465. Albion Edgar Charles Newick ..	" 25	1553. Alexander Johnston ..	" 31
1466. John Augustine Roggiro ..	" 25	1554. John Robert Lindsay ..	" 31
1467. Henry James Bright ..	" 25	1555. Daniel James McIntosh ..	" 31
1468. Hugh Campbell ..	" 25	1556. John McAlpine ..	" 31
1469. Alexander Low ..	" 25	1557. Richmond Frederick Wilson ..	" 31
1470. Dalton William Gambrill ..	" 25		

No. 12.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
688. John Docherty	May 24	739. Archibald Steel	Aug. 25
689. Denis Kelly	" 24	740. Charles Palmer	" 25
690. Henry Harold Batchelor	" 24	741. Ernest John Wotton	" 25
691. William Francis Hallins	" 24	742. Henry Norris	" 25
692. John Price	" 24	743. Joseph Alexander Bower	Dec. 5
693. John Kelly	" 24	744. William Edlund.. ..	" 5
694. David Scott Robertson	" 24	745. John Gibbs	" 5
695. Samuel Manson	" 24	746. Alexander Parker	" 5
696. John Crawley	" 24	747. Samuel Phillips	" 5
697. Frederick Robins	" 24	748. Eli Strawbridge	" 5
698. Edward Tovey	" 24	749. Alfred Turner	" 5
699. Alexander Low	" 24	750. Frank Walker	" 5
700. Harry Child	July 17	751. Joseph Walker	" 5
701. James Flowers	" 17	752. Ernest Percy Fowler	" 5
702. Thomas Huckstep	" 17	753. Christopher McDowell	" 5
703. Albert Murtagh	" 17	754. Frederick William Schmetzer	" 5
704. Frederick Abiathar McAlpine	" 17	755. Frederick Harold Williams	" 5
705. Herbert Ernest Smith	" 17	756. George William Hunter	" 5
706. Ernest Arthur Whittle	" 17	757. Thomas Egerton	" 5
707. Martin Joseph Johanson	" 17	758. James Guyton	" 5
708. Henry Lane	" 17	759. James Hart	" 5
709. James Riordan	" 17	760. Joseph Coulthard	" 5
710. Thomas Collings.. ..	" 17	761. Francis George Laurie	" 5
711. George Edward Ormond	" 17	762. Peter Murray	" 5
712. Charles Edward Robins	" 17	763. James Strickett	" 5
713. William Henry Robins	" 17	764. John Walter Longman	" 5
714. Walter Edwards.. ..	" 17	765. George Williams	" 5
715. Edward Evans	" 17	766. John Adams	" 5
716. Wilfrid Henry Norris	" 17	767. James Dickson	" 5
717. John Gray	" 17	768. William Murphy	" 5
718. Frank Cameron	" 17	769. David Walsh	" 5
719. Charles James Jackson	" 17	770. John Carroll	" 5
720. John Maddock Kinaston	" 17	771. Alonzo Robert Kite Blinkhorne	" 5
721. John Shields	" 17	772. Bertie Maitland	" 5
722. Alexander Stevenson	" 17	773. John Butler	" 5
723. Sydney Terry	" 17	774. Olof Magnus	" 5
724. Gustav Tetzlaff	" 17	775. Joseph John Gyde	" 5
725. Richard Grose Varcoe	" 17	776. Thomas Littleboy	" 5
726. John Andrews	" 17		1903.
727. James Hislop	" 17	777. Frederick Flan	March 31
728. Albert Labes	" 17	778. Shepley Hill	" 31
729. Robert Marchbank	" 17	779. Robert Kyle	" 31
730. George Duthie Ritchie	" 17	780. Thomas McIlroy	" 31
731. Charles Clark	Aug. 25	781. George Holland	" 31
732. Henry Ambrose Kitchen	" 25	782. Charles Ferguson	" 31
733. John Stuart	" 25	783. August Petersen	" 31
734. John Alexander Thorburn	" 25	784. Frederick Eiffelbein	" 31
735. John Baker Thornton	" 25	785. Ambrose George Burt	" 31
736. John Brown	" 25	786. Samuel Flaharty	" 31
737. Edward Carter	" 25	787. Julius Frederick Steenberg.. ..	" 31
738. James Leiland Gardner	" 25	788. Benjamin Exell	" 31

No. 13.—RETURN of RESTRICTED SECOND-CLASS ENGINE-DRIVERS to whom CERTIFICATES of SERVICE have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1903.
1. Robert William Edgeworth.. ..	Dec. 5	3. Archibald Whiteford	March 31

No. 14.—RETURN of EXTRA FIRST-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
12. Joseph Hopkirk	May 24	16. Albert John Daniel	Dec. 5
13. William Earnshaw, jun.	Aug. 25	17. Robert Walker	" 5
14. William Hay	" 25		1903.
15. Robert Beck	" 25	18. John Buchanan	March 31

No. 15.—RETURN of FIRST-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES of COMPETENCY have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
162. Edward Looney, jun. ..	May 24	237. James Wilson McKirdy ..	Dec. 5
163. Francis Clark ..	" 24	238. John Meehan ..	" 5
164. Marston Colbeck Cuff ..	" 24	239. Michael Moye ..	" 5
165. Henry Irvine ..	" 24	240. John Robertson Simpson ..	" 5
166. George Hardwick Matterson ..	" 24	241. William Herbert Thompson ..	" 5
167. Richard James Murphy ..	" 24	242. Robert Douglas Cox ..	" 5
168. William Smaill ..	" 24	243. Alfred Marshall ..	" 5
169. Edward Martin Edkins ..	" 24	244. John James Thompson ..	" 5
170. Joseph Oliver ..	" 24	245. Harold Willoughby Holsted ..	" 5
171. Stephen Tankersley ..	" 24	246. William Lawrence Riordan ..	" 5
172. Arthur Edward Spooner ..	" 24	247. Thomas Christian Frank ..	" 5
173. John Philip Hewitt ..	" 24	248. James Joseph Mohan ..	" 5
174. Rudolf Hindenach ..	" 24	249. Robert Colligan ..	" 5
175. George Henry Baird ..	" 24	250. Charles Edward Clark ..	" 5
176. Robert William Barr ..	" 24	251. Charles William Robinson ..	" 5
177. Graham Duncan ..	" 24	252. Ernest Schafer ..	" 5
178. Herbert Ellis Duncan ..	" 24	253. Alexander Reid ..	" 5
179. Frank Finlay Keam ..	" 24	254. Adam William MacIarn ..	" 5
180. John Alexander Milne ..	" 24	255. Arthur James Parker ..	" 5
181. Edward George Silk ..	" 24	256. John George Snow ..	" 5
182. James Young Alexander ..	" 24	257. David Bruce ..	" 5
183. Walter Edwin Hughes ..	" 24	258. Edward Allan Thomson ..	" 5
184. William Thwaites ..	" 24	259. Peter Heywood Thomson ..	" 5
185. Harry Etches Wilson ..	" 24	260. Charles Edgar Wetherilt ..	" 5
186. Edwin Smallman ..	" 24	261. Valentine Barrett ..	" 5
187. David Leach, jun. ..	" 24	262. Henry Michael Dixon ..	" 5
188. Harold William Mason ..	" 24	263. George Moon, jun. ..	" 5
189. George Morrison ..	" 24	264. William Rose McKenzie ..	" 5
190. Francis William McCowan ..	" 24	265. Ernest Samuel Smart ..	" 5
191. Thomas Schofield ..	" 24	266. Collin Threlkeld ..	" 5
192. James Alexander Robertson ..	" 24	267. John Wallace ..	" 5
193. Thomas Leahy Begg ..	July 17	268. Ernest Stoney Lewis Allan ..	" 5
194. Malcolm Archibald MacGoun ..	" 17	269. Henry Joseph Boardman ..	" 5
195. James Gillies McIlraith ..	" 17	270. Charles Olof Marklund ..	" 5
196. Daniel Joseph Kelleher ..	" 17	271. John Manson ..	" 5
197. Edgar Nelson ..	" 17	272. Alfred Suter ..	" 5
198. William John Sweetman ..	" 17	273. Albert White ..	" 5
199. Austin Frederick Warner ..	" 17		1903.
200. John Peter Everard Wick ..	" 17	274. William Marslin ..	Mar. 31
201. William Burns Souter Lindsay ..	" 17	275. Robert Houlston ..	" 31
202. Thomas Hugh Latimer ..	" 17	276. David Dunwoodie ..	" 31
203. Hugh McKay ..	Aug. 25	277. Harry Ross Dix ..	" 31
204. Frederick Gould Bale Sanders ..	" 25	278. Peter Duncan Russell ..	" 31
205. Victor Alexander ..	" 25	279. James William Smith ..	" 31
206. Alfred Edward Morgan ..	" 25	280. Alfred James Border ..	" 31
207. Leonard Douglas Seldon Dale ..	" 25	281. Albert Errington Exley ..	" 31
208. Edward Duckworth ..	" 25	282. Harold Kemp ..	" 31
209. Levi James ..	" 25	283. Edward Barry ..	" 31
210. David Richmond Fisher ..	" 25	284. Samuel Pizzey ..	" 31
211. James William Hamilton ..	" 25	285. George Lindsay ..	" 31
212. John Chantrey Woodward ..	" 25	286. Michael Francis Enright ..	" 31
213. Thomas Stevenson, jun. ..	" 25	287. Samuel Ernest Hubbard ..	" 31
214. Norvle Butler Brown ..	" 25	288. David Smith Jolly ..	" 31
215. Norman Morris Russell ..	" 25	289. James Holmes Straw ..	" 31
216. John Frederick Doull ..	" 25	290. Harry Graham Lever ..	" 31
217. Henry Kenningham ..	" 25	291. Frank Leonard East ..	" 31
218. Preston Henry Hulton Harold Webber ..	" 25	292. John Alexander Stewart Aitken ..	" 31
219. Jeremiah Bernie ..	" 25	293. William Johnston ..	" 31
220. John Duncan ..	" 25	294. James Mathieson ..	" 31
221. Walter George Fraser ..	" 25	295. Malcolm James McDonald ..	" 31
222. Harry David McRobbie James ..	" 25	296. Robert Frederick Hinton Aldworth ..	" 31
223. William Steele Kay ..	" 25	297. Vincent Philip Aylward ..	" 31
224. John Kelly ..	" 25	298. Stanley Howard Empson ..	" 31
225. Joel Barnett Moss ..	" 25	299. Cecil Houghton ..	" 31
226. Arthur Norman Wakefield ..	" 25	300. Harry Tillman ..	" 31
227. Thomas Walker ..	" 25	301. Reginald Seymour Williams ..	" 31
228. Frederick Charles Davys ..	" 25	302. Frederick Wolff ..	" 31
229. Thomas Matthew Snow ..	" 25	303. Walter Hugh Rudkin ..	" 31
230. George William Bassett Martin ..	" 25	304. John McArthur ..	" 31
231. John James Vincent ..	Dec. 5	305. Samuel Dickson ..	" 31
232. Frank Jacobs ..	" 5	306. Philip George Marshall ..	" 31
233. Joseph Henry Cronin ..	" 5	307. John McBean ..	" 31
234. Alexander Collie ..	" 5	308. Thomas Patrick Walshe ..	" 31
235. Emil Johannes Johansson ..	" 5	309. Allan Clyde Dickie ..	" 31
236. William Kane ..	" 5		

No. 16.—RETURN of SECOND-CLASS STATIONARY-ENGINE DRIVERS to whom CERTIFICATES OF COMPETENCY have been GRANTED from 1st April, 1902, to 31st March, 1903.

No. and Name of Person.	Date of Issue. 1902.	No. and Name of Person.	Date of Issue. 1902.
588. John Albert Irwin Pearson ..	May 24	676. Andrew Lawson ..	Aug. 25
589. Frank Augustus Pearce ..	" 24	677. James Mackie ..	" 25
590. Samuel Bowman ..	" 24	678. Henry Olson ..	" 25
591. Charles Robert Hyde ..	" 24	679. John Rickard, jun. ..	" 25
592. George Horatio Kent ..	" 24	680. Alexander Charles Ross ..	" 25
593. Thomas McLachlan ..	" 24	681. John Simpson ..	" 25
594. Alexander Reid ..	" 24	682. William Thomas Taylor ..	" 25
595. Walter Blackie ..	" 24	683. Frank Charlton ..	" 25
596. Thomas Falconer ..	" 24	684. George Augustus Parrant ..	" 25
597. Robert Hutton, jun. ..	" 24	685. George Ross ..	" 25
598. James McIntosh ..	" 24	686. Henry Edward Roberts ..	" 25
599. Frederick Pearce ..	" 24	687. John Rainforth ..	" 25
600. James Sawers ..	" 24	688. Hugh Joseph Sullivan ..	" 25
601. William Shaw ..	" 24	689. Arnold Septimus Staples ..	" 25
602. John Law Smail ..	" 24	690. William Ever Lange Langeson ..	" 25
603. Henry Smith ..	" 24	691. Henry Blackmore ..	" 25
604. John Alexander Stewart ..	" 24	692. Charles Elliott Lavers ..	" 25
605. Thomas James Sherwood ..	" 24	693. Adolf Otto Christian Poulsen ..	" 25
606. Robert Wright Todd ..	" 24	694. Alfred James Shaw ..	" 25
607. Emil Haming Johanson ..	" 24	695. James Black ..	" 25
608. William Lawson ..	" 24	696. Alfred Brook ..	" 25
609. Valdemar Axel Victor Winge ..	" 24	697. Irwin Clearwater ..	" 25
610. James Haswell Wood ..	" 24	698. Archibald Dickson ..	" 25
611. Robert Barber ..	" 24	699. Donald Henry ..	" 25
612. Stephen Beer ..	" 24	700. Duncan Charles Patrick Macarthur ..	" 25
613. James Breen ..	" 24	701. Donald McKercher McDonald ..	" 25
614. John Elder Gallie ..	" 24	702. William Carson Patterson ..	" 25
615. William Gunn ..	" 24	703. Joseph Frederick William Roggiero ..	" 25
616. Henry Francis Kitto ..	" 24	704. Neil Shaw ..	" 25
617. James Henderson Moir ..	" 24	705. Charles Stevenson ..	" 25
618. Donald McLeod Munn ..	" 24	706. Charles McLaren Turnbull ..	" 25
619. James Arthur Shirley ..	" 24	707. Wallace Williamson ..	" 25
620. William Stewart ..	" 24	708. Charles William Stuart ..	" 25
621. John Young Thomson ..	" 24	709. Peter Andrew Thomas Webb ..	" 25
622. Peter Walker, jun. ..	" 24	710. Robert William Moffitt ..	" 25
623. Edmund Thomas Russell ..	" 24	711. Albert Ernest Quertier ..	" 25
624. William Tom Cooke ..	" 24	712. Herbert Beynon Morris ..	" 25
625. Frank Harrison ..	" 24	713. Albert Edney Briggs ..	" 25
626. William Brand ..	" 24	714. William Alexander Nicholson ..	" 25
627. Albert Edward Gulliver ..	" 24	715. Walter Aldridge Gower ..	" 25
628. Albert Charles Hill ..	" 24	716. Frederick John Carnie ..	" 25
629. Timothy Jones ..	" 24	717. Charles Christopher Davis ..	" 25
630. Ernest Munns ..	" 24	718. Hugh Duffin ..	" 25
631. Stuart Murphy ..	" 24	719. Edward Thorneycroft Frost ..	" 25
632. William George Pearce ..	" 24	720. John Owen Gardner ..	" 25
633. Charles Frederick William Walloscheck ..	" 24	721. Charles Henry Kirk ..	" 25
634. Percy Clifton Firth ..	" 24	722. Thomas Long ..	" 25
635. Charles Angus Shaw ..	" 24	723. Frank Tufnell ..	" 25
636. Robert Buyers Haswell ..	" 24	724. Franklin Henry Walker ..	" 25
637. Francis McGowan ..	" 24	725. Frank William Shultz ..	" 25
638. George Arthur Tegg ..	" 24	726. Robert Aitken Henderson ..	" 25
639. Albert James Gallichan ..	July 17	727. James Strang Paget ..	" 25
640. Richard Twort ..	" 17	728. Alfred Sutton ..	" 25
641. Donald Duncan ..	" 17	729. William Webb ..	" 25
642. Henry Neale ..	" 17	730. August Richard William Boenicke ..	" 25
643. Gabriel Knudsen ..	" 17	731. Alexander Edwards ..	" 25
644. William Martin Collins ..	" 17	732. Norman Marsh Elder ..	" 25
645. John Stuart Dillon ..	" 17	733. Thomas Ryan Jones ..	" 25
646. Stanley Richardson Jackson ..	" 17	734. William John McCulloch ..	" 25
647. Alexander John Malcolm ..	" 17	735. William McKegg ..	" 25
648. Henry Sargent ..	" 17	736. Andrew McKenzie ..	" 25
649. James Daniel Disciaciati ..	" 17	737. John Macpherson ..	" 25
650. Hugh Gilmer ..	" 17	738. James Scott ..	" 25
651. John Hansbury ..	" 17	739. Robert Carr Scott ..	" 25
652. Joseph William Hansbury ..	" 17	740. John Thomas Weatherall ..	" 25
653. Robert Houliston, jun. ..	" 17	741. John William Grant McIntyre ..	" 25
654. William Edwin Kennard ..	" 17	742. William Bond ..	" 25
655. James Ruthven ..	" 17	743. Simon Fraser, jun. ..	Dec. 5
656. Richard Williams ..	" 17	744. Llewellyn Lloyd Blake ..	" 5
657. Albert Edward Wick ..	" 17	745. William Henry Harkless Bunting ..	" 5
658. Joseph Dudley Raine ..	" 17	746. Andrew Melville ..	" 5
659. James Pearce ..	" 17	747. James Middleton Taylor ..	" 5
660. Alexander Leitch ..	" 17	748. Edward Cranage Goodson ..	" 5
661. James Pike Gage ..	" 17	749. Charles Lewis Luke ..	" 5
662. Robert Glen ..	" 17	750. Albert Ernest Meachen ..	" 5
663. James Geaney ..	" 17	751. James Smith ..	" 5
664. John William Horrack ..	" 17	752. Cara Pacey Dugdale ..	" 5
665. Andrew Potts ..	" 17	753. Fred. Harrison ..	" 5
666. Edward James Butcher ..	" 17	754. Sidney Clayton ..	" 5
667. Michael Connors ..	" 17	755. Samuel Alexander Lyttle ..	" 5
668. John Cargan ..	" 17	756. Alexander Mackie ..	" 5
669. Norman Mabin ..	" 17	757. Richard Andrews ..	" 5
670. Stephen White ..	" 17	758. Thomas Stevenson Drake ..	" 5
671. Bernard Ambrose Rogers ..	" 17	759. John Jarvis Gillies ..	" 5
672. Edward Milton Dorée ..	Aug. 25	760. Ernest Henry Runnerstrum ..	" 5
673. Aquila William Pearce ..	" 25	761. James Arthur Adams ..	" 5
674. Henry Ernest Harvey ..	" 25	762. John Nichol Elliot ..	" 5
675. Alister Harry Hunt ..	" 25	763. William McKay ..	" 5

No. 16.—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.	
764.	William James Barclay ..	Dec.	5	855.	George William Wallace ..	Dec.	5
765.	Joseph Rumble ..	"	5	856.	Thomas Cook ..	"	5
766.	Thomas Walton Brown ..	"	5	857.	Joseph Mitchell, jun. ..	"	5
767.	Hugh Cameron Christie ..	"	5	858.	William Alfred Body ..	"	5
768.	William Robert Robertson ..	"	5			1903.	
769.	John James Walker ..	"	5	859.	Robert Weir ..	Mar.	31
770.	James Blackwood Arnott ..	"	5	860.	Archibald Arrol Stewart ..	"	31
771.	John Watson Coulson ..	"	5	861.	William Weaver ..	"	31
772.	William Holloway ..	"	5	862.	Thomas Francis Turner ..	"	31
773.	William Gunn ..	"	5	863.	John Joseph McDonnell ..	"	31
774.	William James Pearson ..	"	5	864.	Thomas Edward Donovan ..	"	31
775.	John May ..	"	5	865.	Owen O'Neill ..	"	31
776.	Benjamin Hansen ..	"	5	866.	Henry Bunn ..	"	31
777.	Daniel Kane ..	"	5	867.	Thomas Farish ..	"	31
778.	Robert Bruce ..	"	5	868.	James Thomas Young ..	"	31
779.	Frederick William Jones ..	"	5	869.	Hugh Campbell ..	"	31
780.	Joseph McCann ..	"	5	870.	James R.obb ..	"	31
781.	James Gilbert Nicholl ..	"	5	871.	James Allan ..	"	31
782.	George Livingstone Horne ..	"	5	872.	Percy William Armiger ..	"	31
783.	Daniel McCorkindale ..	"	5	873.	John Graham ..	"	31
784.	John Joseph O'Brien ..	"	5	874.	Magnus Flaas ..	"	31
785.	Ernest Albert Gardner ..	"	5	875.	Harry Tait ..	"	31
786.	Richard James Allan ..	"	5	876.	Walter Clifford ..	"	31
787.	Walter Fisher ..	"	5	877.	Robert Houston ..	"	31
788.	George William Ericson ..	"	5	878.	Benjamin John Barr ..	"	31
789.	Thomas George Kitchingham ..	"	5	879.	Mark O'Shaughnessy ..	"	31
790.	Axel Holsted ..	"	5	880.	Cyril Eaves ..	"	31
791.	Daniel Martin Byrne ..	"	5	881.	Andrew Munro ..	"	31
792.	Vincent James Pfeifer ..	"	5	882.	John William Ross ..	"	31
793.	George Simpson ..	"	5	883.	Albert Ruback ..	"	31
794.	Andrew John James Peebles ..	"	5	884.	Arthur Henry Hale ..	"	31
795.	Frederick Albert Winter ..	"	5	885.	Albert Peter Lapoehn ..	"	31
796.	James Gordon ..	"	5	886.	Mark John Evans ..	"	31
797.	John Minehan ..	"	5	887.	Andrew Dickson Crawford ..	"	31
798.	Simon Peter McLeod ..	"	5	888.	Ernest Alfred Hart ..	"	31
799.	John Patrick Burley ..	"	5	889.	Cyril Hordern Macgeorge ..	"	31
800.	James Croawell ..	"	5	890.	John Albert May ..	"	31
801.	Frank Charles Buchanan ..	"	5	891.	John Mickelson ..	"	31
802.	Thomas George Gear ..	"	5	892.	Ernest Turner ..	"	31
803.	Samuel Johnston ..	"	5	893.	Adam Blair, jun. ..	"	31
804.	James Patrick Leonard ..	"	5	894.	Albert Edward Olsen ..	"	31
805.	Charles Edward Cain ..	"	5	895.	Timothy Carlean ..	"	31
806.	John Craighead ..	"	5	896.	Donald Fraser Mackenzie ..	"	31
807.	George Burns, jun. ..	"	5	897.	William Murray ..	"	31
808.	George Abbott ..	"	5	898.	Alexander Shaw ..	"	31
809.	Ernest Henry Schwass ..	"	5	899.	John Nelson ..	"	31
810.	Bernard Molneux Holt ..	"	5	900.	Robert James Boyd ..	"	31
811.	Thomas Richard Miller ..	"	5	901.	Charles Edward Chittenden ..	"	31
812.	Henry Priddy ..	"	5	902.	Albert Coles ..	"	31
813.	Thomas Killworth ..	"	5	903.	Harry Collett ..	"	31
814.	William Frederick Herbert Lamborn ..	"	5	904.	Thomas James Evans ..	"	31
815.	Frank Heinrich Stechmann ..	"	5	905.	Edward James Lonsdale ..	"	31
816.	Tom Wakefield ..	"	5	906.	John Grant ..	"	31
817.	Robert McFarlane ..	"	5	907.	Edward Pakenham ..	"	31
818.	Ralph Beaufort ..	"	5	908.	Robert Sloane ..	"	31
819.	William George Gunton ..	"	5	909.	Joseph William Tarry ..	"	31
820.	John Hinde ..	"	5	910.	George Timms Scotcher ..	"	31
821.	John Neill ..	"	5	911.	Frederick William Charles Nees ..	"	31
822.	David Miller Pettigrew ..	"	5	912.	Edward Legg Richards ..	"	31
823.	James Ross ..	"	5	913.	Henry Edgeler ..	"	31
824.	John McGown Stevenson ..	"	5	914.	Harry Merson ..	"	31
825.	George Moffitt ..	"	5	915.	James Joseph Enright ..	"	31
826.	William Thornton ..	"	5	916.	William Harrison ..	"	31
827.	Thomas Ayling ..	"	5	917.	George Robert Charlton ..	"	31
828.	John Johnston ..	"	5	918.	Carl Frederick Hansen ..	"	31
829.	Alexander Dove Pirie ..	"	5	919.	Robert Jackson Russell ..	"	31
830.	Edward Ryde ..	"	5	920.	Carl Anderson ..	"	31
831.	Gideon Scott ..	"	5	921.	Daniel Sutherland Smart ..	"	31
832.	Thomas Benjamin Smith ..	"	5	922.	Joseph Allen ..	"	31
833.	Andrew Aitken ..	"	5	923.	Parnell Cross ..	"	31
834.	Andrew Anderson ..	"	5	924.	Charles Richard Davis ..	"	31
835.	William Goldsmith Tyson ..	"	5	925.	Thomas Dee ..	"	31
836.	Claude Ernest Burgess ..	"	5	926.	William Findlay ..	"	31
837.	Peter Cussen ..	"	5	927.	Matthew Guy ..	"	31
838.	William Alexander Dripps ..	"	5	928.	John Joshua Horton ..	"	31
839.	James Fitzgerald ..	"	5	929.	Jens Peter Jensen ..	"	31
840.	William Grant ..	"	5	930.	Hugh Johnson ..	"	31
841.	James Singleton Melvin ..	"	5	931.	Dennis Finnigan ..	"	31
842.	James Wright Murray ..	"	5	932.	Alexander William Lorimer ..	"	31
843.	William McCord ..	"	5	933.	Daniel Joseph McCafferty ..	"	31
844.	Murdoch McDonald ..	"	5	934.	Thomas Paterson ..	"	31
845.	Peter McLay ..	"	5	935.	Michael Ryan ..	"	31
846.	Robert Patton ..	"	5	936.	Henry Spencer ..	"	31
847.	Benjamin Alfred Albert Pearce ..	"	5	937.	Richard Charles Webb ..	"	31
848.	Hugh Girvan Provan ..	"	5	938.	William Martin ..	"	31
849.	John Phillip Andrew Artha ..	"	5	939.	Thomas Edward Geohagan ..	"	31
850.	Thomas Joseph Cain ..	"	5	940.	Denis James McBean ..	"	31
851.	John Edward Douglas ..	"	5	941.	John Bond ..	"	31
852.	Francis James Morrow ..	"	5	942.	Gustave Martinus Erickson ..	"	31
853.	William McKay ..	"	5	943.	Samuel Patrick Chapman ..	"	31
854.	Duncan Donald Thorburn ..	"	5	944.	James Tannock ..	"	31

No. 17.—RETURN of APPLICANTS who PASSED their EXAMINATIONS as MARINE ENGINEERS for the Year ending 31st March, 1903.

First-class Marine Engineer.—John William Bird, Albert Coad, Robert Charles Green, James Hambelton, W. Johnston, Thomas Alexander Pain.

Second-class Marine Engineer.—Charles Henry Gell, H. Hambelton, Frederick Lewis Harrison, William Jacobsen, Thomas Alexander Lawson, William Webb Luke, George Maxwell, James Powell, Kenneth Sinclair, William John Sutton.

Third-class Marine Engineer.—Ralph Cleave Alexander, George Grey Andrews, Valentine Barrett, George H. Baird, John Fairley Bell, Arthur Hassack Black, Harry Francis Blackie, Percy Edmond Brewer, Benjamin Henry Brown, Peter Nurse Brown, Malcolm Buckland, John Campbell, Lewis Cornelius Calnon, Henry Livingston Chandler, Leonard Douglas Seldon Dale, Walter William Daniel, Thomas Henry Davidson, Leslie Claude Davies, Frederick Charles Davys, Allan Clyde Dickie, Oscar Dillner, William Evans Dive, Harry Ross Dix, Henry Michael Dixon, Albert Errington Exley, Vincent Henry Fama, Charles Robert Furness, Robert Andrew Gibson, John Galbraith Hambleton, John George Hand, Leonard Bushe Harris, Cecil Houghton, Robert George Huggins, George Mathew Humphreys, James Hull, William Patterson Hunter, John Johnson, Thomas Richard Jones, Harold Kemp, William Kemp, Frank Robert Kilgour, Edward J. Looney, John Manson, Harold William Manson, Francis William McCowan, John McDonald, William Bell McKenzie, William Rose McKenzie, Ernest Herbert Noy, Arthur James Parker, John Paterson, Henry Borton Perry, William Peterson, George Robert Pirie, Francis James Welster Pope, Walter Stanley Rentoul, John Coutts Reynolds, Victor Robinson, Peter Duncan Russell, Walter Goodman Sandes, Frederick Mair Silver, James Henry Havelock Speedy, Alexander Murray Swhan, William George Teixeira, Edward Allan Thomson, Peter Heywood Thompson, Harry Tillman, William Robert Waters, Arthur Rennie Watson, Harry Weenink, John Weir, Charles Edgar Wetherilt, Alfred Joseph Williams, Reginal Seymour Williams.

River Engineer.—Henry Alexander Butters, Thomas Joseph Cain, Herbert Christian, Joseph Cox, William Dawson, George Duthie, John Evans, Edward Thorneycroft Frost, George Archibald Green, Charles Hanningan, Thomas Harris Harrison, Christopher James Holford, George Mathew Humphreys, Arthur James, Thomas Long, Arthur Marychurch, Robert James McDonald, James McGlynn, John Neil, Percy Arthur Neild, Henry Nordstrum, Eugenio Charles Perano, Antonio Perez, Michael Rooney, James Patrick Ryan, Frederick James Tattley, George Thomas, John Wheeler, Surties John White.

Marine-engine Driver.—William Allan, Athol Ernest Sercom Foster, George David Nairn Glover, Charles Robert Hyde, Edmund James Lonsdale, Arthur Marychurch, William McFarlane, Horace Pope, William Alfred Ragg, William Henry Scoones, John Mollison Stewart, Gustav Tetzlaff, Peter John Walsh.

First-class Engineer (Sea), Powered Vessels other than Steam.—Henry Cornwall Christian, Edward Looney, Andres Henrich Schmidt.

Second-class Engineer (Sea), Powered Vessels other than Steam.—Thomas Charles Barker, C. Barwell, Nathan Farrar Hall, Henry Ohio Ivey.

River-limits Engineer, Powered Vessels other than Steam.—Horace Chadwick, Frank Henderson, Archibald Weir.

No. 18.—RETURN of VESSELS SURVEYED during the Financial Year ended 31st March, 1903, 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 (Auckland) ..	..	..	8	..	High pressure ..	" ..	..
*Ahuriri (2)	85	31	17	..	Compound S. condensing	" ..	..
Akaroa	76	43	28	144	" ..	" ..	..
Albany .. ..	..	..	8	10	High pressure ..	" ..	..
Alert (Thames) .. ..	..	..	6	..	Condensing ..	" ..	..
Alert (Auckland) .. ..	..	..	1½	..	High pressure ..	" ..	..
Alexandra	104	73	30	80	" ..	" ..	Paddle.
Anna	28	21	10 B.H.P.	..	Oil-engine ..	Single..	..
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	" ..	..
Aparima	5,704	3,684	284	2,702	Triple compound	Twin ..	..
Awarua (Blenheim) ..	..	..	3	..	High pressure ..	Single..	..
Awarua (Auckland) ..	159	100	32	207	Condensing ..	" ..	..
Balmain	604	377	85	436	Compound S. condensing	" ..	..
Beatrice .. ..	..	8	10	..	" ..	" ..	..
Bella	19	12	12	..	High pressure ..	" ..	..
Ben Lomond	46	33	15	..	Compound S. condensing	" ..	..
Birkenhead	87	55	20	..	High pressure ..	" ..	Paddle.
Blanche (Auckland) ..	26	17	9	..	" ..	Single..	..
Britannia	196	108	40	..	" ..	" ..	..
Brothers	68	55	49 B.H.P.	..	Oil-engine ..	" ..	..
Canterbury .. ..	..	..	24	..	High pressure ..	Twin ..	..

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

No. 18.—RETURN of VESSELS SURVEYED, &c.—continued.

Name of Vessel.	Tons Measure- ment.		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.					
Charles Edward (2) ..	245	145	48	213	Compound S. condensing	Single..	..
Chelmsford ..	103	70	24	61	" ..	" ..	..
Clansman ..	591	336	90	527	" ..	" ..	..
Clara ..	..	..	2½	..	High pressure ..	" ..	..
Claymore ..	210	91	54	400	Triple expansion ..	" ..	..
Clematis ..	..	5	8	..	Compound S. condensing	" ..	..
Clyde ..	130	..	40	..	" ..	" ..	Stern wheel.
Comet ..	..	..	2½	..	High pressure ..	Single..	..
Corinna (2) ..	1,279	820	141	898	Compound S. condensing	" ..	..
Coromandel ..	99	67	25	..	" ..	" ..	..
Countess ..	..	84	28	..	" ..	" ..	..
Countess of Ranfurly ..	198	153	90 B.H.P.	..	Oil-engine ..	" ..	..
Cygnat ..	124	66	43	170	Compound S. condensing	" ..	..
Daphne (Hokitika) ..	..	..	½	..	High pressure ..	" ..	..
Despatch (Bluff) ..	35	24	20	..	Compound S. condensing	" ..	..
Dingadee ..	640	393	80	439	" ..	Twin ..	..
Dot (Auckland) ..	..	..	½	..	High pressure ..	Single..	..
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	..	" ..	" ..	..
Emma Sims ..	73	61	32 B.H.P.	..	Oil-engine ..	Twin ..	..
Endon ..	..	..	5	..	Compound S. condensing	Single..	..
Energy ..	58	15	16	..	" ..	" ..	..
Erin ..	..	..	4	..	High pressure ..	" ..	..
Erskine ..	126	98	35	120	Compound S. condensing	" ..	..
Express ..	53	36	25	100	" ..	" ..	..
Fairy (Napier) ..	45	32	15	50	High pressure ..	" ..	..
Falcon ..	..	..	6	12	" ..	" ..	..
Fanny ..	90	55	30	160	Compound S. condensing	" ..	..
Fingal ..	34	22	9½	48	" ..	" ..	..
Gairloch ..	373	211	85	561	Compound S. condensing	Twin ..	..
Gannett ..	10	..	12	..	High pressure ..	Single..	..
Gertie ..	262	100	59	413	Triple expansion ..	Twin ..	..
Gipsy ..	..	..	6 B.H.P.	..	Oil-engine ..	Single..	..
Glenelg ..	288	156	75	331	Compound S. condensing	" ..	..
Goldfinch ..	..	..	10	..	" ..	" ..	..
Gosford ..	83	56	30	..	Compound ..	" ..	..
Gretchen ..	..	..	1½	..	High pressure ..	" ..	..
Greyhound ..	107	83	50 B.H.P.	..	Oil-engines ..	" ..	..
Hauptiri ..	700	475	88	527	Compound S. condensing	" ..	..
Hauturu ..	..	..	3½	14	High pressure ..	" ..	..
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 ..	" ..	..
Hinemoa (C.G.S.) ..	542	282	150	620	Compound S. condensing	" ..	..
Huia (Auckland) ..	204	196	6 B.H.P.	..	Oil-engine ..	" ..	..
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	..	Compound S. condensing	" ..	..
Ithaca ..	..	7	9	..	" ..	" ..	..
Jane Douglas (2) ..	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	..	" ..	" ..	..
Kapiti ..	208	80	35	239	" ..	" ..	..
Kapui ..	58	30	30	..	High pressure ..	" ..	..
Karoro ..	76	51	17	..	Compound ..	" ..	..
Kate ..	..	..	5	..	High pressure ..	" ..	..
Katikati ..	37	26	9	..	Compound S. condensing	" ..	..
Kauri ..	..	..	1	..	High pressure ..	" ..	..
Kawau ..	99	53	20	..	Compound S. condensing	" ..	..
Kennedy (2) ..	188	124	43	188	" ..	Twin ..	..
Kilmorey ..	..	..	1½	..	High pressure ..	Single..	..
Kini ..	1,122	702	130	680	Triple expansion ..	" ..	..
Kiripaka ..	105	75	24	100	Compound S. condensing	" ..	..
Kopu ..	..	18	13	..	High pressure ..	" ..	Paddle.
Koputai ..	153	5	120	441	Compound S. condensing	Single..	..
Kotahi ..	12	9	18 B.H.P.	..	Oil-engine ..	" ..	..

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

No. 18.—RETURN of VESSELS SURVEYED, &c.—*continued*.

Name of Vessel.	Tons Measure- ment.		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.					
Kotiti	58	42	14	..	Compound S. condensing	Single..	..
Kotuku	1,054	662	112	613	Triple expansion ..	" ..	..
Kuaka	45	33	90 B.H.P.	..	Oil-engine .. ..	" ..	..
Lady Barkly (2) ..	55	39	20	90	Compound S. condensing	" ..	..
Lena .. ..	..	..	5	..	High pressure .. ..	" ..	..
Lily .. ..	..	..	1½	..	" .. ..	" ..	..
Little George .. ..	..	4	4	..	" .. ..	" ..	..
Little Jack .. ..	..	..	1½	..	" .. ..	" ..	..
Lyttelton (tug) (2) ..	190	39	80	..	Compound S. condensing	..	Paddle.
Mahuta	15	11	13 B.H.P.	..	Oil-engine	Single..	..
Makarora (2) .. ..	..	45	13	..	High pressure .. ..	" ..	..
Mana	99	77	25	141	Compound S. condensing	" ..	..
Manakau	65	45	20	80	" .. ..	" ..	..
Manapouri	2,060	1,288	220	1,600	" .. ..	" ..	..
Manaroa	122	77	24	178	" .. ..	" ..	..
Manchester (2) .. ..	..	366	160	..	" .. ..	" ..	..
Mangaiti .. ..	..	..	6	..	High pressure .. ..	" ..	..
Manuwai	107	75	25	..	" .. ..	..	Stern wheel
Maori (Auckland) ..	25	17	8	..	"	Single..	..
Maori (Dunedin) ..	173	118	60	150	Compound S. condensing	" ..	..
Mapourika	1,208	718	130	1,247	Triple expansion ..	" ..	..
Mararoa	2,598	1,380	530	3,537	" .. ..	" ..	..
Mascotte .. ..	..	..	..	12	High pressure .. ..	" ..	..
Matuku .. ..	..	..	4	..	" .. ..	" ..	..
May .. ..	..	..	3	..	" .. ..	" ..	..
May Howard	64	55	..	20	Quadruple surface ..	" ..	..
Meremere .. ..	..	..	1½	..	Compound S. condensing	" ..	..
Minnie Casey	74	48	20	..	" .. ..	" ..	..
Moa	188	95	33	153	" .. ..	" ..	..
Moerangi	15	14	27½ B.H.P.	..	Oil-engine .. ..	" ..	..
Mokau	162	98	27	160	Compound S. condensing	" ..	..
Mokoia	3,502	2,154	255	3,501	Triple expansion ..	Single..	..
Monowai	3,433	2,137	290	2,551	" .. ..	" ..	..
Moss Rose .. ..	..	..	6	..	High pressure .. ..	" ..	..
Mountaineer (2) ..	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 .. ..	" ..	..
Nambucca	130	74	24	120	Compound S. condensing	" ..	..
Napier	70	48	30	62	" .. ..	" ..	..
Narcissus .. ..	..	..	2	..	High pressure .. ..	" ..	..
Nauri	47	23	12	30	Compound S. condensing	" ..	..
Nautilus	41	29	18	65	" .. ..	" ..	..
Nene (2)	6	4	2	..	Compound .. ..	" ..	..
Ngapuhi	691	299	160	1,340	Triple expansion ..	Twin ..	..
Ngunguru	80	54	17	69	Compound S. condensing	Single..	..
Nile	43	21	20	..	Compound .. ..	" ..	..
Noko	19	15	9	..	High-pressure .. ..	" ..	..
No. 121	657	394	100	488	Compound S. condensing	Twin ..	..
Ohinemuri	114	73	26	130	" .. ..	" ..	..
Ohuru .. ..	..	20	14	..	Quadruple expansion ..	" ..	..
Omapere	601	352	80	505	Compound S. condensing	Single..	..
Onslow	23	16	14	..	"	Twin ..	..
Opawa (2)	110	64	18	73	"	Single..	..
Oreti	219	117	50	162	" .. ..	" ..	..
Orewa	59	37	17	..	" .. ..	" ..	..
Osprey	219	138	70	..	" .. ..	..	Paddle.
Ovalau	1,299	766	103	673	Quadruple expansion ..	Single..	..
Paeroa	91	46	15	67	Compound S. condensing	" ..	..
Paiaka	14	10	9	..	High pressure .. ..	" ..	..
Pania (2)	40	27	11	45	Compound S. condensing	" ..	..
Pareora	650	355	71	428	Triple expansion ..	" ..	..
Parera .. ..	..	..	4	..	High pressure .. ..	" ..	..
Pelorus	25	18	12	..	" .. ..	" ..	..
Penguin	836	517	180	711	Compound S. condensing	" ..	..
Petone	708	388	82	544	Triple expansion ..	" ..	..
Phantom	44	18	11	140	Compound S. condensing	" ..	..
Phoenix	8	6	5	..	High pressure .. ..	" ..	..
Piraki .. ..	..	10	4	..	" .. ..	" ..	..
Plucky	81	29	40	262	Compound S. condensing	" ..	..
Poherna	1,174	749	123	686	Triple expansion ..	" ..	..
Presto .. ..	..	..	3	..	High pressure .. ..	" ..	..
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) ..	23	18	10	..	Compound S. condensing	" ..	..
Result (Tauranga) ..	..	..	4	..	High pressure .. ..	" ..	..
Rita	40	22	11	55	Compound S. condensing	" ..	..
Rob Roy	95	34	16	..	" .. ..	" ..	..
Rosamond	721	462	90	411	" .. ..	" ..	..
Rose .. ..	..	..	2	2	High pressure .. ..	" ..	..
Rose Casey	132	99	35	..	" .. ..	" ..	..

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

No. 18.—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.					
Rotokino	2,004	1,263	135	929	Quadruple expansion ..	Single..	..
Rotomahana (Auckland)	183	139	50	265	Compound S. condensing	" ..	..
Rotomahana (Dunedin)	1,763	915	450	2,465	" ..	" ..	..
Rotoiti	1,159	630	104	1,127	Triple expansion ..	Twin ..	..
Ruru	31	11	10	..	Compound ..	Single..	..
Savaii	55	31	16	..	Compound S. condensing	" ..	..
Seagull .. ..	..	..	6	..	High pressure ..	" ..	..
Sonoma .. ..	..	..	13	..	" ..	" ..	..
Southern Cross (Lond'n)	291	205	20	116	Compound S. condensing	" ..	..
Spray .. ..	..	..	3	5	High pressure ..	" ..	..
Stella	268	157	90	183	Compound S. condensing	" ..	..
Stormbird (2) ..	217	137	40	226	" ..	" ..	..
Sumner	167	94	35	..	" ..	" ..	..
Swan	24	16	8	..	" ..	" ..	..
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 ..	..
Tangihua	31	20	15	90	" ..	Single..	..
Taniwha (Auckland)	263	191	40	254	" ..	Twin ..	..
Taniwha (Timaru)	..	16	16	..	High pressure ..	Single..	..
Tarakahi .. ..	..	..	4	10	" ..	" ..	..
Tarawera	2,003	1,268	250	1,543	Compound S. condensing	" ..	..
Tarewai	10	7	6	..	High pressure ..	" ..	..
Tasman	178	87	38	240	Compound S. condensing	Twin ..	..
Taviuni	1,465	910	135	1,025	Quadruple expansion ..	Single..	..
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..	..
Toroa	388	174	91	482	Triple expansion ..	" ..	..
Tuariki .. ..	..	..	8 B.H.P.	..	Oil engine ..	Twin ..	..
Tui .. ..	..	..	6½	..	High pressure ..	Single..	..
Tuiwiki	3	2	6	..	" ..	" ..	..
Tuna (Gisborne)	..	..	14	..	Compound S. condensing	Twin ..	..
Tutanekai (C.G.S.)	811	412	205	1,145	Triple expansion ..	" ..	..
Upolu	1,140	692	120	733	Quadruple expansion ..	Single..	..
Victoria	147	92	40	200	Compound S. condensing	" ..	Paddle.
Vivid	21	6	13	..	High pressure ..	Single..	..
Waabi .. ..	..	..	5	..	Oil engine ..	" ..	..
Waihi	92	63	20	172	Compound S. condensing	" ..	..
Waihora (2) ..	2,003	1,269	250	1,509	" ..	" ..	..
Waikare	3,071	1,901	229	2,352	Triple expansion ..	" ..	..
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.
Wairoa (Auckland)	99	63	24	240	Compound S. condensing	Single..	..
Wairoa (Nelson)	70	47	20	50	" ..	" ..	..
Waitangi (Auckland)	171	34	62	368	" ..	Twin ..	..
Waitara .. ..	..	..	12	..	High pressure ..	Single..	..
Waiwera (Dunedin)	..	..	7	..	" ..	" ..	..
Waiwera (Lyttelton)	..	..	8	..	Compound S. condensing	" ..	..
Waiwiri (Auckland)	..	..	7½	..	" ..	" ..	..
Wakatere	441	157	140	698	" ..	" ..	Paddle.
Wakatu	157	95	23	156	" ..	Single..	..
Wanaka (2) ..	2,421	1,572	280	1,241	Triple expansion ..	" ..	..
Warrimoo	3,529	2,076	490	3,701	" ..	" ..	..
Wave .. ..	..	..	1½	..	High pressure ..	" ..	..
Waverley	156	93	25	108	Compound S. condensing	Twin ..	..
Weka (Napier) (2)	89	52	20	75	" ..	Single..	..
Weka (Auckland)	127	86	27	..	" ..	Twin ..	..
Wellington (Auckland)	382	279	80	514	" ..	Single..	..
Westland (2) ..	133	35	60	297	" ..	" ..	Paddle.
Whangape (2) ..	2,931	1,900	280	1,052	Triple expansion ..	Single..	..
Whati .. ..	..	..	1½	..	Compound ..	" ..	..
Winona .. ..	..	19	8	..	Compound S. condensing	" ..	..
Yho .. ..	..	12	24 B.H.P.	..	Oil engine ..	Twin ..	..

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

No. 19.—RETURN of VESSELS SURVEYED for SEAWORTHINESS, &c., from 1st April, 1902, to 31st March, 1903.

Dates of Survey.	Name of Vessel.	Where Surveyed.	Nature of Casualty.
1902.			
Nov. 3, 4 ..	Aparima	Auckland	Damage by fire.
Dec. 12 ..	Athenic	Wellington	Took the ground in Wellington Harbour.
Aug. 11, 13 ..	Beira	Wellington	Damage to boiler.
July 2 ..	Corinna	Dunedin	Damage to hull through striking wharf pile
Aug. 19, 27 ..	Dingadee	Wellington	Mishap to boiler.
July 8 ..	Herald	Invercargill	Collision with "Monowai."
July 15, 16 ..	Invercargill	Invercargill	Stranded going up New River.
1903.			
Feb. 26 ..	Kapanui	Auckland	Broke tail-shaft.
1902.			
July 8 ..	Monowai	Invercargill	Collision with "Herald."
Aug. 20 ..	Montrose	Auckland	Break-down in air-pump.
Sept. 2 ..	Otago	Christchurch	Survey for seaworthiness.
Oct. 9 ..	Pareora	Wellington	Special survey for Lloyd's.
Aug. 24 to 30			
1903.			
Feb. 27 ..	Penguin	Wellington and Nelson	Grounded off Waihi Point.
Mar. 2 ..			
1902.			
Oct. 3 ..	Rimutaka	Wellington	Survey as to seaworthiness.
1903.			
Mar. 6, 7 ..	Samuel Plimsoll	Dunedin	Survey to allow vessel to be towed to Australia, after being dismantled and otherwise injured.
1902.			
Aug. 21 to 23	Tarawera	Napier	Grounded at Napier.
Dec. 17, 18 ..			
1903.			
Jan. 5, 12, 19	Tavinni	Wellington	Tail-shaft broken.
Jan. 23 ..	Tutanekai	Wellington	Special survey for Lloyd's.
Mar. 4 ..	Waikare	Dunedin	Grounded at Port Chalmers.
1902.			
July 3, 4 ..	Waimate	Wellington	Grounded at Rangitoto Channel.
Aug. 12 ..	Walwera	Wellington	Branch of main steam-pipe tested.
July 9 ..	Wakatu	Wellington	Grazed on something rounding Port Gibson.
1903.			
Feb. 2 ..	Wakatu	Lyttelton	Grounded off Kaikoura.
1902.			
July 10 ..	Westralia	Wellington	Collision with Wellington Wharf.

The fees for survey for seaworthiness amount to £74 8s.

No. 20.—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, 1903.

	£	s.	d.
Received under Inspection of Machinery Act	5,329	5	0
Fees for survey of steamers for the year	1,588	10	0
Fees for the survey of steamers for seaworthiness	74	8	0
Received for examinations of marine engineers	177	0	0
Received for certificates for land-engine drivers	631	0	6
Reeovered law costs	3	11	8
	<u>£7,803</u>	<u>15</u>	<u>2</u>

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, 1903.

	£	s.	d.
Salaries	4,562	7	3
Travelling-expenses	2,061	2	1
Rent, cleaning offices, and fuel	379	4	6
Contingencies	896	2	6
	<u>£7,898</u>	<u>16</u>	<u>4</u>

Approximate Cost of Paper.—Preparation, not given; printing (1,775 copies), £21 5s.

By Authority: JOHN MACKAY, Government Printer, Wellington.—1903.

Price 9d.]

