

1913.  
NEW ZEALAND.

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# MARINE DEPARTMENT:

ANNUAL REPORT FOR 1912-13.

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

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My Lord,—

Marine Department, Wellington, 14th August, 1913.

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

I have, &c.,

F. M. B. FISHER.

His Excellency the Right Hon. the Earl of Liverpool, K.C.M.G., M.V.O.,  
Governor of New Zealand.

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Sir,—

Marine Department, Wellington, 26th May, 1913.

I have the honour to make the following report on the work of this Department during the year ended the 31st March last:—

*Shipping and Seamen Amendment Act, 1912.*

This Act has been assented to by His Majesty the King, and came into force on the 1st instant. It embodies provisions of the Imperial Maritime Conventions Act which made alterations in the law regarding liability in cases of collision and as to salvage. It also makes certain amendments in the New Zealand Shipping and Seamen Act, 1908, which authorize the Secretary of the Department to permit a home-trade ship to make a voyage without a certificated second mate on his being satisfied that one cannot be obtained without unduly detaining the ship. It also provides that a sick seaman belonging to a foreign-going ship trading beyond intercolonial limits shall not be discharged until it is known that he is not well enough to rejoin the ship before she leaves the Dominion, and makes better provision for the exercise of the crews of intercolonial and home-trade ships in boat drill.

*Harbours Amendment Act, 1912.*

This Act was passed to remedy certain defects in the law as regards the election of members of Harbour Boards in view of the biennial elections taking place in April, 1913. Several other amendments in the law relating to harbours are necessary, but there was not time to deal with these last session, and it is proposed to introduce another amending Bill during the coming session.

*Mercantile Marine Officers.*

The duties connected with these officers have been performed very satisfactorily, and the Superintendents and their assistants are to be commended for the skill and tact with which they have carried out their important and increasing duties.

A return which is appended shows the number of seamen engaged and discharged at the different ports, and the amounts of fees received for the engagements and discharges. The number of men engaged was 20,554, and the number discharged 20,378. The amount of fees received was £2,801 17s. In the previous year the engagements were 21,123, the discharges 19,749, and the fees received £2,891 7s. The transactions at the four principal ports were as follows:—

	Engagements.	Discharges.	Fees.		
			£	s.	d.
Auckland	5,611	5,692	775	13	0
Wellington	6,930	7,152	932	12	0
Lyttelton	2,152	1,936	296	0	6
Dunedin and Port Chalmers	2,879	3,021	437	13	0
During the previous year they were as follows:—					
Auckland	6,305	6,191	870	1	6
Wellington	6,520	6,623	891	1	6
Lyttelton	2,311	1,929	317	19	6
Dunedin and Port Chalmers	3,081	2,648	399	18	6

The Shipping and Seamen Amendment Act, 1909, empowers the Minister to withhold the certificates of discharge of seamen who desert from or fail to join their ships at the time of sailing for such time as he sees fit, and during the time they are withheld the men cannot ship in other vessels. This power is being exercised with salutary effect, and fewer men are absent at the time fixed for vessels to sail.

The Shipping and Seamen Amendment Act, 1911, empowers a Superintendent to accept an approved security for a sick seaman's wages, maintenance, and medical expenses, instead of a deposit being made in cash, and the practice of accepting such security is working well. It saves a shipowner having to pay the money before it is required, and of having to deposit more than it may be found on the man's recovery is wanted.

A vacancy in the Dunedin office has been filled by the appointment of Mr. H. F. Tomlinson, chief officer of the s.s. "Hinemoa," and one in the Wellington office by the appointment of Mr. W. Whiteford, chief officer of the s.s. "Tutanekai."

P. G. Moffatt has been appointed Superintendent of Mercantile Marine at Motueka to enable seamen to be discharged before him.

Proceedings in connection with seamen were taken by the Department in connection with the following cases with the results stated, viz.: The master of the scow "May," for carrying a seaman without entering into an agreement with him, fined £1 and costs; J. Hartley, Union Company's providore at Auckland, for transferring a steward from one ship to another without his being discharged from ship he was leaving, convicted and ordered to pay costs; P. Banfield, for making a false declaration that he was entitled to ship, fined £2 and costs; P. Lemon, for altering his discharge, sentenced to three months' imprisonment; J. H. Reed, for making a false declaration that he was entitled to ship, sentenced to six weeks' imprisonment; J. Cowan, master of s.s. "Himitangi," for not keeping a sailor on deck when at anchor in a harbour, fined 10s. and costs.

*Masters, Mates, and Engineers.*

The examination of candidates has been carried out satisfactorily at the various examination ports. 422 candidates have passed and 151 failed. Of those who passed, 241 were masters, mates, and engineers of seagoing ships, 54 were masters and engineers of steamships plying within restricted limits, 9 were masters of fishing-boats and of cargo-vessels up to 25 tons register, 13 were engineers of seagoing ships propelled by oil-engines or other mechanical power than steam, and 105 were engineers of similar vessels plying within restricted limits. Under the provisions of the Shipping and Seamen Amendment Act, 1909, two certificates of service as master of oil-engine boats up to 6 tons register, and two as engineer of such vessels, were issued during the year. These with the certificates issued during the previous year make the numbers granted 792 as master and 772 as engineer. There will, however, be no more, as the time within which they can be given has expired.

The following persons have been prosecuted by the Department for offences connected with certificates, viz.: W. Taupo, owner of launch, for running the boat without certificated master or engineer, fined £1 and costs; T. Wahanga, for similar offence, fined 10s. and costs; H. McCormick, for similar offence, fined £1 and costs.

The report of the Chief Examiner of Masters and Mates is appended.

*Registration of Shipping.*

Returns are appended showing the vessels registered in New Zealand on the 31st December last, and the number of seamen and boys employed on them. These show that on that date there were 242 sailing-ships of 34,308 registered tonnage, and 374 steamships of 121,772 tons register, as against 244 sailing-ships of 35,651 tons register, and 361 steamships of 114,973 tons register on the 31st December, 1911. The number of seamen and boys employed on board at the end of 1912 was 4,983, as compared with 5,268 at the end of the previous year.

*Survey of Ships.*

During the year certificates were issued after survey to 337 steamers, 537 oil-engine vessels, and 119 sailing-vessels, as compared with 252 steamers, 166 oil-engine vessels, and 89 sailing-vessels during the previous year.

The following limits have been defined to be river and extended river limits:—

Great Barrier Island: River limits for Port Abercrombie and Port Fitzroy to be inside a right line drawn from the outermost point of Green Island to Wellington Heads, thence to False Head; and for Port Tryphena inside a right line drawn from the outermost point of the easternmost head to the outermost point of the north-western head. The extended river limits for the island are within a radius of three nautical miles from it.

Mokau: River limits, inside the bar.

Tairua: River limits, inside Paku Head; and extended river limits, inside a line drawn from mainland immediately to eastward of most south-eastern points of Rabbit Island, thence to north-western point of Slipper Island, thence to most north-eastern point of Shoe Island, and thence westward to the mainland.

Opotiki: River limits, inside the bar; extended river limits, three miles outside the bar.

Porirua: Ohau, extended river limits for fishing-vessels, between Porirua Harbour and Ohau River.

Timaru: River limits, inside breakwater; extended river limits, within a radius of three miles from outer end of southern breakwater, and extended river limits for fishing-vessels within a radius of twenty miles from breakwater.

Otago: Extended river limits for fishing-vessels, within a radius of thirty miles from Taiaroa Head Lighthouse.

The following fire-extinguishing appliances have been approved for use on motor-boats, viz.: "Kyl Fyre," "Vanguard," and "Pyrene."

Proceedings have been taken by the Department for the following breaches of the law in connection with survey certificates, viz.: I. Fletcher, master of scow "Magic," for carrying passengers without a passenger certificate, fined £1 and costs; H. S. Beer, for running his oil-launch beyond prescribed limits, fined £3 and costs; C. A. Spencer, master of s.s. "Minerva," for carrying more passengers than allowed by vessel's certificate, fined £1 7s. and costs; T. W. Hamilton, master of the s.s. "Ngapuhu," for carrying more passengers than allowed by his certificate, fined £5 and costs; W. Walker, for running his launch for hire without a survey certificate, fined £2 and costs; W. McNeil, for running his launch without life-saving appliances, convicted but no fine imposed.

*Deck Cargo Regulations.*

The regulations have been amended to provide that the decks on which cargo may be carried are the main deck and the working-deck, provided the latter is the next deck above the main deck.

J. Broadhouse, master of the s.s. "Breeze," has been fined £1 and costs for not notifying the Superintendent of the shipment of deck cargo.

*Wireless Telegraphy on Ships.*

Section 50 of the Shipping and Seamen Amendment Act, 1909, provides that the Governor in Council may make regulations requiring ships registered in New Zealand and carrying passengers to be provided with apparatus for transmitting messages by means of wireless telegraphy, and the necessary regulations are now being prepared.

*Deceased Seamen's Estates.*

The estates of thirty-three deceased seamen have been dealt with during the year. The amount received on account of them was £406 7s. 3d., and the amount paid to relatives and other claimants was £338 17s. 10d. The sum of £49 17s. 10d., which had remained unclaimed for over six years, was paid into the Public Account. Particulars of the estates are given in the appended return.

*Wrecks and Casualties.*

During the year ninety-four inquiries into casualties to ships were held, eighty-six of them being preliminary and eight Magisterial inquiries. Tables showing the casualties reported and an analysis thereof are appended. Those on or near the coasts of New Zealand numbered 103, representing 45,001 tons register, as compared with 105, of 46,815 tons, in the previous year. The number of lives lost was thirty-three, as compared with two in the previous year. Included in the lives lost are twenty-five, being the master, officers, and crew of the dredge "Manchester," which left Wellington for Sydney, N.S.W., on the 6th April, 1912, and which has not since been heard of.

*Coastal Surveys and Dangers.*

Whilst the Antarctic ship "Terra Nova" was in New Zealand last year the Department arranged with Lieutenant Pennell, R.N., who was in charge of her, to make a survey of the coast between the French Pass and Jackson's Head; but want of time prevented the whole of the work being carried out. A very complete survey was, however, made in the vicinity of the French Pass and Admiralty Bay, a chart of which has been sent to the Hydrographer to the Admiralty in order that the results may be shown on the Admiralty charts. Two oil-launches were chartered by the Department, one of which was used by Lieutenant Pennell and the other by Lieutenant Renwick, R.N., of the "Terra Nova," who was associated with him in the work.

The s.s. "Hinemoa" took soundings at Mercury Bay in connection with the erection of leading-beacons, off the Western King, in connection with the proposal to moor a lightship there, and at Tauranga in connection with laying buoys. She also searched unsuccessfully for a rock reported off Clay Point.

*Nautical Publications.*

The Nautical Almanac for 1913 was issued in November last, and the large number of copies sold proves the value and popularity of the work. A large number of the A B C Azimuth Tables prepared by Captain Blackburne and issued by the Department have also been sold, as well as a very large number of Admiralty charts. These charts are imported by the Department and are kept for sale at Mercantile Marine Offices at a little over cost-price.

*Notices to Mariners.*

Appended is a return of the Notices to Mariners affecting the Dominion which have been issued by the Department during the year and distributed throughout New Zealand, to the Australian Marine authorities, the Admiralty, and foreign hydrographic offices. In addition to these notices a large number received from Great Britain, the United States, and Australia have been issued for the information of mariners.

*Meteorological and Weather Office.*

During the year the number of forecast-stations has been more than doubled, and wireless weather reports have been obtained from vessels, but they have not come up to expectations, mainly owing to the ships not being generally equipped with standard instruments. The wireless reports received from Macquarie Island have, however, proved of value in connection with forecasting the weather.

The new observatory erected on the Thorndon Esplanade, Wellington, was opened by the Minister of Marine on the 6th June last.

The Public Works Department is supplying a number of rain-gauges which it is distributing to places from which it desires to obtain rainfall records, and arrangements have been made that these records are to be supplied to the Meteorological Office.

I attach a report by the Rev. Mr. Bates, the Director of the Meteorological Office.

*Government Steamers.*

The "Hinemoa" has carried out her usual work of attending to the lighthouses, buoys, and beacons under the control of the Department, and has performed the work very satisfactorily. She also made a special trip to Nelson with mental-asylum patients. She is now thirty-seven years old, and has been nearly all the time in use. Although she has been kept in a good state of repair, she cannot be expected to last much longer. In fact, it would not be advisable now to send her to the Southern Islands, where very bad weather is sometimes met with. It would, in my opinion, be advisable to take a vote during the coming session for part of the cost of a new steamer, so that tenders may be invited and a contract for building one may be entered into. A steamer should be designed specially for lighthouse and buoy work, with separate quarters for lightkeepers, but not much other passenger accommodation, and she should have good cargo-carrying capacity.

For some time past it has been the practice to engage seamen for the "Hinemoa" at the four principal ports only, but it has been found impossible to get sufficient suitable men who are accustomed to boating at those ports. As the vessel has so much boating to do in connection with landing oil and stores at lighthouses, there is great danger of loss of life if the seamen are not men experienced in this work, and as men with the necessary experience can often be got at the smaller ports when not obtainable at the large ports, it has been decided that the master may in future obtain the most suitable men at any port at which he can get them.

The Department has made a two-years agreement with the Seamen's Union, similar to the agreement which the Union has with the principal shipowners, as to the rate of wages, overtime, &c., of the crews of the s.s. "Hinemoa," "Tutanekai," and "Amokura." Under this agreement the hours of labour in port are to be eight hours a day, and on the days of arrival and departure the sea watches are to count are part of the eight hours. As the vessels are deemed to be in port when anchored off a lighthouse, the increase in the amount that has to be paid in overtime in the case of the "Hinemoa" is considerable.

During last winter the training-ship "Amokura" was, as usual, moored in Wellington Harbour, and in addition to undergoing the usual training on board the boys attended instruction classes at the Technical School. As soon as she has finished attending on the battleship "New Zealand" she will be moored in the harbour for the winter for the same purposes. The Technical School classes will in future be held in the building purchased by the Department on the Thorndon Esplanade, which, being near the ship, will be much more convenient and will avoid the necessity of the boys having to walk a considerable distance through the streets to school. In addition to her ordinary training cruises the ship has made trips to the Southern Islands and to the Kermadec Islands to search for castaways and to inspect the provision depots which are maintained on those islands for shipwrecked mariners. It is clear that shipowners recognize the value of the training the boys receive on the ship, as there is no difficulty in obtaining employment for them on other vessels as soon as they have completed their training. So far as can be ascertained, most of them remain at sea.

As most of the work which the "Tutanekai" has to perform is in connection with telegraph-cable laying and repairing, she has been handed over to the Post and Telegraph Department.



*Lighthouses.*

The erection of the lighthouse at Castle Point has been completed, and the light was exhibited on the 12th January last. The light is a second-order group flashing white incandescent oil light, flashing at intervals of forty-five seconds with intervals of eight seconds between each group flash. The light is a very good one indeed, and is visible in clear weather at a distance of 19½ miles. A signal-station is maintained in connection with the light, and it is connected with the telegraph system of the Dominion.

An automatic acetone acetylene light has been erected on one of the Chickens Islands in the Hen and Chickens Group. It was exhibited on the 28th ultimo. It is 3,500 Heffner candle-power white light, flashing light for one-quarter second followed by three and one-twelfth second darkness, thus showing eighteen flashes a minute. It is 480 ft. above the sea, and is visible in clear weather at a distance of twenty-seven miles. A similar light of less power is being procured for erection on Channel Islet, near Cape Colville, and the work of making a track from the landing-place up to the site and of preparing the site is now being put in hand. A similar but more powerful light than that on the Chickens has been ordered for erection on Karori Rock, in Cook Strait.

Incandescent lights are now installed at sixteen lighthouses, the apparatus for two more is at the lighthouses ready to be installed as soon as the lighthouse expert is available, and apparatus for eight more is on the way out from England. These installations, besides giving a much better light than the oil-burners, soon pay for themselves by the saving in the oil used.

An automatic acetone acetylene light has been installed in the Bean Rock Lighthouse in place of the watched oil light, and the lighthouse has been handed over to the Auckland Harbour Board, which is now maintaining it.

During the year I have inspected the lighthouses at Godley Head, Akaroa Head, Moeraki, Taiaroa Head, Cape Saunders, Waipapapa Point, Dog Island, Centre Island, Anglem Point, Puysegur Point, Cape Foulwind, Farewell Spit, Stephens Island, Brothers, Castle Point, Portland Island, East Cape, Cuvier Island, Ponui Passage, Tiritiri, Mokohinou, Cape Brett, Cape Maria van Diemen, and Kaipara Head, and Captain Bollons, of the s.s. "Hinemoa," has made inspections on the vessel's periodical trips round with stores and oil. I found the stations well kept and the keepers carrying out their duties satisfactorily.

One Principal Keeper retired on superannuation during the year, and nine assistants resigned. One was transferred to another lighthouse owing to the installation of an automatic light in the lighthouse where he was stationed. Twelve new appointments were made to fill the vacancies and to provide keepers for the new lighthouse at Castle Point.

New contracts have been let for carrying the mails between Auckland, Cuvier Island, and Mokohinou, and between the French Pass and Stephens Island.

Permission has been granted to the Postal Department to erect a lineman's cottage on the lighthouse reserve at Puysegur Point.

The lighthouses are now supplied with Morse lamps and flags to enable messages to be given to and received from passing vessels, and a Notice to Mariners has been issued stating that such messages can be received and despatched. On request being made to the keepers by signal from vessels, messages are wired to their destination by collect telegram from lighthouses which are connected by telephone. In order that the keepers may get proper practice in making signals it has been decided to supply each station with a second signal lamp so that they may practice at giving and receiving messages.

The following works have been carried out at lighthouses:—

Manukau North Head: A new road has been made.

Bean Rock: An automatic light has been installed.

Ponui Passage: Repairs to the tower have been carried out.

Cuvier Island: A new fence has been erected.

East Cape: Coppers have been put in the washhouses.

Kaipara Head: The cart-shed has been shifted.

Cape Campbell: The road has been improved.

Akaroa Head: Fences have been erected.

Moeraki: The assistant keeper's house has been reroofed and the stable and cart-shed rebuilt.

Taiaroa Head: The floors of the dwellings have been renewed.

Nelson: The assistant keeper's house has been repaired.

Waipapapa Point: The garden fences have been renewed.

The amount of light dues collected during the year was £41,406.7s. 4d., as compared with £38,232 Os. 11d. during the previous year.

*Fog-signals.*

The explosive fog-signals at Pencarrow Head, Godley Head, and Cuvier Island have been properly maintained, and have been of considerable value to ships. Falling pieces of rock have damaged the track which goes down the cliff to the signal at Godley Head, and as rock frequently falls on the road, making it dangerous for the men to go down to work the signal, it is proposed to make a new road down at a place where rock cannot fall on to it.

Repairs have been made to the signals at Pencarrow Head and Taiaroa Head.

*Harbours.*

The s.s. "Hinemoa" has continued to overhaul and paint the buoys and beacons in the harbours under the control of the Department, and they are all in good order. New leading-beacons have been erected at Mercury Bay. The erection of the acetylene light at Shelly Beach, in Kaipara Harbour, has been completed, but there has since been a good deal of trouble with it, and it is not yet working satisfactorily. Steps are being taken to erect a beacon at Beacon Reach, on the Wairoa River, Kaipara, and it is intended to put a light on it.

During the time the Kauri Timber Company held a license to occupy a site for its sawmill at Kohukohu it reclaimed a piece of foreshore by the deposit of slabs and sawdust. It has now moved its mill, and as its license has expired the reclaimed land belongs to this Department. The breastwork round it is decaying and needs renewing, and as the land is valuable it is advisable that a new breastwork should be constructed and that the land should then be cut up and leased. There is also a wharf abutting on the reclamation which it would pay the Department to repair and lease.

The timber breastwork which the Department constructed on the up-river side of the Kohukohu public wharf has been completed, but it needs extending a little further up, and when this is done it will not cost much to reclaim the foreshore inside the wall. In fact, I think it could be cut up into sections and leased subject to the condition that the lessees should reclaim, as the land would be valuable, being right in the business part of the township.

The Department has contributed half the cost of an automatic light which the Whangarei Harbour Board has erected at the entrance to Whangarei Harbour, as the light is of benefit to small coastal vessels seeking shelter.

Blumine Island, at the entrance to Queen Charlotte Sound, was made a reserve for pilot and signal-station purposes many years ago, but as it is not likely to be required for those purposes this Department has consented to the request of the Lands Department that the purpose of the reserve should be changed to one for scenery-preservation.

For many years past £50 per annum has been paid to the Takaka County Council for maintaining leading-lights at Waitapu. During the year the Council satisfied the Department that this sum was not sufficient to defray the cost, and the amount has therefore been increased to £75 a year.

Mr. R. C. Honoré, who was paid £10 a year for acting as signalman at Marakopa, has resigned in consequence of leaving the district, and Mr. Willison has been appointed in his place at the same salary.

Harbour Boards have been constituted by Act of Parliament for Tauranga and Opunake, and the Governor in Council has, under the provisions of the Counties Act, declared that the Mangonui County Council shall exercise the powers of a Board in Mangonui Harbour. These harbours, which have hitherto been administered by this Department, are therefore now under the control of the Boards.

The Governor in Council disallowed a by-law made by the Auckland Harbour Board which provided that questions relating to the Board's business could only be asked upon notice being given not later than three days before any ordinary meeting of the Board.

The following prosecutions for offences in connection with harbours were instituted by the Department, viz.: W. Bedding, W. Hayward, and J. Morrall, for taking shingle from the foreshore near the mouth of the Waingongoro River without a license: the first two were each fined £3 and costs, and the last-mentioned £1 and costs. W. Fraser and J. Pelly, for taking gravel from the foreshore of Waiheke Island: a fine of £5 with costs was imposed in each case. R. H. Davis, for taking sand and shell from Takapuna beach: a fine of £5 with costs was imposed.

The sum of £1,786 17s. has been collected for pilotage and port charges in respect of harbours under the control of the Department, as compared with £1,946 17s. 10d. during the previous year. A return showing the ports at which these charges were collected, and also the pilotage and port charges collected at ports under the control of Harbour Boards, is appended.

A return of harbour-works approved by the Governor in Council and of licenses to occupy foreshores is also appended.

#### *Fisheries.*

The rock-oyster beds in the Hauraki Gulf and the Bay of Islands were picked by the Department during last year's open season between the 1st May and the 31st October, and 7,728 sacks of oysters were taken and sold for £5,212. The cost of picking and selling, including interest and depreciation on the cost of the oil-launches used by the Inspectors of Fisheries in connection with the picking, was £4,065 2s. 10d., which left a net profit of £1,146 17s. 2d. Part of this profit was used in replanting areas on Rabbit and Long Islands, and at Kikowhakariri and Coromandel, which became depleted of oysters by overpicking before the Department took over the picking.

Of the 7,728 sacks of oysters picked, 756 were sold to persons in Russell, 6,836 to persons in Auckland, 199 in New Plymouth, 154 in Gisborne, 82 in Napier, 37 in Wellington, 28 in Hokitika, 17 in Greymouth, 11 in Westport, 4 in Patea, 2 in Wanganui, 1 in Waitara, and 1 in Te Kopuru.

Last season we were able to meet the demand for oysters during the whole season, and from the appearance of the beds, which I went over when in the north in February last, I have no doubt that we shall be able to meet all demands for oysters this year. The manner in which the beds are looked after reflects great credit on the Inspectors for the Hauraki Gulf and the Bay of Islands, where the principal beds are situated.

Some of the beds in Hokianga Harbour have been set apart for the use of the Maoris, from which they may take oysters for food at any time of the year.

A close season has been prescribed for two years for the oyster-beds between Albatross Point and Urenui Stream.

The oyster-beds in Foveaux Strait yielded sufficient oysters last season to meet the demand. Of the quantity taken, 378,896 dozen, valued at £2,984, were exported to Australia, and 1,143,237 dozen, valued at £7,700, were disposed of in New Zealand. Experience has justified the action of the Department in altering the open season to be from the 1st March to the 31st October instead of from the 1st February to the 30th September.

The canning of the toheroa, a shell-fish, which is found in large quantities on the sandy beaches between Kaipara North Head and Mongonui Bluff, is becoming an important industry, and the question of leasing the right to take them on sections of the foreshores and of making a close season for the time the fish are out of condition at spawning-time is under consideration.

The report of the Chief Inspector, Mr. Ayson, which gives detailed information regarding the fisheries, and a return of prosecutions for breaches of the law regarding fish, are appended.

#### *Whaling.*

During the year a great many whaling-vessels, principally Norwegian, came to the Dominion for the purpose of whaling, but apparently they did not meet with the success expected, as most of them have left for other countries. During last session of Parliament an Act was passed to enable regulations to govern the industry to be made, and to grant licenses for the establishment of shore factories. The necessary regulations under the Act are now being prepared.

#### *Seals.*

The close season for seals has been extended until the 30th June, 1913.

The Governments of Great Britain, the United States, Japan, and Russia having entered into a Convention in regard to the killing, hunting, and taking of seals in the seas within such part of the Pacific Ocean as is north of the thirtieth parallel of north latitude, including the seas of Behring, Kamchatka, and Japan, the Imperial Parliament passed an Act in 1912 to enable effect to be given to the Convention. Section 3 of this Act provides penalties for using any port within the United Kingdom for fitting out ships for illegally taking seals in any prohibited area in the seas mentioned, and for the seizure of ships that are being fitted out for the purpose, and the seizure of the skins of seals illegally taken. The Act also provides that His Majesty may by Order in Council extend the provisions of sections 3 and 4 to Canada, Australia, New Zealand, South Africa, and Newfoundland, on the Governor in Council consenting to such extension being made. The Governor in Council has consented to the extension of the provisions referred to being made to New Zealand, and the Secretary of State for the Colonies has been notified of this.

#### *Portobello Marine Fish-hatchery.*

Mr. Anderton, curator of this hatchery, was sent to England last August to bring out a shipment of herring-ova and some live fish, lobsters, and crabs; the lobsters and crabs being to renew the breeding-stock at the hatchery, and during the time he was away his assistant, Mr. W. Adams, took charge of the hatchery. Mr. Anderton left England with 60,000 herring-ova, 300 live turbot, 43 lobsters, and 50 crabs, and he landed at Port Chalmers 200 turbot, 41 lobsters, and 43 crabs, which are doing well at the hatchery. Unfortunately, the attempt to introduce the herring was not successful, but this was through no fault of Mr. Anderton, who did all that could be done to ensure success. The failure of the attempt should not, in my opinion, deter the Department from making another attempt at some future time. I append a very full and interesting report by Mr. Anderton on the shipment.

Reports on the hatchery by Mr. G. M. Thomson, Chairman of the Board which manages it, and by Mr. Anderton, curator, are appended.

#### *Fishery Regulations.*

The following alterations have been made in the Fishery Regulations during the year, viz.: Prescribing that whitebait-nets with an opening of not more than 8 square feet may be used in the Motueka and Moutere Rivers and in the rivers and streams in Hawke's Bay, such nets to be stiffened with wire hoops fixed on poles; prescribing the period from the 1st November in one year to the 31st August in the following year to be a close season for whitebait in the Waikato River and its tributaries; prescribing a three-years close season for oysters on the west coast of the North Island between Albatross Point and the mouth of the Uranui Stream; providing that licenses to net trout in the New River estuary shall be issued to *bona fide* fishermen only; and providing that it shall be illegal to take blue-cod of a less length than 10½ in. in the natural state or not less than 9 in. when properly headed.

The Chief Inspector has been out in fishing-boats to obtain information as to the decrease or otherwise of blue-cod and as to the best way of preventing undersized fish being taken and destroyed. He is now preparing a report on the subject. The taking of kingfish by rod and line is becoming quite common sport in the north, many persons coming to the Dominion for the purpose. There have been unusually large shoals of maumau in the north during the past summer, and fine catches have been made.

The following persons have been appointed Inspectors of Sea-fishing, viz.: F. J. Flinn, H. T. Leydon, J. M. Irwin, and three members of the Police Force.

#### *Salmon.*

It is now two years since the last shipment of Atlantic salmon-ova was obtained from England, and I think it is advisable that another shipment should be procured next season. The fry from two shipments already made were liberated in Lake Te Anau for the purpose of stocking the Waiiau River, but it is yet too soon for the fish to return from the sea, and therefore there is no evidence whether the attempt to introduce them has been successful. The only way to ensure success is to liberate the fry from several shipments of ova, as was done in the case of the quinnat salmon liberated in the Waitaki River. Last season 237,000 quinnat-ova were

collected in the tributaries of the Waitaki, of which 190,000 were hatched in the Hokitika River, 27,500 were sent to Tasmania, 12,000 were lost during hatching, and the fry from 7,500 were kept in the ponds at the Hakataramea Station.

In December, 1901, the Department obtained a shipment of sockeye salmon-ova from Canada, and the fry from them were liberated in Lake Ohau. On the manager of the salmon-station at Hakataramea visiting this lake on the 29th March last he found, in a small spring creek which flows into the lake near the mouth of the Maitland Creek, between twenty and thirty spawning fish, which he identified as sockeye salmon, and the next day he found in a spring creek flowing into the Dobson River about thirty more of these fish. All the fish had finished spawning. They were covered with fungus, and were in a dying condition. They ranged in size from 8 in. to 10 in., and in weight from half to three-quarters of a pound. This is one of the most valuable of the salmon, and it is very satisfactory to find that the attempt to introduce it into the Dominion has been successful.

*Marine Engineer.*

The report of Mr. R. W. Holmes, Marine Engineer, on matters dealt with during the year is appended.

The Hon. Minister of Marine, Wellington.

I have, &c.,

GEORGE ALLPORT, Secretary.

The PRINCIPAL EXAMINER OF MASTERS AND MATES to the SECRETARY, Marine Department.

Office of the Principal Examiner of Masters and Mates,  
Customhouse, Wellington, 13th May, 1913.

SIR,—

I have the honour to submit my annual report on the examination of masters and mates in New Zealand for the year ended on 31st March last. The work, as usual, has been carried out by the Examiners at the four principal ports in a satisfactory manner. I visited the Lyttelton and Dunedin examination-rooms during the year and found everything in very satisfactory order. There has been only a slight increase during the last twelve months in the number of candidates who have presented themselves for examination for masters and mates, and there was a very marked falling-off in the number of applicants after January of this year, when some new and more difficult forms of questions in connection with the problems given in the chart examination-work were brought in for the first time. There has, however, been an increase this year of 26 per cent. in the number of successful passes. The candidates in all grades have done better this year, and instead of 50 per cent. of failures in the whole number of examinations, as was the case in the previous year, this year the failures were only 40 $\frac{3}{4}$  per cent. on the whole, and 51 $\frac{1}{2}$  per cent. for the foreign-going candidates against 64 $\frac{1}{2}$  per cent. of the previous year. The few foreign-going candidates who have gone up since the beginning of this year have managed the new chart-work problems very well.

One candidate only presented himself for examination for extra master and failed. The majority of candidates now voluntarily take the higher standard of form-vision, which will come into force for all candidates when passing their first examination after the 1st January, 1914, and so far the candidates appear to have passed this test successfully.

I have, &c.,

H. S. BLACKBURNE,  
Principal Examiner of Masters and Mates.

The Secretary, Marine Department, Wellington.

The DIRECTOR, Meteorological Office, to the SECRETARY, Marine Department.

SIR,—

Wellington, 13th May, 1913.

The usual 9 a.m. meteorological observations taken throughout the Dominion are now reported in Wellington in time for the issue of the telegraphic weather report at 10 a.m. This is then immediately telegraphed to most of the principal ports in the country. This promptitude on the part of the Telegraph Office has been maintained with wonderful regularity throughout the year. The reports can be delivered at £1 per annum by application to the Secretary of the General Post Office, and shipping people and others are now availing themselves of this privilege.

During the year the number of weather-forecast stations has been more than doubled, and the present number of places supplied with the morning forecast is 101 in the North Island and ninety-nine in the South, and one to Stewart Island.

A new code, comprised of words of four letters, was compiled to signify changes of wind, weather, barometer, seas, tides, &c. This has proved highly satisfactory, and it is hoped shortly to have it somewhat extended and printed. The copies hitherto in use were typewritten and reproduced by duplication on a "Gestetner" in the office.

The morning forecast is the principal one issued, but afternoon weather reports from twenty-four stations are issued as the basis of a more general forecast for the benefit of readers of the morning papers. The observations are taken at 4 p.m., and are usually all in about 5 o'clock. This report is handed freely to the *New Zealand Times* and the *Dominion* newspapers, but it is telegraphed daily at the expense of other papers—viz., the *Auckland Herald*, *Napier Herald*, *Christchurch Press*, *Lyttelton Times*, *Otago Daily Times*, and the *Southland Times*.

Summaries and forecasts are also sent daily, except on Saturdays, Sundays evenings, and Government holidays, to the following journals: *Herald*, Auckland; *Times*, Gisborne; *Herald*, Napier; *News*, New Plymouth; *Chronicle*, Wanganui; *Times*, Palmerston North; *Age*, Masterton; *Colonist*, Nelson; *News*, Westport; *Argus*, Greymouth; *Times*, Hokitika; *Times*, Christchurch; *Press*, Christchurch; *Herald*, Timaru; *Times*, Oamaru; *Times*, Dunedin; *Times*, Invercargill: and on Mondays, Wednesdays, and Fridays to the *Mail*, Ashburton, and the *Times*, Waimate. These reports, summaries, and forecasts go at press rates through the Press Association of New Zealand.

The new Wellington Observatory was opened on the 6th June, 1912, on ground rented from the Wellington City Council at 5s. per annum, and the grass and paths are to be kept in order at a further charge of £1. The site is a very good one, but, though protected as far as possible, the fence has not proved insuperable to mischievous persons, who have on more than one occasion spoiled the records of the exposed instruments. The equipment of the observatory is fairly complete, but an instrument to record wind-directions has not yet arrived, though ordered some time ago in Melbourne. The records of the automatic instruments have proved most useful, and have been referred to on several occasions to decide matters in dispute. The Dine's anemometer established at the new wireless station on Mount Etako has furnished very interesting results, showing nearly double velocity at that height above the city.

The office equipment has also been improved by the addition of a comptometer and a Gestetner duplicating-machine. The work of the office during the past few years has grown so much that only experience and constant effort upon the part of each member of the staff enables the work to be kept up satisfactorily.

Further extension is asked for in the direction of regularly supplying forecasts broadcast for ships at sea. This is now done specially and freely when asked for, but it is not thought prudent to undertake more. Another extension will be in the direction of rainfall statistics in connection with the Public Works Department, for we are about to issue another 500 rain-gauges, chiefly to up-country places, as far as possible at the sources and along the banks of the rivers. This information is needed for hydro-electric problems and flood warnings. There is a disinclination to undertake more until opportunity is given for developing what is already in hand. Wireless weather reports from ships have not come up to expectations, firstly through the vessels being generally not equipped with standard instruments, and secondly because the officers and operators need to be brought into closer touch with the work, and for this we have but little opportunity.

Wireless weather reports from Macquarie Island have proved of interest and value, giving help in forecasting, and throwing considerable light upon Australasian weather problems. Longer observations and further study are needed for their fullest appreciation, for the connection between antarctic conditions and in these latitudes is evidently very intimate though at times difficult to understand. These records will, moreover, link in with those of the British Antarctic Expedition, which, in the capable hands of Dr. G. C. Simpson, are likely to prove of the utmost value to meteorological science. The Commonwealth Weather Bureau as well as this office are supplying records with a view to assisting in this object, for which Captain Scott, Dr. Wilson, and their brave companions gave their lives.

D. C. BATES, Director.

The CHIEF INSPECTOR OF FISHERIES to the SECRETARY, Marine Department.

SIR,—

Wellington, 25th April, 1913.

I have the honour to supply the following report on the fisheries for the year ending 31st March.

During the year I visited the fisheries at Bay of Islands, Kaipara, Whangarei, Great Barrier, Hauraki Gulf, Hawke's Bay, Wellington District, Marlborough Sounds, Nelson, Canterbury District, Otago District, Southland, and Stewart Island. I inspected and reported on the Taupo and Rotorua trout-fisheries at the request of the Minister for the Department of Internal Affairs. I also held the following inquiries: one at Christchurch, in connection with the question of netting-limits in Lake Ellesmere; one at Invercargill, along with the Collector of Customs, in connection with the netting of trout in the New River estuary; and one at Bluff, with the Commissioner of Crown Lands for Southland, with regard to the size-limit for blue cod. During the year I paid several visits to the Portobello Marine Station; and also the salmon-station at Hakataramea, where I assisted with the collection of salmon and trout eggs last spawning season.

With regard to the sea-fisheries: Commencing in the far North, the Inspector at Russell reports that all kinds of marketable fish have been plentiful, especially mullet. Mr. Walker, the proprietor of the mullet-cannery at Awanui, states that these fish have been more plentiful this year than any time during the past twenty years.

The whaling season has been a fairly successful one for the two firms engaged in it at Bay of Islands. Messrs. Cook and Jagger captured twenty-seven humpback whales at their Whangamumu station, and the New Zealand Whaling Company (Norwegian) finished up their operations at Bay of Islands, the total number of whales of all kinds taken by them both south and north being 133.

The number of fishing-boats licensed at Russell for the year ending 31st December last, including five Norwegian whalers, was fifty-five, with a total crew of 207.

The oyster-beds are in good condition. Last season the picking continued for five months, the beds yielding a total of 3,430 sacks.

*Hokianga*.—The number of fishing-boats licensed for the year was fourteen. The Inspector reports fish fairly plentiful and in good condition. All fish caught at the present time are sold locally.

*Kaipara*.—Mullet, schnapper, flounder, and trevalli are the principal fish caught, and the Inspector reports that these fish have been plentiful during the year. There are two mullet-canneries in the district, but most of the fish is sent to the Auckland market. He thinks the rock-oyster beds are in about the same condition as they were last year. A good deal of attention is now being given to the toheroa. The demand for this shell-fish, of which there is a large supply along the west coast, is increasing every year. Two canning-factories are now operating near the beach at the back of Aratapu and Te Kopuru, and the output from these meets with a ready sale.

*Manukau*.—Forty-two fishing-boats were licensed last year. The take of fish for the twelve months was about the average of what has been obtained from this fishery during the last two or three years.

*Hauraki Gulf and Thames*.—Inspector Bennett reports as follows: Schnapper, which is the principal market fish, have been fairly plentiful. Flounders also fairly plentiful, but fishermen at the Thames have suffered considerable loss through jellyfish blocking their nets: at times they were so plentiful that netting was impossible. Mullet he reports as being very scarce; trevalli very plentiful outside a line from Cape Colville to Kawau and up the coast past Whangaruru and the Poor Knights.

On the whole the Auckland market has been well supplied with fish during the year; any scarcity which may have prevailed at times was due to unfavourable weather-conditions. In Auckland there are eight fish-curing establishments, and canning and bottling mussels is now carried on at Tapu, Waimate Island, and Coromandel. At the latter place a well-equipped canning-factory has been started during the year by Messrs. A. R. McNeil and Co.

A system of long-lining for schnapper and other hook-and-line fish has now been adopted by a number of the Hauraki Gulf fishermen, and it is a great improvement on the single hand-lines generally used.

The oyster-beds are steadily improving all over the gulf. Last season the beds picked were those on the islands and reefs off Kawau Island, Mahurangi, Waiwera Island, and Whangaparaoa. These beds supplied all the oysters required for market, and kept the pickers employed for the six months' season. The quantity picked was 4,298 sacks.

*Gisborne*.—The Collector of Customs reports that thirteen boats were licensed to fish during the year, and the supply of fish brought in from the local grounds was not quite up to that of the previous year.

*Hawke's Bay*.—Eight vessels over 5 tons register and sixty under 5 tons were licensed to fish during the year. Trawlers and net fishermen report flat fish as scarce, but round fish, such as schnapper, tarakihi, moki, &c., as plentiful. The Collector at Napier gives the total value of fish brought in at £22,000. The weather-conditions during the year have been favourable, and on the whole those employed in connection with the industry have had a successful year. The estimated value of the fish cured at the two curing establishments is £500.

*Kaikoura*.—The local Inspector reports that fishing during the year has been very satisfactory. Hapuku, trumpeter, tarakihi, butterfish, moki, crayfish, &c., have been plentiful, and very good catches have been made.

*Wellington and District*.—The report from the Inspector at Foxton is to the effect that all kinds of fish usually caught in the tideway have been scarce this season. The whitebait season was a very short one, and fishermen state that it has been the worst for several years. Flounders have also been scarce, and only about half the quantity has been caught as compared with last year. In the opinion of fishermen the reason of the decrease is the extra amount of wash from the flax-mills which has been discharged into the river owing to the mills working night and day. Good catches of schnapper and cod have been made during the summer by boats which have worked outside.

During the year the catches from the local fishing-grounds have, on the whole, been fairly good. When the weather-conditions were favourable good catches of hapuku and other line fish have been made in the Strait and other grounds. Fishermen find that along the edges of the deep depressions which exist in Cook Strait fish are to be had in abundance, and with favourable weather and tide-conditions they seldom fail to make good catches.

The trawler "Energy" has fished for the greater part of the year from Wellington, principally in Cloudy Bay. The steam trawlers "Nora Niven" and "Countess" have lately come down from Napier and have fished the grounds in Palliser Bay, Tasman and Golden Bays, and off Kapiti Island.

*Wellington Municipal Fish-market.*—The market was opened on the 4th October last, and since that date about 40 tons of fish, consisting of all the principal market varieties, has been received and disposed of. The object of the market is to allow the fishermen to deal directly with the consumer. The manager states, however, that so far it has not received the support of the small fishermen that it deserves. The Municipality merely receives and sells the fish sent in, charging 10 per cent. commission on sales. It does not purchase any fish, and accepts no responsibility. The uncertainty of the supply of fish which has so far come forward has no doubt prevented the public from patronizing the market as well as they otherwise would have done.

*Nelson.*—The fishing during the past year has been better than for several previous seasons, the supply obtained during the winter months being particularly good. After supplying the local requirement most of the surplus fish is sent down the west coast to Westport, Greymouth, and Hokitika.

*Westport.*—The run of whitebait in the Buller River last season is reported to have been particularly good, but the catches of other market fish have shown a considerable falling-off.

*Marlborough Sounds and South Coast of Cook Strait.*—These fisheries continue to supply a large quantity of the fish required for the Wellington market. During the past twelve months fair catches have been made, and the total quantity shipped to Wellington has been rather better than during the two previous seasons. Fishermen complain of the decrease of fish in certain parts of the Sounds, and most of the fish is now caught out in the Strait. The principal fish caught are blue cod, hapuku, moki, garfish, tarakihi, butterfish, warehou, flounders, and herrings. Some very good catches of blue cod have been made, and the fish all the season have been in excellent condition.

*Canterbury District.*—Owing to frequent floods in the Waimakariri River, the run of whitebait was unusually poor last season. On the other hand, in the smaller rivers which are not snow-fed the run was exceptionally good. The supply of sea-fish from the local grounds has been unsteady, caused, no doubt, by the frequent gales which have been experienced during the year. The fish-supply at the Christchurch market has in the aggregate been equal to the previous years, but it has been unsteady, no doubt due to the unfavourable weather, which prevented fishermen, sometimes for more than a week at a time, from going out. A large quantity of the fish-supply for the Christchurch market is now obtained from Timaru. The quantity brought into this port during the year has shown a steady increase.

There are now eighteen large oil-launches and one steam trawler working from Timaru. Several of the larger launches are fitted with the Otter trawling-gear and are able to work successfully on the same ground as the steam trawler. Hapuku, flounders, soles, tarakihi, ling, kingfish, and red cod are the principal fish taken.

*Otago District.*—From information received from fishermen at the various fishing-places along the coast, the quantity of fish landed during the year ended 31st March last has been quite equal to what was marketed in 1910–11.

The information I got from fishermen at Oamaru was to the effect that the season had been noted for strong winds and stormy weather, but, notwithstanding this, the total quantity of fish brought in was about the average for this port.

At Moeraki fair catches were made of all kinds of fish when the weather-conditions were favourable. During the winter some exceptional hauls of hapuku were made well off shore in from 50 to 90 fathoms. On the whole the season has been an average one. Here as well as at Oamaru fishermen complain of the high price of benzene, which has increased the cost of running their boats, and prevents them taking any risk in looking for new fishing-grounds. During the year the Dunedin market has been well supplied with flat fish, and a fair supply of all other kinds has come forward. Most of the fish-salesmen, however, state that the supply all round has not been equal to the demand.

At Nugget Bay the fishermen report that fishing on the inshore grounds has been rather poor, but further off in the deeper water the catches were quite equal to other years. Hapuku is the principal fish taken. The boat-landing at this bay is considered by fishermen to be anything but a safe one, and boats caught out in an east, north-east, or northerly gale have to take great risks in getting in. An extension of the groyne or breakwater to the outer reef would undoubtedly effect a great improvement and make it as safe as it is possible to be, and I would recommend that an estimate of the cost of making this extension should be obtained with a view to having this work done.

*Chatham Islands.*—The two Wellington fishing companies have continued operations during the year. The bad weather which prevailed throughout the year very much hindered the fishing, and on that account it has not been nearly as profitable for the fishermen and the companies as it otherwise would have been. Whenever the weather was favourable very good catches of blue cod and other fish were made.

*Southland District.*—During the year it may be said that blue cod have been plentiful, and in fine weather some exceptional catches have been made. The fish, too, have been in excellent condition. In February I visited Stewart Island and went out with a party of fishermen on to the fishing-grounds in Foveaux Strait. The weather was fine and good catches were made by all the boats, and I was very pleased with the quantity and quality of fish caught.

During the greater part of the season of 1912 the quality of the oysters was poor. This season, however, from the opening on the 1st March, they have been exceptionally good. The local Inspector reports that this season most of the oysters are being taken from a bed which has not been worked for nearly twenty years. Information has been received to the effect that the supply on some of the old beds which have been persistently worked for a good many years is giving out. Some inquiries have been made, but the information received has not been quite satisfactory, and I would recommend that the matter should be carefully inquired into and, if considered necessary, a survey of these beds made. These beds are a most valuable asset for the Dominion, and every care must be taken to preserve them. The quantity of oysters exported from the Bluff during the year was 378,896 dozen, valued at £2,984, and the quantity of fish exported was 5,908½ cwt., valued at £8,660.

The Inspector reports that the Norwegian Whaling Company, which has been operating to the west of Stewart Island and Foveaux Strait during the last eleven months, has been successful in capturing forty-five whales (principally sperm), yielding 159 tons of oil, valued at £2,350, and from a large sperm whale ambergris to the value of £32,000 was obtained.

There exists from Waikawa westward to Preservation Inlet and round Stewart Island one of the most important and extensive fisheries in the Dominion. It includes our most extensive blue-cod fishery, and all the other varieties of South Island market fishes are abundant in its waters. With the exception of blue cod, this fishery has not been made use of to any extent for supplying the market with other varieties. The principal reasons for this have been the inadequate steamer communication with Stewart Island, and lack of railway facilities for getting fish to the Dunedin and Christchurch markets in quick time, so as to ensure its arrival in good condition. When these disabilities are removed and more interest is taken in marketing these fish by the Bluff fish-merchants this fishery will undoubtedly supply large quantities regularly to Dunedin and Christchurch, and at certain seasons to the Wellington market.

By instructions from the Minister of Marine an inquiry was held at the Bluff in September last by Mr. McClure, Chief Commissioner of Crown Lands for Southland, and myself into the question of the size-limit at which blue cod should be allowed to be taken. Very full evidence was given by the fishermen's representatives from Stewart Island and other parts. As a result of the evidence given it was recommended in the report furnished to the Department that the size-limit approved by the fishermen should be adopted—viz., 10½ in. in length for whole fish and 9 in. when headed.

An inquiry was also held at Invercargill in September by myself and Mr. Anderson, Acting Collector of Customs, into the question of the netting and sale of trout in the New River estuary. The representatives of the local acclimatization society, Anglers' Club, and others interested gave very full evidence against netting being allowed; and evidence was given by fishermen, fish-dealers, and others in favour of the netting and sale of trout. After the inquiry was finished the area where netting has been allowed was inspected and tested. As a result of the inquiry it was recommended that the netting (within the present limits) and sale of trout should be allowed for the present, but that trout-netting licenses should only be granted to professional fishermen.

*Rock-oyster Beds.*—Last picking season was a most successful one—it extended the full six months; and with the exception of the usual rush during the first few weeks, the market all the rest of the season was fully supplied. The total quantity picked was 7,728 sacks, 3,430 being taken from the Bay of Island beds and 4,298 from the Hauraki Gulf. As an indication of the great improvement which has taken place in the condition of the oyster-beds in the Hauraki Gulf it may be stated that only about half the available beds were picked last season, and these supplied all the oysters required; the rest of the beds, although ready to pick, were not required, and will yield a very large supply of oysters of the finest quality this season. I made a detailed inspection of all the beds in December last, and found a steady improvement in their condition everywhere.

The replanting done by the Department on the Coromandel coast and islands in the Thames Gulf is already effecting an improvement in the beds in these places. Where the first planting was done large numbers of young oysters can now be seen along the rocks, the result of the spawn from the brood oysters planted. The steady improvement in the beds can undoubtedly be taken as clear evidence that the system of picking and protecting the beds which has now been adopted by the Government is the right one.

*Whaling.*—Three foreign whaling firms commenced operations during the year, but two of these have left the Dominion for other countries where they are confident better results will be obtained. Messrs. Cook and Jagger, and the whalers in Tory Channel, express themselves as well satisfied with the season's operations.

*Atlantic Salmon.*—As the importation of herring-ova and other sea-fish was taken in hand last season no importation of salmon-eggs was made. The success of the acclimatization of the quinnat salmon was, I consider, due to the systematic effort made, and it is to be hoped that a similar effort will be made with these fish. If this is done I am sanguine that we will be equally successful in establishing them, and I would strongly recommend that the importation of not less than a million eggs should be made this coming season.

*Quinnat Salmon.*—In point of numbers the run of this salmon, which spawned in the Waitaki River and its tributaries last season, was quite equal to any of the previous years. The average size of the fish was, however, larger, and a peculiarity of the run was the very large percentage of male salmon which were captured. In other seasons the fish taken were about equal sexes, but last season nearly twice as many male fish were taken as females. Had the percentage of



females been equal to other seasons nearly double the quantity of eggs would have been collected. The total quantity of eggs taken was 237,000, and these were disposed of as follows: 27,500 were supplied to the Tasmanian Government; 190,000 sent to the west coast; 7,500 retained at the Hakataramea Hatchery; 12,000, the loss during incubation. The salmon-eggs sent to the west coast hatched out very well, and the young fish were planted in tributaries of the Hokitika River. It is interesting to note that a number of the young fish were taken in whitebait-nets in the tideway of the river during the early summer, showing that they maintain in this country the same characteristics of going to sea at an early stage of their existence as they do in their native country.

The attached list gives the total number of salmon over a year old liberated from the Hakataramea salmon-station during the year, and also the number retained at the station. The following fish were liberated from the station in October, 1912: Quinnat salmon, three years old, 503; two years old, 567. Rhine salmon, three and a half years old, 73. Atlantic salmon, three and a half years old, 69. The following fish were retained in the ponds on the 31st March, 1913: Quinnat salmon, three years old, 70; two years old, 982; one year old, 17,924. Rhine salmon, four and a half years old, 20. Atlantic salmon, four and a half years old, 20.

*Collection of Trout-eggs.*—The season was the most successful one experienced since the Hakataramea station was established. The weather-conditions were favourable all through the time the men were at work on the rivers, the result being that all the eggs required were taken in less than a month. The total quantity collected was 960,000; of this number 810,000 was supplied to different acclimatization societies, and the balance was hatched out and the young fish planted in the Hakataramea River and its tributary creeks.

*Taupo and Rotorua Fisheries.*—At the request of the Minister for the Department of Internal Affairs, the Department sent me in August last to make an inspection and furnish a report on these fisheries. I made a careful inspection of all the rivers and streams flowing into Taupo Lake, and also the fish there and at Rotorua and other lakes, and furnished a report as instructed, with recommendations for the future working of these fisheries.

I have, &c.,

L. F. AYSON,

Chief Inspector of Fisheries.

The Secretary, Marine Department, Wellington.

The CHAIRMAN, Portobello Marine Fish-hatchery Board, to the SECRETARY, Marine Department.

DEAR SIR,—

Dunedin, 21st May, 1913.

I beg to forward the report of work done at the Portobello Marine Fish-hatchery during the past year, as submitted to the Board by Mr. Thomas Anderton, the Curator. You already have received from Mr. Anderton direct the report of his trip to the Old Country and the successful introduction of turbot into New Zealand, together with a fine new stock of lobsters and crabs; also a full account of his attempt to introduce the ova of the herring, and the reasons for the failure of this attempt. The Board is of opinion that this attempt should not be renewed, at any rate, for the present. Under existing conditions the risks of failure are too great to justify a renewal of the shipment.

In forwarding this report the Board wishes to record its great satisfaction with the services rendered both by Mr. Anderton and the assistant curator, Mr. W. Adams. To the former's unceasing vigilance and care, both before and during the voyage out, is due the success of the last shipment of fish and crustacea; and during Mr. Anderton's absence the work of the station was carried on single-handed by Mr. Adams, everything being kept in first-class order. The success of the station is mainly due to the zeal and untiring industry of these two officers.

I am, &c.,

GEO. M. THOMSON.

The Secretary, Marine Department.

GENTLEMEN,— Marine Fish-hatchery and Biological Station, Portobello, 17th May, 1913.

I have the honour to present the following (the seventh) annual report of operations at the Marine Fish-hatchery from the date of the last report, 4th May, 1912, to the present date.

I have already forwarded to Mr. Allport a full account of the recent large shipment of lobsters, crabs, and turbot, and of the attempt to import the ova of the herring from England, and it will not be necessary to refer to it again except as to its effect on the past season's work and with reference to the progress of the stock since their arrival on the 1st March.

During my absence from the 3rd August, 1912, to the 1st March, 1913, the station was worked single-handed by Mr. W. Adams, with the exception of a little occasional assistance. As a consequence of this no flat fish ova were collected from the trawlers this season.

The lobsters were examined on the 7th November, and eight out of fifteen females were found to be still carrying practically full bunches of well-developed eggs. They were removed to the smaller ponds on this date, the three carrying the most advanced eggs being placed in the glass tanks for hatching. The first larvæ appeared on the 23rd November, a fortnight earlier than

last season. From these three 9,387 larvæ were hatched, the average produced for each adult being 3,129. The other five females were allowed to hatch their broods in the ponds, and the larvæ were allowed to escape in the usual manner through the pond-valves on the first of the flood. Many of the larvæ were again liberated to the east of Quarry Point. The total production of lobster-larvæ for the season is estimated at about 25,000. A large percentage of these were hatched from eggs that were shed by the adults whilst in the glass tanks by means of the McDonald hatching-jars. The first moult after spawning was observed on the 18th January. Five other males and four females are known to have cast between this date and the 18th February. Several of the females are again bearing eggs. The younger of the two lobsterlings died during the act of moulting, but the older one is still thriving and is now three and a half years old. The two surviving crabs died before the arrival of the new shipment.

During my absence the paths at the new cottage were asphalted; the large pond was deepened by from 12 in. to 18 in.; new shelters and screens were made for the ponds, the pump-engine was overhauled, and everything was in perfect order on the arrival of the shipment on the 1st March.

The new stock consists of forty-three crabs, forty-one lobsters, and 200 turbot (*Rhombus maximus*). The disposition of the crabs and lobsters in the various ponds has just about brought these up to their full carrying-capacity. The young turbot are being kept in five of the large glass tanks, and have not been handled since their arrival. Although the average daily rate of mortality during the voyage—even to the day of arrival—was two per day, only two have died during the past ten weeks, and these two were sickly on arrival. They are fed once a day on minced fish, chiefly ling, on account of the firmness of the flesh. At feeding-time they all rise towards the surface and seize the particles of food before they reach the bottom of the tank. Feeding is continued until the fish appear satisfied and particles are allowed to settle on the bottom. Feeding is then discontinued, and every particle of uneaten food, manure, and sand is removed from the floor of the tanks by means of syphons. A liberal sprinkling of clean sand is thrown in the tank after this, and the young turbot soon "sand" themselves and become half-buried in this, and remain so for the most part until feeding-time comes round again. They have increased in size enormously since arrival; many of them already exceed 6 in. in length and are proportionately thicker. Provision is being made for their rapid increase in size by erecting one of the large wooden tanks, previously used for conveying lobsters on board steamer, in the hatchery. A sudden fall in the temperature of the water-supply to 5° C. on the 1st May caused them to become somewhat sluggish and to take very little food. They have, however, been subjected to slightly lower temperatures since then, and have fed as usual and have apparently been unaffected in any way. During spells of exceptionally severe weather the temperature of the supply water has occasionally fallen as low as 1° C. in previous seasons. On several occasions large numbers of sole and flounder ova have been destroyed by this. To avoid further losses through this cause, and also to avoid the risk of exposing the turbot to these low temperatures, a small but effective heating-apparatus has been installed. A small lean-to has been added at the rear of the hatchery building and in this has been placed an "Ideal" boiler. The 2 in. supply-pipe has been coupled up so as to allow the water to circulate through the water-jacket surrounding the furnace. By means of three valves all or only a part of the water may be made to pass through this jacket, and it is now possible to have complete control of the temperature during the severe spells.

The boat and launch have been regularly slipped for cleaning and painting.

The whole of the ponds, plant, and buildings are in a very satisfactory state of repair. The whole of the fish-tanks, ova-boxes, and cooling-apparatus was received from the s.s. "Waimana" whilst in Dunedin, and have been brought to the hatchery for storage. The cooling-coils have been removed from the cylinders, painted, and replaced to avoid rust.

I am, &c.,  
T. ANDERTON.

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**REPORT ON IMPORTATION OF LOBSTERS, ETC., AND TRIAL SHIPMENT OF ENGLISH  
HERRING-OVA.**

SIR,—

Portobello, 30th March, 1913.

I have the honour to present the following report of the recent shipment of lobsters, crabs, and turbot, with a small experimental shipment of herring-ova, by the s.s. "Waimana," which arrived in Port Chalmers on Saturday, 1st March.

My instructions from you before leaving were to visit the British, and if necessary the Continental, biological stations; to arrange for the collection, storage, and transport to this country of a number of crabs and lobsters and 60,000 herring-ova; and also to arrange, if possible, for a trial shipment of one or more species of the finest of the English food fishes.

Smaller consignments of lobsters and crabs have previously been carried very successfully by Captain Holmes and Mr. Finlayson on board the s.s. "Karamea," and have withstood a considerably higher temperature than that at which they were carried this voyage, and it will not be necessary to refer at any great length to the details of their management. It is, however, the first time that an attempt has been made to transport the young turbot to this country, and the first time that a really serious attempt has been made with regard to the transport of the herring-ova, and it will be necessary and advisable to refer at greater length to the collection and storage of these, and to give fuller particulars of the details of construction of the boxes, tanks, filters, cooler apparatus, &c. I beg to enclose table of dates, positions, and temperatures during the voyage.

I arrived at Plymouth by the R.M.S. "Ionic" on the 18th September, and at once consulted Dr. Allen as to collections and storage of the stock for shipment, and as to the most important station to visit. I then proceeded to London, and was able to make all necessary preliminary arrangements for a vessel, sailing in January, with the Shaw, Savill, and Albion Company. I then visited the Marine Biological Stations at Port Erin, Isle of Man, Piel Island, Barrow, and Bay of Nigg, Aberdeen. At the latter station I was enabled to see the apparatus that had been used by Dr. Williamson for retarding the development of the herring-ova, and arranged with him to supervise the collection and shipment at Plymouth. No hatching was in progress at this season at any of these places, but I was able to inspect all their plant and to have a long conversation with the curators and scientific superintendents. Copious notes were made of all that might prove useful, and I obtained from Dr. Allen a copy of Professor Kofold's "Biological Stations of Europe." This work contains all information relating to sizes of tanks, ponds, piping, pumps, filters, &c., in use at all the European stations, and may be referred to at any time. The Continental stations were at this time closed down, and as their appliances are practically the same as those in use in the British Isles I considered it unnecessary on the score of economy of time and expense to visit them.

#### *Lobsters and Crabs.*

These are fairly plentiful around Plymouth, and a stock was not secured until early in December. They were placed in two of the large aquarium tanks. The large claws were securely tied, and few deaths occurred. Owing to the reduced size of the fish-chamber on board the vessel provision was only made to carry twenty-four each of lobsters and crabs. A much larger number was stored at Plymouth to allow for possible deaths, and the whole of the surviving stock, consisting of forty-three lobsters (twenty-eight female and fifteen male) and fifty crabs (thirty-three female and seventeen male) were brought on board. The crabs were in some instances placed two and three in a division originally intended for one, and the compartments allotted to the lobsters were again divided in the case of the smaller ones, and in spite of their greatly reduced quarters only two lobsters and seven crabs died during the voyage; the majority of deaths took place soon after leaving Plymouth. They were brought on board in ordinary fish-baskets, from six to a dozen in each basket. The large claws of all were bound when brought on board, and were not cut until each was confined in a separate compartment. Several crabs that were placed two or three in one division managed to get rid of their lashings and were not retied, but did not in any way injure each other. During the voyage they were fed sparingly and somewhat irregularly on frozen hake; a piece about 1 in. square was supplied to each on an average every second day. All unconsumed food was removed from the compartments two or three hours after being supplied, and every particle of fish-rust, &c., was removed by means of a siphon once or twice every day. Only once during the voyage were they handled to permit the tanks to be thoroughly scrubbed out. Nine of the crabs spawned during the voyage, but, as usual in very close confinement, the eggs were shed and lost. Several of the lobsters bore eggs when shipped and still retained them on arrival.

#### *Turbot (Rhombus maximus).*

The reasons in favour of making a trial shipment of turbot were many. The chief of these were—their high commercial value, the large size to which they attain, and their dissimilarity to any of the indigenous flat fishes. In addition to these reasons, Dr. Williamson had already, at the request of the New Zealand Government, proved them capable of withstanding sufficiently low temperatures for the hatchery ponds, and Dr. Allen has reared the young ones with great success in the small tanks, and the large adults thrive particularly well in the large aquarium tanks at Plymouth. Dr. Allen assured me also that if the work was put in hand at once (September) it would be possible to secure a few hundred of a suitable size for shipment. The young turbot were captured by Messrs. Smith and Orton and others of the staff by means of fine-mesh nets in the surf at Whitsand Bay. They were fairly plentiful at the end of September, but as many died from the effects of bruises, &c., it became necessary to continue to make up for losses right on to December, by which time they were very scarce. Some seven hundred odd were caught in all, but these were reduced to about three hundred by the time of shipment. They were transported from Whitsand Bay to the tanks at Plymouth in small jars placed in baskets. Their removal occupied from two to three hours—a long journey by brake, ferry-boat, train, and on foot—during which time the water was changed once. During their confinement in the tanks they were fed once a day on minced worms and squid, and a quantity of each was frozen for a time and then fed to them as a test for a supply of food for the voyage. This appeared quite satisfactory. At one time they were dying off so rapidly that it was considered advisable to get in a stock of plaice to ship in their stead. Some hundred and fifty plaice were captured and stocked in readiness, but as the mortality amongst the turbot steadily decreased they were not needed.

About three hundred young turbot from 2 in. to 3 in. in length were brought off to the vessel in large zinc tubs, and were placed in the three tanks provided for them, a hundred in each tank. The measurement of each tank was 4 ft. by 2 ft. 6 in. by 18 in. deep, and they were made of 1½ in. yellow-pine. Each tank was fitted with an easily removable lid fastened down by means of thumbscrews, and with a rubber joint. In the centre of each lid an opening was left 3 ft. long by 12 in. wide; this was formed into a trunkway by being fitted with sides extending 9 in. above the lid of the tank. During heavy weather these covers were screwed down to minimize the splash of the water from side to side. The lower overflow was plugged up, and the water was allowed to rise and escape through a pipe 5 in. from the top of the trunkway. The surface area of the tanks was thus narrowed down very considerably, and the movement of the whole body of water was greatly reduced.

Worms in pint and half-pint tins, and squid and shelled mussels in small boxes, were frozen and kept in cold storage to serve as food during the voyage. The worms turned out, from some cause or other, to be little better than a mass of slime, and were altogether useless for food purposes. The turbot did not take very well to the mussels, but an excellent substitute was found in minced hake, and this with a little minced squid formed their food throughout the voyage. None were seen to eat for the first five days. They were fed daily, with an occasional day's starving. At feeding-time during the voyage it was necessary to remove the tank-lid and to hold a portable electric light over the tanks. The turbot seized the food whilst descending through the water; any particles that were not thus seized remained on the bottom of the tank until cleared out. Such was not the case previous to shipment, and is not the case at present whilst receiving natural light, and I think this peculiarity must be attributed to a great extent to the effects of the electric light. All unconsumed particles of food, castings, and sand were removed by siphon immediately after feeding, and a light sprinkling of sand was strewn over the bottom of the tank. One hundred died during the voyage, the death-rate thus averaging about two per day. The majority of those that died showed distinct signs of bruises, mostly on the under side. A great many had eaten nothing for many days; the intestines were quite empty, and the whole abdominal cavity was much distended and full of a semi-transparent fluid; the anus in most cases was inflamed.

The three tanks were placed fore and aft in the vessel, each tank received a separate supply of water, but as all were connected and the outlet for all was in the after end of the after tank, the second tank received double and the third tank treble the amount of water that it was possible to supply to the first tank. During the hottest part of the voyage the mortality in the first tank was much greater than in the other two, and when the fish were counted out on arrival it was found that about fifty had died in the first, thirty in the second, and only twenty in the third tank. The aeration of the supply-water was very greatly increased by allowing a fall of about 3 ft. Half-inch glass tubing, drawn out to a needle point and broken off to allow of any desired flow, was secured into the end of the rubber hose leading into each tank, and this, with the cocks left full open, allowed the water to be forced through with the full pressure of the main pumps and to carry a great quantity of oxygen with it.

Up to the date of writing (19th April) only two deaths have occurred since their arrival seven weeks ago, and these two died the day after arrival. They are still being kept in the glass tanks, but at their present rate of growth it will soon be necessary either to liberate a number or to place them in one of the large ponds. Many of them have already attained a length of  $5\frac{1}{2}$  in. and are proportionately thicker. They are fed entirely on minced fish, chiefly ling.

#### *Herring-ova.*

The herring-fishing at Plymouth is very uncertain. On examining the statistics for the last eight years it was found that, as a rule, few herrings were taken during November, but that the greatest quantities were caught in December and early in January. This season's herring-fishing has been a failure throughout owing to the scarcity of herrings.

Dr. Williamson and I journeyed to Plymouth on Sunday, 5th January. Mr. T. Dance, agent for Messrs. Peacock and Co., of Lowestoft (to whom I had previously written), has most kindly made all arrangements for us to accompany the steam drifters. About eight thousand ova were secured the following night on board a steam drifter. On account of heavy weather this was the only vessel to proceed to sea that day, and none were able to do so until Friday, the 10th January. During the week every effort was made to secure ripe herrings within the harbour by means of set-nets, drift-nets, and seine nets, but no ripe herrings were taken. The weather moderated a little on Friday, and the masters of the steam drifters were persuaded to endeavour to bring in a number of live herrings in their large net-tanning casks. A large number of ripe herrings were brought in by the various vessels, and from these Dr. Williamson was enabled to secure the full consignment of sixty thousand ova. Immediately afterwards the weather became worse, and but for this brief lull no ova could have been secured.

The herring-egg is, roughly, about  $\frac{1}{8}$  in. in diameter, and is adhesive. A quantity of milt was expressed from a male and allowed to mix with the water, and the ova were stripped from the herrings in the usual manner (the herring being held under water) on to twenty-four glass plates, each measuring 9 in. by 7 in. These plates were placed in boxes at the aquarium, and the circulating water was cooled by means of a grill improvised out of half-inch iron piping and rubber hose, upon which rested a large cake of ice. They were brought off to the vessel in the shelved boxes that had been made for this purpose, the temperature of the water being about 39° F. The accompanying tables show the maximum, minimum, and average daily temperatures throughout the voyage.

On account of the varying ocean temperatures, but more so on account of the varying pressure of the pumps, it was necessary to keep a constant watch on the coolers, and the ova were rarely left unattended, and never for more than half an hour. A description of the coolers will be found under that heading. All piping between the supply-tank and the coolers was of black iron. The water was led from the bottom of the cooler to the filters by 1 in. rubber hose, and connected up by means of ordinary brass couplings. The filter-boxes were made of  $1\frac{1}{2}$  in. yellow-pine, with watertight lids easily removed. These and all other boxes and tanks were painted with bitumastic solution. The water entered at the bottom of the filter and passed upwards through three trays of thick flannel, and was led by two brass taps and  $\frac{1}{2}$  in. rubber hoses into the first and fourth compartments of the ova-boxes. A second filter was cleared out in readiness, and the charging of the filters did not occupy more than a few minutes.

At times, such as when on one or two occasions the supply-tank had run empty, or whilst in port, an enormous amount of both fine and solid matter was found on the flannels and on the bottom of the filters, and even whilst at sea about a teacupful of matter could be scraped off

the flannels with a knife. In appearance and consistency this substance much resembled yellow ochre just as it is pressed out of a tube of oil colours, and probably consisted of rust-grease from the pump and a large amount of organic matter.

Calculated on a temperature-unit basis, a temperature of 35.5° F. would retard the development for the necessary fifty days. This temperature was maintained with little variation throughout. The maximum and minimum thermometers registered 40° and 32° F. Two streams were laid on, each supplying three compartments. This means that compartments 1 and 4 were of equal temperatures, but that (whilst proceeding through the tropics) Nos. 2 and 5 and 3 and 6 became slightly warmer through contact with the atmosphere, which at times reached 63° F. This difference never exceeded 1½° F., but even with this a considerable difference of development could be seen in the ova from the different boxes. The ova were still fairly clean on crossing the Equator on the 24th January, and the outline of the embryo could be easily distinguished. In the ova from the warmest box the tail of the embryo reached better than half-way to the head. Very few dead eggs were discerned up to this time. The water at Cape Town was somewhat dirty, and the ova received an extra coating of sediment. This was removed by means of a long-haired camel-hair brush, and the compartments were scrubbed out separately soon after leaving Cape Town. By this time the ova were assuming a slightly reddish tint, and more appeared to be dead, especially on those plates upon which the ova were spread thickly. Nevertheless the majority were developing very nicely for some time after this, the tail of the embryo having reached past the head, and the chord and eyes were visible in all the live eggs. No diatoms, algæ, or fungus at any time appeared, and I was not able to detect the presence of any of the crystals mentioned in Dr. Williamson's reports. All the compartments were thoroughly cleaned out on the 6th February, the plates were still in very fair condition, and a number from each box was examined and notes of their condition were made.

Up to this time there appeared to be every prospect of a large number being successfully carried through. This cleaning, which had occupied eight hours, was nicely completed when from some cause or another the supply-tank ran dry. When the water returned it came with such tremendous pressure as to force itself through the joints of the coolers and filters, and brought with it such an amount of rust and sediment that had collected in the bottom of the supply-tanks that in a moment the water became as thick as soup. My time for the next few hours was fully occupied in getting the fish and lobster tanks in order again, and by the time I was able to give my attention to the ova they had received a very heavy coating, and the water in the boxes was so thick that one could not see an inch below the surface. For the next few days the water continued fairly thick, and when a number of eggs were examined on the 12th most of them were seen to contain dead embryos. The experiment was abandoned on the 14th February in latitude 47° 26' S., longitude 104° 57' E. The ova at this time were impregnated through and through with rust, &c.; no trace of a live embryo could be seen in any of the eggs, but where the capsule was sufficiently clear the opaque dead embryo was seen.

The ova were fertilized at Plymouth on the 10th January. By far the majority contained live embryos on the 6th February, twenty-seven days after fertilization, and some still contained live embryos on the 12th February, thirty-three days after being fertilized. None of the ova hatched out: the steady low temperature at which they were maintained precluded the possibility of any hatching up to the thirty-third day. From 30 to 50 gallons of water passed through the boxes per hour.

I attribute the failure to convey the ova to New Zealand to be due to a very great extent to the tremendous amount of matter in suspension in the water taken from the ship's main sanitary service. The boxes and frames containing the ova, and the rotary motion produced by means of the water-wheel, worked perfectly, and could hardly be improved upon, excepting if it were possible by supplying each compartment with a separate water-supply. If the experiment should at any time be repeated it would be advisable to have an independent water-supply, not necessarily from the sea, but to avoid the large amount of cooling and filtering that would be required for a large shipment. By providing two large wooden tanks, one above and one below the fish-chamber, it would be possible to use the same cooled and filtered water over and over again to a great extent. A small electrically driven pump and aerating plant would be required for this purpose, and this would allow the control of the water-service to remain entirely in the hands of the responsible attendants.

In my preliminary report I expressed a strong conviction that the "scheme" was impracticable. I did not mean by this that I considered it would be impossible to retard the development of the ova on board ship for a sufficient period to allow of a number hatching out after reaching these waters, especially by a direct steamer making the passage in about forty-two days. An independent water-supply as described above would go a long way towards remedying the defects that have been pointed out by this small shipment. My reasons for expressing an adverse opinion against the scheme of attempting to acclimatize the herring into New Zealand waters by means of bringing out shipments of ova are on account of the delicacy of the undertaking and the heavy recurring expenditure involved, and, summarized, are as follows:—

- (1.) The retardation of the herring-ova from about nine to fifty days, of itself a very delicate experiment even when conducted on a small scale in a well-equipped marine laboratory.
- (2.) Dr. Williamson only succeeded in one out of three experiments in retarding development for fifty days, and even in this one only one larvæ hatched out of every six thousand ova.
- (3.) During these experiments the water used stood at about 42° F., and therefore contained more oxygen than when suddenly cooled from higher temperatures during the voyage.

- (4.) It is quite possible (as witness the narrow margin on the last occasion) that a shipment of ova might be unprocurable when required after fitting up the plant on board of a certain vessel.
- (5.) I was assured by the refrigerating engineer that the refrigerating-engines were run more during this voyage to cool the supply of water than when carrying a full cargo of mutton, and that the cost would amount to £3 a day. Of this the ova water took half.
- (6.) The fry cannot be reared in confinement, and any that hatched would have to be liberated in the ocean at once.
- (7.) The Shaw, Savill, and Albion Company most kindly, on the last occasion, gave the space required, allowed the vessel to call into Plymouth, and made no charge for the water-supply or cooling. In order to have any reasonable prospects of success it would be necessary to make a large shipment year by year, and the charges for the above obligations would greatly increase the cost of each shipment. The cost of transferring the plant from one vessel to another would be considerable, as it is very rarely that the same vessel would come direct to Port Chalmers on two successive trips at the right season of the year.
- (8.) The acclimatization of the herring presents an entirely different aspect to that of the turbot, lobster, and crab, inasmuch as it would be necessary to establish them around the coasts in such vast numbers as to create an altogether different class of fishing (drift-net) to any at present practised.

#### *The Voyage.*

As I had only returned from Plymouth the previous evening I did not join the "Waimana" until a little before sailing and whilst lying in the river off Gravesend. Owing to my absence since the previous Saturday I had been unable to supervise the final portion of the fitting-up of the fish-chamber. Everything was, however, in very satisfactory order. The "Waimana" left Gravesend at 3.30 p.m. on Saturday, the 11th January, and arrived off Plymouth at 6 p.m. next evening. During the passage down the Channel all tanks were thoroughly scrubbed out and the heavy deposit of Thames silt was got rid of. The coolers were tested, and the water for the herring-ova was brought down to 40° F. The shipment of lobsters, crabs, turbot, and ova were brought off by tender, and the "Waimana" left at 9 p.m. The temperature of the sea-water rose steadily, and by consistent watching no difficulty was experienced in keeping the ova and fishes at the desired degree. The fish and lobster water was allowed to rise to 63° F. for two days only, but as many of the crabs were somewhat distressed it was reduced to 56° F. and maintained at that throughout the voyage. The highest sea-temperature, 84° F., was reached in latitude 5° 47' N., and from this it steadily fell until reaching Cape Town on the 1st February. The water in the harbour was 57°. On leaving Cape Town the sea-water fell to 53° F. at 4.30 a.m., and rose to 61° at 9 a.m. and 71° at noon. For the next few days whilst passing through the Aghulas current the temperature was constantly varying and ranged between 72° and 62°. The water was somewhat cloudy at Cape Town. Before leaving the Aghulas current the temperature of the fish-water was reduced to 53°, a little below the usual 56°, so as not to cause too great a reduction on meeting the colder currents.

The lowest ocean temperature was recorded on the 13th February in latitude 47° 9' S., 96° 29' E. The experiment with the herring-ova was abandoned on the 14th February. The temperature gradually rose to 62° off the New South Wales coast, and then suddenly to 75° outside Sydney Heads. The vessel was detained in Sydney from the Friday evening to Tuesday morning. Captain Holmes and Mr. Arthur, Chief Engineer, had most kindly provided against this by filling two large clean ballast-tanks with sea-water. The sanitary pumps were changed over on to this supply on reaching the inner harbour, but on three occasions on the Saturday the pump lost its water and the supply-tanks became empty. The return of the water brought with it a deluge of rust and sediment each time, and it was decided to open the sea-cock slightly so as to keep the pump primed. The mortality whilst in the harbour was not excessive, but just before leaving all the stock was in a very low state; even many of the lobsters were lying over on their sides and backs and were quite limp. All soon recovered on receiving a liberal supply of sea-water.

The ocean temperature gradually fell, and when the coolers were shut off in Foveaux Strait the sea-water stood at 56.5° F. This was also the temperature of the water at Port Chalmers. The "Waimana" made fast to the wharf at Port Chalmers at 9 a.m. on Saturday, 1st March, after a prolonged passage of forty-nine days, and was met on arrival by Mr. G. M. Thomson, M.P., Mr. L. F. Ayson, Chief Inspector of Fisheries, and others. The large claws of the crabs and lobsters had already been secured, and they were at once conveyed to the ponds at the hatchery by the station launch, packed in the same baskets in which they were brought on board. The turbot were removed from the large tanks by means of small muslin nets, and transferred in large tubs to the tanks at the hatchery by the s.s. "Tarewai."

The cooling plant was designed and constructed by Messrs. J. and F. Hall, of Dartford, Kent. This consisted of two upright iron cylinders, each 4 ft. 6 in. high by 20 in. diameter. Each of these contained two coils of 1½ in. black-iron pipes. The sea-water was led into these at the top and escaped at the bottom, where a self-registering Kew-tested thermometer was fitted to show the temperature of the water. Each cylinder had two separate three-way cocks for the control of the flow of brine, and these were so arranged that the flow of brine could be reversed in the event of the water nearest the intake becoming frozen; it was, however, never necessary to do so. Mr. H. J. Ward, the manager of Messrs. Hall Limited, took a great interest in the experiment, and allowed one of his staff to accompany the vessel to Plymouth so as to see the plant in working-order. The brine system was so arranged that it could be turned on to the chamber itself if necessary, but this was not resorted to, as it was found that by keeping the door closed the temperature inside the room rarely exceeded 56° to 60° F. The plant proved as effective as

it was neat and simple, and would suffice for a still larger flow of water. A Muntz-metal disc was made during the voyage and fixed with an indicator over each inlet brine cock, and this greatly facilitated the task of maintaining a steady temperature during times of sudden variations. Throughout the voyage I was most kindly allowed the services of Mr. T. J. Harrison, a former second refrigerating engineer of the vessel, whose assistance proved of the utmost value.

In conclusion, I need hardly express my own keen disappointment with regard to the loss of the herring-ova when success was almost within sight. The expenditure on the expedition has been more than justified by the large increase in the breeding-stock of lobsters and crabs—from twenty-seven to 111—and by having demonstrated that it is possible to carry them in about one-half the space that was formerly allowed. It has also proved the possibility of transporting one of the finest of the European flat fishes to this country, and has resulted in the introduction of two hundred turbot to form a breeding-stock from which it is considerably hoped to establish this valuable fish into these waters.

The thanks of the Department are due to the Shaw, Savill, and Albion Company for the free use of the required space, pumping and cooling of the water, and for allowing the vessel to call into Plymouth for the shipment; to Captain Noal, Mr. McCallum, and Mr. Adams, superintendents of the company; to Captain Burville Holmes, and Mr. Arthur, Chief Engineer of the "Waimana"; to Dr. Allen and his staff for collecting and storing the fish, &c.; to Mr. T. Dance and Messrs. Peacock and Co., of Lowestoft, for providing facilities for securing the herring-ova; and to Dr. H. C. Williamson for collecting and supervising the shipment of herring-ova.

The Secretary, Marine Department.

I have, &c.,  
T. ANDERTON.

TABLE OF TEMPERATURES IN DEGREES FAHRENHEIT.

Date, 1913.	Position.		Herring-ova Tanks.					Sea.		Remarks.	
	Latitude.	Longitude.	Max.	Min.	Ave- rage.	From	To	From	To		
Jan. 12	English Channel		40	35	37.5	53	53	53	53	Received stock, Plymouth, 7 p.m.  Put on cooler for fish-tanks.	
13	47° 55' N.	6° 6' W.	38	32	36	53	53	53	53		
14	43° 45' N.	9° 30' W.	38	33	36	53	54	53	54		
15	39° 54' N.	11° 14' W.	36	33	35	54	55	54	55		
16	35° 35' N.	13° 10' W.	39	33	35	55	55	55	55		
17	30° 49' N.	15° 25' W.	37	34	35.5	55	58	55	60		
18	25° 44' N.	16° 40' W.	36	33.5	35	63	63	65	67		
19	20° 31' N.	17° 26' W.	37	32	35	63	63	67	63		
20	15° 12' N.	17° 34' W.	35.5	34.5	35	56	57	63	73		
21	10° 1' N.	16° 25' W.	37	34	35.5	56	56	73	79		
22	5° 47' N.	13° 0' W.	37	35	35.5	56	58	79	84		
23	1° 53' N.	9° 45' W.	37	35	35	55	58	84	80		
24	1° 56' N.	7° 14' W.	35	33	34.5	57	57	81	81		
25	5° 45' S.	4° 11' W.	35	33	35	57	57	80	77		
26	9° 49' S.	1° 10' W.	39	35	36	56	56	77	77		
27	14° 4' S.	2° 10' E.	36	33	35	55	56	73	72		
28	18° 10' S.	5° 13' E.	35	33	34.5	55	56	72	71		
29	..	..	35	33	35	55	56	70	70		
30	..	..	35	33	35	55	55	70	70		
31	..	..	35	33	35	55	56	69	66		
Feb. 1	Cape Town		39	34	36	56	57	66	57		Cape Town harbour water 57°. Left Cape Town, 4 a.m. Aghulas current.
2	34° 46' S.	19° 1' E.	38	35	35.5	56	53	71	53		
3	37° 40' S.	24° 11' E.	36	34	35.5	56	54*	70	63		
4	40° 13' S.	30° 40' E.	37	33	36	54	53	72	62		
5	42° 13' S.	36° 52' E.	36	34	35	53	50	58	50		
6	43° 39' S.	43° 35' E.	37	33	35.5	50	46	50	46		
7	44° 52' S.	50° 17' E.	38	34	36	46	44	46	44		
8	45° 37' S.	57° 24' E.	39	34	36	47	43	47	43		
9	45° 24' S.	65° 20' E.	37	34	36	50	46	50	46		
10	45° 51' S.	73° 10' E.	37	33	34.5	45	43	45	43		
11	46° 31' S.	80° 45' E.	36	34	35.5	43	43	43	43		
12	46° 55' S.	88° 48' E.	37	34	36	47	45	47	45		
13	47° 9' S.	96° 29' E.	38	35	36	46	42	46	42		
14	47° 26' S.	104° 57' E.	37	36	36	44	45	44	45		
15	47° 29' S.	112° 39' E.	..	..	..	46	48	46	48		
16	46° 50' S.	119° 53' E.	..	..	..	49	52	49	52		
17	45° 11' S.	127° 11' E.	..	..	..	52	53	52	53		
18	42° 41' S.	133° 47' E.	..	..	..	54	56	54	58		
19	40° 11' S.	140° 11' E.	..	..	..	56	56	58	61		
20	Off Melbourne Heads		..	..	..	56	57	62	63		
21	New South Wales Coast		..	..	..	57	56	62	75		
22	Sydney Harbour		..	..	..	55	56	69	71		
23	"		..	..	..	55	56	73	71		
24	"		..	..	..	56	57	75	75		
25	"		..	..	..	56	57	75	76		
26	..	..	..	..	..	56	56	71	64		
27	..	..	..	..	..	55	56	63	57		
28	Foveaux Strait		..	..	..	55	56	57	56.5		
Mar. 1	Port Chalmers		..	..	..	56.5	56.5	56.5	56.5		

\* Reducing temperature of tanks to meet colder currents. Shut off coolers from fish-tanks.



## The MARINE ENGINEER to the SECRETARY, Marine Department.

SIR,—

Wellington, 7th July, 1913.

I have the honour to report as follows on the various works dealt with during the year ended 31st March, 1913.

*Tuahine Lighthouse.*—During the past year some difficulty was experienced through the advent of sand-flies into the interior of the lantern, which caused the extinction of the pilot light. This has been rectified by placing gauze screens over apertures through which they obtained entrance.

*Hokianga.*—Kohukohu breastwork: The timber breastwork for the protection of reclamation in front of the township has been completed. It has also been extended about 20 ft. at one end to connect with the wharf.

*Cattle-landing:* The construction of a cattle and horse landing close to the wharf is now in hand. This is necessary owing to the muddy nature of the foreshore preventing animals being landed from boats unless a causeway is made.

*Launch-landing:* The development of the motor-launch has resulted in the employment of a very large number on the Hokianga and its tributaries. Owing to the considerable range of tide it has been found necessary, for the safety of passengers and easy landing or shipping of light goods, that a landing-stage be constructed. This is now in hand. It consists of a floating pontoon connected with the wharf by a movable gangway.

*Timber Company's breastwork:* Owing to the small extent of flat land available, the Kauri Timber Company found it necessary to carry out a small extent of reclamation in order to provide a site for their mill. In order to protect this reclamation from the action of the harbour water it was necessary to construct a breastwork, which was duly carried out in timber. This having fallen into decay, and as the mill has been closed, an examination of the breastwork was made and a report prepared on repairs necessary to put it into good order.

*Awanui.*—Several applicants for leases of foreshore in the same place not being able to agree amongst themselves as to the division of the foreshore into suitable lots, the place was examined and a report prepared with recommendations.

*Cape Brett.*—Some slight differences in the coast-line and its position as shown on the Admiralty chart having been discovered, an amended chart of the coast in the vicinity of Cape Brett has been prepared for the information of the Admiralty. Recent surveys in connection with the new lighthouse-site enabled this to be done accurately.

*Mangakahia River.*—This river was inspected during the past summer, and a report prepared on the positions of snags and bars which proved obstructions to navigation.

*Takeke River.*—This river was also examined and a report prepared, as in the case of the preceding river.

*Kaipara and Northern Wairoa.*—Shelly Beach beacon: The erection of this structure was completed during the year, a light apparatus installed and the light duly shown. Considerable difficulty has, however, been experienced in connection with this apparatus, which generates acetylene gas direct from the carbide. The question of its replacement by a light on the Aga principle is now under consideration.

*Beacon Beach beacon:* A survey is in hand of the site of this beacon, which will be of similar construction to that recently erected on Shelly Beach.

*Jack's Point:* The removal of rocks in the Northern Wairoa River at this place has been reported on, and the erection of a lighted leading-beacon through the channel has been recommended, as entailing far less cost than removing rocks.

*Mititai:* The deepening of the river opposite the Mititai Wharf, where some silting has occurred, has been reported on and recommendations made.

*Whakapirau Wharf.*—This structure has been examined, and a report prepared on repairs necessary to put it into good order.

*Wade River.*—Some dredging carried out by local authority by virtue of a grant made by the Marine Department has been completed, and the work examined and duly reported on.

*Matakana Harbour.*—Some dredging in this harbour to improve the approach to the wharf is now being carried out by the Marine Department.

*Whangapoua Wharf.*—This structure was examined and necessary repairs duly reported on.

*Tairua Wharves.*—These also were examined and reported on.

*Chicken Island Light.*—At the date of the last annual report the site and the access tracks had been completed. Since the iron pedestal to receive the light apparatus and shelter the gas-containers has been completed by the contractors, it, together with the apparatus, have been shipped to the island, and their erection is now in hand.

*Ponui Lighthouse.*—During the past year a scow came into collision with the lighthouse structure, smashing one of the cast-iron piles and supports. Repairs are now being carried out in reinforced concrete.

*Channel Island Light (Watchman).*—A report has been prepared in connection with the installation of a light on this island, and an estimate supplied of the cost.

*Omaha.*—Some dredgings having been deposited which are alleged to cause an obstruction to the approach to the Leigh Wharf, the position has been examined and a report prepared.



*Motuihi Wharf*.—Repairs required to this structure have been duly reported upon.

*Mahurangi*.—An examination of the river has been made, and dredging necessary to improve the approach to the wharf has been reported upon and recommended.

*Auckland*.—Kawakawa Bay, Sandspit District: A report has been prepared on the erection of a wharf at this place.

Naval base: A conference has been held with officers of the Defence Department regarding requirements by the Defence Department, and a report duly furnished.

Meola and Motion's Creeks: The construction of a road crossing over these creeks has been reported on.

Hobson Bay: Complaints regarding the sewage outfall have been inquired into and duly reported on.

Turanga Creek Wharf: Plans and specifications for this structure have been prepared, a contract let, and the work has been completed.

*Bean Rock Lighthouse*.—The automatic light apparatus has been installed in position and the characteristic of the light changed to occulting. The light has been handed over to the control of the Auckland Harbour Board.

*Manukau Harbour*.—The roading of an endowment block was reported on; the construction of the roads entrusted to the local authority, and duly completed.

*Waikato River*.—Investigations are now in hand with a view to reporting upon conservation works required in this river between Mercer and the sea for the purpose of deepening the navigable channel.

*Ngaruawahia*.—A report was prepared on the question of the removal of an old wharf at this place.

*Waihou River*.—The removal of the Te Puke Wharf to a position lower down the river below the bridge under construction, connecting the Netherton Settlement with Paeroa, has been investigated. A survey of a suitable site has been made, and plans of a new wharf partially completed.

*Marakopa*.—A site for a new wharf was surveyed, and drawings of a suitable structure prepared.

*Tauranga*.—Wairoa River: This river was inspected for a considerable distance for the purpose of reporting upon the removal of snags and sandbars so as to improve navigation.

Judea: A proposal having been made by the inhabitants for the reclamation of a tidal swamp at this place, the locality was inspected and the whole question carefully considered, and an adverse report prepared, in view of the detrimental effect on the tidal scour at entrance to the Tauranga Harbour.

*Whakatane*.—A survey of this harbour was made, plans prepared, and also a report as to works required to improve the entrance, so as to provide a permanent entrance channel instead of the present shifting one.

*Opotiki Harbour*.—A survey was made and a report prepared of works required to improve the entrance.

*Ohiwa*.—A survey has been made and a report prepared upon the construction of a wharf at Kutarere, together with approach road and dredging of the channel leading thereto.

*Mohaka*.—The entrance to this river was inspected, and a report prepared upon improving the channel immediately inside the bar.

*Flat Point Lighthouse*.—A report has been prepared on the erection of a lighthouse at this place, furnished with an automatic light. An estimate of cost of carrying the work out has also been prepared.

*Awakino River*.—The channel near the entrance to this river has been improved by a slight deepening through a sandstone bar.

*Raglan*.—The erection of a new wharf has been reported on.

*East Cape Lighthouse*.—Plan of a boat-shed to be erected on the mainland for the sheltering of the boat used by the mailman has been prepared.

*Castle Point Lighthouse*.—The lighthouse and dwellings, the construction of which were in hand last year, have been completed, together with all the rest of the works, and the light was exhibited first on the 12th January, 1913. In addition to the lighthouse work proper, a foot suspension bridge has been erected over the Whakataki River, to enable the keepers' children to obtain access to the local school.

*Wellington*.—Marine Stores: Plans have been prepared for the erection of a new store in the new yard, the present yard having to be vacated through the land being required by the Railway Department. Tenders will shortly be invited for its erection.

Meteorological Observatory: The erection of a new observing-station at Pipitea Point has been completed during the year.

*Queen Charlotte Sound*.—Grove Wharf: Repairs have been effected.

*Pelorus Sound*.—Paradise Bay Wharf has been examined and reported on.

*Beef-barrels*.—An estimate has been prepared for a bell buoy to be placed on the above Beef-barrel Rocks as a warning. A report has also been furnished, with estimate of cost, on erecting a beacon on Okuri Point, on the mainland, for the purpose of acting as a leading-light past these rocks.

*Totaranui Wharf.*—The erection of this structure has been reported on and estimate of cost furnished.

*Nelson Lighthouse.*—A new roof has been constructed to the assistant keeper's dwelling.

*Nelson Harbour.*—A further detail report has been prepared at the instance of the Harbour Board, advising as to the best means of carrying out the works recommended in a report prepared last year.

*Westhaven.*—The cost of a resurvey of the channel inside the bar has been reported on, and arrangements have been made to have the work carried out.

*Karamea.*—An extension of the training-wall forming the third section has been carried out during the past year. Repairs have been effected to the part of the wall previously constructed.

*Otumahana Stop-bank:* A portion of a stop-bank across the channel connecting the Karamea River with the Otumahana Lagoon was considerably damaged by a flood. The extent of the damage was investigated and a report duly prepared.

A survey of the entrance to the harbour was made for the purpose of bringing the chart up to date. A report was prepared upon the question of removal of gravel from the river's banks.

*Little Wanganui.*—Some additions to the wharf at this place were carried out during the year.

*Lake Brunner.*—A report was prepared upon obstructions caused by sawmills to the proper and safe access to a launch-slip which has been constructed.

*Cape Campbell Lighthouse.*—The road along the beach giving access to the lighthouse at low tide has been improved by the removal of a number of boulders in one place.

*Kaiapoi.*—Improvement-works at the mouth of the Waimakariri River were examined and reported on.

*Sumner.*—A report has been prepared on a proposal to erect a bridge across the estuary to provide short means of communication between Sumner and New Brighton.

*Godley Head Lighthouse.*—A road giving access to the lighthouse from Evans Pass has been surveyed preparatory to putting construction-work in hand. The existing track to the fog-signal has been repaired. A new track has been surveyed, and plans and report are in course of preparation. This work is considered necessary owing to the numerous slips which have occurred along the existing track. These slips consist principally of boulders detached from the cliff-face by the action of the weather, and which threatened danger to the attendants while going to and from the fog-signal. Repairs have been effected to the fog-signal apparatus.

*Okain's Bay.*—It having been alleged that a chute constructed over the river at this place caused an obstruction to navigation, an investigation was made and a report duly prepared.

*Taiaroa Heads.*—Repairs have been effected to the fog-signal.

*Brighton.*—The construction of a boat-harbour at this place has been reported on.

*Nuggets.*—Some time ago the fishermen's landing at this place was improved by the removal of some rocks, the building of a groyne to cause silting up of the foreshore by sand, and the establishment of an oil-engine winch for the purpose of hauling up the fishermen's boats. These works having proved very successful, the fishermen at once increased the size of their boats, and others joined in the trade, so that it became necessary to increase the power of the winch. This has been done during the past year.

*Invercargill.*—The site for the erection of a septic tank was examined and reported on.

*Stewart Island.*—Half-moon Bay Wharf has been examined and reported on.

Plans and specifications for the approval of the Marine Department have been examined and reported upon as follows:—

*Wharves.*—Hokianga: Rangiora—extension of jetty, and connection of another one; Rawene—additions to and removal of shed; Kohukohu—additions, also latrines on wharf. Russell: Additions, also office building for Northern Steamship Company. Northern Wairoa: Dargaville—breastwork for Mr. D. McLaren; Mititai—extension; Aoroa—new wharf; Kaihu Creek—Mr. G. Bailey's wharf; Te Kopuru—extension of Mr. Chadwick's. Warkworth: Shed on wharf. Auckland: Hobson Street—widening, also breastwork between Nelson and Hobson Streets; Freeman's Bay—Messrs. Gammon's landing, and landing for Messrs. R. O. Clark (Limited); Riverhead—Mr. C. S. Mackie's wharf, also upper wharf; Barry's Point—breastwork; Customs Street West—quay-extension for Kauri Timber Company. Manukau: Waiiau Pa wharf. Paeroa: Gold-extraction Company's. Tauranga: Additions. Gisborne: Erecting new wharves. Raglan: New wharf at Ruakiwi. Foxton: For boats at Heads. Wellington: Ferry Wharf—extension; Waterloo Quay—staging north end breastwork extension; Glasgow Wharf—extension. Pelorus Sound: Forsyth Island—new wharf. Nelson: Extension. Lyttelton: Jetty No. 8. Akaroa: New jetty. Port Chalmers: Sheer-legs Wharf. Bluff: Oyster Wharf.

*Reclamations.*—Auckland: Between Nelson and Hobson Street jetties; Chelsea; Freeman's Bay (small area). Manukau: Mangere—recreation-ground; Otahuhu—recreation-ground. Wellington: Kilbirnie—recreation-ground. Sumner: Widening tramway-bank.

*Foreshore Lease.*—Whangapoua: Site for new wharf.

*Bridges.*—Northern Wairoa: Kirikopunui River. Waihou River: Netherton Bridge. Gisborne: Waimata River.

*Rivers.*—Ngunguru: Dredging of channel. Wade: Deepening of channel. Waikato: Training-works for improving channel between Mercer and the Heads.

*Harbour-works.*—Whangaroa: Tide-wall for Mr. Lane. Waipu River: Extension of north training-wall. Auckland: Freeman's Bay—tide-deflector. Thames: Tide-deflector. Gisborne: Breakwater extension, also dredging new basin. Wanganui: Extension of river training-wall. Westport: Slipway. Greymouth: Extension on north breakwater. Hokitika: Extension of moles. Timaru: Eastern breakwater extension. Dunedin: Boat-harbour.

*Boat-sheds and Skids.*—Auckland: Freeman's Bay—slipway for Mr. A. Henderson; St. George's Bay—boat-shed, also slipway. Wellington: Evans Bay—boatshed for G. Dennes. Picton: Boat-shed for G. Beswick. Kaikoura: Boat-slipway. Invercargill: Boat-sheds, Waihopai River.

*Miscellaneous.*—Hokianga: Rangiora—timber-booms. Rawene: Sewage-disposal. Kawakawa: Timber-booms in Tirohanga River. Kaipara: Stone-bin at Greenhill. Helensville: Sewer crossing Awaroa Creek. Mata River: Timber-rooms. Auckland: Approach road Nobel's explosives store; positions of telegraph-cables; s.s. "Iris," cable-tank. Waihou River: Removal of sand. Waikato: Te Omatea River—removal of willows. Tuahine Lighthouse: Alteration in light arc. Wellington: Kiawarra—sewer outfall. Sumner: Sewer outfall, also artesian well. Lytelton: Dredge-mark beacons, and Teddington Channel beacons. Invercargill: Sewer outfall.

R. W. HOLMES, Marine Engineer.

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RETURN SHOWING THE TOTAL ORDINARY EXPENDITURE OF THE MARINE DEPARTMENT DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1913.

Nature of Expenditure.	Details.		Totals.		Grand To als.	
	£	s. d.	£	s. d.	£	s. d.
Head Office salaries .. .. .					2,760	3 3
Harbours:—						
Manukau,—						
Salaries .. .. .	549	3 4				
House allowance of Harbourmaster .. .. .	24	0 0				
Stores and contingencies .. .. .	204	7 3				
Hokianga,—			777	10 7		
Salaries .. .. .	495	0 0				
Overhauling launch .. .. .	56	12 6				
Stores and contingencies .. .. .	117	14 9				
Kaipara,—			669	7 3		
Salaries .. .. .	715	0				
House allowance to Harbourmaster .. .. .	26	0 0				
Stores and contingencies .. .. .	216	5 10				
Hauraki Gulf,—			957	5 10		
Inspection of beaches .. .. .			84	9 0		
Tauranga,—						
Salary .. .. .	31	5 0				
Stores, &c. .. .. .	9	14 6				
Tongaporutu,—			40	19 6		
Salary .. .. .	25	0 0				
Boatshed .. .. .	20	0 0				
Stores, &c. .. .. .	10	19 9				
Opunake,—			55	19 9		
Salary .. .. .			25	0 0		
Whangaparapara,—						
Salary .. .. .	26	0 0				
Contribution to Customs Department .. .. .	10	0 0				
Stores, &c. .. .. .	11	3 11				
Mokau,—			47	3 11		
Salary .. .. .			50	0 0		
Awakino,—						
Salary .. .. .	20	0 0				
Stores .. .. .	1	18 0				
Marakopa,—			21	18 0		
Salary .. .. .	10	0 0				
Boat .. .. .	6	0 0				
Stores .. .. .	0	10 0				
Picton,—			16	10 0		
Salary .. .. .	250	0 0				
House allowance .. .. .	25	0 0				
Diffenbach Point beacon .. .. .	22	1 0				
Stores, &c. .. .. .	34	13 6				
Nelson,—			331	14 6		
Salaries of signalmen .. .. .			20	0 6		
Waitapu,—						
Salary .. .. .	25	0 0				
Beacons .. .. .	3	12 0				
Puponga,—			28	12 0		
Stores and oil .. .. .			4	10 0		
Collingwood,—						
Salary .. .. .	60	0 0				
Snagging .. .. .	20	12 6				
Stores, &c. .. .. .	14	0 2				
Karamea,—			94	12 8		
Salary .. .. .	120	0 0				
Shifting beacons .. .. .	44	17 0				
Stores, &c. .. .. .	28	11 7				
Little Wanganui,—			193	8 7		
Piloting .. .. .			12	0 0		
Greymouth,—						
Salary of Harbour Engineer* .. .. .			400	0 0		
Okuru,—						
Salary .. .. .	72	10 0				
Stores, &c. .. .. .	9	16 7				
Okarito,—			82	6 7		
Salary .. .. .	120	0 0				
Cutting channel .. .. .	15	3 0				
Stores, &c. .. .. .	51	2 5				
Waikawa,—			186	5 5		
Salary .. .. .			10	0 0		
Salary of storeman .. .. .	215	0 0				
Iron buoys .. .. .	146	11 0				
Buoy-chain .. .. .	172	7 10				
General (buoys and repairs) .. .. .	48	10 3				
Stores, &c. .. .. .	150	12 9				
			733	1 10		
					4,842	15 11

\* Refunded by Greymouth Harbour Board.

RETURN SHOWING THE TOTAL ORDINARY EXPENDITURE OF THE MARINE DEPARTMENT, ETC.—*contd.*

Nature of Expenditure.	Details.	Totals.	Grand Totals.
	£ s. d.	£ s. d.	£ s. d.
<b>Lighthouses :—</b>			
Salaries of keepers .. .. .	11,194 14 9		
Oil .. .. .	1,237 10 8		
Stores and contingencies .. .. .	4,289 18 1		
Lighthouse Expert .. .. .	260 0 0		
Light-keepers' travelling-expenses .. .. .	268 3 6		
			17,250 7 0
<b>Meteorological Office :—</b>			
Salaries .. .. .	1,214 10 0		
Postage and telegrams .. .. .	1,111 13 3		
Wireless telegrams .. .. .	75 0 0		
Instruments and repairs .. .. .	264 0 4		
Rent .. .. .	140 0 0		
Cleaning offices .. .. .	24 0 0		
Office equipment .. .. .	130 6 3		
Telephones .. .. .	34 15 4		
Contingencies .. .. .	54 6 9		
			3,048 11 11
<b>Mercantile marine offices :—</b>			
Salaries .. .. .	4,310 15 5		
Rent .. .. .	150 6 8		
Telephones .. .. .	90 1 7		
Cleaning offices .. .. .	68 17 0		
Equipment, &c., of new office, Lyttelton .. .. .	70 11 0		
Travelling-expenses .. .. .	44 12 11		
Contingencies .. .. .	39 19 6		
			4,775 4 1
<b>Protection of fish and oysters :—</b>			
Salaries of Inspectors .. .. .	1,009 18 7		
Picking and sale of oysters .. .. .	3,876 0 1		
Planting oysters in Hauraki Gulf .. .. .	22 12 6		
Casual labour .. .. .	47 6 0		
Collection, &c., brown-trout ova .. .. .	106 8 5		
Grant for maintenance, Portobello Fish-hatchery,—			
Salaries .. .. .	295 0 0		
Repairs, &c. .. .. .	50 12 8		
Importation of Atlantic-salmon ova .. .. .	3 12 6		
Importation of herring, lobsters, &c. .. .. .	277 16 4		
Stocking Westland rivers with salmon .. .. .	70 3 6		
Travelling-expenses .. .. .	433 17 7		
Contingencies .. .. .	53 11 11		
Hakataramea Salmon Station,—			
Salaries .. .. .	376 0 0		
Working-expenses .. .. .	115 17 6		
			6,738 17 7
			39,415 19 9
Less recoveries .. .. .	..	..	1,124 15 8
<b>Total</b> .. .. .	..	..	<b>38,291 4 1</b>
<b>Government steamers :—</b>			
Installation of wireless apparatus .. .. .	180 0 0		
Working-expenses, s.s. "Hinemoa" .. .. .	9,953 0 7		
Repairs to s.s. "Hinemoa" .. .. .	177 7 6		
Working-expenses, s.s. "Tutanekai" .. .. .	1,951 8 4		
Repairs to decks, &c., s.s. "Tutanekai" .. .. .	344 0 0		
Expenses, training-ship "Amokura" .. .. .	6,639 6 3		
Repairs, &c., training-ship "Amokura" .. .. .	1,115 0 0		
			20,360 2 8
Less cable services, freights, passages, &c. .. .. .	..	..	1,713 6 9
			18,646 15 11
<b>Marine miscellaneous services :—</b>			
Departmental travelling-expenses .. .. .	40 6 4		
Administration of Shipping and Seamen Act, and inquiries into shipping casualties .. .. .	482 14 9		
Audit fees for inspection of accounts .. .. .	50 0 0		
Buoys and beacons,—			
Jackson's Head .. .. .	84 1 7		
Kaipara Harbour .. .. .	449 8 8		
Cartage and freight .. .. .	92 9 3		
Charts, books, &c. .. .. .	539 19 9		
Castle Point Wharf .. .. .	250 0 0		
Checking overcrowding of steamers .. .. .	420 19 7		
Expenses of burial of deceased seaman (L. R. Domey) at Westport .. .. .	2 0 0		
Expenses of burial of deceased seaman (A. Burgess), late of s.s. "Mullogh" .. .. .	10 10 0		
Grant for repairing Half-moon Bay Wharf .. .. .	115 0 0		
Grant to Westland Acclimatization Society .. .. .	50 0 0		
Extra clerical assistance .. .. .	28 0 0		
Grant for renewing Turanga Creek Wharf .. .. .	172 4 0		
Grant for repairing Karitane Jetty .. .. .	50 0 0		
Grant to British and Foreign Sailors' Society's building, Lyttelton .. .. .	250 0 0		

RETURN SHOWING THE TOTAL ORDINARY EXPENDITURE OF THE MARINE DEPARTMENT, ETC.—*contd.*

Nature of Expenditure.	Details.			Totals.			Grand Totals.		
	£	s.	d.	£	s.	d.	£	s.	d.
Marine miscellaneous services— <i>continued.</i>									
Grant to Seamen's Hospital, Greenwich			7 7 0						
Fog-signals, cartridges, &c.			105 9 7						
Improving Graham's Beach Wharf			50 0 0						
Launch for Inspector of Fisheries and Beaches, Auckland			552 19 6						
Legal expenses			96 19 5						
Maintenance Anglem Point light			32 15 8						
Marine survey between French Pass and Jackson's Head			685 7 6						
Morse signals at lighthouses			15 10 9						
"New Zealand Nautical Almanac"			419 16 4						
Office equipment			94 14 8						
Postage and telegrams			445 14 2						
Preparation of tide-tables			778 15 0						
Printing and stationery			119 8 11						
Prosecutions under Marine Acts			74 1 7						
Relief of distressed seamen			106 3 2						
Relief of distressed New Zealand seamen and others in United Kingdom			53 16 10						
Purchase of rails for Foxton Harbour			9 16 10						
Railway fares of Royal Naval Registrar			10 15 4						
Rents and expenses connected with examinations			15 7 6						
Subsidy to Matakoho Wharf repairs			80 16 0						
Surveys of unseaworthy ships			8 12 6						
Telephones			85 13 10						
Contingencies			8 18 6						
						6,946 14 6			
Less recoveries						515 1 5			
								6,431 13 1	
<b>Grand total</b>								<b>£63,369 13 1</b>	

## RETURN SHOWING TOTAL COST OF MAINTENANCE OF THE NEW ZEALAND COASTAL LIGHTHOUSES DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1913.

Name of Lighthouse.	Salaries.	Oil consumed.		Stores and Contingencies.	Totals.
		Gallons.	Value.		
	£ s. d.		£ s. d.	£ s. d.	£ s. d.
Cape Maria van Diemen	389 0 0	695	28 19 2	104 16 6	522 15 8
Cape Brett	407 19 5	624	26 0 0	91 19 0	525 18 5
Mokohinou	356 11 8	810	59 1 3	205 14 8	621 7 7
Tiritiri	269 4 2	506	36 17 11	93 6 7	399 8 8
Bean Rock	75 16 8	64	2 13 4	(a)332 10 2	411 0 2
Ponui Passage	110 19 10	80	5 16 8	(b)103 6 10	220 3 4
Cuvier Island	416 13 4	694	28 18 4	(c)244 17 7	690 9 3
East Cape	337 4 10	873	63 13 1	(d)165 10 2	566 8 1
Portland Island	369 16 8	757	55 3 11	169 7 11	594 8 6
Napier Bluff	20 0 0	Gas	14 0 0	1 11 6	35 11 6
Castle Point	213 0 0	127	5 5 10		218 5 10
Cape Palliser	307 10 0	624	26 0 0	95 4 9	428 14 9
Pencarrow Head	296 13 4	601	25 0 10	39 11 7	361 5 9
Somes Island	300 0 0	632	46 1 8	43 14 0	389 15 8
Cape Egmont	277 10 0	548	22 16 8	74 17 1	375 3 9
Manukau South Head	300 0 0	598	43 12 1	77 5 0	420 17 1
Manukau South Head leading-lights		162	11 16 3		11 16 3
Manukau North Head leading-lights	130 0 0	279	20 6 10	(e)104 12 1	254 18 11
Kaipara Head	233 15 8	562	40 19 7	198 19 5	473 14 8
Brothers	470 12 7	728	30 6 8	204 19 4	705 18 7
Tory Channel leading-lights	100 0 0	183	13 6 10		113 6 10
Cape Campbell	270 0 0	660	27 10 0	109 17 5	407 7 5
Godley Head	290 0 0	587	42 16 0	82 14 8	415 10 8
Akaroa Head	310 0 0	604	44 0 10	75 11 11	429 12 9
Jack's Point	150 0 0	333	13 17 6	37 18 0	201 15 6
Moeraki	285 0 0	584	42 11 8	(f)145 3 9	472 15 5
Taiaroa Head	290 0 0	621	45 5 7	67 15 11	403 1 6
Cape Saunders	260 0 0	648	27 0 0	74 12 0	361 12 0
Nugget Point	405 0 0	721	30 0 10	142 2 5	577 3 3
Waipapapa Point	263 6 8	778	32 8 4	(g)114 12 9	410 7 9
Dog Island	414 4 11	757	55 3 11	107 13 1	577 1 11
Centre Island	426 1 8	642	26 15 0	82 6 11	535 3 7
Puysegur Point	384 19 2	637	26 10 10	81 12 9	493 2 9
Cape Foulwind	292 10 0	574	41 17 1	203 4 2	537 11 3
Hokitika	20 0 0	Gas	11 11 0		31 11 0
Kahurangi Point	372 15 4	1,000	72 18 4	(h)171 10 4	617 4 0
Farewell Spit	432 7 10	718	29 18 4	150 13 9	612 19 11
Nelson	359 7 1	251	18 6 0	(i)145 9 2	523 2 3
French Pass	187 10 0	184	13 8 4	25 14 3	226 12 7
Stephens Island	399 3 11	689	28 14 2	119 0 8	546 18 9
<b>Totals</b>	<b>11,194 14 9</b>	<b>21,155</b>	<b>1,237 10 8</b>	<b>4,289 18 1</b>	<b>16,722 3 6</b>

(a) Includes £297 2s. 4d. for installation of automatic light. (b) Includes £69 17s. 6d. for repairing damage done by scow. (c) Includes £143 15s. 3d. for repairs to dwellings and new fences. (d) Includes £30 15s. 6d. for new boatshed. (e) Includes £43 2s. for forming new road. (f) Includes £72 15s. 8d. for new sheds. (g) Includes £33 0s. 1d. for fencing. (h) Includes £64 for cartage of stores. (i) Includes £70 for repairs to assistant keeper's dwelling.

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

Name of Lighthouse.	Cost of Erection.		
	£	s.	d.
Pencarrow Head .. .. .	6,422	0	4
Nelson .. .. .	2,824	8	9
Tiritiri .. .. .	5,747	7	2
Mana Island* .. .. .	5,513	0	1
Taiaroa Head .. .. .	4,923	14	11
Godley Head .. .. .	4,705	16	4
Dog Island .. .. .	10,480	12	8
Farewell Spit .. .. .	6,139	11	8
Nugget Point .. .. .	6,597	3	7
Cape Campbell .. .. .	5,619	2	6
Manukau Head .. .. .	4,975	2	4
Cape Foulwind .. .. .	6,955	9	1
Brothers .. .. .	6,241	0	0
Portland Island .. .. .	6,554	14	5
Moeraki .. .. .	4,288	13	2
Centre Island .. .. .	5,785	19	0
Puysegur Point .. .. .	9,958	19	5
Cape Maria van Diemen .. .. .	7,028	14	8
Akaroa Head .. .. .	7,150	6	5
Cape Saunders .. .. .	6,066	6	3
Cape Egmont† .. .. .	3,353	17	11
Mokohinou .. .. .	8,186	5	0
Waipapapa Point .. .. .	5,969	18	11
Ponui Passage‡ .. .. .	..	..	..
Kaipara Head .. .. .	5,571	8	0
French Pass .. .. .	1,427	17	5
Cuvier Island .. .. .	7,406	16	11
Stephens Island .. .. .	9,349	9	11
Cape Palliser .. .. .	6,243	16	1
East Cape .. .. .	7,594	8	8
Kahurangi Point .. .. .	9,528	1	1
Jack's Point .. .. .	1,204	10	9
Cape Brett .. .. .	11,237	3	5
Castle Point .. .. .	9,332	2	9
Chicken Island (building) .. .. .	961	4	1
Cost of telegraph-cable to Tiritiri .. .. .	1,085	19	6
Miscellaneous and unallocated .. .. .	1,322	2	2
Total .. .. .	£213,753	5	4

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

RETURN SHOWING THE FEES, ETC., RECEIVED  
UNDER THE SHIPPING AND SEAMEN ACTS, THE  
MERCHANT SHIPPING ACT, THE HARBOURS  
ACTS, AND THE FISHERIES ACTS DURING THE  
FINANCIAL YEAR ENDED 31ST MARCH, 1913.

Nature of Receipts.	Amount.		
	£	s.	d.
Shipping and Seamen Acts:—			
Fees for engagement and discharge of seamen, and sale of forms .. .. .	3,329	10	2
Surveys of steamers and sailing-vessels .. .. .	3,258	10	0
Measurement of ships .. .. .	36	2	6
Examination of masters, mates, and engineers .. .. .	461	7	6
Light dues .. .. .	41,406	7	4
Sundry receipts .. .. .	658	10	8
Merchant Shipping Act .. .. .	190	11	0
Harbours Acts:—			
Pilotage, port charges, &c. .. .. .	1,786	13	0
Foreshore rents, and shingle and sand permits .. .. .	789	19	5
Sundry receipts .. .. .	231	10	0
Fisheries Acts:—			
Sale of oysters .. .. .	5,234	7	4
Sundry receipts .. .. .	373	9	0
Total .. .. .	£57,756	17	11

RETURN SHOWING THE AMOUNT OF LIGHT DUES  
COLLECTED DURING THE FINANCIAL YEAR  
ENDED 31ST MARCH, 1913.

Port.	Amount collected.		
	£	s.	d.
Auckland .. .. .	15,094	1	5
Coromandel .. .. .	18	8	10
Onehunga .. .. .	132	14	10
Whangaroa .. .. .	12	18	5
Whangarei .. .. .	188	3	10
Russell .. .. .	54	15	10
Whangape .. .. .	0	6	10
Mangonui .. .. .	0	15	10
Whangaparapara .. .. .	27	6	10
Hokianga .. .. .	47	1	1
Kaipara .. .. .	137	0	5
Thames .. .. .	67	7	7
Tauranga .. .. .	43	15	4
Poverty Bay .. .. .	807	9	3
Napier .. .. .	1,172	11	2
New Plymouth .. .. .	160	14	10
Waitara .. .. .	260	14	10
Wanganui .. .. .	239	3	11
Patea .. .. .	19	11	6
Wellington .. .. .	10,371	17	10
Wairau .. .. .	19	12	6
Pictou .. .. .	516	15	2
Nelson .. .. .	437	15	2
Westport .. .. .	790	3	1
Greymouth .. .. .	367	9	7
Hokitika .. .. .	2	16	1
Lyttelton .. .. .	3,736	17	4
Timaru .. .. .	529	6	0
Oamaru .. .. .	198	13	4
Dunedin .. .. .	2,663	16	6
Bluff and Invercargill .. .. .	3,340	7	11
Less refunds .. .. .	41,460	13	1
	54	5	9
Total .. .. .	£41,406	7	4

RETURN SHOWING THE AMOUNT OF PILOTAGE,  
PORT CHARGES, ETC., COLLECTED DURING  
THE FINANCIAL YEAR ENDED 31ST MARCH,  
1913.

Name of Port.	Pilotage.		Port Charges, &c.		Total.	
	£	s.	d.	£	s.	d.
Auckland* .. .. .	6,092	11	4	8,883	4	10
Onehunga .. .. .	2	6	10	254	13	10
Hokianga .. .. .	10	15	9	..	..	..
Kaipara .. .. .	458	8	11	667	18	1
Thames* .. .. .	46	14	6	177	15	9
Gisborne* .. .. .	203	19	1	4,241	8	8
Wairoa* .. .. .	217	7	6	130	11	4
Napier* .. .. .	1,046	17	10	6,697	15	3
N. Plymouth* .. .. .	472	18	6	431	15	4
Waitara* .. .. .	115	9	0	248	5	11
Wanganui* .. .. .	908	15	6	334	11	1
Patea* .. .. .	75	11	7	6	6	0
Foxton* .. .. .	..	..	..	..	..	..
Wellington* .. .. .	238	6	9	19,220	2	7
Pictou .. .. .	84	12	8	209	9	11
Wairau* .. .. .	550	8	8	..	..	..
Nelson* .. .. .	3,828	12	9	1,107	19	2
Westport* .. .. .	524	2	0	..	..	..
Karamea .. .. .	98	7	0	..	..	..
Hokitika* .. .. .	..	..	..	25	5	11
Lyttelton* .. .. .	13,722	10	2	8,115	3	0
Timaru* .. .. .	3,525	19	4	4,251	0	1
Oamaru* .. .. .	..	..	..	2,807	13	4
Dunedin* .. .. .	11,405	13	1	10,885	8	1
Bluff* .. .. .	4,194	3	7	2,950	0	2
New River* .. .. .	..	..	..	5	4	2
Totals .. .. .	47,824	12	..	471,651	12	6
				119,476	4	10

\* Harbour Board revenue. † Tonnage dues.

RETURN SHOWING THE NUMBER OF SEAMEN ENGAGED AND DISCHARGED IN THE FOREIGN AND INTERCOLONIAL TRADE, THE HOME TRADE, AND WITHIN RESTRICTED LIMITS RESPECTIVELY, TOGETHER WITH THE AMOUNT OF FEES RECEIVED FOR THE SAME, DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1913.

Port.	Engagements and Discharges in Foreign and Intercolonial Trade.			Engagements and Discharges in Home Trade.			Engagements and Discharges in Restricted Limits.			Total Engagements.		Total Discharges.		Grand Totals.			
	Number of Seamen engaged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Fees received. £ s. d.	Number of Seamen engaged.	Fees received. £ s. d.	Number of Seamen discharged.	Fees received. £ s. d.	Number of Seamen.	Fees received. £ s. d.	Number of Seamen.	Fees received. £ s. d.		
Auckland	2,647	187 5 0	2,584	173 13 0	2,691	181 9 6	407	24 11 0	417	25 8 6	5,611	385 9 0	5,692	390 4 0	11,303	775 13 0	
Dunedin and Port Chalmers	1,183	404 1 6	1,182	108 7 0	1,839	123 4 0	..	..	..	..	2,879	212 8 6	3,021	225 4 6	5,900	437 13 0	
Greymouth	71	4 17 6	61	3 19 6	110	7 8 6	..	..	..	..	237	16 7 0	171	11 8 0	408	27 15 0	
Hokitika	17	1 5 6	12	0 7 0	5	0 5 6	..	..	..	..	25	1 12 6	17	1 3 6	42	2 16 0	
Invercargill	..	..	..	..	1	0 1 6	..	..	..	..	..	..	..	1	0 1 6	1	0 1 6
Kaipara	99	7 8 6	24	1 16 0	5	0 7 6	..	..	..	..	113	8 9 6	29	2 3 6	142	10 13 0	
Lytelton	40	2 6 6	26	1 19 0	34	2 1 6	..	..	..	..	64	3 19 0	60	4 0 6	124	7 19 6	
Napier	657	49 15 6	543	41 5 6	1,334	95 0 0	58	3 14 0	59	3 14 0	2,152	156 1 0	1,936	139 19 6	4,088	296 0 6	
Nelson	63	4 4 0	39	2 18 6	394	23 16 6	54	3 3 0	54	3 3 0	524	32 6 0	487	29 18 0	1,011	62 4 0	
New Plymouth	3	0 4 6	..	..	314	18 1 0	175	11 9 6	172	11 5 0	534	32 19 6	486	29 6 0	1,020	62 5 6	
Oamaru	..	..	..	..	31	1 14 6	..	..	..	..	31	1 14 6	32	1 16 0	63	3 10 6	
Onehunga	17	1 5 6	17	1 5 6	23	1 10 0	..	..	..	..	60	4 4 0	40	2 15 6	100	6 19 6	
Patea	..	..	..	..	492	31 5 0	..	..	..	..	504	32 3 0	492	31 5 0	996	63 8 0	
Pieton	12	0 18 0	11	0 16 6	45	2 8 6	..	..	..	..	56	2 17 0	45	2 8 6	101	5 5 6	
Poverty Bay	8	0 12 0	68	5 2 0	146	9 9 6	..	..	..	..	24	1 16 0	21	1 11 6	45	3 7 6	
Tauranga	..	..	..	..	..	..	..	..	..	..	194	12 16 0	214	14 11 6	408	27 7 6	
Thames	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Timaru	55	4 2 6	27	2 0 6	8	0 12 0	..	..	..	..	9	0 13 6	8	0 12 0	17	1 5 6	
Waiau	..	..	..	..	38	2 17 0	..	..	..	..	137	10 5 6	65	4 17 6	202	15 3 0	
Waikanae	..	..	..	..	22	1 13 0	..	..	..	..	19	1 8 6	22	1 13 0	41	3 1 6	
Wairua	..	..	..	..	8	0 12 0	..	..	..	..	10	0 15 0	8	0 12 0	18	1 7 0	
Wairua	..	..	..	..	168	10 7 6	..	..	..	..	208	13 6 0	175	10 18 0	383	24 4 0	
Wanganui	9	0 13 6	7	0 10 6	4,905	332 5 0	..	..	..	..	6,930	453 18 6	7,152	478 13 6	14,082	932 12 0	
Wellington	2,127	136 7 0	2,247	146 8 6	104	7 12 6	..	..	..	..	184	12 8 6	157	11 12 0	341	24 0 6	
Westport	51	3 16 6	53	3 19 6	41	3 1 6	..	..	..	..	41	3 1 6	41	3 1 6	82	6 3 0	
Whangarei	..	..	..	..	1	0 1 6	..	..	..	..	1	0 1 6	..	..	1	0 1 6	
Whangaparapara	..	..	..	..	7	0 10 6	..	..	..	..	7	0 10 6	6	0 9 0	13	0 19 6	
Totals	7,029	509 3 6	6,901	498 6 0	12,775	858 9 0	694	42 17 6	702	43 10 6	20,554	1,401 11 6	20,378	1,400 5 6	40,932	2,801 17 0	



RETURN OF MASTERS, MATES, AND ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE  
ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Alexander Pyper .. .. .	First mate, steam ..	Foreign trade ..	26 April, 1912 ..	1153
Thomas James Skye .. .. .	Master .. .. .	" .. .. .	15 May, .. .. .	1017
Enersley Albert John Eden .. .. .	First mate, steam ..	" .. .. .	15 .. .. .	1158
Alexander Watchlin .. .. .	Master .. .. .	" .. .. .	25 .. .. .	1159
Duncan Cameron .. .. .	First mate .. .. .	" .. .. .	1 June, .. .. .	1160
Peter Stanley Peterson .. .. .	Master .. .. .	" .. .. .	5 .. .. .	1161
Arthur Lovat Fraser .. .. .	First mate .. .. .	" .. .. .	29 .. .. .	1118
Walter Frederick Suckling .. .. .	" .. .. .	" .. .. .	12 July, .. .. .	1113
Hugh Morrison .. .. .	Second mate, steam ..	" .. .. .	29 .. .. .	1162
Vernon Joseph Hay .. .. .	Second mate .. .. .	" .. .. .	6 Aug., .. .. .	1163
Charles James Townsend Hatfield .. .. .	First mate .. .. .	" .. .. .	14 .. .. .	1117
Percy Edwin White .. .. .	First mate, steam ..	" .. .. .	22 .. .. .	1164
Thomas Clarkson Sawyers .. .. .	" .. .. .	" .. .. .	22 .. .. .	1165
Gordon Archibald Grey .. .. .	First mate .. .. .	" .. .. .	29 .. .. .	1139
Christopher Bajohr .. .. .	Second mate .. .. .	" .. .. .	4 Sept., .. .. .	1166
Selwyn Athol Chatfield .. .. .	First mate .. .. .	" .. .. .	10 .. .. .	1128
Walter William Fish .. .. .	" .. .. .	" .. .. .	27 .. .. .	1167
Donald McDonald .. .. .	First mate, steam ..	" .. .. .	9 Oct., .. .. .	1131
Henry Roger Moag-Levy .. .. .	Second mate, steam ..	" .. .. .	9 .. .. .	1168
Lewin Kingdon .. .. .	First mate .. .. .	" .. .. .	31 .. .. .	1169
George Madden .. .. .	Second mate .. .. .	" .. .. .	31 .. .. .	1170
William Jarvie .. .. .	First mate .. .. .	" .. .. .	31 .. .. .	1127
Noel Buxton .. .. .	Second mate .. .. .	" .. .. .	7 Nov., .. .. .	1171
George Benjamin Corby .. .. .	First mate .. .. .	" .. .. .	7 .. .. .	1172
Ross Clark .. .. .	" .. .. .	" .. .. .	7 .. .. .	1119
Edward Herbert Athol Scales .. .. .	Master .. .. .	" .. .. .	7 .. .. .	1173
Charles Christopher Bullock .. .. .	First mate .. .. .	" .. .. .	21 .. .. .	1174
Joseph William Cameron .. .. .	First mate, steam ..	" .. .. .	25 .. .. .	1107
Frederick Arthur Clark .. .. .	First mate .. .. .	" .. .. .	25 .. .. .	1175
George McDonald .. .. .	" .. .. .	" .. .. .	25 .. .. .	1125
Archie Howard Brooks .. .. .	Master .. .. .	" .. .. .	5 Dec., .. .. .	1060
Reginald Henry Baigent .. .. .	Second mate .. .. .	" .. .. .	17 .. .. .	1176
Norman Berthold Wily Haszard .. .. .	" .. .. .	" .. .. .	17 .. .. .	1177
Alexander Trelss Adam .. .. .	" .. .. .	" .. .. .	17 .. .. .	1178
Victor Gordon Webb .. .. .	Master .. .. .	" .. .. .	17 .. .. .	1179
Andrew Granville Manners Christie .. .. .	Second mate .. .. .	" .. .. .	17 .. .. .	1180
William Mervyn Fry .. .. .	" .. .. .	" .. .. .	17 .. .. .	1181
Everard John McClellan .. .. .	" .. .. .	" .. .. .	30 .. .. .	1182
Justin Victor Bray .. .. .	First mate .. .. .	" .. .. .	30 .. .. .	1183
Jeremiah Aylmer Bunting .. .. .	Second mate .. .. .	" .. .. .	30 .. .. .	1184
Sidney Charles Levack .. .. .	Master, steam .. .. .	" .. .. .	30 .. .. .	1185
Errol Albert Peters .. .. .	Second mate .. .. .	" .. .. .	14 Jan., 1913 ..	1186
Charles Keefe .. .. .	Master, steam .. .. .	" .. .. .	14 .. .. .	1187
John Stewart Gilchrist Reid .. .. .	Master .. .. .	" .. .. .	27 .. .. .	1123
William Whitefield .. .. .	Second mate .. .. .	" .. .. .	4 Feb., .. .. .	1188
John Watson .. .. .	Second mate, steam ..	" .. .. .	5 .. .. .	1189
Percy Harold King .. .. .	First mate, steam ..	" .. .. .	17 .. .. .	1190
Alfred Joseph Tointon .. .. .	Master .. .. .	" .. .. .	18 .. .. .	1049
William Albert Entwisle .. .. .	Second mate .. .. .	" .. .. .	25 Mar., .. .. .	1191
Eric Carlisle Sarginson .. .. .	" .. .. .	" .. .. .	25 .. .. .	1192
Walter Gordon Wilson Millard .. .. .	" .. .. .	" .. .. .	25 .. .. .	1193
Alexander Pert .. .. .	Master .. .. .	Home trade ..	15 April, 1912 ..	5720
David Robertson .. .. .	" .. .. .	" .. .. .	15 May, .. .. .	5721
George Gordon Sang .. .. .	Mate .. .. .	" .. .. .	15 .. .. .	5722
Robert Carnachan .. .. .	" .. .. .	" .. .. .	15 .. .. .	5723
Roland Champion Somerville .. .. .	Master .. .. .	" .. .. .	15 .. .. .	5687
Percival Norman West .. .. .	Mate .. .. .	" .. .. .	10 June, .. .. .	5724
Frederick Alfred Brock .. .. .	" .. .. .	" .. .. .	10 .. .. .	5725
William Edward Sinnott .. .. .	Master .. .. .	" .. .. .	18 .. .. .	5726
Henry Moag-Levy .. .. .	Mate .. .. .	" .. .. .	28 .. .. .	5727
Olaf Jacobsen .. .. .	" .. .. .	" .. .. .	3 July, .. .. .	5728
Max Pierotti .. .. .	Master .. .. .	" .. .. .	8 .. .. .	5506
Henry d'Little Joynt .. .. .	" .. .. .	" .. .. .	8 .. .. .	5729
James Smith .. .. .	" .. .. .	" .. .. .	8 .. .. .	5544
Richard John Knaggs .. .. .	Mate .. .. .	" .. .. .	12 .. .. .	5730
Edward Henry .. .. .	Master .. .. .	" .. .. .	6 Aug., .. .. .	5677
David Simon Davies .. .. .	" .. .. .	" .. .. .	23 .. .. .	5731
Percy Edwin White .. .. .	" .. .. .	" .. .. .	28 .. .. .	5732
Henry Mitchell .. .. .	Mate .. .. .	" .. .. .	28 .. .. .	5733
William Hardie Stevens .. .. .	" .. .. .	" .. .. .	4 Sept., .. .. .	5734
Roderick McKinnon .. .. .	Master .. .. .	" .. .. .	6 .. .. .	5668
Thomas Alcock Farey .. .. .	" .. .. .	" .. .. .	12 .. .. .	5735
John Howick .. .. .	Mate .. .. .	" .. .. .	18 .. .. .	5736
Victor Emanuel Johansen .. .. .	Master .. .. .	" .. .. .	27 .. .. .	5653
Wilbert Stanley Clark .. .. .	" .. .. .	" .. .. .	27 .. .. .	5678
Stanley Percival Martin .. .. .	" .. .. .	" .. .. .	27 .. .. .	5685
Thomas Donovan .. .. .	" .. .. .	" .. .. .	27 .. .. .	5737
Antoine Du Rhone .. .. .	Mate .. .. .	" .. .. .	2 Oct., .. .. .	5738
Isaac William Jalfon .. .. .	" .. .. .	" .. .. .	2 .. .. .	5739
Herbert Spencer Thomas .. .. .	Master .. .. .	" .. .. .	7 Nov., .. .. .	5740
James Robertson Eadie .. .. .	" .. .. .	" .. .. .	21 .. .. .	5741
Harold Brown Grant .. .. .	Mate .. .. .	" .. .. .	21 .. .. .	5742
Carl Sevrin Larsen .. .. .	Master .. .. .	" .. .. .	21 .. .. .	5622
William Henry Roberts .. .. .	Mate .. .. .	" .. .. .	5 Dec., .. .. .	5743
John Rae .. .. .	Master .. .. .	" .. .. .	17 .. .. .	5744

RETURN OF MASTERS, MATES, AND ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913—*continued.*

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Thomas St. Helliers Eaddy	Master	Home trade	30 Dec., 1912	5625
Henry Alexander Anderson	"	"	30 " "	5703
James Lawrence	Mate	"	14 Jan., 1913	5745
Frederick William Roberts	"	"	14 " "	5746
John Eric Bergquist	Master	"	18 Feb., "	5705
Archibald Robertson	Mate	"	26 " "	5747
George Stanley Evans	Master	River steamer	4 April, 1912	3610
Alfred Charles Hansen	"	"	15 May, "	3611
George Adam Emirali	"	"	15 " "	3612
William Thomas Bloy	"	"	25 " "	3613
Norman Guptill	"	"	25 " "	3614
John Dalton	"	"	27 " "	3615
Joseph Stewart	"	"	10 June, "	3616
Frederick Charles Bradney	"	"	29 July, "	3617
Thomas Henry Freeth	"	"	29 " "	3618
William Charles Gentry	"	"	21 Aug., "	3619
John Grubb Munro	"	"	23 " "	3620
John Crawford McBride	"	"	23 " "	3621
John Spilsbury	"	"	29 " "	3622
Benjamin Blakemore	"	"	4 Sept., "	3623
Charles Henry Hucker	"	"	6 " "	3624
Russell Erskine	"	"	27 " "	3625
Walter Hadwen	"	"	9 Oct., "	3626
James Perry	"	"	9 " "	3627
William Henry Crocker	"	"	9 " "	3628
William Smith McPherson	"	"	31 " "	3629
William Harry Smith	"	"	21 Nov., "	3630
George Gathshore Moir	"	"	21 " "	3631
William Lewis Kingston Bishop	"	"	5 Dec., "	3632
Charles Duston	"	"	5 " "	3633
Joseph Muhlegger	"	"	5 " "	3634
Charles Herbert Scopes	"	"	17 " "	3635
John Nicholas Carwood	"	"	17 " "	3636
Knud William Julius Larsen	"	"	30 " "	3637
George Albert Dove Dixon	"	"	20 Jan., 1913	3638
Thomas Redmond Luckie	"	"	28 " "	3639
William John Jones	"	"	4 Feb., "	3640
Edward Albert Morrow	"	"	8 Mar., "	3641
Augustus Herbert Tonkinson	"	"	10 " "	3642
Edward Hurd Kennedy	"	"	25 " "	3643
Robert Carnahan	"	Fishing - boat, or cargo-vessel under 25 tons register	15 April, 1912	56
Thomas James Eaddy	"	Ditto	15 May, "	57
Alfred William Douglas Meiklejohn	"	"	18 June, "	58
George William Roff	"	"	8 July, "	59
Edward Dahlsen Christiansen	"	"	23 Aug., "	60
Isaac William Jalfon	"	"	29 " "	61
Ernst Otto Rumpfer	"	Sailing - vessel in harbours or rivers	10 May, "	1
Nils Ivar Lamberg	"	Ditto	13 " "	2
Duncan Gillies	"	"	26 Feb., 1913	3
John William Crombie	3rd-class engineer	Foreign trade	1 April, 1912	1481
William Sidney Hall	1st-class engineer	"	15 " "	670
William George Thomson	"	"	15 " "	933
Charles James McPherson	"	"	15 " "	701
David William Bennie	"	"	15 " "	924
Albert Rutherford Douglas	3rd-class engineer	"	15 " "	1482
James Alexander Thomson	"	"	15 " "	1483
Gordon George Lunn	"	"	15 " "	1484
Alfred Duncan Shearer	"	"	15 " "	1485
Arthur Wilkinson Bagley	"	"	15 " "	1486
Cecil Stuart Richardson	2nd-class engineer	"	13 May, "	1227
Angus Macdonald	"	"	10 " "	1146
James Oswald Penman	"	"	10 " "	1165
Lewis Vincent Gully	3rd-class engineer	"	13 " "	1487
Alexander Lang	1st-class engineer	"	10 " "	1064
James Alexander Melville Carnahan	3rd-class engineer	"	10 " "	1488
Edward Ross	"	"	10 " "	1489
Benjamin Percy Dawson	"	"	10 " "	1490
William Arthur Martin	"	"	10 " "	1491
Philip Stanley Ring Horne	"	"	10 " "	1492
Thomas Ralph Noble	"	"	13 " "	1493
Fritz Falava Kronfeld	2nd-class engineer	"	10 June, "	1330
Robert Graham	"	"	10 " "	1145
Reginald Aubrey Lewis	"	"	10 " "	1260
William Henry Coates	3rd-class engineer	"	10 " "	1494
Kevin Bartholomew Garvey	"	"	10 " "	1495
Douglas Gordon Jack	"	"	10 " "	1496
Louis Foster McDonald	"	"	10 " "	1497
James Power	"	"	10 " "	1498
Leslie Victor Smith	"	"	10 " "	1499
Gordon Everard Dickey	2nd-class engineer	"	28 " "	1290
Horace Alexander Bower	1st-class engineer	"	28 " "	1015
Lorne Murphy	"	"	28 " "	829

RETURN OF MASTERS, MATES, AND ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Hersey Derwent John Turner	3rd-class engineer	Foreign trade	28 June, 1912	1500
Orlando Lovel Nahr	"	"	28 " "	1501
William Albert John Marris	"	"	28 " "	1502
Cromwell Spencer Tewsley	"	"	28 " "	1503
Hugh Lewis	"	"	8 July, "	1504
Eric Aubrey Mosley	"	"	8 " "	1505
Walter Geoffrey Thomas	"	"	8 " "	1506
William Wallace Maogregor	"	"	8 " "	1507
Alexander Stuart Ewan	1st-class engineer	"	12 " "	1036
Ernest Wilson Mackley	"	"	12 " "	1508
Joseph Edmond Hamer	"	"	12 " "	1151
Ivo Roydon Gilmour	"	"	12 " "	867
Clement Canty Richardson	3rd-class engineer	"	29 " "	1509
Elliott Fleming	"	"	29 " "	1510
Griffith Fitz Howell Jones	"	"	6 Aug., "	1511
William Henry Claude Monaghan	"	"	6 " "	1512
Edward William Scott	"	"	6 " "	1513
Donald David Matheson	"	"	6 " "	1514
Wilson Campbell	"	"	6 " "	1515
Cecil Thomas Berwick Le Grys	"	"	6 " "	1516
Alexander Smith	1st-class engineer	"	14 " "	968
James William Wheatley	"	"	14 " "	1009
Francis Onslow Morath	2nd-class engineer	"	14 " "	1245
Bertram William Gandell	"	"	14 " "	1341
Morris De Camp Ranson	3rd-class engineer	"	14 " "	1517
Richard Stanley Maunder	"	"	14 " "	1518
James Charles Gray	"	"	14 " "	1519
William Frederick Herbert Lamborn	"	"	14 " "	1520
George Luke	1st-class engineer	"	2 Sept., "	870
Alexander Cable	3rd-class engineer	"	2 " "	1521
Leslie Gordon Ring	2nd-class engineer	"	4 " "	1342
Vincent Maplesden	3rd-class engineer	"	9 " "	1522
Cecil Nicholson Willis	1st-class engineer	"	9 " "	838
Arthur Edward Victor Evans	3rd-class engineer	"	12 " "	1523
Oscar Hugh Wright	"	"	12 " "	1524
Leonard Edgar Gillett	"	"	12 " "	1525
Malcolm Campbell	"	"	12 " "	1526
Duncan William Palmer	"	"	12 " "	1527
William Gibson Stevenson	"	"	12 " "	1528
George Watson Fraser	"	"	12 " "	1529
William Frank Pegler	"	"	12 " "	1530
Edwin Robinson Gibbons	"	"	12 " "	1531
David William Vaughan	"	"	12 " "	1532
Leslie Claude Davies	1st-class engineer	"	12 " "	633
Walter Somerville	2nd-class engineer	"	18 " "	1161
James Arthur Robinson Scott	"	"	3 Oct., "	1369
Harold Boyd	1st-class engineer	"	14 " "	1012
William Henry Young	2nd-class engineer	"	14 " "	1300
Alexander Hugh Ross	3rd-class engineer	"	14 " "	1533
Archibald Walker, jun.	"	"	14 " "	1534
Lionel Stanhope Dawson	1st-class engineer	"	14 " "	997
John Egerton Langdon	3rd-class engineer	"	14 " "	1535
Bernard James Rasmussen	"	"	14 " "	1536
Hubert Loveland Munson	"	"	14 " "	1537
Charles Broadley	1st-class engineer	"	31 " "	783
Henry James Stratford Johnson	"	"	31 " "	1056
Albert Edward William Scully	3rd-class engineer	"	31 " "	1538
Leopold Herbert Claude Paterson	"	"	21 Nov., "	1539
Leigh Easton Baxter	2nd-class engineer	"	21 " "	1381
Joseph Frank McPherson	"	"	21 " "	1121
John Le Cren Morgan	3rd-class engineer	"	21 " "	1540
Arthur Brown	"	"	21 " "	1541
Oscar Christian David Lundius	"	"	21 " "	1542
William Vallance Rowan	"	"	21 " "	1543
Gordon Morgan	"	"	21 " "	1544
Frank McCalman	"	"	21 " "	1545
George Robert Falla	1st-class engineer	"	25 " "	777
George Frank Banfield	2nd-class engineer	"	5 Dec., "	1296
Charles Henry Harris	"	"	17 " "	1207
Frank Harold James	3rd-class engineer	"	17 " "	1546
Charles Thomas Stewart	1st-class engineer	"	30 " "	1024
Gerald Geoffrey Potts	"	"	30 " "	1404
William Peterson	"	"	30 " "	601
John McLeish Maxwell	"	"	30 " "	825
Horace Park Matheson	2nd-class engineer	"	30 " "	1388
Frank Bernard Williams	"	"	30 " "	1390
Benjamin Dennitts Smith	"	"	30 " "	1160
James Wallace Clark	3rd-class engineer	"	30 " "	1547
William Gillies	"	"	30 " "	1548
Reginald Victor Hurley	"	"	30 " "	1549
Ernest McCallum	"	"	30 " "	1550
George Henry Sharp	"	"	30 " "	1551
David Finlayson MacDonald	"	"	30 " "	1552
Norman Rivers Kitching	"	"	30 " "	1553

RETURN OF MASTERS, MATES, AND ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE  
ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913—*continued.*

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Wathen Wallace Houghton	1st-class engineer	Foreign trade	27 Jan., 1913	859
Alexander Inglis Clark	"	"	27 " " "	1554
Edward Charles Roi Young	2nd-class engineer	"	27 " " "	1267
John Oliver Cooper	3rd-class engineer	"	27 " " "	1555
William Perry Okey	"	"	27 " " "	1556
Ernest Edward Jones	"	"	27 " " "	1557
Frederick Charles McLeod	"	"	27 " " "	1558
Roy Ernest William Fordham	"	"	27 " " "	1559
Percy William Rickards	"	"	27 " " "	1560
Gordon Louis Ansenne	"	"	27 " " "	1561
Charles Field Goldsbro	"	"	27 " " "	1562
Allan Ramsay Wilson	"	"	27 " " "	1563
Arthur Ballington Daniel	1st-class engineer	"	27 " " "	1033
Francis Percival Hewitt	"	"	28 " " "	1091
Randall Robert Parker	3rd-class engineer	"	5 Feb., " "	1564
Arthur George Rogerson	2nd-class engineer	"	6 " " "	1398
John Athol Nicol	1st-class engineer	"	12 " " "	922
Frank Mowatt	2nd-class engineer	"	12 " " "	1348
Ralph Beaufoy	"	"	12 " " "	1405
John Alexander Urquhart	"	"	12 " " "	1196
William Thomas	"	"	12 " " "	1200
Frederick John Dobson	3rd-class engineer	"	12 " " "	1565
William Alfred Henry Scott	"	"	12 " " "	1566
John Joseph Flaherty	"	"	12 " " "	1567
James John Minehan	"	"	12 " " "	1568
Michael O'Sullivan	"	"	12 " " "	1569
Robert Henry Gerrie	"	"	12 " " "	1570
Thomas Robin Morgan	"	"	12 " " "	1571
William Francis Aonui Dennan	"	"	12 " " "	1572
Ernest Carlton Hall	"	"	12 " " "	1573
William Byers Stanley Sealy	2nd-class engineer	"	12 " " "	1418
Sydney Herbert Wynne	3rd-class engineer	"	12 " " "	1574
Leslie George Wilkinson	"	"	12 " " "	1575
Frederick Burnell	Engineer	River trade	13 May, " "	2175
Charles Albert Cook	"	"	13 " " "	2176
Andrew Munro	"	"	13 " " "	2177
John Penman Newby	"	"	13 " " "	2178
Robert O'Neil	"	"	13 " " "	2179
Alfred Clarke	"	"	13 " " "	2180
John James	"	"	13 " " "	2181
Albert John Jensen	"	"	13 " " "	2182
John McDonald	"	"	13 " " "	2183
Kenneth Kennedy	"	"	13 " " "	2184
Alister Harvey Robert Hunt	"	"	13 " " "	2185
Frank Harris	"	"	13 " " "	2186
James Edward Brown	"	"	14 Oct., 1912	2187
Arthur Forbes Murray	"	"	14 " " "	2188
Cyril Probyn Berridge	"	"	27 Jan., 1913	2189
Arthur Drummond	"	"	27 " " "	2190
John Dyer	"	"	12 Feb., " "	2191
Robert Gibb	Marine engine-driver	"	25 May, 1912	151
Arthur Edward Lockwood	"	"	2 Oct., " "	152
Arthur Burrows	"	"	27 Jan., 1913	153
Charles Edwin Nicholson	1st-class oil engineer	Sea-going	15 May, 1912	147
Fræderick Burnell	2nd-class oil engineer	"	15 " " "	188
Michael Tants	"	"	25 " " "	189
Robert John Murray	"	"	6 Aug., " "	190
Edward Stanford Hibbard	1st-class oil engineer	"	3 Oct., " "	191
Charles James Roberts	2nd-class oil engineer	"	9 " " "	192
Herbert Garnet Luke	1st-class oil engineer	"	14 " " "	124
Robert George Huggins	"	"	14 " " "	193
William Roxburgh Eadie	"	"	17 Dec., " "	120
William Little	2nd-class oil engineer	"	30 " " "	194
James Ambrose Lawler	"	"	27 Jan., 1913	195
John Thomas Clark	"	"	27 " " "	196
Alexander Kennedy	1st-class oil engineer	"	12 Feb., " "	197
Charles Henry Bowman	River oil engineer	River trade	13 May, 1912	242
Frank Battenbury Britton	"	"	13 " " "	243
Leonard George Walker	"	"	13 " " "	244
John Melville	"	"	13 " " "	246
Thomas Henry Flavell	"	"	13 " " "	247
Trevor McLeod	"	"	13 " " "	248
Daniel McCurdy	"	"	13 " " "	249
George Walter Swan	"	"	13 " " "	250
Louis Lovell Blanche	"	"	13 " " "	251
John Christian Berg	"	"	10 June, " "	252
Edgar Hastings Cambridge	"	"	18 " " "	253
Frederick Samuel William Wyatt	"	"	28 " " "	254
Gunther Laage	"	"	28 " " "	255
Carl Eliel Carson	"	"	28 " " "	256
Leonard Charles McAllister	"	"	8 July, " "	257
John Thomas Pegley	"	"	8 " " "	258
Richard Bettridge	"	"	29 " " "	259
William Harawira Armstrong	"	"	6 Aug., " "	260
Edward Withers	"	"	14 " " "	261
John Devoy Ballantyne	"	"	14 " " "	262

RETURN OF MASTERS, MATES, AND ENGINEERS TO WHOM CERTIFICATES OF COMPETENCY WERE  
ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913—*continued.*

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Arthur Edward Forbes	River oil engineer..	River trade	14 Aug., 1912 ..	263
John Fitzgerald	"	"	4 Sept., " ..	264
John Thomas Wade	"	"	12 " " ..	265
Charles Samuel Marks	"	"	12 " " ..	266
Harry Marsh	"	"	12 " " ..	267
William John Stewart	"	"	12 " " ..	268
Edward Thomas Lamb	"	"	12 " " ..	269
Allan Glass	"	"	12 " " ..	270
Harold Abel Partridge	"	"	12 " " ..	271
William Brown Glover	"	"	12 " " ..	272
Herbert Hannam	"	"	12 " " ..	273
David Moran	"	"	12 " " ..	274
Henry James Sharland	"	"	12 " " ..	275
Thomas Norman Brocas	"	"	12 " " ..	276
Harold Norman Brocas	"	"	12 " " ..	277
Thomas William Baker	"	"	12 " " ..	278
John Jackson Ogle	"	"	12 " " ..	279
Charles Northwood	"	"	12 " " ..	280
Arthur Ellesmere Grover	"	"	12 " " ..	281
Henry William Coxhead Sharland	"	"	12 " " ..	282
Charles Herbert Eyes	"	"	12 " " ..	283
Gerald John Lane	"	"	12 " " ..	284
Richard Howard	"	"	12 " " ..	285
Richard Alfred Northwood	"	"	12 " " ..	286
Sydney John Cooper	"	"	12 " " ..	287
William Henry Edgell	"	"	12 " " ..	288
Frederick Andrew Lees	"	"	12 " " ..	289
Leonard Morton Hartley Cheriton	"	"	12 " " ..	290
Reginald Hawkins	"	"	12 " " ..	291
John James Beazley	"	"	12 " " ..	292
Herbert Charles Harris	"	"	12 " " ..	293
Robert Hugh Harris	"	"	12 " " ..	294
Joseph Fell	"	"	12 " " ..	295
Harry Blundell	"	"	12 " " ..	296
James Munro	"	"	12 " " ..	297
Charles Eyes	"	"	12 " " ..	298
Carl Schrader	"	"	12 " " ..	299
William Henry Cawne Warren	"	"	12 " " ..	300
Dawson Grover	"	"	12 " " ..	301
Albert Josephus Craig	"	"	12 " " ..	302
John Bernard Andrews	"	"	12 " " ..	303
James William Silcock	"	"	12 " " ..	304
Murdo Stewart	"	"	9 Oct., " ..	305
Henry Angus Nicholson	"	"	14 " " ..	306
Herbert Pasquale Clarke	"	"	31 " " ..	307
Henry William Walker	"	"	31 " " ..	308
Thomas Henry Walker	"	"	31 " " ..	309
John Leslie Crane	"	"	31 " " ..	310
Frederick Kukutai	"	"	21 Nov., " ..	311
Heywood Armstrong	"	"	21 " " ..	312
Samuel Ure	"	"	21 " " ..	313
William Knarston	"	"	25 " " ..	314
Alfred Elliott Knarston	"	"	25 " " ..	315
Herbert Halliwell	"	"	25 " " ..	316
Henry Archibald Williams	"	"	25 " " ..	317
Hedley James Hirst	"	"	25 " " ..	318
Frederick Solloway Lane	"	"	25 " " ..	319
James Stuart Hallahan	"	"	25 " " ..	320
Edward Thomas Stone	"	"	25 " " ..	321
Albert John Craig	"	"	25 " " ..	322
Ernest Walter Baker	"	"	25 " " ..	323
Alfred Thorne Banks	"	"	25 " " ..	324
Frederick Allan Parry	"	"	25 " " ..	325
Frederick Harold Denham	"	"	25 " " ..	326
Charles William Sundstrum	"	"	25 " " ..	327
Augustus Herbert Tonkinson	"	"	25 " " ..	328
John Alfred Hansen	"	"	25 " " ..	329
George Ogle, jun.	"	"	25 " " ..	330
William James Irwin	"	"	25 " " ..	331
Arthur Percy Haslam	"	"	25 " " ..	332
Walter Dyer	"	"	25 " " ..	333
Arthur Miles Herriott	"	"	25 " " ..	334
Leonard Arbour Brown	"	"	25 " " ..	335
George Tinsley Thompson	"	"	25 " " ..	336
Joseph Brookes	"	"	25 " " ..	337
Edgar John Waite	"	"	25 " " ..	338
Norman Richard Harris	"	"	25 " " ..	339
William Ernest John Harvey	"	"	25 " " ..	340
Frank Lockwood Clayton	"	"	25 " " ..	341
William Daniels	"	"	25 " " ..	342
William Langdon	"	"	25 " " ..	343
Albert William Redmond Beecroft	"	"	25 " " ..	344
Wilmot Armstrong	"	"	25 " " ..	345
Richard Woodgate Fuzzle	"	"	25 " " ..	346
Theodore Montague Brogman	"	"	25 " " ..	347

RETURN SHOWING THE NUMBER OF MASTERS', MATES', AND ENGINEERS' EXAMINATIONS IN NEW ZEALAND DURING THE YEAR ENDED THE 31ST MARCH, 1913, SHOWING THE NUMBER OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES.

Class of Certificate.	Auckland.			Wellington.			Lyttelton.			Dunedin.			Other Places.			Totals.		
	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign-going masters and mates	16	19	35	17	20	37	15	14	29	3	1	4	..	..	..	51	54	105
Home-trade masters and mates	23	15	38	9	3	12	4	6	10	4	2	6	..	..	..	40	26	66
River-steamer masters ..	13	4	17	4	2	6	1	..	1	9	3	12	7	1	8	34	10	44
Master, fishing-boat or cargo-vessel under 25 tons register	6	1	7	..	..	..	..	..	..	..	..	..	..	..	..	6	1	7
Master, sailing-vessel plying in harbours and rivers	..	..	..	..	..	..	..	..	..	..	..	..	3	1	4	3	1	4
Sea-going engineers (steam) ..	41	9	50	39	13	52	12	1	13	31	5	36	27	7	34	150	35	185
River-steamer engineers ..	8	4	12	3	1	4	1	..	1	1	..	1	4	5	9	17	10	27
Marine engine-drivers ..	2	..	2	1	..	1	..	..	..	..	..	..	..	1	1	3	1	4
Sea-going engineers (mechanical power other than steam)	4	2	6	3	..	3	..	..	..	1	..	1	5	..	5	13	2	15
River engineers (mechanical power other than steam)	49	3	52	..	..	..	4	..	4	4	..	4	48	8	56	105	11	116
Totals ..	162	57	219	76	39	115	37	21	58	53	11	64	94	23	117	422	151	573

RETURN OF CERTIFICATES OF SERVICE AS MASTERS OF OIL-ENGINE VESSELS NOT EXCEEDING SIX TONS REGISTER ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Person.	Date of Issue.	Class of Certificate.	No. of Certificate.
John Nobilo ..	May 21, 1912	Restricted limits ..	3944
Charles Edwin McCarthy ..	August 27, ..	..	3945

RETURN OF CERTIFICATES OF SERVICE AS ENGINEERS ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Person.	Date of Issue.	Class of Certificate.	No. of Certificate.	
	1912.			
John Nobilo ..	May 21	Restricted limits	1842	Oil-engine vessel.
Victor Sjolund ..	July 8	..	1843	..
Charles Edwin McCarthy ..	August 27	..	1844	..
James Lane ..	Nov. 21	1st-class steam	1845	Foreign trade.

RETURN OF CERTIFICATES OF EXEMPTION FROM EXAMINATION AS THIRD-CLASS ENGINEERS ISSUED DURING THE YEAR ENDED 31ST MARCH, 1913.

Date of Issue.	Name.	Date of Issue.	Name.
19 April, 1912 ..	William Leonard Parker.	24 April, 1913..	William Edward Joseph Greaney.
9 July, " ..	Frederick Noel Hamilton Beamish.	" " ..	Clive Alfred Fraser.
14 Sept., " ..	Walter Evan Cookson.	" " ..	Robert Norman Biggs.
2 Dec., " ..	Roy Allan Strathallan Martin.		

RETURN OF LICENSES AS COLONIAL PILOTS ISSUED IN PURSUANCE OF SECTION 190 OF THE SHIPPING AND SEAMEN ACT, 1903, DURING THE YEAR ENDED 31ST MARCH, 1913.

No. of License.	Date of Issue.	Name of Licensee.	Port of Residence.	Date of Expiry of License.
43	10 Oct., 1912	Felix Black ..	Wellington ..	8 Oct., 1913.
41	20 Dec., "	Thomas Fernandez ..	Gisborne ..	18 Dec., "
45	9 April, 1913	John Grant ..	Onehunga ..	3 April, "

## RETURN OF LICENSED ADJUSTERS OF COMPASSES IN NEW ZEALAND.

Date of Issue.	Name of Licensee.	Address.
9 April, 1896	Frederick Macbeth .. .. .	Dunedin.
15 May, "	Robert Strang .. .. .	"
5 " "	George Urquhart Thomson .. .. .	"
27 April, 1897	Frederick William Cox .. .. .	Nelson.
27 May, "	Thomas Fernandez .. .. .	Auckland.
27 July, "	Robert Hatchwell .. .. .	Lyttelton.
1 Sept., "	Arthur G. Gifford .. .. .	Wellington.
13 Aug., 1898	Herbert John Richardson .. .. .	"
26 April, 1899	Robert Heddelston Neville .. .. .	"
26 June, 1900	Charles Frederick Sundstrum .. .. .	Dunedin.
27 July, "	John Adamson .. .. .	Auckland.
27 Nov., "	Thomas Basire .. .. .	Port Chalmers.
27 March, 1903	George Samuel Hooper .. .. .	Wellington.
19 Oct., "	John McLennon McKenzie .. .. .	"
1 Nov., 1906	Frederick Pryce Evans .. .. .	Dunedin.
6 Feb., 1907	David Todd .. .. .	"
22 " 1909	Norman Macdonald .. .. .	Bluff.
28 May, "	Charles Cornelius Plunket .. .. .	Auckland.
23 Oct., "	Robert Crawford .. .. .	Wellington.
24 May, 1910	John James Reeves .. .. .	Auckland.
19 June, 1911	Frederic George Cooper .. .. .	Wellington.
16 Nov., "	Major William Solloway Lane .. .. .	Totara North

TABLE showing the Number and Tonnage of Sailing and Steam Vessels which remained upon the Register of the Dominion of New Zealand on the 31st December, 1911; of those added to and deducted from the Register during the Year 1912; and of those remaining on the Register on the 31st December, 1912.

	Sailing Vessels.			Steam Vessels.			Totals.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Upon the Register on the 31st December, 1911 .. .. .	244	37,710	35,651	361	196,374	114,973	605	234,084	150,624
Added to the Register,—									
Vessels registered for the first time—									
Built at ports in United Kingdom .. .. .	..	..	..	7	13,084	7,300	7	13,084	7,300
Built at ports in British possessions .. .. .	4	101	55	13	1,565	895	17	1,666	950
Vessels transferred from ports in the United Kingdom .. .. .	..	..	..	1	2,833	1,830	1	2,833	1,830
Vessels transferred from ports in British possessions abroad .. .. .	3	858	792	3	1,573	794	6	2,431	1,586
Vessels purchased from Foreigners .. .. .	1	352	309	..	..	..	1	352	309
Vessels registered <i>de novo</i> .. .. .	1	50	45	2	82	46	3	132	91
Tonnage added in consequence of re-measurement or alteration .. .. .	..	2	..	..	..	..	..	2	..
Errors in previous returns .. .. .	2	845	752	..	..	..	2	845	752
Total added .. .. .	11	2,208	1,953	26	19,137	10,865	37	21,345	12,818
Deducted from the Register,—									
Vessels wrecked or otherwise lost .. .. .	2	126	109	3	1,214	782	5	1,340	891
Vessels broken up, decayed, &c. .. .. .	1	40	40	1	100	68	2	140	108
Vessels transferred to ports in British possessions abroad .. .. .	4	1,571	1,465	5	2,656	1,259	9	4,227	2,724
Vessels converted into hulks .. .. .	2	1,502	1,456	..	..	..	2	1,502	1,456
Vessels registered <i>de novo</i> .. .. .	2	75	71	1	50	43	3	125	114
Other vessels (registration cancelled as converted into fishing boats) .. .. .	2	44	44	..	..	..	2	44	44
Tonnage deducted in consequence of re-measurement or alteration .. .. .	..	2	55	..	96	71	..	98	126
Errors in previous returns .. .. .	..	..	56	3	2,508	1,843	3	2,508	1,899
Total deducted .. .. .	13	3,360	3,296	13	6,624	4,066	26	9,984	7,362
Remaining on Register on 31st December, 1912 .. .. .	242	36,558	34,308	374	208,887	121,772	616	245,445	156,080

TABLE showing the Number and Tonnage of the Registered Vessels (distinguishing Sailing from Steam) which belonged to each of the Ports of New Zealand on the 31st December, 1912.

Ports.	Sailing Vessels.			Steam Vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland .. .. .	146	11,156	9,925	165	20,675	10,972
Napier .. .. .	5	325	312	27	3,418	1,934
Wellington .. .. .	24	4,407	4,168	45	12,211	6,162
Nelson .. .. .	8	205	201	12	2,118	1,034
Lyttelton .. .. .	17	4,097	3,964	17	5,360	2,353
Timaru .. .. .	1	733	690	1	942	488
Dunedin .. .. .	39	15,263	14,704	96	163,005	98,278
Invercargill .. .. .	2	372	344	11	1,158	551
Totals .. .. .	242	36,558	34,308	374	208,887	121,772

TABLE showing, for the Year 1912, the Number and Tonnage of Registered Vessels (exclusive of River Steamers) of the Dominion of New Zealand which were employed wholly in the Home Trade, partly in the Home and partly in the Foreign Trade, respectively; and the Number of Men and Boys (exclusive of Masters) employed thereon.

Class of Vessels.	Under 50 Tons.		50 Tons and under 100.		100 Tons and under 200.		200 Tons and under 300.		300 Tons and under 400.		400 Tons and under 500.		500 Tons and under 600.		600 Tons and under 700.		700 Tons and under 800.		800 Tons and under 1,000.		1,000 Tons and under 1,200.		1,200 Tons and under 1,500.		1,500 Tons and under 2,000.		2,000 Tons and under 3,000.		3,000 Tons and over.		Totals.							
	Vessels.	Men and Boys.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.						
In the Home (Coastal) Trade only—																																						
Sailing ..	73	1,705	116	382,924	126	3,569	20	569	20	1	217	1	217	1	690	2	1,836	1	836	1	1,190	4	1,028	50	56,577	292	1,157	31	1,213	77	..	..	118	8,131	268			
Steam ..	91	2,148	342	493,489	336	273,982	368	2,009	161	62,260	75	62,738	166	21,023	24	31,955	86	53,648	139	21,752	49	1,028	50	56,577	292	1,157	31	1,213	77	..	..	208	36,408	2,196				
Totals ..	164	3,853	458	876,413	462	304,551	388	2,316	161	62,260	75	62,738	166	21,023	24	42,645	88	53,648	139	32,588	49	2,218	54	56,577	292	1,157	31	1,213	77	..	..	326	44,539	2,464				
Partly in the Home and partly in the Foreign Trade—																																						
Sailing ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Steam ..	1	44	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Totals ..	1	44	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
In the Foreign Trade only—																																						
Sailing ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Steam ..	2	59	12	53	4	623	30	3	746	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Totals ..	2	59	12	146	10	616	59	3	746	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Grand Totals..	167	3,956	479	926,796	497	375,638	454	13	3,062	188	72,584	88	94,101	229	31,592	38	106,522	185	64,433	142	8,717	211	5,655	137	141,814	596	915,740	388	10,252	397	94,983	520	52,557	395	1,307,894	4,983		



## DESCRIPTIVE RETURN OF NEW ZEALAND COASTAL LIGHTHOUSES.

Name of Lighthouse.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower built of	Dwellings built of	Date first lighted.
Cape Maria van Diemen	1st order dioptric	Revolving	1'	White .. ..	Timber	Timber	24 Mar., 1879
Cape Brett	1st order dioptric	Group flashing	*	Red, to show over Columbia Reef.	Iron ..	Timber	21 Feb., 1910
Mokohinou	1st "	Flashing	10"	White .. ..	Stone	"	18 June, 1888
Chicken Island (Marotiri)	Acetone-acetylene (unwatched)	"	Fl. $\frac{1}{2}$ " ecl. $3\frac{1}{2}$ "	" .. ..	Iron ..	"	28 April, 1913
Tiritiri	2nd order dioptric	Fixed ..	..	White, with red arc over Flat Rock	" ..	Timber	1 Jan., 1865
Ponui Passage	5th "	" ..	..	White and red ..	Timber	"	29 July, 1871
Cuvier Island	1st "	Revolving	30"	White .. ..	Iron ..	"	22 Sept., 1889
East Cape	2nd "	Flashing	10"	" .. ..	" ..	"	9 Aug., 1900
Portland Island	2nd "	Revolving	30"	" .. ..	Timber	"	10 Feb., 1878
Castle Point	2nd order dioptric	Group flashing	†	Red, to show over Bull Rock.	Iron ..	Timber	12 Jan., 1913
Cape Palliser	2nd "	Revolving	‡	White .. ..	" ..	"	27 Oct., 1897
Pencarrow Head	2nd "	Fixed ..	..	" .. ..	" ..	"	1 Jan., 1859
Cape Egmont	2nd "	" ..	..	" .. ..	" ..	"	1 Aug., 1881
Manukau Head	3rd "	" ..	..	" .. ..	Timber	"	1 Sept., 1874
Kaipara Head	2nd "	Flashing	10"	" .. ..	" ..	"	1 Dec., 1884
Brothers	2nd "	" ..	10"	" .. ..	" ..	"	24 Sept., 1877
Cape Campbell	2nd order dioptric	Revolving	1'	Red, to show over Cook Rock.	Iron ..	Timber	1 Aug., 1870
Godley Head	2nd "	Fixed ..	..	White .. ..	Stone	Stone	1 April, 1865
Akaroa Head	2nd "	Flashing	10"	" .. ..	Timber	Timber	1 Jan., 1880
Jack's Point	4th "	Fixed ..	..	" .. ..	Iron ..	"	1 July, 1904
Moeraki	3rd "	" ..	..	" .. ..	Timber	"	22 April, 1878
Taiaroa Head	3rd "	" ..	..	Red .. ..	Stone	Stone	2 Jan., 1865
Cape Saunders	2nd "	Revolving	1'	White .. ..	Timber	Timber	1 Jan., 1880
Nugget Point	1st "	Fixed ..	..	" .. ..	Stone	Stone	4 July, 1870
Waipapapa Point	2nd "	Flashing	10"	" .. ..	Timber	Timber	1 Jan., 1884
Dog Island	1st order catadioptric	Revolving	30"	" .. ..	Stone	Stone	1 Aug., 1865
Centre Island	1st order dioptric	Fixed ..	..	White, with red arcs over inshore dangers	Timber	Timber	16 Sept., 1878
Puysegur Point	1st "	Flashing	10"	White .. ..	" ..	"	1 Mar., 1879
Cape Foulwind	2nd "	Revolving	30"	" .. ..	" ..	"	1 Sept., 1876
Kahurangi Point	2nd "	Fixed ..	..	White, with red sector to show over Stewart Breaker	Iron ..	"	30 Nov., 1903
Farewell Spit	2nd "	Revolving	1'	White, with red arc over Spit end	" ..	"	17 June, 1870
Nelson	4th "	Fixed ..	..	White, with red arc to mark limit of anchorage	" ..	"	4 Aug., 1862
French Pass	6th "	" ..	..	Red and white, with white light on beacon	" ..	"	1 Oct., 1884
Stephens Island	1st "	Group flashing	*	White .. ..	" ..	"	29 Jan., 1894

\* Two flashes in quick succession every half-minute. † Three white flashes every forty-five seconds. ‡ Flashing twice every half-minute, with interval of three seconds between flashes.

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE ISSUED IN NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Admiral..	82	28	..	Compound	Screw	River	..	..	..	..	
Advance (A'kland)	12	8	..	Non-condensing	"	Extended river	..	..	..	..	
Advance (Hokianga)	3	7	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Advance II.	4	8	..	"	"	"	..	..	..	..	
A.H.B.	5	15	..	"	"	"	..	..	..	..	
Ahuriri ..	31	17	..	Compound	"	Extended river	..	..	..	..	
Ailoma ..	4	15	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	First survey.
Aio ..	5	20	..	"	Screw	"	..	..	..	..	
Airship ..	1	4	..	"	"	"	..	..	..	..	
Akaroa ..	29	28	102	Compound	"	Home trade ..	1	2	..	..	
Albatross (A'kland)	111	37	..	"	"	Extended river	..	..	..	..	
Albatross(H'kianga)	2	4	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Alert ..	5	15	..	"	"	"	..	..	..	..	
Alexander ..	185	72	339	Compound	Twin-screw	Home trade ..	4	3	..	..	
*Alexandra ..	5	15	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Alice ..	2	5	..	"	"	"	..	..	..	..	
All Black (Tairua)	4	17	..	"	"	"	..	..	..	..	
All Black, No. 1 ..	5	18	..	"	"	"	..	..	..	..	
All Black, No. 2 ..	4	12	..	"	"	"	..	..	..	..	
Alma ..	5	10	..	"	"	"	..	..	..	..	First survey.
Alva ..	4	10	..	"	"	"	..	..	..	..	
*Amy ..	2	5	..	"	"	"	..	..	..	..	
Anna ..	19	10	..	"	"	Home trade ..	1	..	..	..	Fishing.
Antrim ..	35	30	..	Condensing	"	River	..	..	..	..	
Aorere ..	49	16½	63	Compound	"	Home trade ..	2	1	..	..	
Aotea ..	157	33	..	"	"	River	..	..	..	..	
Apanui ..	135	28	208	Triple-expansion	"	Home trade ..	4	2	..	..	
Aparima ..	3,684	284	2,547	"	Twin-screw	Foreign trade	13	9	3	3	
Arahura ..	771	147	1,726	"	"	Home trade ..	7	6	3	3	
Arapawa ..	128	47	242	"	Screw	"	4	2	..	..	
*Arawa (Rotorua) ..	2	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Arawa (Port Under-wood)	5	10	..	"	"	"	..	..	..	..	
Ariadne ..	1	4	..	"	"	"	..	..	..	..	
Aroha ..	4	8	..	"	"	"	..	..	..	..	
Arrino ..	2	5	..	"	"	"	..	..	..	..	
Arumai ..	6	10	..	"	Twin-screw	"	..	..	..	..	First survey.
Atarua ..	2	8	..	"	"	"	..	..	..	..	
Atlas ..	2	10	..	"	"	"	..	..	..	..	
Atua (Dunedin) ..	1,895	329	2,617	Triple-expansion	"	Foreign trade	9	9	3	3	
*Atua (Stw't Island)	2	5	..	Oil-engine	Screw	Restricted limits	..	..	..	..	
Aupouri ..	220	55	402	Triple-expansion	"	Home trade ..	5	3	..	..	
Aurere ..	3	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Averil ..	3	6	..	"	"	"	..	..	..	..	
Awahou ..	151	74	298	Compound	Twin-screw	Home trade ..	4	3	..	..	
*Awaroa (Well'gton)	211	62	..	Triple-expansion	Screw	Extended river	..	..	..	..	
Awaroa (Rangiriri)	4	7	..	Oil-engines	"	Restricted limits	..	..	..	..	First survey.
Awarua ..	2	4½	..	Oil-engine	"	"	..	..	..	..	
*Baden Powell ..	72	30	199	Compound	"	Home trade ..	2	2	..	..	
Bader ..	3	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Baroona ..	79	24	184	Compound	"	Foreign trade	2	2	..	..	
Beldame ..	4	20	..	Oil-engine	"	Extended river	..	..	..	..	
*Bell Bird ..	52	14	..	Triple-expansion	"	River	..	..	..	..	
Belle ..	5	10	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Benares ..	2	4	..	"	"	River	..	..	..	..	
Ben Lomond ..	33	15	..	Compound	"	"	..	..	..	..	
Betsy Beard ..	10	40	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Betty ..	2	16	..	"	"	"	..	..	..	..	
Bittern ..	1	5	..	"	"	"	..	..	..	..	
Blenheim ..	85	50	220	Compound	"	Home trade ..	2	2	..	..	
Bletsoe ..	2	5	..	Oil-engine	"	River	..	..	..	..	
Breeze ..	286	84	454	Triple-expansion	"	Home trade ..	4	3	..	..	
Breta Tui ..	36	40	..	Oil-engine	"	River	..	..	..	..	
Britannia (A'kland)	108	40	..	Non-condensing	Paddle	"	..	..	..	..	
Britannia (Bluff) ..	10	2½	..	Oil-engine	Screw	Home trade ..	1	..	..	..	Fishing.
Brooklyn ..	2½	8	..	"	"	Restricted limits	..	..	..	..	
Campbell ..	6	20	..	"	"	"	..	..	..	..	First survey.
Canopus ..	835	250	1,138	Triple-expansion	"	Home trade ..	6	3	2	3	
*Canterbury ..	..	24	..	Non-condensing	Twin-screw	Extended river	..	..	..	..	
Canterbury ..	521	120	..	Compound	"	"	..	..	..	..	Dredge.
Cascade ..	11	70	..	Oil-engine	"	"	..	..	..	..	
Centaur ..	6	32	..	"	Screw	River	..	..	..	..	
Chelmsford ..	79	24	79	Compound	"	Home trade ..	2	1	..	..	
Clansman ..	379	99	566	"	"	"	5	3	..	..	
Claymore ..	119	54	366	Triple-expansion	"	"	4	3	..	..	
Clematis ..	3	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Clutha ..	96	24	..	Compound	Stern-paddle	River	..	..	..	..	

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.					Remarks.
							Able Seamen.	Firemen.	Trimmers.	Grassers.		
Clyde .. .. .		40		Compound	Stern-paddle	River						
Cobar .. .. .	57	40		"	Screw	"						
Comet (Auckland)	8	6		Oil-engine	"	Restricted limits						
*Comet (Stewart I.)	6	5		"	"	"						First survey.
Condor .. .. .	188	24		Compound	"	Extended river						
Conella .. .. .	1	3½		Oil-engine	"	Restricted limits						First survey.
Cooce .. .. .	3	8		"	"	"						"
Corinna .. .. .	812	141	1,045	Compound	"	Home trade	6	3	2	3		
Coromandel .. .. .	67	25		"	"	River						
Countess (W'gton)	57	28	178	"	"	Home trade	2	2				Fishing-vessel.
Countess (Hokitika)	3	6		Oil-engines	"	Restricted limits						First survey.
Cygnat (Lyttelton)	66	43	182	Compound	Screw	Home trade	2	2				
Cygnat (Kaipara)	3	8		Oil-engine	"	Restricted limits						First survey.
Dairymaid .. .. .	2	6		"	"	"						"
Daphne (Auckland)	100	55	245	Compound	"	Home trade	4	2				
Daphne (Hokianga)	2	6		Oil-engines	"	Restricted limits						First survey.
Dart .. .. .	1	3		"	Twin-screw	"						"
Dauntless .. .. .	3	16		Oil-engine	Screw	"						"
Dawn .. .. .	14	16		"	"	"						"
Defender (Lytt'ton)	109	36	116	Compound	"	Home trade	4	2				
Defender (Thames)	4	18		Oil-engine	"	River						
*Defiance .. .. .	5	15		"	"	Restricted limits						
Despatch .. .. .	24	20		Compound	"	Home trade	1	1				
Doak .. .. .	3	8		Oil-engine	"	Restricted limits						First survey.
Dolly Varden .. .. .	17	36		"	"	Home trade	1					
Dolphin .. .. .	6	15		"	"	River						
Doris (Napier) .. .. .	4	20		"	"	Restricted limits						
Doris (Picton) .. .. .	2	4		"	"	"						
Doris (Russell) .. .. .	3	12		"	"	"						First survey.
Dorrigo .. .. .	195	40	220	Compound	"	Foreign trade	4	2				
Dot .. .. .	1	5		Oil-engine	"	Restricted limits						First survey.
Doto .. .. .	19	16		Compound	"	Home trade	1	1				
Dove (Picton) .. .. .	2	4		Oil-engine	"	Restricted limits						
Dove (French Pass)	2	4		"	"	"						
Dovey .. .. .	2	5½		"	"	"						First survey.
Dreadnaught (Aka-roa)	3	19		"	Twin-screw	"						"
Dreadnaught (Invercargill)	26	12		"	Screw	"						"
Dreadnaught (Westport)	4	5		"	"	"						"
*Duchess (Hokitika)	1	1½		"	"	"						"
Duchess (Well'gton)	95	81		Triple-expansion	"	Extended river						
Eagle .. .. .	138	70		Compound	Paddle	River						
Earl .. .. .	3	8		Oil-engine	Twin-screw	Restricted limits						First survey.
Earnslaw .. .. .	155	80	1,000	Triple-expansion	"	River						"
Echo .. .. .	98	60		Oil-engine	"	Home trade	2					
Eclipse .. .. .	2	8		"	Screw	River						
Eileen .. .. .	2	4		"	"	Restricted limits						First survey.
Eileen Ward .. .. .	472	124		Triple-expansion	"	"						
Eleanora .. .. .	2	8		Oil-engine	"	"						First survey.
Eliza .. .. .	9	28		"	"	"						
Elsie (Auckland) .. .. .	21	30		"	Twin-screw	River						
Elsie .. .. .	4	15		"	Screw	"						
Elsie (Picton) .. .. .	22	11		Compound	"	Extended river						
*Elsie (French Pass)	3	5		Oil-engine	"	Restricted limits						First survey.
Elsie Evans .. .. .	6	20		"	"	"						
Elswick .. .. .	4	12		"	"	River						
Emerald .. .. .	4	10		"	"	Restricted limits						First survey.
Empress .. .. .	6	18		Oil-engines	"	"						
Endeavour .. .. .	54	30		Oil-engine	"	"						
Energy .. .. .	17	15		Compound	"	Home trade	1	1				
Erin .. .. .	4	3½		Non-condensing	"	River						
Erlin .. .. .	4	4		Compound	"	"						
Erskine .. .. .	98	35		"	"	"						Dredge.
Eureka (Hokianga)	3	10		Oil-engine	Twin-screw	Restricted limits						First survey.
Eureka (Kaipara)	3	10		"	"	"						"
Eva .. .. .	7	20		"	"	River						"
Eveline .. .. .		8		Non-condensing	Screw	"						
Excelsior (Auckland)	29	24		Oil-engine	Twin-screw	Home trade	1					
Excelsior (Waikato)	5	6½		Non-condensing	Screw	River						
Express .. .. .	36	25	97	Compound	"	Home trade	2	1				Fishing-vessel.
Fairburn .. .. .	60	60		Oil-engine	"	"	2					
Fairy (Napier) .. .. .	32	11		Compound	"	Restricted limits						
Fairy (Rotorua) .. .. .	1	6		Oil-engine	"	"						First survey.
Faony .. .. .	55	30	147	Compound	"	Home trade						

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
*Farina .. ..	5	16	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	First survey.
Ferro .. ..	10	20	..	" ..	" ..	" ..	..	..	..	..	" ..
Ferry .. ..	2	4	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Fiona .. ..	2	4	..	" ..	" ..	" ..	..	..	..	..	" ..
Firefloat .. ..	..	13	..	Non-condensing	" ..	River	..	..	..	..	" ..
Firefly .. ..	3	9	..	Oil-engine ..	Twin-screw	Restricted limits	..	..	..	..	First survey.
*Floating Crane ..	353	28	..	Compound ..	" ..	River	..	..	..	..	First survey. (now "Mabua").
Flora (Akaroa) ..	2	8	..	Oil-engine.	Screw ..	Restricted limits	..	..	..	..	First survey.
Flora (Dunedin) ..	838	180	1,140	Compound ..	" ..	Home trade ..	6	3	2	3	" ..
Flossie .. ..	2	4½	..	Oil-engine	" ..	Restricted limits	..	..	..	..	First survey.
Foam .. ..	2	5	..	" ..	" ..	River	..	..	..	..	" ..
*Freetrader .. ..	94	50	..	Non-condensing	Stern-paddle	" ..	..	..	..	..	" ..
Gael .. ..	55	20	93	Compound ..	Screw ..	Home trade ..	2	1	..	..	" ..
Gannet .. ..	10	12	..	" ..	" ..	Extreme limits	..	..	..	..	" ..
Geisha .. ..	4	12	..	Oil-engine	" ..	Restricted limits	..	..	..	..	First survey.
Gem .. ..	3	6	..	" ..	" ..	" ..	..	..	..	..	" ..
Gipsy .. ..	3	4	..	" ..	" ..	" ..	..	..	..	..	" ..
Gladsome .. ..	3	5	..	" ..	" ..	" ..	..	..	..	..	" ..
Glenelg .. ..	156	75	255	Compound	" ..	Home trade ..	4	3	..	..	" ..
Glenlee .. ..	5	10	..	Oil engine	" ..	River	..	..	..	..	" ..
Goldfinch .. ..	..	10	..	Compound	" ..	Restricted limits	..	..	..	..	" ..
Gordon .. ..	10	8	..	" ..	" ..	Extended river	..	..	..	..	First survey.
Gosford .. ..	23	30	..	" ..	" ..	" ..	..	..	..	..	" ..
*Goshawk .. ..	122	28	..	" ..	" ..	River	..	..	..	..	" ..
Green Duck .. ..	2	4	..	Oil-engine	" ..	Restricted limits	..	..	..	..	First survey.
Greyhound (Auckland)	83	60	..	" ..	" ..	Home trade ..	2	..	..	..	" ..
Haanui II .. ..	44	58	259	Triple-expansion	" ..	Foreign trade	2	2	..	..	" ..
Hapai .. ..	363	155	..	" ..	Twin-screw	Extended river	..	..	..	..	" ..
Harriet .. ..	3	8	..	Oil-engine	Screw ..	Restricted limits	..	..	..	..	First survey.
*Hauti .. ..	82	32	230	Compound ..	" ..	Home trade ..	2	2	..	..	" ..
Haumoana .. ..	4	16	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	" ..
Haupiri .. ..	452	88	463	Compound	Screw ..	Home trade ..	6	3	..	..	" ..
Hauroto .. ..	1,276	250	1,302	" ..	" ..	Foreign trade	8	6	3	3	" ..
*Hawera .. ..	92	31	155	" ..	" ..	Home trade ..	2	2	..	..	" ..
Heathcote .. ..	94	35	..	" ..	" ..	Extended river	..	..	..	..	First survey.
H ather .. ..	6	8	..	Oil-engine	" ..	Restricted limits	..	..	..	..	" ..
Hilary .. ..	5	5	..	" ..	" ..	" ..	..	..	..	..	" ..
Himitangi .. ..	149	45	278	Triple-expansion	" ..	Foreign trade	4	3	..	..	" ..
Hina (Nelson) ..	39	20	76	Compound	" ..	Home trade ..	2	1	..	..	" ..
Hinemoa (Hokianga)	1	2	..	Oil-engine	" ..	Restricted limits	..	..	..	..	First survey.
*Hinemoa (Rotorua)	4	10	..	" ..	" ..	" ..	..	..	..	..	" ..
Hipi .. ..	13	11	..	Triple-expansion	" ..	Extended river	..	..	..	..	" ..
Hirere .. ..	18	16	..	Compound	Twin-screw	" ..	..	..	..	..	" ..
Hobsonville ..	23	15	..	Oil-engine	Screw ..	" ..	..	..	..	..	" ..
Hoha .. ..	6	10	..	" ..	Twin-screw	Restricted limits	..	..	..	..	First survey.
Hokimai .. ..	5	10	..	" ..	Screw ..	" ..	..	..	..	..	" ..
Holliday .. ..	4	15	..	" ..	" ..	" ..	..	..	..	..	" ..
Holmdale .. ..	197	27	119	Compound	" ..	Home trade ..	4	2	..	..	" ..
Houto .. ..	78	45	..	Oil-engine	" ..	" ..	..	..	..	..	" ..
Huanui .. ..	59	45	..	" ..	" ..	Foreign trade	2	..	..	..	" ..
*Huia (Hamilton) ..	1	4	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Huia (Kaipara) ..	3	5	..	" ..	" ..	" ..	..	..	..	..	" ..
Huia (Auckland) ..	200	60	..	" ..	" ..	Home trade ..	4	..	..	..	" ..
Huia (Wellington) ..	69	23	121	Compound	" ..	" ..	2	2	..	..	" ..
Huia (Wellington) ..	..	2	..	Condensing	" ..	River	..	..	..	..	" ..
Huia (Wilson's Bay)	1	4½	..	Oil-engines	" ..	Restricted limits	..	..	..	..	First survey.
Ida .. ..	1	2	..	" ..	" ..	" ..	..	..	..	..	" ..
Ilex .. ..	4	10	..	" ..	" ..	" ..	..	..	..	..	" ..
Invercargill ..	123	41	233	Compound	Twin-screw	Home trade ..	4	2	..	..	" ..
Ira .. ..	4	6	..	Oil-engine	Screw ..	Restricted limits	..	..	..	..	First survey.
Irene (Waikato) ..	3	6	..	" ..	" ..	" ..	..	..	..	..	" ..
Irene (Kaipoi) ..	3	8	..	" ..	" ..	" ..	..	..	..	..	" ..
Irihi .. ..	6	15	..	" ..	" ..	" ..	..	..	..	..	" ..
Iris (Auckland) ..	3	12	..	" ..	" ..	River	..	..	..	..	First survey.
Iris (Coromandel) ..	3	6	..	" ..	" ..	Restricted limits	..	..	..	..	" ..
*Iris (Waikato) ..	3	5	..	" ..	" ..	" ..	..	..	..	..	" ..
Isa (Whangarei) ..	4	7½	..	" ..	" ..	River	..	..	..	..	" ..
Isa (Picton) ..	3	5	..	" ..	" ..	Restricted limits	..	..	..	..	" ..
Isabel .. ..	2	8	..	" ..	" ..	" ..	..	..	..	..	First survey.
Isabella de Fraine	76	60	..	" ..	Twin-screw	" ..	..	..	..	..	" ..
Ivy .. ..	9	13	..	" ..	Screw ..	" ..	..	..	..	..	First survey.
Ivy Leaf .. ..	2	6	..	" ..	" ..	" ..	..	..	..	..	" ..
Jane .. ..	20	20	..	" ..	" ..	" ..	..	..	..	..	" ..
J.D.O. .. ..	88	28	..	Compound	" ..	" ..	..	..	..	..	" ..

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.	
							Able Seamen.	Firemen.	Trimmers.	Crewers.		
Jersey Lily ..	4	12	..	Oil-engine ..	Screw ..	River ..	..	..	..	..	..	First survey.
John ..	111	40	195	Compound ..	..	Home trade ..	4	2	..	..	..	First N.Z. survey.
John Anderson ..	36	20	..	..	..	Extreme limits ..	..	..	..	..	..	..
John Kennedy ..	4	12	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	..
Kaero ..	147	60	..	..	Twin-screw ..	Home trade ..	4	..	..	..	..	..
*Kahu (Auckland) ..	25	40	..	..	Screw ..	Restricted limits ..	..	..	..	..	..	..
Kahu (Napier) ..	99	40	227	Compound ..	..	Home trade ..	2	2	..	..	..	..
*Kaiaia ..	24	24	..	Oil-engine ..	Twin-screw ..	..	1	..	..	..	..	..
Kaipoi ..	1,246	201	1,031	Triple-expansion ..	Screw ..	Foreign trade ..	7	3	2	3	..	..
Kaipara ..	..	4	..	Compound ..	..	River ..	..	..	..	..	..	..
Kaipatiki ..	20	9	..	Triple-expansion ..	..	Extended river ..	..	..	..	..	..	..
Kaipoi ..	4	9	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kairaki (Lyttelton) ..	182	92	526	Triple-expansion ..	Twin-screw ..	Home trade ..	4	3	..	..	..	..
Kairaki (Kaiaoi) ..	4	5	..	Oil-engines ..	Screw ..	Restricted limits ..	..	..	..	..	..	First survey.
Kaitangata ..	1,219	200	1,234	Triple-expansion ..	..	Foreign trade ..	7	3	2	3	..	..
Kaitoa ..	118	65	267	Compound ..	Twin-screw ..	Home trade ..	4	3	..	..	..	..
Kaituna (Dunedin) ..	1,246	200	1,008	Triple-expansion ..	Screw ..	Foreign trade ..	7	3	2	3	..	..
Kaituna (Tauranga) ..	6	10	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	..
Kamona ..	903	117	748	Triple-expansion ..	..	Foreign trade ..	6	3	..	..	..	..
Kanieri (Auckland) ..	115	20	143	Compound ..	..	Home trade ..	4	2	..	..	..	..
Kanieri (Hokitika) ..	2	3½	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kapiti ..	114	35	203	Compound ..	..	Home trade ..	4	2	..	..	..	..
Kapui ..	30	30	..	Non-condensing ..	..	Extended river ..	..	..	..	..	..	..
Kapuni ..	97	30	190	Compound ..	..	Home trade ..	2	2	..	..	..	..
Karaka ..	10	22	..	Triple-expansion ..	..	Extended river ..	..	..	..	..	..	..
Karamu ..	452	102	645	..	..	Foreign trade ..	5	3	..	..	..	..
Karewa ..	..	4	3	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Karori ..	1,194	147	898	Triple-expansion ..	..	Foreign trade ..	7	3	2	3	..	..
Karoro ..	52	17	..	Compound ..	..	Extended river ..	..	..	..	..	..	..
Kate (Foxton) ..	..	5	..	Non-condensing ..	..	River ..	..	..	..	..	..	..
Kate (Batley) ..	5	14	..	Oil-engine ..	..	..	..	..	..	..	..	First survey.
Katoa ..	1,332	335	1,661	Triple-expansion ..	..	Foreign trade ..	7	6	3	3	..	..
Kauri ..	1,830	304	1,226	..	..	..	8	3	2	3	..	..
Kawa ..	3	5	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	..
Kawau (Auckland) ..	53	20	82	Compound ..	..	Home trade ..	2	1	..	..	..	..
Kawau (Auckland) ..	37	14	..	..	..	Extended river ..	..	..	..	..	..	..
Kelvin ..	2	7	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kennedy ..	131	39	131	Compound ..	Twin-screw ..	Home trade ..	4	2	..	..	..	..
Kereru ..	1	5	..	Oil-engine ..	Screw ..	Restricted limits ..	..	..	..	..	..	First survey.
Kestrel ..	159	43	..	Compound ..	Screw ..	Extended river ..	..	..	..	..	..	..
Kia-Ora ..	1½	4	..	Oil-engine ..	Screw ..	Restricted limits ..	..	..	..	..	..	..
Kina ..	5	10	..	..	..	..	..	..	..	..	..	..
Kingfisher ..	5	10	..	..	..	..	..	..	..	..	..	First survey.
King Hami ..	5	7	..	..	..	..	..	..	..	..	..	..
Kini ..	702	130	662	Triple-expansion ..	..	Home trade ..	6	3	..	..	..	..
Kinohaku ..	6	8	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kiripaka ..	75	24	89	Compound ..	..	Home trade ..	2	2	..	..	..	..
Kiritona ..	75	150	..	Oil-engine ..	Twin-screw ..	..	2	..	..	..	..	First survey.
Kittawa ..	708	120	735	Compound ..	Screw ..	..	6	3	..	..	..	..
Kiwi (Te Kopuru) ..	16	20	..	Non-condensing ..	..	Restricted limits ..	..	..	..	..	..	..
Kiwi (Invercargill) ..	1	2	..	Oil-engine ..	..	..	..	..	..	..	..	..
Koi ..	54	32	..	Compound ..	Twin-screw ..	Extreme limits ..	..	..	..	..	..	..
Kokeri ..	3	10	..	Oil-engine ..	Screw ..	Restricted limits ..	..	..	..	..	..	First survey.
Kokiri ..	4	8	..	..	..	River ..	..	..	..	..	..	..
Komata ..	1,194	260	1,230	Triple-expansion ..	..	Foreign trade ..	7	3	2	3	..	..
Koonya ..	663	115	715	..	..	Home trade ..	6	3	..	..	..	..
Kopapu ..	1	4½	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kopu ..	18	13	..	Non-condensing ..	Paddle ..	Extended river ..	..	..	..	..	..	..
Koputai ..	5	120	448	Compound ..	..	Home trade ..	1	3	..	..	..	Tug.
Korari ..	4	8	..	Oil-engines ..	Screw ..	Restricted limits ..	..	..	..	..	..	First survey.
*Koroī (Thames) ..	..	9½	..	Quadruple-expansion ..	..	Extended river ..	..	..	..	..	..	..
Koroī (Hokianga) ..	3	7	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Koromiko ..	1,541	313	1,519	Triple-expansion ..	..	Foreign trade ..	8	6	3	3	..	..
Kotare ..	79	20	152	Compound ..	..	Home trade ..	2	2	..	..	..	..
Kotere ..	5	6	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	First survey.
Kotiti ..	42	14	..	Compound ..	..	Home trade ..	2	1	..	..	..	..
Kotuku ..	662	112	735	Triple-expansion ..	..	..	6	3	..	..	..	..
Koutu ..	2	5	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	..
Koutunui ..	98	26	149	Compound ..	Twin-screw ..	Home trade ..	2	2	..	..	..	..
*Kowhai ..	414	128	597	Triple-expansion ..	Screw ..	..	5	3	..	..	..	..
Kura ..	16	35	..	Oil-engine ..	..	River ..	..	..	..	..	..	..
Kurow ..	1,564	333	1,629	Triple-expansion ..	..	Foreign trade ..	8	6	3	3	..	..
Kyra ..	2	7	..	Oil-engine ..	..	Restricted limits ..	..	..	..	..	..	..
Lady Moira ..	2	5	..	..	..	..	..	..	..	..	..	First survey.
La Mascotte (Pic'tn) ..	4	10	..	..	..	..	..	..	..	..	..	..

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
*La Mascotte (Rotorua)	1	4	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Larola (Picton)	4	10	..	"	"	"	..	..	..	..	First survey.
Larola (Wanganui)	3	10	..	"	"	"	..	..	..	..	First survey.
Lena	12	8	..	"	"	"	..	..	..	..	First survey.
Lillian	4	10	..	"	"	"	..	..	..	..	First survey.
Lily	1	10	..	"	"	"	..	..	..	..	"
Little Jack	..	1½	..	Non-condensing	"	River	..	..	..	..	"
Little George	4	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Lizzie 222	3	4	..	"	"	"	..	..	..	..	"
Lomen	..	6	..	Compound	"	River	..	..	..	..	"
*Loyalty	24	35	78	"	"	Home trade	1	1	..	..	Fishing.
Lupe	3	10	..	Oil-engine	"	River	..	..	..	..	"
Lyttelton (Auckl'd)	24	80	234	Compound	Paddle	Home trade	1	2	..	..	"
Lyttelton (Lyttel'n)	1	133	..	"	Twin-screw	Extreme limits	..	..	..	..	"
Magic	58	60	..	Oil-engine	"	Home trade	2	..	..	..	"
Maheno	24	90	..	"	"	River	..	..	..	..	"
Mahino	6	5	..	"	Screw	Restricted limits	..	..	..	..	First survey.
Mahinapua	1	4	..	"	"	"	..	..	..	..	"
*Mahua	353	28	..	Compound	Twin-screw	River	..	..	..	..	Floating-crane.
Mahurangi	95	80	..	"	Screw	Extended river	..	..	..	..	"
Mahuroto	4	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Mahuta	13	10	..	Compound	"	River	..	..	..	..	"
Maidi	12	10½	..	"	"	"	..	..	..	..	"
Maitai	1,888	490	3,327	Triple-expansion	"	Foreign trade	9	9	6	3	"
Majestic (H'kianga)	2	5	..	Oil-engine	"	"	..	..	..	..	First survey.
*Majestic (Mercer)	3	7	..	"	"	"	..	..	..	..	"
*Makere	3	4	..	"	"	"	..	..	..	..	"
Mako	4	12	..	"	"	"	..	..	..	..	"
*Makura	2	7	..	"	"	"	..	..	..	..	"
Mana (Riverton)	2	4	..	"	"	"	..	..	..	..	"
*Mana (Wellington)	77	25	134	Compound	"	Home trade	2	2	..	..	"
Mana (French P'ss)	3	6	..	Oil-engines	"	Restricted limits	..	..	..	..	"
Mana (Westport)	51	90	..	Compound	Paddle	"	..	..	..	..	"
Manaia	3	7	..	Oil-engine	Screw	River	..	..	..	..	"
Manaroa	78	24	147	Compound	"	Home trade	2	2	..	..	"
Manchester	366	160	769	Triple-expansion	"	Foreign trade	4	3	2	2	Dredge; since wrecked.
Mangapapa	87	28	191	Compound	"	Home trade	2	2	..	..	"
Manukotuku	3	16	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Manuwai (Tr'nga)	5	30	..	"	"	"	..	..	..	..	"
Manuwai (Wang'ui)	94	30	..	Non-condensing	"	River	..	..	..	..	"
Maori (Dunedin)	1,433	..	5,859	Turbines	Triple screw	Home trade	8	15	9	3	"
*Maori (Inver'gill)	3	5	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Maori (Hamilton)	2	5	..	"	"	"	..	..	..	..	"
Maori (Portage)	3	10	..	"	"	River	..	..	..	..	"
Mapourika	718	130	1,194	Triple-expansion	"	Home trade	7	3	2	3	"
Mapu	3	10	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	"
Marama	2	6	..	"	Screw	"	..	..	..	..	First survey.
Mararoa (D'nedin)	1,381	530	3,238	Triple-expansion	"	Home trade	8	9	6	3	"
*Mararoa (Rotorua)	2	6	..	Oil-engines	"	Restricted limits	..	..	..	..	First survey.
Marawa	5	18	..	"	"	"	..	..	..	..	"
Mareno	4	5	..	"	"	"	..	..	..	..	"
Maritana	4	8	..	Oil-engine	"	"	..	..	..	..	"
Marokopu	4	7	..	"	"	"	..	..	..	..	First survey.
Maroro	5	8	..	"	"	"	..	..	..	..	"
Mascotte (Wang'ui)	..	12	..	Non-condensing	"	River	..	..	..	..	"
Mascotte (Waikato)	..	5	..	"	"	"	..	..	..	..	"
*Matakokiri	3	10	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Matariki	3	6	..	"	"	"	..	..	..	..	"
Matariki (Tuakau)	3	6	..	"	"	River	..	..	..	..	"
Matariki (L'ttelt'n)	4	10	..	"	"	Restricted limits	..	..	..	..	"
Matarere	..	2	..	Compound	"	River	..	..	..	..	"
Matuku	..	4	..	Non-condensing	"	"	..	..	..	..	"
*Maude	1	3	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Maui	251	80	534	Compound	Twin-screw	Home trade	4	3	..	..	Dredge.
Maukena	1	4	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Mavis (Dunedin)	3	10	..	"	"	River	..	..	..	..	"
Mavis (Stewart I.)	3	5	..	"	"	"	..	..	..	..	"
Mavis (Manakau)	2	6	..	"	"	Restricted limits	..	..	..	..	"
*Mawhera	292	168	..	Triple-expansion	Twin-screw	Home trade	4	3	2	3	Dredge.
May (Awanui)	2	4	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
May (Rawene)	2	6	..	"	"	"	..	..	..	..	"
May (Wanganui)	1	4	..	"	"	River	..	..	..	..	"
May Howard	55	45	..	"	"	Home trade	2	..	..	..	"
Melville	4	10	..	"	Twin-screw	Restricted limits	..	..	..	..	First survey.
Mere Ana	4	12	..	"	Screw	"	..	..	..	..	"
Mere Mere	..	3	..	Non-condensing	"	River	..	..	..	..	"

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.	
							Able Seamen.	Firemen.	Trimmers.	Crewsers.		
Merlin (Auckland)	3	4	..	Compound	Screw	River	..	..	..	..	..	..
Merlin (Picton)	4	5	..	Oil-engine	"	Restricted limits	..	..	..	..	..	..
Mermaid (A'ckland)	4	7	..	"	"	"	..	..	..	..	..	First survey.
Mermaid (Fr. Pass)	4	7	..	"	"	"	..	..	..	..	..	"
Mermaid (Hok'ga)	1	3	..	"	"	"	..	..	..	..	..	"
Mermaid (Tuakau)	1	8	..	"	Twin-screw	"	..	..	..	..	..	"
*Merry Duchess	4	8	..	"	Screw	River	..	..	..	..	..	"
Meteor	2	5	..	"	"	"	..	..	..	..	..	"
Midlothian	3	5	..	"	"	"	..	..	..	..	..	"
Mikado	6	12	..	"	"	"	..	..	..	..	..	First survey.
Minoru	3	10	..	"	"	Restricted limits	..	..	..	..	..	"
Mirree	2	5	..	"	"	"	..	..	..	..	..	"
Mizpah (P'lor's Sd.)	5	20	..	"	Twin-screw	"	..	..	..	..	..	"
Mizpah (Picton)	3	5	..	"	Screw	River	..	..	..	..	..	First survey.
*Moa (Henley)	5	4	..	"	"	Restricted limits	..	..	..	..	..	"
Moa (Wanganui)	3	10	..	"	"	"	..	..	..	..	..	"
Moa (Wellington)	92	33	145	Compound	"	Home trade	2	2	..	..	..	"
Moana (Gt. Barrier)	2	4½	..	Oil-engine	"	Restricted limits	..	..	..	..	..	First survey.
Moana (Dunedin)	2,414	372	4,216	Triple-expansion	"	Foreign trade	10	9	6	3	..	"
Moana (Moana)	6	7	..	Oil-engine	"	River	..	..	..	..	..	"
Moana (Picton)	4	8	..	"	"	Restricted limits	..	..	..	..	..	"
*Moata	3	5	..	"	"	"	..	..	..	..	..	First survey.
Moeraki	2,715	357	4,082	Triple-expansion	Twin-screw	Foreign trade	11	9	6	3	..	"
*Moerangi (Dunedin)	16	27½	..	Oil-engine	Screw	River	..	..	..	..	..	First survey.
Moerangi (Whangarei)	5	16	..	"	Twin-screw	Restricted limits	..	..	..	..	..	First survey.
Mokoia (Dunedin)	2,154	255	2,944	Triple-expansion	"	Foreign trade	10	9	3	3	..	"
*Mokoia (Rotorua)	2	5½	..	Oil-engine	Screw	Restricted limits	..	..	..	..	..	First survey.
Mona	2	5	..	"	"	"	..	..	..	..	..	"
Monica II	29	27	..	Compound	"	Extreme limits	1	..	..	..	..	"
Monowai	2,137	290	2,885	Triple-expansion	"	Foreign trade	10	9	3	3	..	"
Mosca	1	4	..	Oil-engine	"	Restricted limits	..	..	..	..	..	First survey.
*Moturata	13	25	..	"	"	"	..	..	..	..	..	"
Moturoa	10	10	..	Compound	"	River	..	..	..	..	..	"
Mountaineer	66	50	..	"	"	"	..	..	..	..	..	"
Moura	1,247	275	1,865	Triple-expansion	Twin-screw	Foreign trade	8	6	3	3	..	"
Mullogh	46	15	..	Vertical	Screw	Restricted limits	..	..	..	..	..	Fishing.
Muratai	5	14	..	Oil-engine	Twin-screw	"	..	..	..	..	..	"
Muriel (Napier)	16	18	..	Compound	Screw	Extended river	..	..	..	..	..	Fishing.
*Murihiku	368	70	524	Triple-expansion	Twin-screw	Home trade	4	3	..	..	..	Dredge.
Myna	6	5	..	Oil-engine	Screw	River	..	..	..	..	..	First survey.
Myrtle	1	4	..	"	"	Restricted limits	..	..	..	..	..	"
Namu	2	3	..	"	"	"	..	..	..	..	..	"
Napier	48	30	86	Compound	"	Home trade	2	1	..	..	..	Trawler.
Natone	50	24	..	"	"	River	..	..	..	..	..	"
Naumai (Kaipara)	29	12	..	"	"	"	..	..	..	..	..	"
Naumai (Kawhia)	5	5	..	Oil-engine	"	Restricted limits	..	..	..	..	..	First survey.
Nautilus (Bluff)	6	6	..	"	"	"	..	..	..	..	..	"
Nautilus (Onehunga)	6	6	..	"	"	River	..	..	..	..	..	"
Navua	1,813	220	1,978	Triple-expansion	Twin-screw	Foreign trade	9	6	3	3	..	"
Nellie Mason	14	15	..	Oil-engine	Screw	River	..	..	..	..	..	"
Neptune	2	6	..	"	"	Restricted limits	..	..	..	..	..	First survey.
*Never Despair	..	1½	..	Non-condensing	"	River	..	..	..	..	..	"
Ngahere	556	118	719	Triple-expansion	"	Home trade	6	3	..	..	..	"
Ngapuhi	299	160	675	"	Twin-screw	"	5	3	..	..	..	"
Ngaru (Huntly)	3	6	..	Oil-engine	Screw	Restricted limits	..	..	..	..	..	"
Ngaru (Thames)	3	4	..	"	"	River	..	..	..	..	..	"
Ngatiawa	220	55	415	Triple-expansion	Twin-screw	Home trade	5	3	..	..	..	"
Ngatoro	583	118	724	"	Screw	"	5	3	..	..	..	"
Niagara	5	10	..	Oil-engine	"	Restricted limits	..	..	..	..	..	First survey.
Nick	6	25	..	"	"	"	..	..	..	..	..	"
Nicola	4	20	..	"	"	"	..	..	..	..	..	"
*Nikau	93	55	245	Compound	Twin-screw	Home trade	2	3	..	..	..	"
Nimrod (Auckland)	4	32	..	Oil-engine	Screw	River	..	..	..	..	..	"
*Nimrod (Rotorua)	2	3½	..	"	"	Restricted limits	..	..	..	..	..	First survey.
Nina	7	2½	..	Compound	"	River	..	..	..	..	..	"
Nita	3	5	..	Oil-engine	"	Restricted limits	..	..	..	..	..	First survey.
Nopera	3	5	..	"	"	River	..	..	..	..	..	"
*Nora Niven	57	35	167	Triple-expansion	"	Home trade	2	2	..	..	..	Trawler.
Norah	2	4	..	Oil-engines	"	Restricted limits	..	..	..	..	..	First survey.
No. 121	394	100	..	Compound	Twin-screw	"	..	..	..	..	..	Dredge.
No. 222	502	140	883	"	"	Home trade	5	3	..	..	..	"
*No. 350	488	117	707	Triple-expansion	"	"	5	3	2	3	..	"
No. 404	211	78	416	Compound	"	River	..	..	..	..	..	"
Nui	4	10	..	Oil-engine	Screw	Restricted limits	..	..	..	..	..	First survey.
Nydia	1	4	..	"	"	River	..	..	..	..	..	"

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Crewmen.	
Nymph ..	1	3	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Ohinemuri ..	73	26	143	Triple-expansion	..	Home trade	2	1	..	..	
Ohura ..	34	25	..	Condensing	Twin-screw	River	..	..	..	..	
O.K. ..	4	14	..	Oil-engine	Screw	Restricted limits	..	..	..	..	
Oleo ..	5	20	..	"	"	River	..	..	..	..	
*Olive ..	1	5	..	"	"	Restricted limits	..	..	..	..	First survey.
Olive Branch ..	3	9	..	"	"	"	..	..	..	..	
*Onewa ..	31	16	..	Compound	..	Extended river	..	..	..	..	
Ongarue ..	7	35	..	Oil-engine	"	River	..	..	..	..	
Onoko ..	2	3 $\frac{3}{4}$	..	"	"	Restricted limits	..	..	..	..	First survey.
Oparau ..	5	5	..	"	"	"	..	..	..	..	
Opawa ..	64	18	86	Compound	"	Home trade	2	1	..	..	
Opouri ..	218	86	484	Triple-expansion	"	Foreign trade	4	3	..	..	
Opoutia ..	..	5	..	Non-condensing	"	River	..	..	..	..	
Orete ..	92	60	..	Oil-engine	"	Home trade	2	..	..	..	
Orewa ..	37	17	79	Compound	"	"	2	1	..	..	
Orira ..	2	4	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Osprey ..	138	70	..	Compound	Paddle	River	..	..	..	..	
Otara ..	3	12	..	Oil-engine	Screw	"	..	..	..	..	
Otunui ..	12	35	..	"	"	River	..	..	..	..	
Paeroa ..	46	25	74	Compound	"	Home trade	2	1	..	..	
*Pakeha ..	6	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
*Palatine ..	3	4	..	"	"	"	..	..	..	..	
Pahiki ..	14	10	..	"	"	"	..	..	..	..	
*Pandora ..	5	14	..	"	"	"	..	..	..	..	First survey.
*Pania ..	35	11	..	Compound	"	"	..	..	..	..	Fishing.
Panirau ..	3	20	..	Oil-engine	Twin-screw	"	..	..	..	..	First survey.
*Pararua ..	4	8	..	"	Screw	"	..	..	..	..	
Parera ..	6	6	..	Non-condensing	"	River	..	..	..	..	
*Paritutu ..	233	90	648	Triple-expansion	Twin-screw	Home trade	4	3	..	..	Dredge.
Parua ..	3	10	..	Oil-engine	Screw	River	..	..	..	..	
Pateena ..	550	250	1,986	Compound	"	Home trade	6	6	3	3	
Patiti ..	6	15	..	Oil-engine	"	Restricted limits	..	..	..	..	
Pearl (Kohukohu) ..	3	5	..	"	"	River	..	..	..	..	First survey.
Pearl (Kaipara) ..	9	7	..	Non-condensing	"	"	..	..	..	..	
Pearl (Havelock) ..	2	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Pearleen ..	6	10	..	"	"	"	..	..	..	..	
Pelican ..	1	57	298	Triple-expansion	"	Home trade	1	3	..	..	
Pelorus (Auckland) ..	3	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Pelorus (Havelock) ..	18	40	..	"	"	River	..	..	..	..	
Petone ..	388	82	490	Triple-expansion	"	Home trade	4	3	..	..	
Petrel ..	3	10	..	Oil-engine	"	River	..	..	..	..	
Phantom ..	18	11	..	Compound	"	Restricted limits	..	..	..	..	Fishing.
Phœbe ..	4	10	..	Oil-engine	"	"	..	..	..	..	First survey.
*Phyllis (Hokitika) ..	1	3	..	"	"	"	..	..	..	..	
Phyllis (Russell) ..	4	12	..	"	Twin-screw	"	..	..	..	..	
Pihinga ..	3	5	..	"	Screw	"	..	..	..	..	
Pilot (Lyttelton) ..	11	13	..	Compound	"	Extended river	..	..	..	..	
Pilot (Nelson) ..	3	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Pilot (Wellington) ..	27	15	..	Triple-expansion	"	River	..	..	..	..	
Pioneer ..	1	4	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Pitoitoti (Waitara) ..	19	13 $\frac{1}{2}$	..	Compound	"	Home trade	1	1	..	..	
Planet ..	4	9	..	"	"	River	..	..	..	..	
Plucky ..	29	40	271	"	"	Home trade	1	3	..	..	Tug.
Poherua ..	749	128	683	Triple-expansion	"	"	6	3	..	..	
*Portare ..	9	13	..	Oil-engine	"	Restricted limits	..	..	..	..	
Presto ..	3	..	..	Compound	"	River	..	..	..	..	
Progress ..	112	45	162	"	"	Home trade	4	2	..	..	
Psyche (Rotorua) ..	1	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Pukaki ..	917	110	645	Quadruple-expansion	"	Home trade	6	3	..	..	
Pukeore ..	4	7	..	Oil-engine	"	"	..	..	..	..	First survey.
Pupuke ..	68	28	..	Compound	Twin-screw	River	..	..	..	..	
Purau ..	33	18	..	"	Screw	Extended river	..	..	..	..	
Potiki ..	157	60	281	"	"	Home trade	4	3	..	..	
Queen ..	2	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Queen of the South ..	121	40	182	Compound	"	Home trade	4	2	..	..	
Queen of Beauty (Hamilton) ..	4	16	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Radium ..	5	5	..	"	"	"	..	..	..	..	
*Rakiura (Dunedin) ..	82	25	108	Compound	"	Home trade	2	2	..	..	
Rakiura (Stewart I.) ..	13	10	..	Oil-engine	"	Restricted limits	..	..	..	..	
Rakanoa ..	1,393	200	938	Triple-expansion	"	Foreign trade	7	3	2	3	
Ralaco ..	2	10	..	Oil-engine	"	River	..	..	..	..	
Rangi (Pelorus) ..	4	8	..	"	"	Restricted limits	..	..	..	..	First survey.
Rangi (Tuakau) ..	2	4 $\frac{1}{2}$	..	"	"	"	..	..	..	..	
Raogimahora ..	2	10	..	"	"	"	..	..	..	..	

\* Surveyed twice.



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Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Rangiriri ..	2	6	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	First survey.
*Rarawa ..	460	140	1,003	Triple-expansion	Twin-screw	Home trade ..	6	3	2	3	First survey.
*Ratanui ..	2	3	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	First survey.
Rawene ..	3	16	..	" ..	Twin-screw	" ..	..	..	..	..	"
*Rawhiti ..	3	5	..	" ..	Screw ..	" ..	..	..	..	..	"
Redwing ..	5	12	..	" ..	" ..	" ..	..	..	..	..	"
*Regal ..	1½	10	..	" ..	" ..	River ..	..	..	..	..	"
Regulus ..	227	150	695	Compound ..	Twin-screw	Home trade ..	4	3	..	..	First survey.
Reliance (Hok'nga)	3	5	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	First survey.
Reliance (Kaipara)	5½	14	..	" ..	" ..	" ..	..	..	..	..	"
Reliance (Picton)	2	1	..	Non-condensing	" ..	River ..	..	..	..	..	"
Reliance (Raglan)	2½	4	..	Oil-engines ..	" ..	Restricted limits	..	..	..	..	"
Rene ..	4	10	..	Oil-engine ..	" ..	River ..	..	..	..	..	"
Result ..	18	10	..	Compound ..	" ..	Restricted limits	..	..	..	..	Fishing.
Rimu ..	144	95	526	Triple-expansion	Twin-screw	Foreign trade	4	3	..	..	"
Ripple (Auckland)	8	5	..	Oil-engine ..	Screw ..	River ..	..	..	..	..	"
Ripple (Hokianga)	2	6	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Ripple (Lyttleton)	187	80	290	Triple-expansion	" ..	Home trade ..	4	2	..	..	"
Rita ..	5	11	..	Compound ..	" ..	" ..	1	1	..	..	Fishing.
Roamer ..	4	8½	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	First survey.
Rodesian ..	4	7	..	" ..	" ..	" ..	..	..	..	..	"
Roko ..	3	8	..	" ..	" ..	" ..	..	..	..	..	"
Rona ..	4	12	..	" ..	" ..	" ..	..	..	..	..	"
Rosamond	462	90	451	Compound ..	" ..	Home trade ..	5	3	..	..	"
Rose ..	4	10	..	Oil-engine ..	" ..	River ..	..	..	..	..	"
Rotoehu ..	1	2	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
*Rotoiti ..	6	30	..	" ..	" ..	" ..	..	..	..	..	"
Rotokohu ..	11	8	..	Compound ..	" ..	Extended river	..	..	..	..	"
Rotomahana	139	50	228	" ..	" ..	Home trade ..	4	2	..	..	"
*Rotongaro ..	4	14	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	First survey.
Rotorua No. 1 ..	1	5	..	" ..	" ..	" ..	..	..	..	..	"
Ruahine (Akaroa)	5	12	..	" ..	" ..	" ..	..	..	..	..	"
*Rubi Seddon	349	80	..	Triple-expansion	Twin-screw	Extended river	..	..	..	..	"
Ruru (Auckland) ..	11	10	..	Compound ..	Screw ..	" ..	..	..	..	..	"
Ruru (Moana) ..	3	8	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	First survey.
Ruru (Napier) ..	58	50	223	Compound ..	" ..	Home trade ..	2	2	..	..	"
St. George ..	2	8	..	Oil-engine ..	" ..	River ..	..	..	..	..	"
St. Mary ..	1	4	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Sarah ..	1	3	..	" ..	" ..	" ..	..	..	..	..	"
*Savaii ..	31	16	..	Condensing	" ..	" ..	..	..	..	..	"
Saxon ..	34	50	..	Oil-engine ..	" ..	Home trade ..	2	..	..	..	First survey.
Scout ..	4	20	..	" ..	" ..	Restricted limits	..	..	..	..	"
Sea Bird ..	4	14	..	" ..	Twin-screw	" ..	..	..	..	..	First survey.
Sea Mew ..	2	6	..	" ..	" ..	" ..	..	..	..	..	"
Sea Queen ..	10	25½	..	" ..	Screw ..	" ..	..	..	..	..	"
Sea Wolf ..	5½	28	..	" ..	" ..	" ..	..	..	..	..	"
Secret ..	3½	10	..	" ..	Twin-screw	" ..	..	..	..	..	First survey.
Settler (Russell) ..	8	7	..	Compound ..	Screw ..	River ..	..	..	..	..	"
Settler (Thames) ..	6	18	..	Oil-engine ..	" ..	" ..	..	..	..	..	First survey.
Shamrock ..	60	120	..	" ..	Twin-screw	Home trade ..	2	..	..	..	"
Sir William Wallace	30	20	..	Compound ..	Screw ..	Restricted limits	..	..	..	..	Fishing.
Sonoma (Hokianga)	4	10	..	Oil-engine ..	Twin-screw	" ..	..	..	..	..	First survey.
Sonoma (Kaipara)	..	13	..	Non-condensing	Screw ..	River ..	..	..	..	..	"
Sonoma (Rotorua)	1	4	..	Oil-engines ..	" ..	" ..	..	..	..	..	First survey.
Southern Cross ..	403	117	357	Triple-expansion	Screw ..	Foreign trade	6	3	..	..	"
Southern Isle ..	59	28	..	Oil-engine ..	" ..	Home trade ..	2	..	..	..	"
Sparrow ..	..	1½	..	Triple-expansion	" ..	River ..	..	..	..	..	"
Sparrowhawk ..	99	32	260	Compound ..	" ..	" ..	..	..	..	..	First survey.
Special ..	5	..	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	"
Speed ..	1	2	..	" ..	" ..	" ..	..	..	..	..	"
Speedy ..	3	5	..	" ..	" ..	" ..	..	..	..	..	"
Spray ..	2	3	..	" ..	" ..	River ..	..	..	..	..	"
Squall ..	133	60	258	Compound ..	" ..	Home trade ..	4	3	..	..	"
Standard ..	9	10	..	Oil-engine ..	" ..	River ..	..	..	..	..	"
Stanley ..	2	7½	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Stella (Hokianga)	2	4	..	" ..	" ..	" ..	..	..	..	..	"
Stella (Whangarei)	3½	8	..	" ..	" ..	River ..	..	..	..	..	"
Sterling (Kaipara)	26	39	172	Compound ..	" ..	Foreign trade	1	3	..	..	"
Sterling (Auckland)	4	28	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	"
Storm ..	186	70	270	Compound ..	" ..	Home trade ..	4	3	..	..	"
Stormbird ..	129	40	203	" ..	" ..	" ..	4	2	..	..	"
Stromboli (Fr.Pass)	2	5	..	Oil-engine ..	" ..	Restricted limits	..	..	..	..	First survey.
Success (Thames)	8	8	..	" ..	" ..	River ..	..	..	..	..	"
Success (Moana) ..	2	3	..	" ..	" ..	Restricted limits	..	..	..	..	First survey.
Sumner ..	94	35	..	Compound ..	" ..	" ..	..	..	..	..	"
Swan (Mokau) ..	5	10	..	Oil-engine ..	Twin-screw	" ..	..	..	..	..	First survey.
Swan (Gisborne) ..	16	10	..	Compound ..	" ..	" ..	..	..	..	..	Fishing.

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Sybil ..	1½	5	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Sylph (Hokianga)	1	4	..	"	"	"	..	..	..	..	"
Sylph (Kaipara) ..	5	8	..	Non-condensing	"	River	..	..	..	..	"
*Sylvia ..	4	9	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Tahawai ..	9	14	..	"	"	"	..	..	..	..	"
Tahuna ..	3	8	..	"	"	"	..	..	..	..	First survey.
Taihoa ..	2	4	..	"	"	"	..	..	..	..	"
Tainui (Auckland)	60	24	151	Compound	"	Home trade ..	2	2	..	..	"
Tainui (Tuakau) ..	2	6	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Tainui (Gt. Barrier)	2	6	..	"	"	"	..	..	..	..	"
Takapuna ..	472	165	1,360	Compound	"	Home trade ..	6	6	3	3	"
Takitimo ..	2	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Talune ..	1370	255	1,660	Triple-expansion	"	Foreign trade	8	6	3	3	"
*Tanfield Lea ..	3	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Tangaroa ..	110	70	..	Compound	Twin-screw	Extended river	..	..	..	..	"
Tangihua ..	20	15	..	"	"	River	..	..	..	..	"
Taniwha (Auckland)	191	40	..	"	"	Extended river	..	..	..	..	"
Taniwha (Timaru)	16	16	..	Non-condensing	"	"	..	..	..	..	"
Tarakahi ..	..	4	..	"	"	River	..	..	..	..	"
Tarawera ..	1269	250	1,503	Compound	"	Home trade ..	8	6	3	3	"
Tarewai ..	11	6	..	Non-condensing	"	River	..	..	..	..	"
Tasman ..	97	45	198	Compound	"	Home trade ..	2	2	..	..	"
*Tauranganui ..	3	8	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Taviuni ..	974	135	931	Quadruple-expansion	"	Foreign trade	6	3	2	3	"
Tawera (Gisborne)	44	40	..	Oil-engine	"	Extended river	..	..	..	..	"
Tawera (Hamilton)	2	7½	..	"	"	River	..	..	..	..	First survey.
Tawera (Mercer) ..	..	8	..	Non-condensing	"	"	..	..	..	..	"
Te Akau ..	2	7	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	First survey.
*Te Anau ..	1028	250	1,238	Compound	"	Home trade ..	8	3	2	3	"
Te Aroha ..	57	85	..	Oil-engine	"	"	2	..	..	..	"
Te Aumiti ..	3	10	..	"	"	River	..	..	..	..	"
Te Awhina ..	2	99	588	Triple-expansion	"	Home trade ..	1	3	..	..	Tug.
Te Kooti ..	2	5	..	Oil-engine	"	River	..	..	..	..	"
*Te Kura ..	2	7	..	"	"	Restricted limits	..	..	..	..	First survey.
Te Maika ..	5	10	..	"	"	"	..	..	..	..	"
Te Pioneer ..	25	13	..	Compound	Screw	River	..	..	..	..	"
*Te Puke Lass ..	3	15	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Te Pua ..	3	10	..	"	"	"	..	..	..	..	"
Te Bangi ..	2	6	..	"	"	"	..	..	..	..	"
Te Rino ..	4	5	..	"	"	"	..	..	..	..	"
Tetio ..	1	3	..	"	"	"	..	..	..	..	"
Te Wake ..	3	5	..	"	"	"	..	..	..	..	"
Te Whaka ..	140	45	..	Compound	"	Extended river	..	..	..	..	"
Te Wharu ..	3	7½	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Terawhiti ..	47	90	..	Triple-expansion	"	Home trade ..	2	3	..	..	Tug.
Thelma (Kaipara)	1	4	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
*Thelma (Queenst'n)	3	5	..	"	"	"	..	..	..	..	"
The Minerva ..	20	14	..	Compound	"	Extended river	..	..	..	..	"
The Peregrine ..	162	52	..	Triple-expansion	"	"	..	..	..	..	"
Theresa Ward ..	9	95	473	"	"	Home trade ..	1	3	..	..	Tug.
Thistle (Kaiapoi) ..	4	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Thistle (Kaipara) ..	4	5	..	"	"	"	..	..	..	..	"
*Thistle (Moana) ..	1	4	..	"	"	"	..	..	..	..	First survey.
Thistle (Wanganui)	77	90	..	"	Twin-screw	Home trade ..	2	..	..	..	"
Thomas King ..	70	16	..	Compound	Screw	Restricted limits	..	..	..	..	"
Thornicroft ..	2	6	..	Oil-engine	"	"	..	..	..	..	First survey.
Tikirau ..	5	20	..	"	"	"	..	..	..	..	"
Tikiteri ..	3	8	..	"	"	"	..	..	..	..	"
Tilikum ..	7	13	..	"	"	"	..	..	..	..	"
Tofua ..	2634	355	3,234	Triple-expansion	Twin-screw	Foreign trade	11	9	6	3	"
Togo (Wanganui)	..	14	..	Compound	"	River	..	..	..	..	"
Togo (Auckland) ..	5	12	..	Oil-engine	Screw	"	..	..	..	..	First survey.
Toiler ..	28	13½	..	Compound	"	"	..	..	..	..	"
Tongariro ..	4	8	..	"	"	"	..	..	..	..	"
Torea ..	24	60	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	First survey.
Toroa ..	1	2½	..	"	Screw	"	..	..	..	..	"
Tot ..	6	16	..	"	"	"	..	..	..	..	"
Traveller ..	..	8	..	Compound	"	River	..	..	..	..	"
Tuatea (Gisborne)	58	28	232	"	"	Home trade ..	2	2	..	..	"
Tuatea (Raglan) ..	4	8	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Tu Atu ..	30	60	..	"	Twin-screw	"	..	..	..	..	"
Tui (Hamilton) ..	2	4½	..	"	Screw	"	..	..	..	..	First survey.
Tui (Hokianga) ..	1	1½	..	"	"	"	..	..	..	..	"
Tui (Nelson) ..	1	5	..	"	"	"	..	..	..	..	"
Tui (Picton) ..	1	1½	..	"	"	"	..	..	..	..	"

\* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Crews.	
Tui (Rawene)	3	5	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Tui (Whangarei)	20	6½	..	Compound	..	Extended river	..	..	..	..	..
*Tuirangi	72	22½	..	Triple-expansion	..	River	..	..	..	..	..
Tukua	11	9	..	Oil-engine	Twin-screw	"	..	..	..	..	..
Tuna	..	3½	..	Compound	Screw	"	..	..	..	..	..
Turamakina	2½	5	..	Oil-engine	..	Restricted limits	..	..	..	..	First survey.
Turanga	18	25	..	"	..	"	..	..	..	..	..
Tutanekai	2	8	..	"	Twin-screw	"	..	..	..	..	First survey.
Uira	4	3½	..	"	Screw	River	..	..	..	..	..
Undine	5	10	..	"	Twin-screw	Restricted limits	..	..	..	..	First survey.
Uta	23	50	..	"	Screw	"	..	..	..	..	..
Utu	2	8	..	"	"	"	..	..	..	..	First survey.
Vanora	5	24	..	"	"	"	..	..	..	..	..
Vectus	22	16	..	"	"	"	..	..	..	..	"
Vesper (Auckland)	20	32	..	"	Twin-screw	Home trade	1	..	..	..	..
Vesper (Kaipara)	3	16	..	"	Screw	Restricted limits	..	..	..	..	First survey.
Victoria (Rotorua)	4	20	..	"	"	"	..	..	..	..	"
*Victory (Auckland)	16	16	..	"	"	"	..	..	..	..	..
Victory (Mercer)	2	9	..	"	"	"	..	..	..	..	First survey.
Victory (Rotorua)	3	6	..	"	"	"	..	..	..	..	"
*Viking	5	14	..	"	"	"	..	..	..	..	"
Violet	8	6	..	"	"	"	..	..	..	..	"
Vivid	6	13	..	Non-condensing	..	River	..	..	..	..	"
Vixen	15	24	..	Oil-engine	Twin-screw	Home trade	1	..	..	..	"
W	11	26	..	"	Screw	Restricted limits	..	..	..	..	"
Waiapu	57	15	..	"	"	"	2	..	..	..	"
Waihora	2993	410	1,811	Triple-expansion	Twin-screw	Foreign trade	10	6	3	3	"
Waihou	4	12	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Wai-iti (Akaroa)	5	47	..	"	Screw	"	..	..	..	..	"
Wai-iti (Wanganui)	5	45	..	"	"	"	..	..	..	..	"
Waikana	66	200	..	Compound	Twin-screw	River	..	..	..	..	"
Waikare (Hokianga)	1	4½	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Waikare (Rangiriri)	2½	5	..	"	"	"	..	..	..	..	"
Waikato (Hokianga)	2	6	..	"	Twin-screw	"	..	..	..	..	"
*Waikato (Tuakau)	6	9	..	"	"	"	..	..	..	..	"
*Waikuku	2	5	..	"	"	"	..	..	..	..	"
Waima	6	20	..	"	"	"	..	..	..	..	"
Waimatama	1	5	..	"	Screw	"	..	..	..	..	First survey.
Waimarie (Auckland)	159	48	..	Compound	"	Extended river	..	..	..	..	"
Waimarie (Wanganui)	53	20	..	Non-condensing	Paddle	River	..	..	..	..	"
*Waimea	207	100	625	Triple-expansion	Twin-screw	Home trade	4	3	..	..	"
Wainui (Akaroa)	5	10	..	Oil-engines	Screw	Restricted limits	..	..	..	..	First survey.
Wainui (Picton)	2	5	..	"	"	"	..	..	..	..	"
Waiome	4	10	..	"	Twin-screw	"	..	..	..	..	First survey.
Waione	48	80	..	Compound	"	River	..	..	..	..	"
Waioara	..	..	66	"	Screw	"	..	..	..	..	"
*Wai-ora	3	15	..	Oil-engine	Twin-screw	Restricted limits	..	..	..	..	First survey.
Waipapakauri	5	4	..	"	"	"	..	..	..	..	"
Waipori	1299	180	843	Triple-expansion	"	Foreign trade	7	3	2	3	"
Waipuna	2½	7	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
*Wairau	60	20	137	Compound	"	Home trade	2	2	..	..	"
Waireka (Dunedin)	72	49	..	Triple-expansion	"	River	..	..	..	..	"
Waireka (Russell)	3	5	..	Oil-engine	Screw	Restricted limits	..	..	..	..	First survey.
Waireka (Wanganui)	5	45	..	"	"	"	..	..	..	..	"
Waitere	41	25	..	Non-condensing	Paddle	River	..	..	..	..	"
Wairoa (Auckland)	49	40	114	Condensing	Screw	Home trade	2	2	..	..	"
*Wairoa (Nelson)	48	20	77	Compound	"	"	2	1	..	..	"
*Wairoa (Queens-town)	5	10	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
Wairoa (Riverton)	6	4	..	"	"	"	..	..	..	..	"
Wairua (Wanganui)	Under 20	5	..	Compound	"	River	..	..	..	..	"
Wairuna	2530	396	2,099	Triple-expansion	"	Foreign trade	10	9	3	3	"
Waitangi (Auckland)	21	66	292	Compound	Twin-screw	Home trade	1	3	..	..	"
*Waitangi (Dunedin)	31	60	..	"	Screw	"	1	1	..	..	Trawler.
Waitara	16	3½	..	"	"	Extended river	..	..	..	..	"
Waitaria	2	5	..	Oil-engine	"	River	..	..	..	..	"
Waitata	2	4	..	"	"	Restricted limits	..	..	..	..	Formerly "Heather."
Waitemata	3460	258	..	Triple-expansion	"	Foreign trade	11	9	6	3	"
Waiohi	18	10	..	Compound	"	Extended river	..	..	..	..	"
*Waituna	3	5	..	Oil-engine	"	Restricted limits	..	..	..	..	First survey.
*Waiwera (Henley)	..	16	..	"	"	"	..	..	..	..	"
Waiwera (Thames)	..	..	..	"	"	Extended river	..	..	..	..	"

\*Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
* Waiwiri .. ..	..	8	..	Compound ..	Screw ..	Extended river	..	..	..	..	
Wakaiti .. ..	15	43	..	Oil-engine ..	Twin-screw	Home trade ..	1	..	..	..	
Wakanui .. ..	6	20	..	..	Screw ..	Restricted limits	..	..	..	..	First survey.
Wakapai .. ..	Under 20	10	..	Compound ..	..	River	..	..	..	..	
Wakatere (A'kland)	157	140	..	..	Paddle ..	Extended river	..	..	..	..	
Wakatere (Raglan)	4	5	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	First survey.
Wakatu .. ..	95	23	138	Compound ..	..	Home trade ..	2	2	..	..	
Wanaka .. ..	1572	280	1,030	Triple-expansion	..	Foreign trade	8	3	2	3	
Warrimoo .. ..	2076	490	3,506	..	..	..	10	9	6	3	
* Wave .. ..	29	38	..	Oil-engine ..	Twin-screw	Home trade ..	1	..	..	..	
Waverley .. ..	93	25	128	Compound ..	..	..	2	2	..	..	
Weka (Auckland)	86	27	..	..	Screw ..	River	..	..	..	..	
Weka (Napier) ..	53	20	94	..	..	Home trade ..	2	2	..	..	
Westland .. ..	8	35	..	..	Paddle ..	..	1	..	..	..	Tug.
Whaka .. ..	2	10	..	Oil-engine ..	Screw ..	River	..	..	..	..	
Whakarire .. ..	449	120	..	Compound ..	Twin-screw	Home trade ..	5	3	..	..	Dredge.
Whangape .. ..	1901	280	1,106	Triple-expansion	Screw ..	Foreign trade	8	3	2	3	
Whanui .. ..	2	5	..	Oil-engine ..	..	Restricted limits	..	..	..	..	First survey.
Wharepapa .. ..	4	12	..	..	..	..	..	..	..	..	
Whati .. ..	..	6½	..	Compound ..	..	River	..	..	..	..	
Whisper .. ..	3	1	..	..	..	Extended river	..	..	..	..	
Will Watch .. ..	48	45	..	Oil-engine ..	..	Home trade ..	2	..	..	..	
Winifred .. ..	3½	8	..	..	Twin-screw	Restricted limits	..	..	..	..	First survey.
Wootton .. ..	90	33	119	Compound ..	..	Home trade ..	2	2	..	..	
Young Bungaree ..	2	35	160	..	..	..	1	2	..	..	
Zephyr .. ..	4	7	..	Oil-engine ..	Screw ..	Restricted limits	..	..	..	..	
Zior .. ..	1	6	..	..	..	..	..	..	..	..	First survey.
Zoe .. ..	2	4½	..	..	..	..	..	..	..	..	
Zomar .. ..	3½	12	..	..	..	..	..	..	..	..	

\* Surveyed twice.

RETURN OF SAILING-SHIPS TO WHICH SURVEY CERTIFICATES WERE GRANTED DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Vessel.	Tons Register.	Class of Certificate.	Minimum Number of Seamen required by Law to be carried.			Remarks.
			Able Seamen.	Ordinary Seamen.	Boys.	
Albatross .. ..	45	Home trade ..	2	..	..	
Alert .. ..	98	" .. ..	2	1	..	
Alma .. ..	56	" .. ..	2	..	..	
Altair .. ..	57	" .. ..	2	..	..	
Amelia Sims .. ..	98	" .. ..	2	1	..	
Annie Hill .. ..	121	" .. ..	4	..	1	
Aratapu .. ..	122	" .. ..	4	..	1	
Argus .. ..	36	" .. ..	2	..	..	
Arrah-na-Pohue ..	100	" .. ..	2	1	..	
* Awanui .. ..	85	" .. ..	2	1	..	
Bee .. ..	24	" .. ..	1	..	..	
Bessie .. ..	9	" .. ..	1	..	..	
Bravo .. ..	99	" .. ..	2	1	..	
Briton .. ..	19	" .. ..	1	..	..	
Cead Mile Failte ..	63	" .. ..	2	..	..	
Clifton .. ..	18	" .. ..	1	..	..	
Clio .. ..	81	" .. ..	2	1	..	
Combine .. ..	24	Restricted limits	1	..	..	
Comet .. ..	20	Home trade ..	1	..	..	
Coronation .. ..	85	" .. ..	2	1	..	
* Dandy .. ..	82	" .. ..	2	1	..	
Daphne .. ..	20	" .. ..	1	..	..	
Deveron .. ..	26	" .. ..	1	..	..	
Dominion .. ..	25	" .. ..	1	..	..	
Edith .. ..	19	" .. ..	1	..	..	
Edna .. ..	15	" .. ..	1	..	..	
Eliza Firth .. ..	143	" .. ..	4	..	1	
* Era .. ..	49	" .. ..	2	..	..	

\* Surveyed twice.

RETURN OF SAILING-SHIPS TO WHICH SURVEY CERTIFICATES WERE GRANTED DURING THE YEAR  
 ENDED 31ST MARCH, 1913—continued.

Name of Vessel.	Tons Register.	Class of Certificate.	Minimum Number of Seamen required by Law to be carried.			Remarks.
			Able Seamen.	Ordinary Seamen.	Boys.	
Esme .. .. .	20	Restricted limits	1	..	..	
Ethel Wells .. .. .	19	"	1	..	..	
*Eunice .. .. .	171	Home trade ..	4	..	1	
Falcon .. .. .	98	"	2	1	..	
Gannet .. .. .	25	"	1	..	..	
Gem .. .. .	20	"	1	..	..	
Glenae .. .. .	11	Restricted limits	1	..	..	
Helen .. .. .	299	Intercolonial ..	5	1	1	
Herald .. .. .	73	Home trade ..	2	1	..	
Hero .. .. .	56	"	2	..	..	
Huia .. .. .	20	Restricted limits	1	..	..	
Huon Bell .. .. .	43	Home trade ..	2	..	..	
Ida .. .. .	25	"	1	..	..	
Inez Dean .. .. .	12	"	1	..	..	
Irene .. .. .	30	"	1	..	..	
Isabella de Fraine .. .. .	93	"	2	1	..	
Janet .. .. .	22	"	1	..	..	
Jane Gifford .. .. .	20	"	1	..	..	
Jessie Craig .. .. .	634	Intercolonial ..	8	1	2	
Joseph Craig .. .. .	694	"	8	1	2	
Kapua .. .. .	18	"	1	..	..	
*Karora .. .. .	160	Home trade ..	4	..	1	
*Katie S. .. .. .	20	"	1	..	..	
Kereru .. .. .	100	Intercolonial ..	2	1	..	
Kiatia .. .. .	20	Home trade ..	1	..	..	
Kaitere .. .. .	11	"	1	..	..	
Kitty Fraser .. .. .	25	"	1	..	..	
Kiwi .. .. .	19	"	1	..	..	
Lady of the Lake .. .. .	19	Restricted limits	1	..	..	
*Lena Gladys .. .. .	24	Home trade ..	1	..	..	
Lily (Lyttelton) .. .. .	84	"	2	1	..	
*Lily (Nelson) .. .. .	16	"	1	..	..	
*Lizette .. .. .	35	"	2	..	..	
Lizzie Taylor .. .. .	77	"	2	1	..	
Louisa Craig .. .. .	683	Intercolonial ..	8	1	2	
*Maggie .. .. .	20	Home trade ..	1	..	..	
Maid of Italy .. .. .	15	Restricted limits	1	..	..	
May .. .. .	44	Home trade ..	2	..	..	
Moa (Auckland) .. .. .	99	"	2	1	..	
Moa (Napier) .. .. .	66	Restricted limits	2	1	..	
Moehau .. .. .	23	Home trade ..	1	..	..	
Moonah .. .. .	83	"	2	1	..	
Morning Light .. .. .	92	"	2	1	..	
Ngaru .. .. .	66	"	2	1	..	
Nor'west .. .. .	18	Restricted limits	1	..	..	
Northern Chief .. .. .	263	Intercolonial ..	5	1	1	
Old Jack .. .. .	14	Home trade ..	1	..	..	
Onerahi .. .. .	25	"	1	..	..	
Orakei .. .. .	32	"	2	..	..	
Pearl Kasper .. .. .	25	"	1	..	..	
Ranger .. .. .	64	"	2	1	..	
Rangi .. .. .	86	"	2	1	..	
Reliance .. .. .	76	"	2	1	..	
Result .. .. .	23	"	1	..	..	
Rimu .. .. .	49	"	2	..	..	
Rona .. .. .	618	Intercolonial ..	8	1	2	
Rosalie .. .. .	7	Home trade ..	1	..	..	
Saucy Kate .. .. .	25	"	1	..	..	
Scot .. .. .	18	"	1	..	..	
Seagull .. .. .	20	"	1	..	..	
Stag .. .. .	19	"	1	..	..	
Talisman .. .. .	84	Restricted limits	2	1	..	
Tally Ho .. .. .	51	Home trade ..	2	..	..	
Tararawa .. .. .	44	"	2	..	..	
*Tay .. .. .	15	"	1	..	..	
The Portland .. .. .	59	"	2	..	..	
The Lee .. .. .	19	"	1	..	..	
Three Cheers .. .. .	97	"	2	1	..	
Transit .. .. .	19	"	1	..	..	
Tuahine .. .. .	22	"	1	..	..	
Venture .. .. .	19	"	1	..	..	
Vindex .. .. .	23	"	1	..	..	
Violet .. .. .	20	Restricted limits	1	..	..	
Wakonini .. .. .	23	Home trade ..	1	..	..	
Wanganui .. .. .	309	Intercolonial ..	6	1	1	
Wanderer .. .. .	85	Home trade ..	2	1	..	
Welcome .. .. .	62	"	2	1	..	
Winnie .. .. .	19	Restricted limits	1	..	..	
Ysabel .. .. .	149	Intercolonial ..	4	..	1	

\* Surveyed twice.

## STATEMENT SHOWING PROSECUTIONS INSTITUTED BY THE MARINE DEPARTMENT IN CONNECTION WITH FISH AND OYSTERS.

Name of Person.	Offence.	Fine imposed.	
R. O'Shea .. .. .	Selling fish taken on unlicensed vessel ..	10s. and costs.	
Mrs. Kaspar .. .. .	Illegally taking oysters .. .. .	£2 and costs.	
G. Langley .. .. .	Taking undersized flounders .. .. .	£1 and costs.	
A. Batten .. .. .	" .. .. .	"	
W. Wood .. .. .	" .. .. .	"	
F. McCallum .. .. .	Damaging oyster-beds .. .. .	5s. and costs.	
Two Maori girls .. .. .	Illegally taking oysters .. .. .	Convicted, and 7s. 6d. each costs.	
H. A. Nicholson .. .. .	" .. .. .	£6 and costs. Launch forfeited, but returned on payment of £50.	
W. Rolton .. .. .	}	} Each £5 and costs. Launch forfeited, but returned on payment of £15.	
E. Brown .. .. .			" .. .. .
T. Matthews .. .. .			" .. .. .
J. O. Keefe .. .. .	Selling undersized garfish .. .. .	£1 and costs.	
R. Norris .. .. .	" .. .. .	"	
T. Cook .. .. .	Using undersized net .. .. .	"	
J. Powley .. .. .	Taking undersized flounders .. .. .	£3 and costs.	
T. Hand .. .. .	" .. .. .	£1 and costs.	
A. Tough .. .. .	" .. .. .	"	
C. Ruffell .. .. .	Taking oysters from closed bed .. .. .	"	
R. Johns .. .. .	" .. .. .	"	
E. Allnutt .. .. .	For being in possession of undersized flounders .. .. .	"	
V. Suttor .. .. .	" .. .. .	"	
R. Collins .. .. .	Illegally taking oysters .. .. .	"	
F. Francis .. .. .	" .. .. .	"	
E. Crawford .. .. .	" .. .. .	"	
G. Bishop .. .. .	" .. .. .	"	
E. James .. .. .	" .. .. .	"	
J. H. Scott .. .. .	" .. .. .	"	
P. Hill .. .. .	" .. .. .	"	
T. McKnight .. .. .	" .. .. .	"	
A. Lomey .. .. .	Assaulting Inspector of Fisheries .. .. .	"	
R. S. Lawrence .. .. .	Illegally taking oysters .. .. .	"	
Mrs. D. Simmons .. .. .	" .. .. .	"	
E. A. Hackell .. .. .	Allowing sawdust to go into river .. .. .	£2 and costs.	
O. Rasmussen .. .. .	Illegally taking whitebait .. .. .	£1 and costs.	
H. Rasmussen .. .. .	" .. .. .	"	
F. Algar .. .. .	" .. .. .	"	
A. Scrivens .. .. .	" .. .. .	"	
A. Cross .. .. .	" .. .. .	"	
W. F. Cross .. .. .	" .. .. .	"	
G. Cross .. .. .	" .. .. .	"	
F. G. Cross .. .. .	" .. .. .	"	
W. Graham .. .. .	" .. .. .	"	
A. Wells .. .. .	" .. .. .	"	
B. Nicholls .. .. .	" .. .. .	"	
F. Jackson .. .. .	" .. .. .	"	
A. Rose .. .. .	" .. .. .	"	
P. Brady .. .. .	" .. .. .	"	
D. Jackson .. .. .	" .. .. .	"	
F. Harrison .. .. .	" .. .. .	"	
E. Wohlers .. .. .	Taking undersized flounders .. .. .	£2 and costs.	
D. Oughton .. .. .	" .. .. .	"	
H. Faith .. .. .	" .. .. .	"	
J. Aitken .. .. .	" .. .. .	£1 and costs.	
A. F. Martin .. .. .	" .. .. .	"	
C. M. Myers .. .. .	" .. .. .	"	
J. Myers .. .. .	" .. .. .	"	
R. Dick .. .. .	" .. .. .	"	
W. Cunningham .. .. .	" .. .. .	"	
B. Barry .. .. .	" .. .. .	"	
P. Kettle .. .. .	" .. .. .	"	
A. White .. .. .	" .. .. .	"	
J. Bell .. .. .	" .. .. .	"	
J. Chrystal .. .. .	" .. .. .	"	
W. Fraser .. .. .	" .. .. .	"	
P. Fraser .. .. .	" .. .. .	"	
S. Cooper .. .. .	" .. .. .	"	

RETURN SHOWING NUMBER OF FISHING-BOATS REGISTERED AND LICENSED AT EACH PORT DURING THE YEAR ENDED 31ST DECEMBER, 1912.

Port.	Number registered.	Number licensed.	Port.	Number registered.	Number licensed.
Auckland .. .. .	270	270	Brought forward .. .. .	922	868
Bluff .. .. .	87	87	New Plymouth .. .. .	20	20
Chatham Islands .. .. .	..	..	Oamaru .. .. .	36	32
Dunedin and Port Chalmers .. .. .	80	80	Picton .. .. .	21	21
Greymouth .. .. .	9	9	Poverty Bay .. .. .	24	14
Hokitika .. .. .	3	3	Russell .. .. .	55	55
Hokianga .. .. .	14	14	Tauranga .. .. .	24	24
Invercargill .. .. .	36	36	Thames .. .. .	92	41
Kaipara .. .. .	89	43	Timaru .. .. .	26	26
Lyttelton .. .. .	204	204	Wairau .. .. .	9	9
Mangonui .. .. .	..	..	Wanganui .. .. .	9	9
Napier .. .. .	68	68	Wellington .. .. .	136	46
Nelson .. .. .	62	54	Westport .. .. .	14	14
Carried forward .. .. .	922	868	Totals .. .. .	1,388	1,179

LIST OF BOYS WHO JOINED S.S. "AMOKURA" PRIOR TO 31ST MARCH, 1913.

Name.	Date of Joining.	Date of Discharge.	Occupation taken up on Discharge.
Whitelaw, L. C. .. .. .	12/3/07	21/6/08	Joined s.s. "Kittawa" as O.S.
Canavan, C. F. .. .. .	12/3/07	10/9/08	Discharged, owing to sickness.
Hannan, J. M. .. .. .	20/3/07	6/9/08	Joined s.s. "Tutanekai" as O.S.
Stemp, A. H. .. .. .	12/3/07	16/11/08	" " "Ripplingham Grange" as O.S.
Macvean, D. E. J. .. .. .	12/3/07	29/9/08	" " "Pateena" as O.S.
Reeves, J. M. .. .. .	17/3/07	29/9/08	" " "Putiki" as O.S.
Campbell, J. A. .. .. .	15/3/07	15/11/08	" " "Tutanekai" as O.S.
Holder, R. .. .. .	22/3/07	13/5/09	" " "Rotoiti" as O.S.
Heaphy, E. A. .. .. .	20/3/07	24/9/08	Joined schooner "Clyde" as O.S.
Miller, C. .. .. .	27/5/07	25/11/08	" barquentine "Helga" as O.S.
Johnstone, J. A. .. .. .	14/3/07	25/11/08	" " "as boy.
Guthrie, T. J. .. .. .	12/3/07	27/11/08	" s.s. "Maori" as O.S.
Schlaadt, E. A. .. .. .	20/3/07	10/12/08	" " "Monowai" as O.S.
McKay, F. D. .. .. .	16/3/07	13/12/08	Did not go to sea; working on vessels in port
McKay, H. .. .. .	16/3/07	13/12/08	Working on dredges on River Molyneux } Found berths on ships, but parents objected to their going.
McNabb, C. H. .. .. .	30/5/07	13/12/08	Joined s.s. "Warrimoo" as O.S.
Tait, G. .. .. .	21/3/07	18/9/08	Discharged on parents' request.
Varcoe, C. .. .. .	31/5/07	13/12/08	Joined s.s. "Waikare" as O.S.
Macalister, J. .. .. .	22/3/07	17/6/08	Discharged on parents' request.
Hay, E. D. .. .. .	21/3/07	8/1/09	Joined "Joseph Craig" as O.S.
Hay, V. J. .. .. .	21/3/07	8/1/09	" " "Marjorie Craig" as O.S.
Marshall, G. W. .. .. .	14/3/07	2/2/09	" " "Jessie Craig" as O.S.
Mitchell, D. .. .. .	5/7/07	2/2/09	" s.s. "Wakanui" as O.S.
Neels, R. .. .. .	12/3/07	8/2/09	" " "Manapouri" as O.S.
Scott, W. V. A. .. .. .	17/5/07	8/2/09	" " "Kimi" as O.S.
Ellisson, L. G. .. .. .	27/6/07	8/2/09	" " "Hinemoa" as O.S.
Taylor, W. H. .. .. .	15/7/07	8/2/09	" " "as boy.
Walker, J. E. .. .. .	15/5/07	18/2/09	" " "Te Anau" as O.S.
Nelson, F. .. .. .	24/6/07	1/3/09	" " "Maori" as O.S.
Seymour, W. .. .. .	28/5/07	4/3/09	" " "Takapuna" as O.S.
Trudgeon, A. .. .. .	22/5/07	21/5/09	Training completed; returned home at parents' request.
Davies, H. .. .. .	17/10/07	11/5/09	Joined s.s. "Moana" as O.S.
Burborough, W. H. .. .. .	3/12/07	17/5/09	" H.M.S. "Challenger" as boy.
Grace, I. W. .. .. .	30/10/07	17/5/09	" " " "
Brown, D. M. .. .. .	22/10/07	17/5/09	" " " "
Talbot, P. D. .. .. .	3/7/07	24/5/09	" s.s. "Maori" as O.S.
Wyllie, E. .. .. .	7/11/07	17/5/09	" " "Hinemoa" as boy.
Kemp, R. .. .. .	29/3/07	16/4/09	Training completed; returned home at parents' request.
Fea, D. .. .. .	15/5/07	25/7/08	Discharged on parents' request.
Langmuir, I. .. .. .	18/6/07	27/4/09	Training completed; returned home at parents' request.
Soper, A. H. .. .. .	3/11/08	18/5/10	Joined H.M.S. "Pioneer" as boy.
McCullough, C. C. .. .. .	22/5/07	1/6/09	" s.s. "Pateena" as O.S.
Hurley, G. A. R. .. .. .	22/2/09	8/8/10	" " "as O.S.
Bond, B. .. .. .	2/7/07	2/7/09	" " "Ngatiawa" as O.S.
Holder, F. .. .. .	4/2/08	14/12/09	" " "Maori" as O.S.
Tindall, W. H. A. .. .. .	3/11/08	12/6/10	" " "Kennedy" as O.S.
Diggle, N. .. .. .	22/7/07	10/8/09	" " "Manapouri" as boy.
Manson, R. V. .. .. .	24/7/07	28/8/09	" " "Putiki" as O.S.
Woods, G. .. .. .	15/10/07	27/9/09	" barque "Joseph Craig" as O.S.
Ford, J. J. .. .. .	15/8/07	22/9/09	" ship "Dartford" as cadet.
Dyte, N. V. .. .. .	19/10/07	28/3/08	Discharged to return home.
Groves, W. .. .. .	22/10/07	24/10/09	Returned home, as training complete.
McNeilage, R. .. .. .	18/10/07	9/7/09	Joined s.s. "Moana" as O.S.
Carr, O. G. .. .. .	14/11/08	24/11/08	Discharged to return home.

LIST OF BOYS WHO JOINED S.S. "AMOKURA" PRIOR TO 31ST MARCH, 1913—*continued.*

Name.	Date of Joining.	Date of Discharge.	Occupation taken up on Discharge.
Arthur, T. S. E.	31/10/07	7/6/09	Joined s.s. "Rimutaka."
Sharpe, C. . .	27/10/07	9/9/09	" " "Nikau" as O.S.
Sharpe, G.	27/10/07	12/6/09	" " "Queen of the South" as O.S.
Lawton, C. J.	20/1/08	8/2/10	" " Union Steamship Company's shore staff.
Welham, R. F.	24/4/08	1/11/09	" s.s. "Ngapuhi" as O.S.
Cullen, B. M.	1/2/08	28/9/09	" " "Hinemoa" as O.S.
Powell, W. J.	23/2/08	26/8/09	" " "Tutanekai" as O.S.
Jansen, G.	23/1/08	25/1/08	Discharged to return home.
Sarginson, E. C.	28/2/08	22/9/09	Joined ship "Dartford" as cadet.
Millard, W. G. W.	12/7/08	29/9/09	" " " " "
Maisey, J. F.	9/7/08	14/12/09	" s.s. "Maori" as O.S.
Clarke, V. C. M.	4/11/08	24/5/10	" " "Rotoiti" as O.S.
Martin, S. E.	30/9/08	30/5/10	" barque "Rona" as O.S.
Breach, H. E.	9/9/08	14/12/09	" s.s. "Maori" as O.S.
Mahoney, E. L. G.	20/11/08	3/9/10	" " "Moana" as O.S.
Miles, P. A.	19/11/08	5/5/10	" " "Putiki" as O.S.
Olson, E. N.	18/9/08	24/5/10	" " "Tainui" as O.S.
Inglis, A. L.	16/2/09	22/6/10	" barque "Speculant" as O.S.
Haines, H. F.	10/2/09	5/8/10	" s.s. "Warrimoo" as boy.
Hucks, R. H.	12/2/09	18/5/10	" H.M.S. "Pioneer" as boy.
Carston, A. C.	21/2/09	10/10/10	" s.s. "Kennedy" as O.S.
Burrows, J. F.	16/2/09	18/5/10	" H.M.S. "Pioneer" as boy.
Bennett, H. E.	12/2/09	6/9/10	" s.s. "Kennedy" as O.S.
McGregor, A.	9/2/09	4/9/10	" " "Pateena" as boy.
Wagstaff, T. R.	12/2/09	19/10/10	" " "Aorangi" as O.S.
Jenkins, P. J.	3/4/09	16/1/11	" scow "Whangaroa" as O.S.
Burnside, V.	28/3/09	5/8/10	" s.s. "Pateena" as boy.
Culling, S. G.	27/2/09	7/9/10	" " "Moana" as O.S.
Cree, J.	27/2/09	6/10/10	" " "Moa" as O.S.
Fisher, B. F.	30/6/08	4/5/10	" " "Maori" as boy.
McDougall, J. F.	29/3/09	1/8/10	" " "Rosamond" as O.S.
Rutledge, R.	6/4/09	10/10/10	" " "Queen of the South" as O.S.
Day, G. R. H.	25/5/09	16/1/11	" " " " "
Sturgess, W. G.	25/5/09	18/5/10	" H.M.S. "Pioneer" as boy.
Grieve, C. R.	30/5/09	29/11/10	" s.s. "Mokoia" as O.S.
Washer, H. L.	31/5/09	16/1/11	" " "Rosamond" as O.S.
Herring, C.	4/6/09	16/1/11	" " "Himitangi" as O.S.
Martin, E. W.	8/6/09	16/1/11	" " "Putiki" as O.S.
Smith, V.	11/6/09	16/1/11	" " "Hinemoa" as boy.
Hood, J. J.	11/6/09	15/12/10	" " "Nikau" as O.S.
Wait, A. G.	17/6/09	20/1/11	" " "Star of Scotland" as O.S.
Latimer, A. E. C.	28/6/09	21/1/11	" barque "Helen Denny" as O.S.
Darlow, F. J.	21/7/09	8/2/10	Written off as a deserter.
Chapple, H. M. B.	27/7/09	21/1/11	Joined s.s. "Haupiri" as O.S.
Dalzell, St. J. C.	6/8/09	25/5/11	" " "Alexander" as O.S.
Stone, H. O.	28/8/09	8/6/11	" H.M.S. "Pioneer" as boy.
Hay, H. L.	5/9/09	1/5/11	" s.s. "Nerehana" as O.S.
Soper, A. F.	8/9/09	17/6/11	" " "Arahura" as boy.
Watson, C. H.	14/9/09	12/6/11	" " "Poherua" as O.S.
Moir, T. P.	18/9/09	17/5/11	" " "Aorangi" as O.S.
McLeish, D. N.	22/9/09	2/5/11	" " "Kaitoa" as O.S.
Brennan, W.	29/9/09	12/6/11	" " "Kaiapoi" as O.S.
Lawson, R.	5/10/09	9/6/11	" " "Kaitoa" as O.S.
Seafe, J. . .	5/10/09	2/5/11	" " "Muritai" as O.S.
Wilson, J. . .	27/10/09	1/6/11	" " "Manuka" as O.S.
Satherley, H. G. B.	30/10/09	19/6/11	" " "Takapuna" as O.S.
Foreman, J. W.	28/10/09	1/5/11	" " "Ngahere" as O.S.
King, C. F.	28/10/09	24/7/11	" " "Stormbird" as O.S.
Todd, C. C.	1/11/09	22/8/11	" " "Maitai" as boy.
Brown, J. P. G.	26/10/09	23/12/09	Discharged, medically unfit.
Small, F. . .	8/11/09	18/6/11	Joined s.s. "Moa" as O.S.
Swinbourne, T. H.	10/11/09	8/6/11	" H.M.S. "Pioneer" as boy.
Gaby, C. J. M.	19/1/10	28/6/11	" barque "Alexa" as O.S.
Jenkins, W. H. P.	15/1/10	28/6/11	" " " " as boy.
Collans, G. M.	20/1/10	21/8/11	" H.M.S. "Challenger" as boy.
Birse, A. S.	19/1/10	3/7/11	" s.s. "Putiki" as O.S.
Jory, H. D.	19/1/10	18/10/11	" " "Rosamond" as O.S.
Middleton, W.	19/1/10	30/8/11	" " "Poherua" as O.S.
Magnusson, E. R. H.	9/5/10	8/6/11	" H.M.S. "Pioneer" as boy.
Healey, A. C.	20/2/10	17/8/11	" s.s. "Himitangi" as O.S.
Patton, T. W.	2/6/10	8/6/11	" H.M.S. "Pioneer" as boy.
Eagle, C. L.	2/6/10	16/12/11	" s.s. "Arahura" as boy.
Brown, C. E.	8/6/10	29/2/12	" schooner "Lizzie Taylor" as O.S.
Turvey, F. O.	10/6/10	11/1/12	" s.s. "Mararoa" as boy.
Cuddon, W. S. F.	10/6/10	15/3/12	" " "Waitemata" as O.S.
Silvester, G.	11/6/10	15/1/12	" " "Poherua" as O.S.
Freeman, W. J.	11/6/10	23/1/12	" " "Putiki" as O.S.
McNeil, W. H.	15/6/10	16/12/11	" " "Kini" as O.S.
Young, H. R.	22/6/10	1/5/12	" " "Putiki" as O.S.
Berry, N. L.	3/7/10	8/1/12	" " "Putiki" as O.S.
Friston, E. O.	15/7/10	15/5/12	" " "John" as O.S.
Cole, S. E.	29/8/10	8/6/11	" H.M.S. "Pioneer" as boy.
Braddock, S. H.	1/9/10	24/2/12	" s.s. "Mararoa" as boy.
Morrissey, W.	1/9/10	23/3/12	" " " " as O.S.



## LIST OF BOYS WHO JOINED S.S. "AMOKURA" PRIOR TO 31ST MARCH, 1913—continued.

Name.	Date of Joining.	Date of Discharge.	Occupation taken up on Discharge.
Kelsey, W. G.	9/9/10	2/5/12	Joined s.s. "Alexander" as O.S.
Ellis, J. R.	27/9/10	11/5/12	" " "Poherua" as O.S.
Frame, F. E.	27/9/10	11/5/12	" " "Nikau" as O.S.
Lippert, L. O. R.	30/9/10	31/7/12	" " "Holmdale" as O.S.
Rasmussen, C. F.	18/10/10	20/5/12	" " "Ngahere" as O.S.
Walker, L.	19/10/10	1/5/12	" " "Corinna" as O.S.
Foster, A. G.	27/10/10	..	Discharged.
Fitzsimmons, A. J.	27/10/10	12/5/12	Joined s.s. "Mangapapa" as O.S.
Fox, R. V.	27/10/10	11/5/12	" " "Mararoa" as boy.
Cory, G. E.	21/1/11	31/7/12	" " "Maori" as O.S.
Cox, A. J.	21/1/11	31/7/12	" " " " as O.S.
Miller, H. J.	28/1/11	6/9/12	" " "Putiki" as O.S.
Martin, M.	28/1/11	31/8/12	" " "Poherua" as O.S.
Drummond, G.	28/1/11	1/10/12	" " "Turakina" as O.S.
Freeman, G. H.	28/1/11	17/3/13	" " "Hinemoa" as O.S.
Bower, D. W. C.	28/1/11	21/8/12	" " "Stormbird" as O.S.
Kemp, H. E.	11/2/11	19/8/12	" " "Manaia" as O.S.
Billett, L. J.	11/2/11	..	Deserted. Since joined s.s. "Maitai."
Reeves, A.	18/5/11	19/2/13	Joined s.s. "Himitangi" as O.S.
Page, R. K.	19/5/11	19/2/13	" " "Delphic" as O.S.
Kevill, R.	19/5/11	19/2/13	" " "Koromiko" as O.S.
Fisher, S. F.	20/5/11	18/2/13	" " "Tyrone" as O.S.
Manson, P. C.	1/6/11	15/3/13	" " "Arachura" as O.S.
Cain, W. G.	2/6/11	21/3/13	" " "Tainui" as O.S.
Paterson, W. H.	22/6/11	15/3/13	" " "Breeze" as O.S.
Christie, E. G.	24/6/11	22/3/13	" " "Ngatoro" as O.S.
Hood, J. L.	29/6/11	..	Still on board.
Westrupp, A. W.	9/7/11	..	" "
Bray, H. L.	7/7/11	..	" "
McKenzie, A. M. B.	9/7/11	..	" "
Maney, E. O.	10/7/11	19/6/12	Joined H.M.S. "Pioneer" as boy.
Asher, I.	11/7/11	..	Still on board.
Dowell, A. J.	11/7/11	..	" "
Watt, J. W.	11/7/11	..	" "
Uridge, R. W.	11/7/11	..	" "
Gordon, W. J.	12/7/11	..	" "
Hastie, J. D.	14/7/11	..	" "
Lunn, E. S.	11/7/11	..	" "
Rawlins, A. E.	11/7/11	..	" "
Carr, F. J.	27/8/11	..	Deserted.
Gilbertson, P. A.	29/8/11	..	Still on board
Warren, G. N.	29/8/11	..	" "
Bromwell, M. C.	30/8/11	..	" "
Edwards, C. G. F.	13/9/11	..	" "
Prideaux, H. A.	15/9/11	..	" "
McFarlane, B. W.	26/9/11	..	Deserted. Since joined s.s. "Maitai."
Farrow, V. R.	11/10/11	..	Still on board.
Tarbutt, G. S.	25/1/12	..	" "
Cullen, C. G.	25/1/12	..	" "
Morrison, A. P.	25/1/12	..	" "
Taylor, S. J. W.	25/1/12	..	Returned to care of Education Department.
Burton, C. W.	25/1/12	..	Still on board.
Brockett, H. A.	25/1/12	..	" "
Newton, F. J. W.	28/5/12	..	" "
Hullah, T. H. G.	29/5/12	..	" "
Went, O. L.	29/5/12	..	" "
Stapleton, H. P. A.	29/5/12	..	" "
Moore, W.	29/5/12	..	" "
Cameron, J.	29/5/12	..	" "
Julian, A. H.	29/5/12	..	" "
McFarlane, G. Mc.	29/5/12	..	" "
Richter, S.	30/5/12	..	" "
Gandy, C. P.	30/5/12	..	" "
Lovett, R. A. K.	1/6/12	..	" "
Bell, L. A. R.	1/6/12	..	Discharged at parents' request
Hay, C. J.	12/6/12	..	Still on board.
Carter, A.	12/6/12	..	Returned home medically unfit.
Newman, W. T.	12/6/12	..	Dismissed ship.
Smith, J. B.	15/6/12	..	Still on board.
Wickens, T. L.	20/11/12	..	" "
Sutton, J.	20/11/12	..	" "
Bacon, W. S.	20/11/12	..	" "
Fairweather, R. W.	21/11/12	..	" "
Neale, W. A.	23/11/12	..	" "
Edwards, J. T.	22/11/12	..	" "
Retter, F. H.	27/11/12	..	" "
Massey, L. J.	11/2/13	..	" "
Robertson, A. B.	11/2/13	..	" "
Hardley, C. F. S.	11/2/13	..	" "
Chapman, D. M.	11/2/13	..	Returned home as unsuitable.
Cadwallader, W. H.	13/2/13	..	Still on board.

RETURN OF ESTATES OF DECEASED SEAMEN RECEIVED AND ADMINISTERED IN PURSUANCE OF THE PROVISIONS OF THE SHIPPING AND SEAMEN ACT, 1908, DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Seaman.	Balance to Credit of the Estate on 31st March, 1912.			Amount received.	Amount paid.	Balance to Credit of the Estate on 31st March, 1913.						
	£	s.	d.			£	s.	d.	£	s.	d.	
Robert McKellar .. .. .	..	..	..	13	4	6	..	..	..	13	4	6
Peter Cawte .. .. .	..	..	..	8	3	3	8	3	3	..	..	..
F. W. Christie .. .. .	..	..	..	33	16	1	33	16	1	..	..	..
John Lenihan .. .. .	..	..	..	3	3	7	3	3	7	..	..	..
George Sluice .. .. .	..	..	..	0	7	6	..	..	..	0	7	6
John Jorgensen .. .. .	40	12	2	..	..	..	40	12	2	..	..	..
Lawnts Olsen .. .. .	15	6	9	..	..	..	15	6	9	..	..	..
George Northcote .. .. .	29	6	0	1	17	3	31	3	3	..	..	..
William Benjamin .. .. .	9	11	3	..	..	..	4	5	0	5	6	3
George Paton .. .. .	6	12	6	..	..	..	6	12	6	..	..	..
John Patterson .. .. .	4	16	0	..	..	..	4	16	0	..	..	..
Donald Campbell .. .. .	..	..	..	4	7	1	4	7	1	..	..	..
Thomas Doran .. .. .	3	4	8	0	10	0	3	14	8	..	..	..
Alexander McRae .. .. .	9	2	11	93	16	3	102	19	2	..	..	..
John Richard Glanville .. .. .	2	7	6	8	10	6	10	18	0	..	..	..
Robert Parry .. .. .	..	..	..	1	15	6	..	..	..	1	15	6
Samuel Wadsworth .. .. .	..	..	..	2	15	4	..	..	..	2	15	4
Alfred Bullen .. .. .	..	..	..	11	5	2	..	..	..	11	5	2
J. J. Mays .. .. .	..	..	..	4	19	6	..	..	..	4	19	6
Frank Terceel .. .. .	..	..	..	1	7	5	1	7	5	..	..	..
William Severn .. .. .	..	..	..	10	1	9	10	1	9	..	..	..
Lionel Dorney .. .. .	..	..	..	11	13	3	11	13	3	..	..	..
Thomas B. Williams .. .. .	..	..	..	2	5	8	..	..	..	2	5	8
William Roberts .. .. .	..	..	..	10	7	2	10	7	2	..	..	..
John Ward Dingle .. .. .	..	..	..	3	7	0	3	7	0	..	..	..
D. Lynn .. .. .	..	..	..	0	10	5	..	..	..	0	10	5
James Gully .. .. .	..	..	..	15	3	3	15	3	3	..	..	..
J. Lindsay .. .. .	..	..	..	0	7	0	..	..	..	0	7	0
H. L. Halversen .. .. .	..	..	..	2	14	4	..	..	..	2	14	4
P. W. Barnett .. .. .	..	..	..	8	14	11	..	..	..	8	14	11
Edwin Gale .. .. .	3	12	6	1	12	3	..	..	..	5	4	9
Walter Greenhalgh .. .. .	..	..	..	15	7	0	15	7	0	..	..	..
J. Ward .. .. .	2	18	2	6	13	11	1	13	6	7	18	7
Totals .. .. .	127	10	5	278	16	10	338	17	10	67	9	5

RETURN SHOWING AMOUNTS RECEIVED PRIOR TO 1ST APRIL, 1912, STANDING TO CREDIT OF ESTATES OF DECEASED SEAMEN, AND FOR WHICH CLAIMS HAVE NOT BEEN PROVED.

	£	s.	d.		£	s.	d.
Gustav W. Lindbloom, late A.B., "Wanderer"	2	10	10	Mrs. A. Jacobs, late stewardess, "Penguin"	2	3	6
John Forman, late A.B., "Waitemata"	3	4	5	H. McGuire, late sculleryman, "Penguin"	1	10	2
Henry Payne, late A.B., "Kini"	70	7	11	J. Peterson, late of "Ronga"	0	10	0
Gustave Hanley, late A.B., "Waikonini"	3	7	6	James Brown, late fireman, "Hinemoa"	10	12	1
Hugh Trimble, late cook, "Frank Guy"	6	15	3	Lindvist M. Matsen, late A.B., "Huia"	4	10	8
Nelson O. Stred, late A.B., "Helen Denny"	0	11	3	Frederick Clark, late O.S., "Flora"	0	10	0
T. Clark, late A.B., "Flora"	1	0	0	Robert Lewis, late cook, "Clyde"	0	16	0
Erick A. Osterlund, late A.B., "Ganymede"	16	1	6	Frederick Smith, late A.B., "Moonah"	1	6	8
William Wood, late trimmer, "Arahura"	4	6	11	A. L. Menard, late chief engineer, "Duco"	1	8	0
E. Kelly, late O.S., "Surprise"	1	11	6	S. Annis, late fireman, "Duco"	0	10	8
E. Johansen, late A.B., "Surprise"	1	16	2	J. W. Mutton, late fireman, "Duco"	0	10	8
J. Nelson, late sailmaker, "Constance Craig"	0	10	0	C. Williams, late second mate, "Duco"	0	12	0
A. Maller, late of "Constance Craig"	0	5	0	W. Murdoch, late A.B., "Duco"	0	9	4
H. Hansen, late of "Constance Craig"	0	5	0	William Mackay, late A.B., "Duco"	0	9	4
T. Brown, late of "Constance Craig"	0	5	0	P. Holmegard, late A.B., "Duco"	0	9	4
M. Keogh, late of "Constance Craig"	0	5	0	C. Hansen, late A.B., "Duco"	0	9	4
Thor Christiansen, late A.B., "Haere"	0	2	10	J. Dahlborg, late A.B., "Duco"	0	13	4
Duncan Kennedy, late A.B., "Kini"	5	16	9	A. Cameron, late O.S., "Duco"	0	9	4
J. Court, late chief officer, "Loch Lomond"	16	6	8	O. Blanquist, late A.B., "Aotea"	1	18	2
J. Dawson, late A.B., "Talune"	3	6	2	Charles Roberts, late O.S., "Morning Light"	3	4	11
C. Waddington, late A.B., "Loch Lomond"	10	11	0	Alfred Tronson, late mate, "Rangi"	6	8	7
J. Jones, late A.B., "Loch Lomond"	11	12	0	Arthur Penry Lewis, late engineer, "Pioneer"	18	8	3
T. Grey, late A.B., "Loch Lomond"	11	12	0	James Tall, late A.B., "Aorere"	7	11	6
C. Sornson, late A.B., "Loch Lomond"	10	10	1	W. Henderson, late A.B., "Penguin"	0	12	6
J. McKay, late A.B., "Loch Lomond"	11	12	0	J. H. Waters, late second engineer, "Duco"	0	13	0
J. McVicar, late A.B., "Loch Lomond"	6	9	0	J. Porter, late cook, "Duco"	2	11	2
H. Cooper, late cook, "Loch Lomond"	18	11	0	A. L. Ross, late A.B., "Fanny"	41	2	6
Walter Owens, late A.B., "Kiripaka"	2	18	6	John Grimshaw, late A.B., "Ngatoro"	4	10	11
T. Woodford, late A.B., "Penguin"	3	12	6	William Benjamin, late A.B., "Waotahi"	5	6	3
E. Gale, late A.B., "Penguin"	5	4	9	Jean Yviquel, late A.B., "Eliza Firth"	0	0	6
W. Westacott, late A.B., "Penguin"	3	12	6	J. Mercer, late cook, "Jessie Niccol"	1	4	6
G. Gaffra, late donkeyman, "Penguin"	4	19	6	Samuel Henderson, late greaser, "Waipori"	11	19	0
James Piercy, late A.B., "Kia Ora"	1	2	2	J. S. Denholm, late fireman, "Pukaki"	6	18	3
G. Barnes, late trimmer, "Penguin"	4	1	8				

RETURN OF WRECKS AND CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT FROM THE 1ST APRIL, 1912, TO THE 31ST MARCH, 1913.

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Registered Tonnage	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1912. Feb. 2	Himitangi, s.s., 13 years	Schooner	149	16	9	Fish and wool	Stranded; slight damage	..	Petre Bay, Chatham Islands	S.S.W.	Strong ..	The pin of the shackle worked out and detached the cable from the anchor, and the vessel drifted ashore. No proper anchor watch had been set, a fireman having been left in charge, but the Court absolved the master from blame as it had been the practice for a fireman to take the watch on the "Himitangi" when in harbour	J. C. Cowan.
" 28	Vixen, 29 years	Ketch ..	15	4	..	..	Stranded; slight damage	..	Matata Bar	E.	Moderate	When crossing the bar the vessel struck and broke her rudder	J. Taft.
Mar. 12	Mannkau, s.s., 31 years	Schooner	45	5	..	Coal ..	Stranded; total loss	..	South Spit, Waitara Bar	N.N.W.	Fresh breeze	When crossing the bar of the Waitara River a sudden squall obliterated the back beacon, and the vessel stranded on the south side of the channel. The Court found that no blame was attachable to the master or any member of the crew	J. O. Berg.
About April 6-9	Manchester, s.s., 22 years	Dredge..	366	24	..	..	Foundered; total loss	25	Tasman Sea	..	..	The dredge left Wellington for Sydney on 6th April, 1912, and was sighted off Farewell Spit on the following day, but has not since been heard of. It is supposed that she foundered with all hands in the very stormy weather prevailing immediately after her departure. Careful search has been made by H.M.S. "Challenger," "Encounter," and "Pioneer," and by the s.s. "Eden," but without result	James Downie.
April 16	Clan Ogilvy, s.s., 16 years	Schooner	1,683	33	..	..	Broken shaft; damage, £1,200	..	Lat. 37° 10' S., Long. 164° 54½ E.	S.W.	Light ..	The intermediate shaft broke	J. W. Swanston.
Between April 22 and May 7	Lottie	Auxiliary cutter	5	2	2	..	Not known; total loss	4	Between Big Omaha and Whangaruru	..	..	The launch left Big Omaha for Whangaruru on 22nd April, and nothing further was known about her until her wreckage and the bodies of the four occupants were found on the beach at Whangaruru on 7th May	W. T. Brown.
April 23	Hero, 7 years..	Ketch ..	56	3	..	Coal ..	Collision with wharf; trifling damage	..	Auckland Harbour	S.W.	Strong breeze	The tide carried the vessel against the wharf, breaking her bowsprit.	J. Francis.
" 30	Vixen, 29 years	Ketch ..	15	4	..	General	Stranded; damage, £175	..	Matata Bar	E.	Moderate	When crossing the bar one of the engines stopped and she was carried ashore, the bulwarks being considerably damaged	J. Taft.
May 4	Savaii, s.s., 16 years	Schooner	31	4	..	..	Fire; damage, £300	..	Port Ahuriri	S.W.	Light ..	The vessel was found to be on fire at about 9 p.m., but the origin of the fire could not be ascertained	P. H. Jenkins.
" 6	Ngaru, 14 years	Schooner	66	5	..	..	Stranded; slight damage	..	Kawhia Bar	S.W.W.	Light ..	The vessel had just crossed the bar when the wind dropped and changed, and the swell carried her on to the bar. She was got off on 14th May	H. W. Vile.
" 15	May Howard, 24 years	Auxiliary schooner	55	4	..	Cement	Stranded; trifling damage	..	Auckland Harbour	S.	Light ..	Grounded in a thick fog, but floated off next day	T. Jones.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of	Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.				Cargo.	Casualty.		
1912. May 16	Kotuku, s.s., 12 years	Auxiliary schooner	662	22	..	Stranded; total loss	..	Mouth of Grey River..	N.W.	Light	Whilst proceeding down the river the steering-gear jammed, causing the vessel to deflect from her course and strike the north tip-head. She afterwards backed out, crossed the river full speed astern, struck the south training-wall and stripped her propeller. Being thus rendered helpless, and having either carried away her anchors or stripped the flukes, she drifted across the bar and stranded on the north tip-head. The Court considered that the master, in proceeding full speed from the wharf to the position where the steering-gear jammed, did not act with due prudence, and was guilty of negligent navigation; that after the vessel struck on the north tip-head the master broke down and collapsed; that the mate, James Edward Corrick, then took charge, and in the opinion of the Court the subsequent striking of the vessel on the south training-wall and becoming a total wreck was mainly due to his want of coolness and judgment	John Christian.
"	16 Rotiti, s.s., 14 years	Schooner	630	26	..	Collision with breakwater; slight damage	..	New Plymouth	..	..	When approaching the wharf the engines failed to stop the vessel in time to avoid a collision	John Flynn.
"	17 Haupiri	Schooner	452	30	..	Stranded; slight damage	..	Barrett's Reef, Wellington Heads	S.	Strong	When leaving Wellington Harbour a heavy rain-squall obscured all lights and landmarks, and the vessel touched the reef. The Court found that the master committed an error of judgment in not anchoring when he found the lights obscured, and he was ordered to pay the costs of the inquiry	J. Morrison.
"	17 Kaipatiki, s.s., 5 years	Cutter ..	20	3	12	Collision; damage, £5	..	Wharf, Albany, Auckland Harbour	W.N.W.	Light	When going alongside the wharf the launch ran into the "Kaipatiki," doing slight damage	P. McElwain.
"	17 Centaur, 1 year	Oil launch	6	2	5	Collision; no damage	..	Off Stephens Island ..	N.W.	Moderate	The vessel is a new one, and the caulking in one of the seams started, causing a leak	C. Hunter.
June 1	Havera, s.s., 1 year	Schooner	100	10	..	Sprung a leak; trifling damage	..	Lyttelton Harbour ..	Calm	..	When berthing at No. 5 wharf her port anchor fouled No. 4 wharf. Casualty attributed to shadows cast by the moon	T. M. Jackson.
"	8 Canopus, s.s., 9 years	Schooner	835	26	..	Collision with wharf; slight damage	..	Auckland Harbour ..	S.E.	Strong	A steerage passenger named Thomas Banks was missed on the voyage between Auckland and Wellington, and is supposed to have been lost overboard	T. A. Gibbons.
"	6 Lady of the Lake, 36 years	Schooner	19	2	..	Capsized; trifling damage	..	Between Auckland and Wellington	N.W.	Moderate	Vessel proceeding from Kawhia to Kaipara was found to be leaking, and being driven back, made for Wellington, where she put	W. Lang.
"	15 Nairnshire, s.s.	Schooner	3,679	..	..	Loss of life ..	1	Lat. 37° 33' S., Long. 174° 15' E.	N.W.	Gale	put in for repairs	Charles Forder.
"	16 Ngaru, 14 years	Schooner	66	5	..	Sprung a leak; slight damage	..					H. W. Vile.

"	16	Mania. 6 years	Oil launch	3	1	5	..	Stranded; total loss	..	North-west end of Chicken Island	W.	Light ..	The engine stopped after anchor was weighed; the anchor was again dropped, but failed to hold, and the launch drifted, struck a rock, and sank	H. E. Hewlett.
"	20	Ranger, 19 years	Schooner	64	4	..	..	Stranded; damage, £65	..	Off Whakatane, Bay of Plenty	N.	Gale ..	When beating to an anchorage under Whale Island the mainsail blew out and the foresail split, causing the vessel to drift ashore. She got off a few days later	H. Andersen.
"	21	Kawan, s.s., ..	Schooner	37	3	30	..	Stranded; no damage	..	Kolimarama, Auckland Harbour	W.	Light ..	The vessel rounded the point into St. Helier's too soon and ran ashore, but got off when tide rose	W. G. Tye.
"	23	Star of Canada, s.s., 3 years	Schooner	4,623	67	..	General	Stranded; total loss	..	Kaiti Beach, Gisborne	S.W.	Gale ..	The vessel was anchored in the Gisborne roadstead when a fierce southerly squall came up and caused her to drag her anchors and go ashore. The Court absolved the master and others concerned from all blame in the matter	J. M. Hart.
"	24	St. Anne, 13 years	Ketch ..	19	2	..	..	Collision with wharf; no damage	..	Town Wharf, Whangarei	S.	Strong breeze	When coming up the river the master left the helm to a cattle-drover, who put it to starboard instead of port, and the vessel ran into a fishing-boat which was lying on the ground alongside the jetty	M. Rountree.
July 11		Melody ..	Auxiliary ketch	4	2	..	Fish ..	Capsized; total loss	2	Wairau Bar ..	S.E.	Strong breeze	Caught by heavy sea when crossing the bar and capsized	E. Collett.
"	14	The Peregrine, s.s. (new)	Barge ..	162	4	50	..	Stranded; damage, £110	..	Stanley Point, Auckland Harbour	..	Calm ..	Went aground in a dense fog, damaging the rudder and deadwood, and stripping the propeller	N. Simmons.
"	22	Condor, s.s., 9 years	Ferry-boat	188	4	500	..	Collision; slight damage	..	Victoria Wharf, Auckland Harbour	..	Calm ..	Vessels collided in dense fog when going dead slow	Thomas Scott.
"	22	Kestrel, s.s., 7 years	Ferry-boat	203	4	12	..	Collision; no damage	..	..	..	..	..	T. Clark.
"	22	Kestrel, s.s., 7 years	Ferry-boat	203	4	140	..	Collision; no damage	..	No. 3 Jetty, Auckland Harbour	..	Calm ..	The vessels came into collision in a dense fog	T. Clark.
"	22	Wakatere, s.s., 16 years	Schooner	157	28	30	..	Collision; trifling damage	..	..	..	..	..	A Farquhar.
"	23	Haere, 9 years	Lighter	99	1	..	Coal ..	Fire; slight damage	..	Devonport Wharf, Auckland Harbour	..	Calm ..	The fire was caused by the overheating of the deck-planking near the donkey boiler	..
"	25	Lizae Taylor, 20 years	Ketch ..	77	5	..	Timber	Dis masted; damage, £150	..	Pelorus Sound ..	S.E.	Strong squalls	A sudden squall carried away the mainmast starboard rigging, bringing down the mast and sails	A. Peterson.
"	27	Kaiaia, 3 years	Auxiliary schooner	24	4	..	Timber	Stranded; damage, £50	..	Waipu Bar ..	S.E.	Moderate	When crossing the bar the vessel touched and ran ashore. She was refloated three weeks later	A. Clark.
Aug. 5		Mana, 37 years	Cutter ..	22	3	..	Shingle	Foundered; total loss	..	Waiheke Island ..	E.	Moderate	When beating out of Hook's Bay the starboard chain-plate carried away, and the mast and rigging went overboard with the bulwarks and stanchions. The vessel filled rapidly, and as the crew were unable to keep the water down with the pump, they left in the ship's boat, and got safely ashore. The vessel shortly sank in 20 fathoms	E. J. Grogan.
"	11	Taniwha, s.s., 14 years	Schooner	191	17	9	Genera	Foundered; damage, £550	..	Thames River ..	..	Calm ..	The vessel struck a snag, which knocked a hole in her side, and she filled and sank. She was afterwards refloated	W. Sullivan.
"	17	Kotare, s.s., 8 years	Schooner	79	10	..	Timber	Broken tail-shaft; damage, £40	..	Off Waikawa ..	..	Calm ..	Tail-shaft carried away. Cause unknown ..	H. J. Treurn.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig	Register Tonnage	Number of		Nature of		Number of Lives Lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1912. Aug. 19	John, s.s., 13 years	Schooner	111	13	..	Produce	Collision; no damage	..	Queen's Wharf, Wellington	N.W.	Strong breeze	Whilst the "John" was coming to her berth the engines failed to go astern owing to a slight accident to the h.p. cylinder, and she ran against the "Defender".	S. Holm.
"	Defender, s.s., 11 years	Schooner	109	9	..	General	Collision; damage, £100	..	Patea Bar ..	N.E.	Calm ..	Vessel grounded when crossing the bar	J. Jamieson.
"	Aorere, s.s., 26 years	Ketch ..	49	9	..	General	Stranded; slight damage	..	Hobson Street Wharf, Auckland	N.E.	Light ..		A. H. Fisk.
"	Dorrigo, s.s., 11 years	Schooner	195	20	..	..	Broken to mast	..	Off Farewell Spit ..	..	..	When berthing, the foretopmast caught the top-sail yard of the "Joseph Craig," and was carried away	A. J. Mahy.
"	Defender, s.s., 11 years	Schooner	109	9	..	General	Trifling damage to machinery	..	Near Tauranga ..	N.N.E.	Strong breeze	Induction-pipe cracked, and vessel put into Nelson for repairs	J. Jamieson.
"	Apouari, s.s., 7 years	Schooner	220	23	20	..	Loss of propeller; damage, £70	..	No. 4 Jetty, Quay Street, Auckland	..	Calm ..	The port tail-shaft broke, and was lost with propeller	T. Hautain.
Sept. 4	Manaiia, s.s., 6 years	Schooner	630	40	60	General	Collision; no damage	..	140 miles north of Mokolimou Tolago Bay	N.	Moderate gale	As the "Manaiia" was leaving the wharf she bumped into the "Kanieri" moored there	E. Stephenson.
"	Kanieri, s.s., 26 years	Schooner	116	14	..	..	Collision; trifling damage	..	..	W.	Moderate		T. Myers.
"	Dorrigo, s.s., 11 years	Schooner	195	20	..	..	Damage to machinery	..	..	..	..	The condenser-pump broke down, and the vessel returned to Auckland for repairs	A. J. Mahy.
"	Squall, s.s., 8 years	Schooner	133	..	..	..	Struck submerged object; slight damage	..	..	..	..	Struck some submerged object and dented two plates	A. R. Stewart.
"	Wanganui, 10 years	Barquentine	309	11	..	Timber	Disasted; damage, £2,000	..	Cook Strait	N.N.W.	Strong breeze	Disasted in strong wind and heavy sea; towed to Wellington by s.s. "Arapawa"	J. A. Berquist.
"	Hina, s.s., 51 years	Schooner	39	8	5	..	Stranded; no damage	..	Collingwood River ..	W.	Gale ..	A strong fresh in the river combined with the heavy gale drove the vessel ashore on the river flat	R. Goldie.
"	Magie, 11 years	Auxiliary schooner	58	6	..	Piles ..	Stranded; no damage	..	Wairoa River, Hawke's Bay	S.W.	Moderate	Grounded when crossing the bar owing to insufficient depth of water	S. Fletcher.
"	Gertie, s.s., 21 years	Schooner	119	14	..	Coal ..	Stranded; damage, £50	..	Bar, Manawatu River	S.	Light ..	Grounded on the bar owing to insufficient depth of water, and broke propeller-blades and twisted rudder	R. Rodger.
Oct. 7	Eileen Ward, s.s., 2 years	Dredge	956	14	..	..	Collision; no damage	..	Wharf, Westport Harbour	..	Light	When proceeding down the river the Mangapapa touched the ground and lost steerage-way, and the strong current carried her against the dredge moored at the wharf	G. A. Simpson.
"	Mangapapa, s.s., 9 years	Schooner	87	10	8	General	Collision; damage, £50	..	Omaha Beach, Haunaki Gulf	..	Calm ..	The stranding was caused by the helmsman failing to keep a proper lookout, and neglecting to call the master when instructed to do so	F. Fletcher.
"	Waro, 36 years	Auxiliary schooner	34	5	..	Coal ..	Stranded; no damage	..	Near Jackson's Head beacon	W.	Moderate breeze	When nearing Jackson's Head the strong tide caused the vessel to swing towards the beacon, and prevented her answering the helm promptly, and in coming round, her stern touched a small outlying rock	M. McGregor.
"	Pateaena, s.s., 29 years	Schooner	550	50	41	General	Stranded; no damage	..	Wool Wharf, Wellington	S.E.	Light ..	When approaching her berth the lever of one of the engines dropped, and caused it to go ahead for a few seconds instead of astern, and the vessel took a sheer and bumped into H.M.S. "Pioneer" moored at the wharf	J. G. Watson.
"	Awahou, s.s., 1 year	Schooner	151	15	..	Wool ..	Collision with wharf; damage, £10	..	..	..	..		W. Manley.

"	Weka, s.s., 29 years	Schooner	53	9	General	Stranded; no damage	Porangahau, Hawke's Bay	S.E.	Moderate	The course set by the master was not followed by Seaman Nelson, who was left in charge, and who failed to call the master, although instructed to do so if the weather became hazy. The master was ordered to pay £4 6s. 6d., half-cost of inquiry	O. Haraldson.
"	25 Wanderer, 9 years	Schooner	85	4	Timber	Damaged rigging, slight	1½ miles east of Kawanu Island	S.W.	Strong breeze	A sudden squall carried away the bowsprit	H. Andersen.
"	26 Haveré, s.s., 2 years	Schooner	92	10	General	Stranded; partial loss	Patea Bar	S.W.	Strong breeze	The vessel touched bottom when crossing the bar and lost steerage-way, and was swept on to the end of the breakwater, where some loose blocks damaged her hull. She was then carried round the end of the wall and stranded on the beach	T. M. Jackson.
"	29 Surrey, s.s., 13 years	Schooner	3,843	93	General	Collision; slight damage	Wharf, Wellington Harbour	N.E.	Strong	The "Ngatoro," when berthing, bumped into the "Surrey," and her port anchor damaged a starboard plate of the "Surrey"	J. Uren. J. Christian.
"	29 Ngatoro, s.s., 2 years	Schooner	583	19	Coal	Collision; no damage	Wharf, Wellington Harbour	N.	Strong	The coal-hulk "Countess of Errol," when being put alongside the "Wakatu," to coal her, bumped into her and slightly damaged two plates	J. Willis.
"	29 Wakatu, s.s., 33 years	Schooner	95	14	General	Collision with hulk; trifling damage	Wharf, Wellington Harbour	N.	Strong	The rudder-head carried away, and the vessel put into Nelson for repairs	W. E. Wahlstrom.
Nov. 2	Putiki, s.s., 7 years	Schooner	157	15	Live-stock	Damaged rudder-head; trifling damage	Rock's Point, West Coast, South Island	W.	Fresh breeze	When berthing, her starboard bow bumped heavily on the end of the wharf, denting two plates	J. R. M. Morley.
"	11 Kurow, s.s., 3 years	Schooner	1,564	34	Coal	Collision with wharf; slight damage	Miramar Wharf, Wellington Harbour	N.W.	Fresh breeze	Valve-spindle of high-pressure cylinder broke	J. McKenzie.
"	15 Hauti, s.s., 1 year	Schooner	82	12	General	Slight damage to machinery	Tiri Passage	S.W.	Fresh breeze	When crossing the bar she touched and lost way, and the strong wind caught her bow and drove her ashore, where she sustained considerable damage generally	J. Jamieson.
"	18 Defender, s.s., 9 years	Schooner	109	13	General	Stranded; damage, £1,000	Bar, Karamea River	S.S.W.	Strong breeze	The vessel encountered a heavy cyclonic storm, which did considerable damage to deck-fittings and flooded the saloons, cabins, and officers' rooms	C. Forder.
Oct. 19 and 20	Nairnshire, s.s., 13 years	Schooner	3,079	63	General	Considerable damage to fittings	Between Lat. 41° S. and Long. 60° 29' E.	..	Cyclone	Key between tail of shaft and boss of propeller broke and dropped out	R. Goldie.
Nov. 20	Hina, s.s., 51 years	Schooner	39	8	General	Trifling accident to machinery	Aoreere River, Collingwood	S.E.	Moderate	Fire occurred in after end of hold, probably caused by rain-water coming in contact with quicklime in cargo	R. Keynes.
"	29 Kiritona, s.s., 3 years	Auxiliary schooner	75	9	General	Fire; no damage to ship	West Quay, Port Ahuriri	..	..	The coal in one of the bunkers was found to be on fire; cause not known	A. J. Charman.
Dec. 3	Waivera, s.s., 13 years	Schooner	4,025	60	General	Fire; slight damage	Port Chalmers Wharf	N.W.	Moderate	A passenger named Roddy McGregor was missed from the vessel on the night of the 4th December, and is supposed to have fallen overboard; but there was no evidence as to how the accident occurred	..
"	4 Tangihua, s.s., 35 years	Auxiliary schooner	20	..	General	Loss of life	Beacon Point, Wairoa River, Kaipara	..	..	Port tail-shaft carried away	J. Corbett.
"	9 Waitangi, s.s., 23 years	Auxiliary schooner	34	10	General	Broken shaft; damage, £50	Off Waiheke Island	E.	Light	Rudder carried away and she missed stays, and the inner jib then carried away. She was towed to Auckland for repairs	J. Brown.
"	11 May Howard, 26 years	Auxiliary schooner	55	5	Timber	Rudder carried away; slight damage	Off Cape Colville	S.W.	Fresh breeze	The crank-shaft broke, but vessel was able to reach port under easy steam	R. Goldie.
"	12 Hina, s.s., 51 years	Cutter	39	7	General	Broken crank-shaft; slight damage	Off Totaranui	N.	Light		

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

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	Registers Tonnage	Number of		Nature of		Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of aster.
				Crew	Passengers	Cargo.	Casualty.		Direction.	Force.		
1912. Dec. 12	Hauroto, s.s., 30 years	Schooner	1,276	1	..	Fire; trifling damage	..	Auckland Harbour ..	..	..	Fire probably caused by lamp exploding in nightwatchman's room	..
"	Waro, 36 years	Auxiliary ketch	34	5	Coal ..	Stranded; slight damage	..	Mahurangi River ..	N.E.	Light ..	When proceeding up the river the vessel got slightly out of the channel and ran on a rock	M. Stuart.
"	The Portland, 3 years	Schooner	59	4	Coke ..	Disasted; damage, £70	..	Mahurangi River ..	W.	Fresh breeze	Whilst beating up the river the mainmast snapped and went over the side, taking mizzen topmast with it	G. Mayall.
"	John, s.s., 13 years	Schooner	111	13	Wool ..	Stranded; no damage	..	Clive Beach, near Napier	N.E.	Light ..	The first mate set the course S.W. by W. $\frac{1}{2}$ W., instead of S. by W. $\frac{1}{2}$ W., and handed over the wrong course to the second mate at midnight. The master should have given written orders in regard to the course to be steered. The Court ordered the first mate to pay £3 3s., and the second mate £1 1s., towards expenses of inquiry	S. Holm.
"	Kekeno, 33 years	Auxiliary schooner	19	7	Fish ..	Struck a dolphin; damage, £100	..	Entrance to Bluff Harbour	W.S.W.	Moderate	Caused through the rudder becoming disabled	J. W. Temarama.
"	Natal Transport, 3 years	Schooner	2,648	31	Timber	Collision with wharf; damage, £600	..	Napier	S.	Moderate	Caused through error of judgment on part of Harbourmaster, who was in charge	D. Thomas.
"	Pitoitoti, s.s., 5 years	Schooner	28	4	Paper ..	Collision; no damage	..	Greenhythe Wharf, Auckland	..	Calm ..	"Pitoitoti" came up to the wharf too fast, and crushed "Centaur" against wharf	F. C. Bradney. B. Hunter.
"	Centaur, s.s., 1 year	Oil launch	6	2	General	Collision; no damage	..	..	..	..	..	..
1913. Jan. 5	Inga, s.s., 9 years	Schooner	570	20	..	Collision; trifling damage	..	..	..	..	The "Ohinemuri" attempted to pass the "Inga" and the "Bell Bird" (which was towing the "Inga"), and collided with the "Bell Bird," causing her to run ashore; and the "Inga," before her way could be stopped, ran against the "Bell Bird." The Court found that the master of the "Ohinemuri" was guilty of an error of judgment in attempting to pass the other vessels at a narrow bend of the river, and he was ordered to pay the costs of the inquiry, £11 12s. 6d.	J. H. Bull.
"	Bell Bird, s.s., 7 years	Schooner	52	6	..	Collision; trifling damage	..	Wairoa River, Kaipara Harbour	N.E.	Moderate	..	H. Cortleson.
"	Ohinemuri, s.s., 22 years	Schooner	73	8	..	Collision; no damage	..	..	..	..	..	E. Keane.
"	Kiripaka, s.s., 19 years	Schooner	75	10	..	Fire; trifling damage	..	Off D'Urville Island..	W.	Fresh breeze	Fire started in galley through range being in contact with wooden bulkhead	V. E. Johansen.
"	Marjorie Craig, 22 years	Barque	499	14	Salt, &c.	Disasted; damage, £100	..	12 miles S. by W. from Cape Willoughby, S.A.	W.	Strong ..	Stiff breeze, heavy sea, and big press of canvas caused fore topmast, topgallant mast, and topsail yards to carry away	R. G. Holmes.
"	Nairnshire, s.s., 14 years	Schooner	3,679	56	General	Fire; trifling damage	..	Bluff Wharf	S.W.	Gale ..	Fire occurred in No. 1 hold amongst bales of tow. Probably caused by some one having thrown a lighted match amongst bales	C. Forder.
"	Arahura, s.s., 8 years	Schooner	771	52	..	Fires; trifling damage	..	Queen's Wharf, Wellington	N.	Light breeze	Three fires broke out within three hours, but were extinguished before much damage was done	G. Lambert.



"	21	Jane, 27 years	Auxiliary ketch	20	3	..	..	South mole, entrance Nelson Harbour	N.N.W.	Fresh breeze	When entering the harbour two heavy seas struck her and caused her to run her bowsprit against the mole	T. Green.
"	25	Hina, s.s., 51 years	Cutter ..	39	8	..	..	Waitapu Wharf	N.	Light ..	When approaching the wharf the tail end of the propeller-shaft broke, and the vessel was carried against the wharf	R. Goldie.
"	26	Manarua, s.s., 15 years	Schooner	78	11	..	..	Queen's Wharf, Wellington	N.W.	Moderate	Fire was discovered in the saloon; supposed to have been caused by rats gnawing matches	R. Hart.
"	27	May Howard, 27 years	Auxiliary schooner	55	5	..	..	Railway Wharf, Auckland	W.	Gale ..	Heavy seas caused her to bump against the wharf	R. E. Thorp.
"	27	Reliance, 9 years	Schooner	76	4	..	..	Manukau Heads	N.E.	Storm ..	Struck by heavy squall and dismasted, when she was carried by the current on to the Emma Bank and stranded	R. Palmer.
"	30	Arahura, s.s., 8 years	Schooner	77	52	..	..	Queen's Wharf, Wellington	N.	Light ..	Fire was discovered in one of the bunks in the forecabin. The sheets had been saturated with kerosene and the ventilators blocked. Evidently the work of an incendiary	G. Lamber.
Feb.	9	Stella, s.s., 37 years	Schooner	157	..	..	..	Auckland Harbour	..	Calm ..	Fire occurred amongst the coal. Probably spontaneous combustion	Vessel laid up.
"	20	Goshawk, s.s., 4 years	Barge ..	122	4	8	..	..	..	..	The "Goshawk" was coming in to berth just as the "Pupuke" was leaving, and the way being partially obstructed by the Harbour Board dredge, the vessels came into collision	W. Simmons.
"	20	Pupuke, s.s., 4 years	Barge ..	68	4	120	..	Ferry Tee, Auckland Harbour	N.	Light	..	T. Braidwood.
"	25	Matatua, s.s., 8 years	Schooner	4,179	61	..	..	Timaru Harbour	..	..	Fire occurred amongst flax in No. 5 hold. Cause unknown	L. B. Gillman.
"	26	Waverley, s.s., 30 years	Schooner	93	11	..	..	French Pass	N.	Light ..	Whilst proceeding through the French Pass against the tide the vessel was carried ashore, but got off undamaged on the rising tide	A. E. H. Purvis.
"	28	Koonya, s.s., 15 years	Schooner	663	22	..	..	Railway Wharf, Wellington	S.	Light ..	The steering-gear jammed, and the vessel bumped into the wharf	A. R. Pryde.
Mar.	1	Waikana, s.s., 4 years	Schooner	66	6	150	..	Maori Kaik, Otago Harbour	S.E.	Moderate	When leaving the wharf at low water her stern struck the bank of the channel and bent the rudder	N. Macdonald.
"	7	Rod Pine, s.s., 1 year	Schooner	181	15	..	..	Cape Stephens, D'Urville Island	W.	Moderate	The master was guilty of error of judgment in not slowing down and putting out to sea when the fog obscured all observation-points, and he was ordered to pay costs of inquiry	E. A. J. Eden.
"	12	Kowhai, s.s., 3 years	Schooner	404	21	..	..	Taiaroa Heads, Otago Harbour	N.E.	Moderate gale	The "Kowhai" had to slow down to let the s.s. "Flora" pass, and having lost way and being in light trim, was carried on to the mole at entrance to the harbour	W. W. Hender.
"	28	Clio, 42 years	Ketch ..	81	4	..	..	7 miles north of Rangitoto Reef	N.N.W.	Moderate	Her back-stays carried away and caused the foremast to fall	W. Palley.

Broken bow-sprit; trifling damage

Collision with wharf; trifling damage

Fire; damage, £100

Belting stove in; trifling damage

Dismasted and stranded; greatly damaged

Fire; trifling damage

Fire; no damage to ship

Collision; trifling damage

Collision; trifling damage

Fire; much cargo damage to

Stranded; no damage

Collision with wharf; slight damage

Stranded; trifling damage

Stranded; total loss

Stranded; slight damage

Dismasted; damage, £30

General

..

Wool ..

General

..

..

..

Coal ..

General

Nil

General

General

Coal ..

..

Timber and coal

General

..

SUMMARY OF CASUALTIES TO SHIPPING REPORTED TO THE MARINE DEPARTMENT DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1913.

Nature of Casualty.	Casualties on or near the Coasts of the Dominion.						Casualties outside the Dominion.						Total Number of Casualties reported.							
	Steamers.			Sailing-vessels.			Total within Dominion.			Steamers.					Sailing-vessels.			Total outside Dominion.		
	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.			No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.
Strandings.—																				
Total wrecks	5	5,514	..	1	22	..	6	5,536	..	..	..	..	..	..	..	6	5,536	..	..	
Partial loss	4	482	..	2	79	..	6	561	..	..	..	..	..	..	6	561	..	..		
Slight damage	9	1,233	..	1	15	..	10	1,314	..	..	..	..	..	..	10	1,314	..	..		
No damage	8	975	..	..	..	..	8	975	..	..	..	..	..	..	8	975	..	..		
Total strandings	26	8,270	..	4	116	..	30	8,386	..	..	..	..	..	..	30	8,386	..	..		
Foundered.—																				
Total loss	1	366	25	..	..	..	1	366	25	..	..	..	..	..	1	366	25	..		
Partial loss	1	191	..	..	..	..	1	191	..	..	..	..	..	..	1	191	..	..		
Total foundered	2	557	25	..	..	..	2	557	25	..	..	..	..	..	2	557	25	..		
Collisions.—																				
Partial loss	1	109	..	..	..	..	1	109	..	..	..	..	..	..	1	109	..	..		
Slight damage	10	5,223	..	..	..	..	10	5,223	..	..	..	..	..	..	10	5,223	..	..		
No damage	10	2,799	..	..	..	..	10	2,799	..	..	..	..	..	..	10	2,799	..	..		
Total collisions..	21	8,131	..	..	..	..	21	8,131	..	..	..	..	..	..	21	8,131	..	..		
Fires.—																				
Partial loss	2	109	..	..	..	..	2	109	..	..	..	..	..	..	2	109	..	..		
Slight damage	7	10,672	..	..	..	..	8	10,771	..	..	..	..	..	..	8	10,771	..	..		
No damage	2	4,336	..	..	..	..	2	4,336	..	..	..	..	..	..	2	4,336	..	..		
Total fires	11	15,117	..	1	99	..	12	15,216	..	..	..	..	..	..	12	15,216	..	..		
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	26	8,165	6	10	847	..	36	9,012	6	2	5,362	1	499	..	39	14,873	6	..		
Total casualties to shipping	86	40,240	31	15	1,062	..	101	41,302	31	2	5,362	1	499	..	104	47,163	..	..		
Loss of life only	2	3,699	2	..	..	..	2	3,699	2	..	..	..	..	..	2	3,699	2	..		
Total number of casualties reported	88	43,939	33	15	1,062	..	103	45,001	33	2	5,362	1	499	..	106	50,862	33	..		

RETURN OF ACCIDENTS TO SEAMEN AND OTHERS ON BOARD SHIP REPORTED TO THE MARINE DEPARTMENT DURING THE FINANCIAL YEAR ENDED THE 31ST MARCH, 1913.

Date of Accident.	Name of Vessel, Port of Registry, and Official Number.	Name of Person injured.	Nature of Injury: Fatal or otherwise.	Place where Accident occurred.	Particulars as to Accident and its Cause, and Verdict of Jury where Coroner's Inquest held.
1912.					
April 2	Hauroto, Dunedin, 84479	S. Hamblin, greaser	Injured knee	At sea	He slipped on the deck.
" 8	Moe, Bluff	E. Anderson, deck hand	Drowned	Off Half-moon Bay	Was washed overboard during a gale.
" 18	Tarawera, Dunedin, 84480	W. J. Nelson, O.S.	Twisted ankle	Wellington	Whilst hauling a line along the deck.
" 22	Waitara, Lyttelton, 76076	J. Quirk, A.B.	Strained back	Blenheim	Whilst working cargo.
" 22	Haupiri, Dunedin, 89094	M. Saunders, A.B.	Strained back	Te Araroa	Whilst working in surf-boat.
" 23	Maori, Dunedin, 117588	F. Horn, 1st mate	Strained back	Lyttelton	He fell down the companion.
" 23	Aorangi, Dunedin, 76068	J. McDonald, A.B.	Bruised	At sea	Was knocked down by a sea.
" 24	Tofua, Dunedin, 117600	C. Minto, fireman	Crushed toe	Auckland	A ventilator fell on his foot.
" 25	Aorangi, Dunedin, 76068	D. McPhee, carpenter	Injured back	At sea	Was knocked down by a sea.
May 1	Waipori, Dunedin, 101485	T. McCarthy, fireman	Burnt arm	Westport	Whilst working at boiler his arm touched a steam-pipe.
" 1	Waipori, Dunedin, 101485	W. Gullifer, greaser	Injured leg	Westport	Slipped on stokehold ladder.
" 1	Opawa, Wellington, 91800	J. R. Wilshire, A.B.	Crushed finger	Wellington	Whilst working cargo.
" 4	Maungani, Dunedin	H. Jeffrey, steward	Poisoned finger	At sea	Whilst scrubbing floor a piece of glass got under his finger-nail.
" 7	Mararoa, Dunedin, 89380	M. Heta, fireman	Strained back	Lyttelton	Whilst working in boilers.
" 7	Karamea, Southhampton, 110264	J. H. Harvey, bosun	Broken thigh and wrist	Wellington	Was knocked down hold by sling.
" 9	Falcon, Lyttelton, 57585	H. Olsen, A.B.	Cut hand	Wellington	Cut his hand whilst cutting a rope.
" 9	Regulus, Dunedin, 117596	J. Krantz, A.B.	Injured foot	Westport	A hatch-beam fell on his foot.
" 11	Kittawa, Dunedin, 106640	N. Wells, A.B.	Sprained ankle	Lyttelton	Tripped.
" 14	Rimu, Auckland, 102280	J. A. Hinch, A.B.	Cut and bruised head and hand	Raglan	Some bricks fell out of a basket on to him.
" 15	Arapawa, Wellington, 108090	F. Babbage, A.B.	Injured knee	Lyttelton	Hook slipped and ran into his knee.
" 15	Karawa, Auckland, 115207	W. Kingham, A.B.	Bruised shoulder	New Plymouth	He slipped and fell on the deck.
" 16	Waitemata, Dunedin, 127801	R. Martin, passage-worker	Bruised arm and hand	Surabaya	Whilst clearing cables.
" 17	Alexander, Nelson, 93988	J. H. Oldridge, A.B.	Injured leg	Wellington	A rail fell and struck his leg.
" 17	Rotoiti, Dunedin, 101481	J. Hunter, greaser	Amputated finger	Wellington	He got his finger caught in the machinery.
" 20	Pohrua, Dunedin, 98061	R. Fitton, fireman	Injured hand	At sea	Wrench slipped and broke a bone in his hand.
" 22	Maheno, Dunedin, 117590	C. W. Last, 3rd mate	Injured foot	Auckland	Whilst letting go anchor his leg got caught in buoy-rope.
" 22	Orari, Plymouth, 119350	J. McDonald, fireman	Injured leg	Nelson	Slipped on engine-room ladder.
" 27	Ruahine, Plymouth, 124582	H. Saville, G.S.	Broken collarbone	At sea	Slipped and fell on the deck.
" 29	Tarawera, Dunedin, 84480	T. Hayes, A.B.	Ricked back	Lyttelton	Through lifting a case.
" 29	Tangaroa, Napier, 106231	J. Bergin, A.B.	Broken arm	At sea	Whilst coming out of hold, ladder slipped and he fell to the bottom.
" 30	Warrimoo, Dunedin, 101901	F. Mitchell, donkeyman	Burnt hand	Lyttelton	Fuse on dynamo blew out.
June 1	Regulus, Dunedin, 117596	J. Singer, cook	Injured back	Westport	Whilst descending ladder he slipped and fell.
" 1	Kaikoura, Plymouth, 114629	G. Singleton, G.S.	Ruptured	At sea	Ruptured himself whilst lifting.
" 2	Lena Gladys, Auckland, 130071	O. C. Laurin, O.S.	Injured hand	Thames	Whilst driving oil-engine hoist he got his hand jammed.
" 7	Kurou, Dunedin, 127804	A. V. Barton, A.B.	Injured eye	Westport	Hurt his eye whilst sending down derrick.
" 8	Ngapuhi, Auckland, 102329	R. Hopkins, mate	Broken arm	Whangarei	A sling of cargo slipped and struck him on the arm.
" 8	Lizzie Taylor, Launceston, 79299	H. Davison, A.B.	Broken leg	At sea	Got foul of main-sheet.
" 14	Waiofahi, Auckland, 94250	A. Willcocks, steward	Injured arm	Auckland	Fell from gangway.
" 17	Squall, Dunedin, 118113	J. Wyatt, A.B.	Injured head	At sea	Slipped and fell on the deck.
" 21	John, London, 110059	W. Severn, cook	Killed	Napier	He fell down stokehold and fractured his skull.
" 24	Corinna, Launceston, 79252	G. Curtis, fireman	Injured perineum	Ochununga	Whilst working in engine-room he received a severe blow.
" 24	Mapourika, Dunedin, 101482	B. Vind, steward	Injured foot	Greymouth	Some hatches fell on his foot.
" 24	Navia, Dunedin, 117583	J. Lewis, fireman	Injured thigh	At sea	Whilst firing, back draught burnt his arm.
" 25	Corinna, Launceston, 79252	J. Rowell, steward	Injured knee	Wellington	He fell down the bilges.
" 26	Rosmond, Dunedin, 89594	J. Foley, fireman	Injured fingers	At sea	Twisted his knee.
" 29	Mararoa, Dunedin, 89380	S. Wadsworth, A.B.	Drowned	Lyttelton	Got his fingers caught in winch of ash-hoist.
" 29	Era, Auckland, 115186	H. Swindley, assistant steward	Bruised finger	Auckland	Knocked overboard by a boom.
July 1	Daphne, Auckland, 122923			Whangarei	Got his finger jammed in saloon door.

RETURN OF ACCIDENTS TO SEAMEN AND OTHERS ON BOARD SHIP REPORTED TO THE MARINE DEPARTMENT, ETC.—continued.

Date of Accident.	Name of Vessel, Port of Registry, and Official Number.	Name of Person injured.	Nature of Injury: Fatal or otherwise.	Place where Accident occurred.	Particulars as to Accident and its Cause, and Verdict of Jury where Coroner's inquest held.
1912.					
July 4	Ripple, Napier, 120627	J. Saffery, A.B.	Bruised back	At sea	Fell down the fore-bridge-deck ladder.
" 7	Moeraki, Dunedin, 101488	J. Dixon, steward	Injured knee	At sea	Fell down the companion-way.
" 8	Morayshire, Glasgow, 108778	P. Doolan, A.B.	Injured side	Wellington	Fell down hold.
" 8	Wakatu, Wellington, 64818	W. Donnelly, A.B.	Crushed foot	At sea	Got his foot jammed between ship and boat.
" 8	Awahou, Wellington, 121389	J. Parry, 1st mate	Injured leg	Wanganui	Slipped on ship's rail.
" 9	Hinemos, Wellington, 69016	J. Bowman, greaser	Crushed finger	At sea	Whilst shifting forge in stovehold.
" 10	Kiatiia, Auckland, 122929	B. Eaddy, A.B.	Bruised finger	Auckland	Got finger caught in cogs of winch.
" 11	Ngatiawa, Auckland, 122916	H. Sinclair, pantryman	Bruised shin	At sea	Knocked his shin against an iron step.
" 15	Manuka, Dunedin, 117582	C. Andrews, A.B.	Fractured elbow	San Francisco	Slipped and fell on the deck.
" 15	Bravo, Auckland, 102291	C. Olsen, A.B.	Twisted ankle	Auckland	Got his foot entangled and fell.
" 15	Maori, Dunedin, 117598	J. Grummah, A.B.	Poisoned hand	Wellington	Knocked his hand and dirt got into it.
" 16	Rototiti, Dunedin, 101481	H. Warner, steward	Injured foot	Wellington	A trunk fell on his foot.
" 16	Morayshire, Glasgow, 108778	N. McDougall, A.B.	Injured kneecap	Wellington	Whilst on duty at gangway another seaman kicked him.
" 17	The Portland, Auckland, 130082	E. Mayall, cook	Injured side	Wellington	Fell and hurt his side.
" 19	Mokoia, Dunedin, 101483	M. Nicholson, A.B.	Crushed finger	At sea	Sling of cargo crushed his finger against a stanchion.
" 19	Maori, Dunedin, 117598	W. H. Johnson, A.B.	Injured knee	Auckland	Whilst working on deck.
" 20	Warrimoo, Dunedin, 101901	A. Baker, steward	Injured arm and shoulder	At sea	Slipped and fell on the deck.
" 20	Warrimoo, Dunedin, 101901	R. Hayes, baker	Scaided arm	At sea	Spit boiling fat on his arm.
" 21	Strathroy, Glasgow, 129440	J. H. Thomas, 2nd mate	Rupture	At sea	Strained himself whilst lifting.
" 21	Kereru, Auckland, 122913	William Ruth, mate	Sprained ankle	At sea	Slipped on the deck.
" 22	Paparoa, Plymouth, 111346	R. Gill, A.B.	Fatal	Bluff	Fell off gangway into water and collapsed after being rescued.
" 24	Waipori, Dunedin, 101485	J. Ramshaw, greaser	Crushed fingers	At sea	Whilst feeling eccentric straps.
" 25	Clansman, Auckland, 87520	A. Naylor, boy	Injured nose	Mangonui	Got his nose jammed in the lift.
" 25	Navua, Dunedin, 117583	A. McGregor, trimmer	Poisoned leg	Wellington	Knocked his shin.
" 27	Hauipiri, Dunedin, 89094	A. Robinson, pantryman	Injured head	At sea	Bumped his head on electric-light indicator.
" 30	Kawau, Auckland, 102318	R. Oldfield, cook	Poisoned finger	At sea	Bone ran into his finger whilst cleaning fish.
" 31	Hua, Auckland, 122915	J. Johnson, A.B.	Injured toe	Auckland	A brick fell on his toe whilst discharging.
" 31	Kurov, Dunedin, 127804	W. Burt, cook	Poisoned thumb	Lautoka, Fiji	Cut his thumb whilst killing a sheep.
Aug. 1	Taviuni, Dunedin, 84500	E. Downie, greaser	Scaided leg	Greytown	Escape of steam scalded his leg.
" 1	Ulmaroa, Melbourne, 120744	J. Green, fireman	Injured foot	Wellington	A sack of potatoes fell on his foot.
" 2	Ruru, Napier, 121586	H. Birkenhead, A.B.	Bruised foot	Wellington	A case of benzine fell on his foot.
" 5	Houto, Auckland, 125166	S. Satre	Injured groin	At sea	Struck by fire-boom.
" 6	Mokota, Dunedin, 101483	J. Semple, baker	Broken rib	Dunedin	Fell down manhole.
" 9	Kopu	Charles Anderson, master	Broken arm	Thames	Arm got caught in winch.
" 12	Tahiti, Dunedin, 117715	W. Mason, A.B.	Fractured leg	At sea	Got washed under the anchor.
" 14	Maheno, Dunedin, 117590	H. W. Robinson, engineer	Injured arm	At sea	Got right arm cut and burned.
" 24	Mararua, Dunedin, 89380	H. Adams, cook	Injured elbow	Wellington	Whilst lifting bags of coal he twisted his elbow.
" 28	Star of Scotland, Belfast, 120702	J. Sales, fireman	Broken collarbone	Wellington	Assaulted by another fireman.
" 29	Turakina, Dunedin, 114620	H. Edwards, steward	Fractured kneecap	At sea	Fell on the deck.
" 30	Tarawera, Dunedin, 84480	W. Dodd, engineer	Crushed finger	Wellington	Whilst working donkey-engine.
" 31	Whakatane, Plymouth, 111348	W. Sheely, donkeyman	Double rupture	At sea	Whilst working below.
Sept. 2	Opouri, Lyttelton, 76083	T. B. Williams, cook	Drowned	Greytown	Whilst boarding vessel he slipped and fell into river.
" 2	Hauipiri, Dunedin, 89094	W. J. White, chief engineer	Badly shaken	Wairoa Bay	Whilst going ashore the launch capsized.
" 4	Kini, Dunedin, 104337	J. McLoughlin, fireman	Crushed finger	Lyttelton	Whilst working at engine.
" 6	Mokota, Dunedin, 101483	R. S. Smith, engineer	Injured thumb	At sea	Got thumb caught in eccentric.
" 12	Ngapuhi, Auckland, 102329	W. Donohue, fireman	Injured knee	At sea	Fell from forecastle ladder.
" 18	Maori, Dunedin, 117598	W. Nelson, trimmer	Injured spine	Wellington	Slipped off coal on to bunker-door.
" 19	Gertie, Wellington, 97443	A. Aldo, A.B.	Bruised leg	Foxton	Bale of flax fell on his leg.
" 19	Kanieri, Auckland, 84490	T. Hill, 2nd mate	Bruised foot	Auckland	Piece of timber fell on his foot.
" 21	Navua, Dunedin, 117583	N. Usher, O.S.	Sprained ankle	Westport	He slipped on deck.
" 23	Wakatu, Wellington, 64818	I. Sinclair, A.B.	Fractured clavicle	Pictou	Whilst passing timber out of hold.

Sept. 26	Wanganui, Wellington, 127810	A. Colin, A.B.	Injured back	Wellington	Slung of timber fell on him.
" 27	Corinthic, Liverpool, 115296	R. Jasper, A.B.	Killed	Dunedin	A derrick fell on him.
" 28	Paeroa, Auckland, 94251	J. M. Michael, fireman	Sprained arm	Auckland	He fell against a davit.
" 29	Opawa, Plymouth, 124566	D. Smith, steward	Cut hand	At sea	He fell on deck with a bottle in his hand.
Oct. 4	Himitangi, Wellington, 108074	T. Gray, engineer	Injured knee	Wellington	Slipped on plates in engine-room.
" 7	Manaroa, Wellington, 108071	J. McAskill, A.B.	Poisoned thumb	Wellington	He jammed his thumb between two hatches.
" 9	Jessie Craig, Auckland, 73861	A. Carpenter, A.B.	Broken arm	Thames	Slung of timber pinned him against deckhouse
" 11	Himitangi, Auckland, 108074	W. Baldry, O.S.	Injured leg and internally	Greymouth	Fell down hold.
" 11	Tahiti, Bristol, 117115	W. Clancey, boy	Broken jaw	Wellington	Fell off ladder into hold.
" 12	Waverley, Nelson, 69012	B. Burns, fireman	Internal strain	At sea	Strained himself in engine-room.
" 17	Waipatu, Auckland, 117600	J. Entage, engineer	Inflammation of knee	Whangarei	Knocked his knee on step of engine-room.
" 22	Tavuni, Dunedin, 84500	H. Brandon, fireman	Scalded foot	Dunedin	Whilst working at boilers.
" 24	Manuka, Dunedin, 117582	B. Dillon, trimmer	End of finger cut off	Lyttelton	Whilst lowering smoke-box door his finger got caught.
" 26	Karori, Dunedin, 118306	J. Paine, fireman	Fractured skull	At sea	A sea struck him and knocked him down.
" 27	Maori, Dunedin, 117598	P. H. Murray, engineer	Scalded foot	Lyttelton	Whilst working at machinery some boiling water splashed on his foot.
" 29	Kini, Dunedin, 104337	W. Ormiston, A.B.	Injured wrist	Lyttelton	Struck on wrist with hatch.
" 29	Haupiri, Dunedin, 89094	R. Fitton, fireman	Burnt arm	At sea	Fire blew out and burnt his arm.
" 29	Maori, Dunedin, 117598	R. Mann, fireman	Injured leg and buttock	At sea	Was washed down companion by a sea.
" 30	Orete, Auckland, 117669	E. Storer, engineer	Cut finger	At sea	Whilst repairing oil-engine.
" 30	Mararoa, Dunedin, 89380	A. Taylor, trimmer	Injured knee	Lyttelton	Slipped and fell.
" 31	Maori, Dunedin, 117598	M. Brown, trimmer	Sprained shoulder	Lyttelton	Fell in the stokehold.
" 31	Maori, Dunedin, 117598	T. Wentworth, fireman	Injured foot	Lyttelton	A bunker-hatch fell on his foot.
Nov. 1	Manaroa, Wellington, 108071	R. Page, fireman	Scalded leg	At sea	Whilst working at boilers.
" 4	Manuka, Dunedin, 117582	W. Wheelan, greaser	Broken ribs	At sea	Whilst putting turning-engine in gear.
" 4	Kopiti, Wellington, 108078	D. Wolhart, A.B.	Injured knee	Wellington	When stepping from ship to wharf.
" 4	Alfair, Auckland, 115200	C. Proctor, A.B.	Injured thumb	Auckland	Whilst scraping mast a splinter ran into his thumb.
" 5	Mokoia, Dunedin, 101483	F. L. Davis, steward	Bruised leg	Wellington	He fell down ladder.
" 5	Maipourika, Dunedin, 101482	A. Williamson, steward	Crushed hand	Wellington	Lid of ice-chest fell on his hand.
" 5	Maipourika, Dunedin, 101482	D. Tofo, Napier, 94140	Broken finger	Kawau	Whilst adjusting pump.
" 6	Kauri, Dunedin	W. King, fireman	Burnt with caustic soda	Auckland	Whilst using caustic soda he spilled some on himself.
" 6	Ruru, Napier, 121586	A. Seastrand, A.B.	Crushed	Palliser Bay	Whilst in boat alongside the ship.
" 7	Surrey, London, 101184	B. J. Piccard, A.B.	Killed	Lyttelton	He fell down the hold.
" 8	Wootton, Lyttelton, 112500	J. E. Hardwicke, A.B.	Injured arm	Lyttelton	Whilst working cargo in hold.
" 8	Haupiri, Napier, 91784	E. E. Goodall, A.B.	Injured eye	Napier	Struck by sling whilst working cargo.
" 8	Niwaru, London	F. A. Richmond, cook	Crushed hand	At sea	Crushed in door.
" 9	Haupiri, Dunedin, 89094	R. M. Hem, 3rd mate	Crushed shoulder	At sea	Slipped and fell on deck.
" 9	Echo, Auckland, 118978	R. Fisher, A.B.	Crushed ankle	Blenheim	Caught his foot in guy-rope of winch.
" 12	Alexander, Nelson, 93988	W. Hall, fireman	Crushed testicles	At sea	Strained whilst firing.
" 15	Manaaia, Dunedin, 101481	F. Fitzgerald, A.B.	Strained	Auckland	Whilst lifting heavy weight.
" 19	Nairnshire, Glasgow, 108793	J. Stewart, A.B.	Broken thigh	At sea	Knocked down by heavy sea.
" 23	Mokoia, Dunedin, 101483	E. Rosnell, A.B.	Ruptured	Gisborne	Lifting a gangway.
" 25	Aupouri, Auckland, 122909	T. Crocker, stewardess	Injured shoulder	At sea	Slipped on a grating and fell.
" 25	Kalapoi, Dunedin, 117592	W. Ballantine, A.B.	Injured back and legs	Wellington	Fell down hold.
" 27	Maori, Dunedin, 117598	G. Tucker, trimmer	Broken finger	At sea	Knocked his hand in stokehold.
" 28	Monowai, Dunedin, 117598	W. Green, fireman	Strained back	At sea	Slipped on stokehold-plates.
" 28	Monowai, Dunedin, 84497	J. Bargey, greaser	Injured ribs	At sea	Slipped and fell.
" 29	John, London, 110059	E. Shaw, 1st mate	Broken rib	Wellington	Knocked down hold by sling of cargo.
" 30	Albatross, Auckland, 118971	W. Douglas, A.B.	Injured leg	Auckland	Ran cargo-hook into his leg.
" 30	Kiritapaka, Wellington, 102275	H. Irwin, fireman	Injured back and leg	Wellington	Slipped off top of boiler.
Dec. 4	Koko Head, American bark 'tine.	J. Walker, A.B.	Drowned	At sea	Fell overboard.
" 6	Pukaki, Dunedin, 84491	G. Moore, A.B.	Crushed hand	Greymouth	Whilst knocking out pins of railway-trucks.
" 7	Korora, Auckland, 122911	N. Mortenson, A.B.	Blood poisoning	Auckland	Cut his hand whilst handling railway iron.
" 11	Ripple, Napier, 120627	W. Morris, A.B.	Injured foot	Capa Turnagain	Got foot jammed between boat and ship.
" 12	Haupiri, Dunedin, 89094	W. Spargo, engineer	Sprained ankle	Onehunga	Slipped and fell.
" 12	Haupiri, Dunedin, 89094	R. Reilly, cook	Cut finger	Onehunga	Cut his finger whilst cutting meat.
" 12	Atua, Dunedin, 117591	S. Docherty, fireman	Bruised	Suva	Fell from stokehold-ladder.
" 12	Komata, Dunedin, 117593	J. H. Collins, A.B.	Sprained ankle	At sea	Slipped on deck.

RETURN OF ACCIDENTS TO SEAMEN AND OTHERS ON BOARD SHIP REPORTED TO THE MARINE DEPARTMENT, ETC.—continued.

Date of Accident.	Name of Vessel, Port of Registry, and Official Number.	Name of Person injured.	Nature of Injury: Fatal or otherwise.	Place where Accident occurred.	Particulars as to Accident and its Cause, and Verdict of Jury where Coroner's Inquest held.
1912.					
Dec. 14	Maori, Dunedin, 117598	R. Kosketa, trimmer	Sprained back ..	Lyttelton	Whilst pricking fires.
" 14	Kiritona, Napier, 121592	E. Mills, A.B.	Strained muscles	Napier ..	Whilst loading ool.
" 15	Mokoia, Dunedin, 101483	J. McGregor, fireman	Injured thumb ..	At sea ..	Fell in stokehold ..
" 18	Taitiwha, Auckland, 102302	J. Dawson, deck boy	Injured knee ..	Thames ..	Struck his knee against bulwarks.
" 19	Warrimoo, Dunedin, 101901	W. Sales, fireman	Strained back ..	At sea ..	Whilst firing.
" 19	Marana, Dunedin, 117597	J. Johnson, fireman	Bruised knee and back ..	At sea ..	Knocked against a nut in the bunker.
" 20	Waverley, Nelson, 69012	J. O'Donnell, fireman	Injured hand ..	Nelson ..	Ran a fish-hook in his hand.
" 22	Mokoia, Dunedin, 101483	H. Ellison, trimmer	Injured back ..	Auckland	Some gear fell from a sling and struck him.
" 24	Waihora, Dunedin, 123842	D. McDonald, boy	Ruptured ..	At sea ..	Whilst lifting spare hatches.
" 28	Clansman, Auckland, 87520	T. C. Gill, pantryman	Poisoned thumb ..	Auckland	Cut his thumb on broken cup.
" 28	Clansman, Auckland, 87520	F. Smith, boy	Crushed foot ..	Auckland	Gangway plank fell on his foot.
1913.					
Jan. 2	Ripple, Napier, 120627	C. E. Wellum, steward	Scalded foot ..	At sea ..	Slipped and upset a bucket of hot water.
" 3	Wairau, Lyttelton, 76076	J. F. Bradnock, cook	Sprained ankle	Wellington	Fell over a bale of wool.
" 3	Mararoa, Dunedin, 89380	R. McKellar, fireman	Drowned	At sea ..	Lost overboard.
" 4	Arahura, Dunedin, 117587	C. Cecil, steward	Sprained foot ..	Lyttelton	Slipped on a grating on deck.
" 6	Rakiura, Dunedin, 78369	A. Shields, trimmer	Lacerated toe ..	At sea ..	Slipped in engine-room.
" 7	Pohorua, Dunedin, 98061	J. McGarrity, fireman	Injured testicles	Lyttelton	Slipped on plates in stokehold.
" 10	Tangaroa, Napier, 106231	T. Clifford, cook	Broken rib ..	At sea ..	Fell down saloon stairway.
" 13	John, London, 110059	J. McIntosh, A.B.	Injured head ..	Wellington	Was struck on the head by cargo derrick.
" 14	Mararoa, Wellington, 108071	J. Miller, A.B.	Crushed fingers	Motueka	Whilst working cargo.
" 15	Ngaru, Auckland, 102300	W. Bourke, A.B.	Crushed arm ..	Whananaki	Whilst stowing logs.
" 20	Rangi, Auckland, 118976	T. Blakely, A.B.	Bruised ..	Auckland	Slipped and fell between two logs.
" 20	Chelmsford, Auckland, 89398	J. Laursen, A.B.	Poisoned hand ..	Auckland	Splinter of iron got into his hand.
" 21	Koromiko, Dunedin, 117599	A. Grescott, fireman	Injured arm ..	Auckland	Slipped on gangway.
" 22	Wakatu, Wellington, 64818	S. Johnston, fireman	Crushed finger	Kaikoura	Got finger caught in machinery.
" 24	Kaioa, Dunedin, 127811	R. Martin, fireman	Broken rib ..	At sea ..	Slipped on foot-plate in stokehold.
" 27	Ripple, Napier, 120627	S. Giles, A.B.	Crushed fingers	At sea ..	Got fingers caught between boat and ship.
" 28	Magic .. ..	C. R. Hyde, engineer	Injured spine ..	Akitio ..	Was hit on the head by a pile.
" 29	Mararoa, Dunedin, 89380	G. Mart, greaser	Twisted instep	Lyttelton	Tripped over a mat on deck.
" 30	Hinemoa, Wellington, 69016	T. Whaitiri, A.B.	Crushed finger	The Brothers	Got finger caught in cogs of winch.
Feb. 7	Waimarie, Auckland, 102282	J. Dagnall, A.B.	Bruised leg ..	Auckland	A sling of cargo struck his leg.
" 9	Wairoa, Auckland, 102271	R. Crum, cook	Scalded hand ..	Auckland	Spilt some boiling water.
" 19	Wairopi, Dunedin, 101485	B. Jenkins, trimmer	Injured ribs and back	At sea ..	Slipped whilst going down stokehold-ladder.
" 26	Fairburr, Napier, 121587	M. McCorkindale, A.B.	Injured elbow ..	At sea ..	Block of fore-sheet struck his elbow.
" 26	Orewa, Auckland, 102310	W. McCabe, fireman	Burnt face and arms	Auckland	Flame blew out from furnace.
" 5	Mokoia, Dunedin, 101483	M. D. Gibson, A.B.	Crushed finger	Lyttelton	Got finger caught in hydraulic cargo-gear.
" 5	Caed Mile Faite, Auckland	T. Donovan, A.B.	Injured arm ..	Ngunguru	Whilst lowering centreboard, handle struck his arm.
" 11	Mahurangi, Auckland, 127879	M. Hanson, A.B.	Injured head ..	Auckland	A bag of cement fell from sling and struck him.
" 12	Chelmsford, Auckland, 89398	A. Sligo, fireman	Injured kneecap	Wellington	Whilst firing, slice struck his knee.
" 12	Lyttelton, Auckland, 54008	A. Dalberg, A.B.	Sprained ankle	Whangarei	Fell whilst going into hold.
" 14	Marana, Dunedin, 117597	H. Rider, trimmer	Injured back and arm	Auckland	He fell on to the sponson of s.s. " Lyttelton."
" 14	Marama, Dunedin, 117597	M. Tousson, fireman	Strained back ..	Auckland	He slipped and fell in bunker.
" 18	Storm, Lyttelton, 118090	I. Taft, 2nd mate	Sprained ankle	Auckland	Slipped on stokehold-ladder.
" 20	Kowhai, Dunedin, 128040	N. Mestson, A.B.	Injured knee ..	At sea ..	Bag of grain fell down hold and struck his knee.
" 20	Lyttelton	Lyttelton	Lyttelton	Lyttelton	Lyttelton

RETURN SHOWING AMOUNTS PAID TO SICK AND DISABLED SEAMEN UNDER SECTION 6 OF THE SHIPPING AND SEAMEN AMENDMENT ACT, 1911, FOR THE YEAR ENDED 31ST MARCH, 1913.

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.		
			£	s.	d.
Adams, H.	Mararoa	Injured elbow	19	6	6
Adams, H.	Mapourika	Burst vein in leg	19	13	6
Adams, J.	Pateena	Rheumatism	12	8	4
Adamson, F. F.	Southern	Quinsy	19	19	0
Aldo, A.	Gertie	Bruised leg	14	18	4
Ambrose, G.	Pateena	Rheumatism	8	4	2
Anderson, A.	Blenheim	Strained back	12	15	0
Anderson, F.	Wakanui	Bronchial asthma	10	10	0
Anderson, J.	Opawa	Pneumonia	4	4	6
Anderson, V.	Taniwha	Pain in head	6	8	4
Andrews, C.	Manuka	Fractured elbow	18	15	0
Anscombe, J.	Monowai	Strained back	7	13	4
Armstrong, W.	Mararoa	Appendicitis	6	14	8
Babbage, F.	Arapawa	Injured knee	6	14	0
Backler, A.	Marere	Internal pains	35	13	6
Baker, A.	Warrimoo	Injured arm and shoulder	8	5	8
Baker, F.	Pateena	Broken finger	11	13	8
Baldry, W.	Himitangi	Internal injury and injured leg	8	11	0
Ballantine, W.	Kaipoi	Various injuries	19	0	6
Barjery, G.	Monowai	Injured ribs	16	9	0
Barton, A. V.	Kurow	Injured eye	10	18	10
Baxter, J.	Wakatu	Influenza	9	13	8
Bennett, J. G.	Navua	Appendicitis	17	16	2
Benson, H. C.	Komata	Injured foot	40	13	0
Bergin, J.	Tangaroa	Broken arm	55	11	0
Berriman, W.	Kotare	Sprained wrist	11	0	10
Birkeland, H.	Kuru	Bruised foot	19	16	3
Bjornsen, H. J.	Southern	Ruptured	9	11	6
Blackburn, J.	Navua	Burnt arm	13	3	2
Blakely, T.	Rangi	Brusied	8	0	8
Bloomfield, E.	Rarawa	Ricked shoulder	18	15	4
Bluhm, T.	Hauroto	Poisoned hand	27	14	9
Bond, J.	Kahu	Diarrhoea	4	2	6
Bourke, W.	Ngaru	Crushed arm	15	13	6
Bowman, J.	Hinemoa	Crushed finger	17	18	8
Bownes, R.	Rosamond	Swollen throat	6	2	6
Boyes, T. R.	Maitai	Injured back	9	1	6
Braithwaite, J.	Maori	Quinsy	12	15	10
Brandstead, H.	Taviuni	Scalded	11	13	6
Brewer, A.	Clansman	Swollen glands	16	11	6
Brewer, A. V.	Monowai	Swollen neck	12	6	4
Briggs, G.	Monowai	Appendicitis	15	19	4
Brooks, T.	Gertie	Rheumatism	12	7	8
Brown, I.	Ngatiawa	Influenza	16	11	4
Brown, J.	Victoria	Rheumatism	16	18	4
Brown, M.	Maori	Sprained shoulder	9	4	0
Burns, B.	Waverley	Internal strain	15	3	2
Burt, W.	Kurow	Poisoned thumb	20	19	10
Butler, M.	Maitai	Bronchitis	27	0	10
Bysantson, A. L.	Taniwha	Swollen leg	22	18	6
Cahill, G.	Nikau	Injured foot	28	13	2
Cahill, P.	Maori	Varicose vein	13	16	2
Cape, W.	Rosamond	Rheumatism	8	4	6
Carpenter, A.	Jessie Craig	Broken arm	12	13	0
Casey, T.	Warrimoo	Appendicitis	31	7	8
Cawte, P.	Turakina	Pneumonia	7	15	6
Cecil, C.	Arahura	Sprained foot	7	10	8
Clancey, R.	Maori	Boils	10	15	8
Clancey, W.	Tahiti	Broken jaw	7	11	6
Clark, W.	Kaitangata	Whitlow on toe	14	6	6
Clements, H.	Wairoa	Influenza	9	7	4
Clifford, T.	Tangaroa	Broken rib	21	7	0
Coats, H.	Monowai	Sciatica	14	17	2
Cochrane, J.	Maunganui	Poisoned hand	42	13	4
Collins, J. H.	Komata	Sprained ankle	14	9	0
Collopy, M.	Aorere	Pleurisy	8	4	2
Cooper, D.	Rimutaka	Rheumatism	7	11	0
Connelly, J.	Navua	Cramps	7	18	4
Conway, D.	Pateena	Appendicitis	31	10	0
Cox, A.	Maori	German measles	9	18	2
Crocker, T.	Aupouri	Injured shoulder	15	3	0
Crosby, H.	Mokola	Bronchitis	17	2	4
Crosby, W.	Mararoa	Influenza	24	16	4
Crumr, R.	Wairoa	Scalded hand	10	19	0
Curtis, G.	Corinna	Injured perineum	6	14	0
Dagnall, J.	Waimarie	Bruised leg	10	0	4
Dalberg, A.	Lyttelton	Injured back	6	5	0
Davidson, H.	Lizzie Taylor	Broken leg	39	19	6
Davis, F. L.	Mokola	Bruised leg	9	1	8
Davis, P.	Monowai	Eczema	14	17	0

RETURN SHOWING AMOUNTS PAID TO SICK AND DISABLED SEAMEN—*continued.*

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.
Dawson, J.	Taniwha ..	Injured knee ..	£ s. d. 5 14 0
Devlin, P.	Warrimoo ..	Sprained wrists ..	12 12 6
Dillon, B.	Manuka ..	Injured finger ..	18 16 8
Dixon, J.	Moeraki ..	Injured knee ..	16 0 0
Dobbie, J.	Kaitangata ..	Pleurisy ..	17 14 6
Dodd, W.	Tarawera ..	Crushed finger ..	21 13 2
Doherty, E. A.	Star of Scotland ..	Rheumatic fever ..	14 5 0
Doherty, S.	Atua ..	Bruised ..	14 2 6
Donaghey, T.	Mararoa ..	Bronchial catarrh ..	10 1 4
Donnelly, W.	Wakatu ..	Crushed foot ..	18 12 0
Donohue, W.	Ngapuhi ..	Injured knee ..	17 19 4
Donovich, T.	Caed Mile Failte ..	Broken bone in arm ..	10 19 0
Dolan, P.	Morayshire ..	Pneumonia ..	36 12 0
Douglas, W.	Albatross ..	Cut on leg ..	15 9 6
Downey, E.	Taviuni ..	Scalded leg ..	10 10 0
Driscoll, J.	Monowai ..	Muscular rheumatism ..	15 19 9
Duzac, L.	Mokoia ..	Scalded foot ..	4 13 2
Eaddy, B.	Kiatia ..	Bruised finger ..	14 15 0
Eleazar, C.	Wakatere ..	Mumps ..	6 7 6
Ellis, E.	Casablanca ..	Fractured skull ..	39 18 0
Ellison, H.	Mokoia ..	Injured back ..	11 10 8
Emtage, J.	Waiapu ..	Injured shin ..	18 15 0
Ericksen, W.	Tarawera ..	Bruised hand and leg ..	9 2 0
Evans, J.	Talune ..	Boil on back ..	19 12 0
Fahey, J.	Corinna ..	Pains in stomach ..	15 14 8
Faulkner, W.	Indralema ..	Crushed finger ..	10 10 0
Felton, G.	Storm ..	Broken ribs ..	6 13 4
Finnie, G.	Laura ..	Appendicitis ..	16 0 4
Fisher, R.	Echo ..	Sprained ankle ..	19 9 2
Fitton, R.	Hauptiri ..	Burnt arm ..	7 13 4
Fitzgerald, F.	Manaia ..	Sprain ..	9 19 2
Fitzgibbon, M. E.	Kahu ..	Poisoned arm ..	12 18 0
Flinkenberg, F.	Ruru ..	Neuritis ..	8 6 0
Foley, E.	Mararoa ..	Injured fingers ..	11 2 4
Fowler, K. J.	Hauptiri ..	Quinsy ..	15 18 6
Freed, W.	Makura ..	Abscess ..	21 9 0
Frost, G.	Maunganui ..	Rupture ..	45 10 0
Frye, W.	Maitai ..	Appendicitis ..	20 0 0
Gabrielson, J.	Koi ..	Appendicitis ..	28 2 0
Gerard, R.	Maori ..	Bronchitis ..	8 11 2
Gibson, M.	Mokoia ..	Pleurisy ..	9 11 0
Giles, S.	Ripple ..	Crushed fingers ..	12 19 4
Gill, T. C.	Clansman ..	Poisoned thumb ..	10 8 2
Gillan, A.	Corinna ..	Poisoned finger ..	11 7 0
Gillman, C. H.	Wakanui ..	Nephritis ..	14 8 0
Goodall, E. E.	Ahuriri ..	Injured eye ..	11 12 4
Gordon, J.	Cape Finisterre ..	Hæmorrhage of lungs ..	9 9 0
Gorman, E.	Kumara ..	Typhoid fever ..	8 16 0
Grange, H.	Ngapuhi ..	Lumbago ..	18 11 2
Gray, T.	Himitangi ..	Injured knee ..	45 4 2
Green, J.	Kennedy ..	Tonsillitis ..	22 13 10
Green, J.	Ulimaroa ..	Injured foot ..	10 18 0
Green, W.	Maori ..	Strained back ..	20 16 10
Grescott, A.	Koromiko ..	Injured arm ..	8 7 6
Grummah, J.	Maori ..	Poisoned hand ..	12 1 4
Gullifer, W.	Waipori ..	Injured leg ..	21 3 0
Gullifer, W.	Wairuna ..	Rheumatism ..	10 14 6
Gully, J.	Atua ..	Lacerated hand ..	8 2 8
Gunn, H.	Putiki ..	Pleurodynia ..	24 13 6
Hall, W.	Alexander ..	Descended testes ..	10 4 6
Hamblin, S.	Hauroto ..	Injured knee ..	14 15 8
Hamel, F.	Eliza Firth ..	Bronchitis ..	10 8 8
Hands, J.	Whangape ..	Lumbago ..	10 10 6
Hansard, H.	Orari ..	General illness ..	13 12 9
Hansen, M.	Mahurangi ..	Injured head ..	7 11 6
Hardwick, J.	Taviuni ..	Strained chest and back ..	10 16 10
Harrington, J.	Maori ..	Influenza ..	8 13 4
Harvey, J.	Karamea ..	Cerebral concussion ..	60 11 2
Hayes, R.	Warrimoo ..	Scalded arm ..	7 16 6
Hayes, T.	Tarawera ..	Ricked back ..	13 10 8
Head, S.	Kamona ..	Injured testicles ..	16 7 6
Henderson, H.	Indrabarah ..	Bladder trouble ..	23 5 4
Herring, C.	Pateena ..	Influenza ..	10 1 4
Hern, R. M.	Hauptiri ..	Wrenched shoulder ..	9 9 2
Heta, M.	Mararoa ..	Strained back ..	9 13 4
Hill, T.	Kanieri ..	Bruised foot ..	25 11 6
Hinch, J. A.	Rimu ..	Cut and bruised head and hand ..	6 1 8
Hodges, H.	Navua ..	Piles ..	15 8 8
Hopkins, R.	Ngapuhi ..	Broken arm ..	31 6 4
Horn, F.	Maori ..	Strained back ..	18 0 0
Howard, G.	Warrimoo ..	Iritis ..	6 4 6
Humpherson, W.	Mapourika ..	Influenza ..	8 0 0



RETURN SHOWING AMOUNTS PAID TO SICK AND DISABLED SEAMEN—*continued.*

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.		
			£	s.	d.
Hunter, J.	Rotoiti	Amputated finger	27	0	6
Hyde, C. K.	Magic	Injured spine	53	7	8
Irwin, H.	Kiripaka	Strained back and leg	12	2	2
Jardine, C.	Warrimoo	Consumption	38	8	4
Jarvie, W.	Poherua	Crushed toe	17	6	6
Jeffrey, H.	Maunganui	Poisoned finger	39	6	4
Jenkins, B.	Waipori	Injured ribs and back	7	14	6
Johannsen, J.	Bravo	Poisoned hand	7	7	2
Johnson, J.	Whangape	Phthisis	51	6	0
Johnson, J.	Huia	Injured toe	8	18	0
Johnson, J.	Marama	Injured knee and back	1	14	0
Johnson, S.	Wakatu	Crushed finger	11	10	6
Johnson, T.	Waihora	Abscess on buttock	14	6	8
Johnson, W. H.	Maori	Injured knee	14	8	6
Julian, C.	Eliza Firth	Kidney and eye disease	7	12	0
Kerr, J.	Monowai	Broken ribs	28	4	8
King, J.	Warrimoo	Acute pneumonia	22	9	4
King, T.	Mararoa	Gastritis	8	5	10
King, W.	Kauri	Scalded with caustic soda	25	4	8
Kingham, W.	Rarawa	Bruised shoulder	6	12	6
Koskela, R.	Maori	Sprained back	8	8	0
Krantz, J.	Regulus	Injured foot	5	2	2
Kristian, K.	Pateena	Lumbago	7	14	6
Last, C. W.	Maheno	Injured foot	62	5	0
Laurenson, J.	Chelmsford	Poisoned hand	6	18	6
Laurin, O. E.	Lena Gladys	Crushed hand	13	5	8
Leers, W.	Hawera	Ruptured	22	9	0
Lewis, J.	Corinna	Injured thigh	7	11	0
Liversey, W. J.	Maunganui	Injured arm	8	2	8
Llewellyn, N.	Tofua	Sore eyes	10	15	0
Lloyd, T.	Warrimoo	Poisoned hand	10	3	4
Lopez, E.	Te Anau	Crushed fingers	8	0	8
Malloy, M.	Squall	Swollen feet and severe cold	10	4	6
Maloney, D.	Maori	Ulcerated leg	11	7	10
Mann, R.	Maori	Injured leg and buttock	11	2	8
Mart, G.	Mararoa	Twisted instep	14	1	0
Martensen, F.	Blenheim	Injured knee	6	0	6
Martin, R.	Waitemata	Bruised arm and hand	21	13	16
Martin, R.	Katoa	Broken rib	10	1	20
Maubon, J.	Monowai	Injured leg	19	4	6
May, H.	Maori	Appendicitis	18	11	8
Mayall, E.	The Portland	Injured side	14	14	2
Maylund, A.	Ruru	Broken leg	47	5	3
Michael, J. M.	Paeroa	Sprained arm	7	16	4
Miller, G.	Kittawa	Nephritis	20	6	0
Miller, J.	Manaroa	Crushed fingers	8	14	10
Miller, W.	Kurou	Lumbago	11	5	8
Mills, E.	Kiritona	Strained back		6	10
Mills, H.	Maitai	Rheumatism	12	0	0
Minto, C.	Tofua	Crushed toe	11	11	4
Mitchell, F.	Warrimoo	Burnt hand	14	9	10
Moore, G.	Pukaki	Crushed hand	9	8	9
Morris, S. P.	Taviuni	Sciatica	16	19	10
Morris, W.	Ripple	Injured foot	15	6	8
Morrison, D.	Putiki	Appendicitis	17	17	5
Mortensen, N.	Korora	Poisoned hand	6	12	4
Mose, T.	Mararoa	Mumps	11	19	4
Miller, J.	Turakina	Appendicitis	18	10	0
Murray, I. P.	Canopus	Bright's disease	60	0	0
Murray, P. H.	Maori	Scalded foot	23	8	8
Murphy, T.	Kairaki	Eczema	45	17	6
Macdonald, G.	Talune	Dysentery	10	5	6
Mackay, P.	Mokoia	Broken ankle	14	19	6
Mackenzie, E.	Turakina	Abscess on liver	10	4	0
Mackenzie, R.	Waihora	Poisoned arm	18	7	4
McAleary, O.	Regulus	Appendicitis	12	5	4
McArthur, G.	Mararoa	Chest complaint	16	1	3
McArthur, R.	Kowhai	Erysipelas	57	12	0
McAskill, J.	Manaroa	Poisoned thumb	12	13	4
McCabe, O.	Mokoia	Injured testicle	12	19	0
McCabe, W.	Orewa	Burnt face and arms	10	14	8
McCallum, D.	Mokoia	Inflammation of eye	16	0	0
McCallum, D.	Talune	Pain in leg	38	19	6
McCarthy, M.	Mararoa	Lumbago	7	10	4
McCarthy, T.	Waipori	Burnt arm	10	0	0
McCartney, J.	Mokoia	Bronchial catarrh	10	14	2
McConville, F.	Komata	Inflammation of pelvis bone	47	9	0
McCorkindale, M.	Fairburn	Injured elbow	31	9	9
McDonald, D.	Waihora	Ruptured	9	5	6
McDonald, J.	Orari	Injured leg	13	18	0
McDougall, N.	Morayshire	Injured kneecap	37	11	6
McDowell, S.	Maori	Nervous exhaustion	37	10	0

RETURN SHOWING AMOUNTS PAID TO SICK AND DISABLED SEAMEN—*continued.*

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.		
			£	s.	d.
McEarchean, I.	Lizzie Taylor	Broken legs	48	0	0
McEwan, T.	Whakarua	Hernia	8	8	0
McGainty, I.	Maunganui	Orchitis	12	11	4
McGarrity, —	Pohera	Swollen testicle	14	10	0
McGregor, A.	Navua	Poisoned leg	7	19	0
McGregor, J.	Mokoia	Injured thumb	16	9	0
McHugh, P.	Maunganui	Lumbago	10	13	0
McIntosh, J.	John	Injured head	25	0	8
McIntyre, J.	Brisbane	Rheumatism	23	10	0
McKenzie, A.	Rakanoa	Tuberculosis of ankle	46	15	0
McLean, J.	Invercargill	Injured hand	8	19	8
McLennan, D.	Mokoia	Scalded arms and hands	18	8	0
McLennan, D.	Ngatiawa	Pleurisy	13	11	4
McLoughlin, C.	Mana	Cold in kidneys	12	7	4
McLoughlin, I.	Kini	Crushed finger	10	16	8
McMahon, S. G.	Chelmsford	Sprained ankle	7	11	6
McNulty, W.	Waipori	Gout	16	0	2
McPhie, D.	Aorangi	Injured back	10	10	0
McPherson, M.	Victoria	Heart trouble	16	10	6
McReynolds, S.	Moana	Crushed fingers	21	6	4
Naylor, A.	Clansman	Nose jambed	3	19	0
Needham, A. A.	Takapuna	Gastric influenza	20	11	4
Nelson, V. E.	Whakatere	Injured thumb	14	18	10
Nelson, W.	Maori	Injured spine	11	11	8
Nelson, W. J.	Tarawera	Twisted ankle	4	19	0
Newman, O.	Koromiko	Abscess on knee	13	16	8
Nicholson, M.	Mokoia	Crushed finger	27	19	8
Nolhart, D.	Kapiti	Synonitis of left knee	11	2	0
Norris, Miss A.	Maheno	Pain in breast	5	9	6
O'Callaghan, —	Navua	Throat affection	14	19	6
O'Connor, D.	Tarawera	Muscular rheumatism	18	8	6
O'Donnell, C.	Waverley	Fish-hook in hand	7	3	6
O'Donnell, J.	Waverley	Bruised back	8	8	8
Oldfield, R.	Kawau	Poisoned finger	11	19	6
Oldridge, J. H.	Alexander	Injured leg	13	1	10
Olsen C.	Bravo	Twisted ankle	12	19	4
Ormiston, W.	Kini	Injured wrist	27	10	5
Packham, J.	Maori	Influenza	5	6	2
Page, R.	Mararoa	Scalded leg	8	4	0
Paine, J.	Karori	Fractured skull	36	43	8
Paitry, J. M.	Taniwha	Bronchitis	7	12	6
Parker, G.	Karamea	Swollen neck	14	10	0
Parry, J.	Awahou	Injured leg	7	19	0
Patton, J. W.	Warrimoo	Navolipoma	25	0	6
Paxton, H. T.	Mararoa	Acute laryngitis	12	3	10
Petersen, P.	Arrah na Pogoe	Pains all over	11	13	4
Petersen, F.	Warrimoo	Hæmorrhoids	9	11	2
Phillips, R.	Maori	Injured thumb	11	9	4
Pritchard, G.	Rotorua	Acute Bright's disease	21	12	0
Proctor, C.	Altair	Splinter in thumb	16	5	6
Quilligan, D.	Huia	Hydroceles	16	14	0
Quinn, C.	Corinna	Heat exhaustion	11	18	4
Quirk, J.	Wairau	Sprained back	6	18	0
Ramshaw, I.	Waipori	Crushed finger	15	1	0
Read, T.	Karamea	Poisoned neck	7	16	0
Reilly, R.	Hauptiri	Cut finger	6	17	2
Rhodes, L.	Maori	Gastritis	24	18	0
Richardson, C. C.	Maori	Fever	13	5	8
Richmond, F. A.	Niwaru	Crushed hand	11	17	9
Ricketts, F.	Wairoa	Mumps	13	5	6
Rider, H.	Marama	Injured shin	2	11	6
Robin on, A.	Hauptiri	Injured head	8	0	0
Robinson, H. W.	Maheno	Injured arm	10	1	6
Rosnall, E.	Mokoia	Rupture	21	8	2
Rowell, J.	Rosamond	Injured knee	22	0	10
Russell, J.	Pohera	Influenza	13	5	0
Russell, J.	Regulus	Boils	15	19	0
Russell, T.	Tarawera	Influenza	11	10	0
Ru h, W.	Kerery	Sprained ankle	28	16	10
Ryan, F.	Dandy	Crushed	32	17	6
Saffery, J.	Ripple	Bruised back	9	0	2
Sales, J.	Star of Scotland	Broken collarbone	7	7	0
Sales, W.	Warrimoo	Dislocated vertebræ	8	13	4
Samuels, M.	Mararoa	Abscess	7	6	0
Satre, S.	Houto	Injured groin and testes	33	18	0
Saunders, M.	Hauptiri	Strained back	8	0	0
Saville, H.	Ruahine	Broken collarbone	10	2	0
Schmidt, H.	Doto	Broken finger	22	3	2
Scorrer, H.	Warrimoo	Influenza	1	6	8
Scott, J.	Breeze	Pneumonia	15	3	4
Seastrand, A.	Ruru	Crushed	16	9	6
Semple, J.	Mokoia	Broken rib	11	0	4

RETURN SHOWING AMOUNTS PAID TO SICK AND DISABLED SEAMEN—*continued.*

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid. for Wages, Maintenance, &c.		
			£	s.	d.
Severn, W.	John	Fractured skull	11	18	4
Shaw, E.	John	Broken rib	42	2	2
Sheehy, W.	Whakatane	Double rupture	9	7	6
Shibon, A.	Monowai	Pleurisy	13	6	6
Shields, A.	Rakiura	Injured toe	20	13	4
Sims, W. W.	Fanny	Sciatica	33	9	5
Sinclair, G.	Mokoia	Appendicitis	15	15	6
Sinclair, H.	Ngatiawa	Bruised shin	7	6	4
Sinclair, I.	Wakatu	Fractured clavicle	22	13	8
Sinclair, K.	Whangape	Bladder complaint	18	10	6
Singer, J.	Regulus	Injured back	23	16	0
Singleton, G.	Kaikoura	Rupture	14	1	0
Sinnott, P.	Koromiko	Sprained wrist	22	3	4
Slavin, J.	Victoria	Injured hand	51	8	6
Sligo, A.	Mokoia	Injured kneecap	11	9	10
Smalldon, C. H.	Aorangi	Yellow jaundice	6	6	0
Smith, D.	Opawa	Injured hand	10	19	6
Smith, F.	Clansman	Crushed foot	6	17	6
Smith, H.	Wimmera	Rupture	12	2	0
Smith, R. S.	Mokoia	Injured thumb	31	9	4
Spargo, W. W.	Hauptiri	Sprained ankle	19	17	2
Steinbrigger, H.	Komata	Influenza	11	11	0
Stephens, H.	Mapourika	Chill	12	8	4
Stobie, W.	Manuka	Rheumatism and sciatica	9	6	6
Storer, E.	Orete	Injured hand	11	15	0
Strandbeck, C.	Fanny	Sciatica	10	0	6
Stuart, J.	Nairnshire	Broken thigh	24	0	0
Sturges, G. A.	Mokoia	Blood poisoning	5	2	6
Sutcliffe, H.	Mokoia	Rheumatism	8	14	0
Sutherland, H.	Clansman	Poisoned finger	6	6	6
Swan, I.	Monowai	Abscess	6	0	0
Swindley, H.	Daphne	Jambed finger	4	16	0
Taylor, A.	Mokoia	Inflammation of neck	11	17	10
Taylor, A.	Mararoa	Injured knee	9	17	7
Taylor, H.	Kaiapoi	Pleurisy	16	10	4
Thegman, W.	Red Pine	Pleurisy	20	18	1
Thomas, J.	Ulimaroa	Pleurisy	17	7	4
Thompson, R.	Blenheim	Injured thigh and knee	14	18	0
Thorburn, E.	Mokoia	Poisoned finger	4	17	8
Tonsson, N.	Marama	Strained back	2	14	0
Truman, H.	Monowai	Strained back	6	13	0
Tucker, G.	Maori	Broken finger	13	9	4
Tunnage, T.	Echo	Nephritis	22	14	0
Underdown, J.	Wimmera	Rheumatic fever	12	15	4
Usher, N.	Navua	Sprained ankle	10	1	6
Victory, R.	Maori	Inflammation of testicle	11	16	10
Vind, B.	Mapourika	Injured foot	18	10	8
Wallen, L.	Kahu	Influenza	7	3	2
Ware, C.	Mararoa	Kidney trouble	12	4	2
Warner, H.	Rotoiti	Injured foot	6	18	4
Warnes, C.	Talune	Injured shoulder and groin	28	4	6
Warren, A.	Weka	Acute tonsillitis	17	10	4
Waters, C.	Kapuni	Lumbago	15	4	8
Watson, G.	Opawa	Specific cerebritis	4	0	0
Wells, V.	Kittawa	Sprained ankle	9	18	8
Wellum, C. E.	Ripple	Scalded foot	9	5	6
Wentworth, T.	Maori	Injured foot	12	3	11
Westman, M.	Waimea	Pneumonia	8	8	8
Wheelan, W.	Manuka	Broken ribs	26	10	0
White, I. G.	Hauptiri	Severely shaken	18	17	10
White, W. J.	Maheno	Burst veins in leg	50	6	10
Whitford, C.	Wakatere	Swollen hand	13	12	6
Wickstrom, F.	Rangi	Cold	13	19	0
Wildman, F. C.	Alexander	Pyelitis	11	0	6
Wilkinson, W. J.	Maitai	Injured foot	6	11	6
Williams, A.	Mararoa	Septic burn	7	18	4
Williams, J.	Mokoia	Gastric fever	7	7	6
Williams, W. R.	Maori	Influenza	10	6	2
Williamson, A.	Mapourika	Crushed hand	4	15	10
Williamson, A.	Fairburn	Poisoned finger	40	1	2
Wolfe, M.	Aorangi	Burnt foot	2	3	6
Wyatt, J.	Squall	Injured head	20	7	0
		Total	£6,303	5	3

RETURN OF ACCIDENTS TO WATERSIDE WORKERS REPORTED TO THE MARINE DEPARTMENT DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1913.

Date.	Name of Person injured.	Nature of Injury: Fatal or otherwise.	Place where Accident occurred.	Particulars as to Accident and its Cause, and Verdict of Jury if Inquest held.
1912.				
April 4	R. Ford ..	Injured leg and back	Greymouth	He fell over a hand-truck.
" 5	P. Nelson ..	Crushed finger	Greymouth	Had his finger jammed between piece of timber and hatch-coaming.
" 10	R. Douglas ..	Injured back	Port Chalmers	Strained his back whilst dragging sling of cargo.
" 16	F. Docherty ..	Concussion of the brain	Wellington	Whilst trucking coal railway-truck struck trestle and knocked down the tramway.
" 16	William Walker ..	Injured head and back	Wellington	"
" 18	E. Green ..	Bodily injuries	Greymouth	A sling carried away and the timber fell on him.
" 23	S. Grassam ..	Bruised toe	Greymouth	Slipped in the bunker.
" 24	E. Southam ..	Crushed finger	Greymouth	Got his finger jammed between rope and capstan.
" 26	John Anderson ..	Broken thigh and wrist and other injuries	Auckland	Whilst removing hatch he fell down the hold.
May 2	J. E. Hill ..	Crushed foot	Auckland	A fly-wheel fell on his foot.
" 4	W. Daighton ..	Injured kidneys	Napier ..	A falling case knocked him from truck on to wharf.
" 7	James McDonald ..	Sprained ankle	Lyttelton	He fell out of a railway-truck.
" 10	F. Newfield ..	Injured hand	Lyttelton	A piece of timber fell from a sling and struck his hand.
" 10	Daniel Moar ..	Split nose and wounded head	Wellington	Got jammed between a truck and ship.
" 11	L. S. Agnew ..	Sprained ankle	Greymouth	He slipped on the deck.
" 13	William Barrow ..	Injured back	Greymouth	He slipped whilst carrying a gangway.
" 14	W. Bourne ..	Injured back	Greymouth	Hurt his back whilst breaking out cargo in hold.
" 16	F. Gilmore ..	Injured hand	Greymouth	Piece of coal struck his hand.
" 16	R. G. Smith ..	General injuries	Lyttelton	Was struck by a piece of coal.
" 17	F. Davine ..	Injured head	Greymouth	A piece of timber fell on him.
" 20	Charles Thorpe ..	Killed	Wellington	Crushed against shed door by three bales of flax.
" 22	Charles Olsen ..	Crushed	Wellington	Was struck by a sling of cargo.
" 24	H. P. Hansen ..	Injured finger	Greymouth	Got his finger jammed between two pipes.
" 25	William Burton ..	Killed	Gisborne	A forequarter of beef fell from sling on to his head.
" 27	T. Saunders ..	Twisted arm	Greymouth	He fell on the deck.
June 4	F. Gillard ..	Injured foot	Lyttelton	A carcass of mutton fell off chute on to his foot.
" 10	W. Dvniels ..	Injured head and shoulder	Lyttelton	Some timber fell out of a truck and struck him.
" 10	W. Ellison ..	Sprained ankle	Greymouth	He fell out of a wagon on to the wharf.
" 11	H. Gardiner ..	Broken rib	Lyttelton	Whilst pulling a sack his hook slipped and struck his side.
" 14	Thomas Forsyth ..	Scalp wound	Wellington	A piece of timber fell from a sling and struck his head.
" 18	John Carr ..	Fractured skull	Wellington	A sling of cement knocked him against the fore-castle ladder.
July 1	W. J. Tillyshort ..	Bruised foot	Greymouth	A piece of timber fell on his foot.
" 2	George Wilson ..	Bruised hip	Port Chalmers	A basket of coal fell off a truck and knocked him down.
" 4	D. Pratt ..	Injured back	Wanganui	Struck by a sling of timber.
" 15	A. K. Phillips ..	Crushed hand	Greymouth	Got his hand crushed between iron rails.
" 17	J. Loader ..	Poisoned finger	Lyttelton	Scratched his finger whilst receiving cargo and some dirt got in it.
" 17	W. Nielson ..	Strained back	Lyttelton	Strained his back whilst traversing trucks.
" 20	Thomas Anderson ..	Twisted leg	Greymouth	He slipped on the 'tween decks.
" 22	L. H. Davis ..	Injured back and hip	Greymouth	A sling of cargo knocked him out of a truck.
" 22	A. Nurrose ..	Crushed finger	Lyttelton	Whilst handling frozen pork.
" 24	F. Cole ..	Crushed finger	Lyttelton	Whilst stowing cargo into a truck.
" 25	J. Barron ..	Bruised back	Wanganui	A basket of coal struck him on chest and crushed him against a truck.
" 26	W. Fearon ..	Injured hand	Lyttelton	Whilst handling a case a splinter ran into his hand.
August 12	J. Pickup ..	Injured back	Greymouth	He fell off a railway wagon.
" 16	W. G. Pile ..	Injured face	Greymouth	Was struck by a piece of timber.
" 19	T. Saunders ..	Broken hand	Greymouth	He slipped on the deck and fell.
" 23	P. Magee ..	Bruised leg	Greymouth	A sling of timber fell on him.
" 27	H. Leach ..	Injured arm	Greymouth	He fell backwards over a barrow.
Sept. 2	William Williams ..	Injured arm	Auckland	Whilst landing baskets of coal planking was upset and he fell.
" 4	C. Southam ..	Crushed finger	Greymouth	Got his finger jammed by chain-screw.
" 9	A. McCormick ..	Ruptured	Lyttelton	Got jammed by a basket of coal.



RETURN OF CONVICTIONS OF SEAMEN, ETC., FOR OFFENCES AGAINST THE PROVISIONS OF THE SHIPPING AND SEAMEN ACT, UNDER PROCEEDINGS TAKEN BY MASTERS AND OTHERS, REPORTED TO THE MARINE DEPARTMENT DURING THE YEAR ENDED 31ST MARCH, 1913.

Name of Person.	Position held.	Ship.	Particulars of Offence, &c.	Date of Conviction.	Penalty imposed.
Aldwinkle, V.	Fireman	Ruapehu	Desertion	22/11/12	One month's imprisonment.
Alesawesky, A.	A.B.	Clan Alpine	Absent without leave	18/2/13	Fourteen days' imprisonment.
Arnold, Thomas	Fireman	Cian Grant	"	5/3/13	Two days' imprisonment and costs.
Ashford, T.	"	Wakanui	Assaulting the master	3/4/12	One month's imprisonment with hard labour.
Atfield, H. J.	Trimmer	Orari	Stealing field-glasses	13/2/13	One month's imprisonment.
Beadle, Arthur	O.S.	Opawa	Desertion	13/9/12	One month's imprisonment.
Black, W.	Trimmer	Manuka	Refusing to obey lawful commands	30/12/12	Fined £1 and 7s. costs, or seven days' imprisonment.
Bowles, George	Fireman	Tyrone	Absent without leave	5/3/13	One month's imprisonment.
Boyd, Thomas	"	Rakaia	"	6/11/12	Two months' imprisonment, 2s. costs, and 6s. solicitor's fee.
Boyle, John R.	"	Waimana	"	11/9/12	Seven days' imprisonment.
Butler, Richard	"	"	"	11/9/12	Seven days' imprisonment.
Cameron, A.	A.B.	"	"	7/1/13	Seven days' imprisonment and 7s. costs.
Caulfield, J.	"	Ruapehu	"	10/3/13	Fourteen days' imprisonment.
Cavanagh, J.	Fireman	Ruafine	"	18/6/12	Fined two days' pay and costs.
Chaney, G. E.	"	Zealandic	"	28/11/12	One month's imprisonment.
Chapman, W.	Trimmer	Tongariro	Desertion	25/11/12	One month's imprisonment.
Church, B.	Fireman	"	"	1/2/13	One month's imprisonment.
Church, William	"	Turakina	"	3/3/13	One month's imprisonment.
Coleman, P.	"	"	Absent without leave	4/2/13	7s. costs.
Collins, John	"	Rakaia	"	6/11/12	Two months' imprisonment, 2s. costs, and 6s. solicitor's fee.
Deans, J.	"	Hurunui	Desertion	1/3/13	One month's imprisonment.
Dillon, John	"	Anglo-Mexican	Disobedience of orders and desertion	12/12/12	Fined £3 and costs.
Entwhistle, J. W.	"	Mapourika	"	20/12/12	Fined £2 or ten days' imprisonment.
Finnie, John	"	"	Absent without leave	20/12/12	Seven days' imprisonment, and forfeit two days' pay.
Hagan, J.	"	Anglo-Mexican	Disobedience of orders and desertion	12/12/12	Fined £3 and costs.
Hark, J.	A.B.	Turakina	Disobeying lawful commands	22/1/13	Fined £3 and costs.
Hay, A. J.	Fireman	Corinthic	Broaching cargo	24/9/12	One month's imprisonment, and forfeit £3 8s.
Haydon, F.	A.B.	Kia Ora	Absent without leave	30/10/12	Fined 7s.
Holloway, R.	Fireman	Rimutaka	Assaulting boatswain	6/11/12	Fined £2 or fourteen days' imprisonment.
Honer, J.	A.B.	Kia Ora	Absent without leave	16/4/12	Three weeks' imprisonment.
Hutton, J.	Fireman	Opawa	Desertion	23/5/12	One month's imprisonment.
Ingbreton, J.	Fireman	Zealandic	Absent without leave	18/6/12	Fined two days' pay and costs.
Jackson, W.	A.B.	Wimbleton	Desertion	27/1/13	Fourteen days' imprisonment.
Jamieson, J.	Fireman	Tongariro	"	15/9/12	Fourteen days' imprisonment.
Jennings, A.	"	Kia Ora	"	30/10/12	Fined 10s. 4d.
Jones, John	"	Rakaia	Absent without leave	16/4/12	One month's imprisonment and 7s. costs.
Kelly, O.	"	Zealandic	Desertion	6/11/12	Two months' imprisonment, 2s. costs, and 6s. solicitor's fee.
Klass, J.	"	Kia Ora	"	18/6/12	Fined two days' pay and costs.
Koehane, J.	"	Sussex	Desertion	30/10/12	Fined 10s. 4d.
Kyle, William	"	Kia Ora	Absent without leave	23/4/12	Fourteen days' imprisonment.
Law, G.	"	Tyrone	"	22/5/12	One month's imprisonment.
Leeming, Joseph	"	Kia Ora	"	5/3/13	One month's imprisonment.
Lemon, R.	"	Rakaia	Assaulting second officer	30/10/12	Fined 13s. 8d.
	"	"	Absent without leave	30/10/12	Fined 10s. or forty-eight hours' imprisonment.
	"	"	Altering certificate of discharge	6/11/12	Two months' imprisonment, 2s. costs, and 6s. solicitor's fee.
	"	"	"	31/10/12	Three months' imprisonment.



RETURN SHOWING THE NOTICES TO MARINERS RELATING TO MATTERS, WITHIN THE DOMINION  
ISSUED BY THE MARINE DEPARTMENT DURING THE YEAR ENDED 31ST MARCH, 1913.

Port or Place.	Subject of Notice.
Auckland Harbour .. ..	Beacon in Mechanics Bay.
" .. ..	Rocks in Motuihi Channel.
" .. ..	Mechanics Bay reclamation.
" .. ..	Compulsory pilotage.
" .. ..	Mechanics Bay reclamation.
" .. ..	Dredging off Queen Street and Hobson Street wharves.
" .. ..	Light on Calliope Dock Pier.
" .. ..	Beacon off Orakei Wharf.
" .. ..	Datum-point for guns at Rangitoto Beacon.
" .. ..	Caution against anchoring over cable-ground, Stokes Point.
" .. ..	Change in characteristic of Bean Rock Light.
" .. ..	New wharf and light at Kohimarama.
" .. ..	Change in position of buoy in Mechanics Bay.
" .. ..	Dredging off Kohimarama Wharf.
" .. ..	Light on St. Helier's Bay Wharf.
" .. ..	Erection of beacons.
" .. ..	Beacon off Tamaki River.
" .. ..	Light on Takapuna Wharf.
" .. ..	Rocks off Kohimarama Wharf.
" .. ..	Erection of beacons.
" .. ..	Dredger off Hobson Street Wharf.
Bluff Harbour .. ..	Dredging at entrance to harbour.
" .. ..	Mark-buoy in fairway removed.
" .. ..	New flagstaff at Stirling Point.
Gisborne Harbour .. ..	Breakwater extension.
Greymouth Harbour .. ..	"Kotuku" wreck in channel.
" .. ..	"Kotuku" wreck removed.
Hokitika Harbour .. ..	Change of light.
Kaipara Harbour .. ..	Beacon light in south branch of river.
" .. ..	Signal-station.
" .. ..	Bar soundings.
" .. ..	Temporary change in character of light in south branch of river.
Karamea Harbour .. ..	Special signals for vessels taking the bar.
" .. ..	Light moved.
Lyttelton Harbour .. ..	Dredging operations.
Manukau Harbour .. ..	Beacon below Onehunga Wharf.
" .. ..	Shoaling of bar in South Channel.
Motuoka Harbour .. ..	Harbour construction-works: Dredger and mooring-piles at entrance, and at entrance to Moutere Lagoon.
Napier Harbour .. ..	Auckland Rock buoy.
" .. ..	Temporary light at entrance to Inner Harbour.
" .. ..	Signals for Inner Harbour.
New Plymouth Harbour .. ..	Berthing-signals from wharf flagstaff.
New Zealand coast .. ..	Uncharted rock off Trio Islands, approaching Admiralty Bay, Cook Strait.
" .. ..	Dusky Sound, Pickersgill Harbour: Extension of foul ground.
" .. ..	Signals to be made by vessels approaching defended ports when inconvenienced by searchlights.
" .. ..	Mooring-buoy off Wairau River.
" .. ..	Establishment of Morse signalling at lighthouses and signal-stations.
" .. ..	Hope Rock at west approach to Current Basin, Cook Strait.
" .. ..	"New Zealand Nautical Almanac," and Supplement to "New Zealand Pilot," issued.
" .. ..	Reported rock off Waitara roads.
" .. ..	Rock in Te Kouma Harbour, Coromandel.
" .. ..	"New Zealand Nautical Almanac": <i>Erratum re</i> Timaru fog-signal.
" .. ..	Castle Point light characteristics.
" .. ..	Castle Point light: Date of exhibition.
" .. ..	Buoy laid in Te Kouma Harbour, Coromandel.
" .. ..	Discoloured water off New Zealand coast.
" .. ..	"New Zealand Nautical Almanac": <i>Erratum re</i> Tory Channel tidal predictions.
" .. ..	Telegraph cable across Port Hardy, D'Urville Island.
" .. ..	Tuahine light: Arc of visibility.
Oamaru Harbour .. ..	Dredging at entrance.
Otago Harbour .. ..	Beacon lights in Lower Harbour.
" .. ..	Beacon lights in Lower Harbour, and removal of Tongue Wharf at Dunedin.
" .. ..	Light-beacon on Quarantine Island.
Picton Harbour .. ..	Light on Railway Wharf.
" .. ..	Dart Rock buoy adrift, Tennyson Inlet.
Stewart Island .. ..	Rock near entrance to Paterson Inlet.
" .. ..	Rock near entrance to Paterson Inlet.
" .. ..	Barclay Rock buoy, Paterson Inlet.
Thames Harbour .. ..	Waihou River ferry crossing.
" .. ..	Warning-signals <i>re</i> ferry-punt, Waihou River.
Wanganui Harbour .. ..	Alteration in river light.
Wellington Harbour .. ..	Anchorage.
" .. ..	Dredging on Falcon Shoal.
Whangarei Harbour .. ..	New soundings.
" .. ..	Position of cable altered.
" .. ..	Lights for lifting-span on bridge at Kioreroa.
" .. ..	New light at entrance.



RETURN SHOWING THE ORDERS IN COUNCIL WHICH HAVE BEEN ISSUED DURING THE YEAR ENDED THE 31ST MARCH, 1913.

Date of Order.	Purpose of Order.
1912.	
April 18	Approves plans of reclamation by Tamaki West Road Board for wharf-approach at Pipimea Head, Auckland Harbour, and authorizes reclamation.
" 18	Approves plans of vehicular landing and breastwork at Hobson Street Wharf for Auckland Harbour Board.
" 23	Approves plans of groynes in Waikato River for Waikato River Board, and authorizes same.
" 23	Approves plans of extension of ferry jetty, and plans of new ferry jetty for Wellington Harbour Board.
" 23	Licenses P. Brown to occupy foreshore at Dargaville as site for shed.
" 23	Approves plans of addition to eastern side of Hobson Street Wharf for Auckland Harbour Board.
" 23	Approves plans of reclamation in Otago Harbour.
" 23	Authorizes Otago Harbour Board to reclaim land in Otago Harbour.
May 7	Approves plans of extension of down-stream wharf, Greymouth.
" 8	Makes special order authorizing Auckland Harbour Board to reclaim land at O'Neill's Point, and approves plan.
" 8	Approves plans of temporary jetty for G. S. Mackie at Harkin's Point, Riverhead, Auckland Harbour.
" 8	Licenses Parker-Lamb Timber Company to occupy foreshore, Hoanga, Grahamsfern, as site for wharf.
" 15	Approves plans of extension of north breakwater for Greymouth Harbour Board.
" 23	Extends close season for seals.
" 23	Vests part of foreshore at New Brighton in New Brighton Borough Council.
" 23	Revokes Order in Council fixing dues for Waipu River wharves, and fixes other dues in lieu thereof.
" 23	Approves plan of Sumner Borough Council's road on foreshore between boat harbour and Sumner Head, and authorizes same.
June 5	Approves plans of oyster-wharf for Messrs. Tothill (Limited) in Bluff Harbour.
" 5	Appoints Mangonui County Council to exercise powers of Harbour Board within port or harbour of Mangonui.
" 5	Approves plans of tide-deflector in Auckland Harbour.
" 5	Licenses L. B. Marriner to occupy foreshore at Mount Wesley, Wairoa River, as site for wharf.
" 11	Makes special order authorizing Auckland Harbour Board to reclaim land between Nelson Street and Hobson Street jetties.
" 24	Declares license granted by Order in Council of the 7th May, 1912, <i>re</i> foreshore, Grahamsfern, shall be for Lamb Timber Company instead of Parker-Lamb Timber Company.
" 24	Varies Order in Council vesting Russell Wharf in Bay of Islands County Council.
" 24	Approves plan of Hobson County Council wharf at Mititai, and authorizes Council carrying out same.
" 24	Vests management of Mititai Wharf in Hobson County Council.
" 24	Amends regulation for election of members of Harbour Boards.
July 1	Approves plans of temporary staging, Waterloo Quay, Wellington.
" 1	Approves plans of outfall drain from Railway Workshops, Kaiwarra.
" 1	Declares German, French, Swedish, and Dutch ships exempt from provisions of Shipping and Seamen Act <i>re</i> load-lines.
" 1	Approves Raglan County Council leasing sections of Harbour Board endowments at Whaingaroa.
" 9	Licenses Leyland-O'Brien Timber Company to occupy foreshore at Wharekawa River as site for booms.
" 9	Revokes Order in Council licensing trustees of Hokianga Brass Band to occupy foreshore, Kohukohu, as site for shed.
" 9	Approves plans of bridges for Northern Wairoa Timber Company over Kirikopuni Stream, and authorizes occupation of necessary foreshore.
" 9	Approves plans of wharf for E. W. Toogood at Jock's Point, Kaipara.
" 9	Licenses E. W. Toogood to occupy necessary foreshore at Jock's Point, Kaipara, as site for wharf.
" 9	Approves plans of booms for Leyland-O'Brien Timber Company on Mata River, Thames County.
" 9	Licenses Leyland-O'Brien Timber Company to occupy necessary foreshore on Mata River as site for booms.
" 16	Approves plans of jetty for Lyttelton Harbour Board.
" 16	Licenses P. N. Kingswell to occupy foreshore, Hauraki Gulf, to erect hoppers thereon for purpose of taking shingle.
" 22	Approves plans of shearlegs wharf near Port Chalmers for Otago Harbour Board.
" 22	Approves plans of extension of Chadwick's wharf for Hobson County Council, and authorizes County Council to occupy foreshore.
" 22	Amends Order in Council vesting town wharf at Tauranga in Borough Council.
" 22	Makes regulations <i>re</i> taking of whitebait in Hawke's Bay District.
" 22	Prescribes close season for oysters at Albatross Point, Urenui Stream, Tongaporutu.
" 29	Approves plans of three wharves for Waihi-Paeroa Gold Extraction Company on Ohinemuri River.
" 29	Licenses Waihi-Paeroa Gold Extraction Company to occupy foreshore on Ohinemuri River as site for wharves.
August 5	Approves plan and authorizes Auckland Harbour Board to reclaim land near Custom Street West, Auckland Harbour.
" 19	Approves plans of harbour-works for Gisborne Harbour Board in Waikanae Creek, Gisborne.
" 19	Makes close season for whitebait in Waikato River.
" 19	Approves plans of bridge for Ohinemuri County Council over Waihou River.
" 26	Approves plans of slipway for A. Henderson in Freeman's Bay, Auckland Harbour.
" 26	Approves plans of wharf and shed at Ruakiwi for Raglan County Council.
" 26	Licenses Raglan County Council to occupy foreshore at Ruakiwi as site for wharf and shed.
" 26	Approves plans of wharf for G. Bailey on Kaihu Creek, Kaipara Harbour.
" 26	Licenses G. Bailey to occupy foreshore on Kaihu Creek, Kaipara, as site for wharf.
" 26	Appoints G. E. Perkins to be member of Greymouth Harbour Board, <i>vice</i> A. C. Russell, resigned.
Sept. 2	Makes regulation for whitebait-fishing in Motueka and Moutere Rivers.
" 2	Vests wharves at Portage Bay and Waitaria in J. W. Taylor and J. D. Henderson as trustees.
" 2	Approves plans of reclamation for Wellington City Corporation at south end of Evans Bay, Wellington Harbour.
" 2	Makes special order authorizing Auckland Harbour Board to reclaim land at Chelsea, and approves plans.
" 2	Approves plans of extension of Glasgow Wharf, Wellington Harbour.
" 9	Approves plans of launch-steps at Russell Wharf, and authorizes Bay of Islands County Council to construct same.

RETURN SHOWING THE ORDERS IN COUNCIL ISSUED, &c.—*continued.*

Date of Order.	Purpose of Order.
1912.	
Sept. 9	Authorizes Waimakariri Harbour Board to cut channel through north spit.
" 9	Approves Lyttelton Harbour Board driving piles as marks for dredging, as shown on plan M.D. 3927.
" 16	Makes regulations for appointment of staff and enrolment of boys on New Zealand training-ship.
" 23	Approves plans of wharf for Ward Bros. at Forsyth Island.
" 23	License: Ward Bros. to occupy foreshore at Forsyth Island as site for wharf.
" 23	Approves plans of hopper for Hobson County Council at Greenhill, Kaipara.
" 23	Licenses Hobson County Council to occupy foreshore at Greenhill, Kaipara, as site for hopper.
" 23	Approves plans of addition to town wharf, Tauranga Harbour.
" 30	Removes restrictions on taking of trout in Oruru River, Mangonui-Whangaroa Acclimatization District.
" 30	Approves plans of boat-shed in St. George's Bay for Auckland Harbour Board.
" 30	Approves plans of artesian well in Heathcote estuary for Moreton's trustees, and authorizes same.
" 30	Licenses Northern Steamship Company to occupy foreshore at Cowes Bay, Waiheke, as site for wharf.
October 7	Approves plans of landing in Freeman's Bay, Auckland Harbour, for R. O. Clark (Limited).
" 7	Amends regulations for trout-fishing in Auckland Acclimatization District.
" 7	Amends regulations for trout-fishing in Rotorua Acclimatization District.
" 7	Approves plans of Rangiora Timber Company's wharf at the Narrows, Hokianga Harbour.
" 7	Licenses Rangiora Timber Company to occupy foreshore at the Narrows, Hokianga Harbour, as site for wharf-extension.
" 14	Approves plans of boat-slip at Kaikoura for Kaikoura County Council.
" 14	Approves plans of additions and repairs to Rawene Wharf for Hokianga County Council.
" 14	Approves plans of additions and repairs to Kohukohu Wharf for Hokianga County Council.
" 14	Approves plans of Pacific Cable Board's tank at Devonport, Auckland.
" 14	Amends regulations for trout and perch fishing in Auckland Acclimatization District.
" 14	Exempts Dutch, Danish, French, Swedish, German, and Norwegian ships from New Zealand Life-saving Regulations.
" 21	Approves plans of Timaru Harbour Board's extension of eastern mole.
" 28	Makes regulations re trout-fishing in Rotorua Acclimatization District.
" 28	Amends regulations re netting in New River estuary.
Nov. 4	Licenses trustees of Akaroa Boating Club to occupy foreshore as site for boat shed and slip.
" 4	Approves plan of septic tank and outfall sewer in New River estuary for Invercargill Borough Council, and authorizes same.
" 18	Approves plan of widening embankment across Heathcote estuary, and authorizes Christchurch Tramway Board to occupy necessary foreshore.
" 18	Amends regulation for trout, perch, and carp fishing in Waimarino Acclimatization District.
" 18	Approves plans of booms on Tirohanga River for G. Peace.
" 18	Licenses G. Peace to occupy necessary foreshore, Tirohanga River, as site for booms.
" 18	Appoints W. Morris to be member of Greymouth Harbour Board.
" 18	Prescribes charge for storage on Tauranga town wharf when receipt required by owner.
" 28	Extends trout-netting season in Lake Hawea.
" 28	Approves plans of boat-sheds for R. H. Brodrick in New River estuary.
" 28	Licenses R. H. Brodrick to occupy foreshore New River estuary as site for boat-sheds.
" 28	Approves plan of artesian well for Moreton's trustees in Heathcote estuary, and authorizes same in lieu of authority of 30th September, 1912.
" 28	Approves plan of wharf for Foxton Harbour Board at Manawatu Heads.
Dec. 16	Approves plan of reclamation for Carder Bros. and Co. at Hobsonville, Auckland Harbour.
" 16	Licenses Carder Bros. and Co. to occupy foreshore at Hobsonville, Auckland Harbour, in connection with tile and pottery business.
" 16	Approves plans of reclamation for R. O. Clark (Limited) at Hobsonville, Auckland Harbour.
" 16	Licenses R. O. Clark (Limited) to occupy foreshore at Hobsonville, Auckland Harbour, in connection with brick and pottery business.
" 16	Revokes clause fixing charges on Hobson County Council's hopper-site at Greenhill, Wairoa River, Kaipara Harbour.
1913.	
January 6	Amends regulations controlling traffic on Lakes Rotorua and Rotoiti, and management of wharves and dues for use thereof.
" 13	Approves plan of landing for Auckland Harbour Board at Barry's Point.
" 20	Amends Order in Council licensing Coulthard Timber Company to occupy foreshore, Kaipara Harbour, as site for wharf and booms.
" 20	Revokes Order in Council licensing Northern Steamship Company to occupy foreshore at Gray's Landing as site for wharf.
" 27	Approves plan of wharf for Coromandel County Council at Whangapoua.
" 27	Licensing Coromandel County Council to occupy foreshore at Whangapoua as site for wharf.
Feb. 17	Approves plans of extension of north training-wall, Wanganui.
" 17	Approves plans of extension of eastern breakwater at Gisborne.
" 17	Approves plans of extension of Kauri Timber Company's platform in Auckland Harbour.
" 17	Approves plans of office for Northern Steamship Company at Russell.
" 17	Licenses Northern Steamship Company to occupy foreshore at Russell as site for office.
" 17	Approves plans and authorizes removal and re-erection of shed and latrines on Rawene Wharf.
" 17	Alters representation of certain combined districts on Otago Harbour Board, and appoints principal authorities.
" 21	Approves plans of breastwork, Waterloo Quay, for Wellington Harbour Board.
" 24	Fixes minimum length at which blue cod may be taken, bought, and sold.
" 24	Varies regulations for election of members of Harbour Boards in respect of Lyttelton Harbour Board.
" 24	Approves plans of timber-landing for G. A. Gamman and Co. in Freeman's Bay, Auckland Harbour.
March 5	Extends provisions of sections 3 and 4 of Seal Fisheries (North Pacific) Act to New Zealand.
" 5	Appoints principal authorities for combined districts of Counties of Franklin and Manukau and Boroughs of Otahuhu and Pukekohe for Harbour Board election.
" 19	Amends general regulations under Part II of the Fisheries Act, 1908, re sale of trout from Lakes Rotorua and Taupo.
" 22	Alters representation of certain combined districts on Auckland Harbour Board, and appoints principal authorities for these districts.
" 22	Approves plans of slipways to boat-sheds in St. George's Bay, Auckland Harbour.

RETURN showing the ORDERS IN COUNCIL issued, &c.—*continued.*

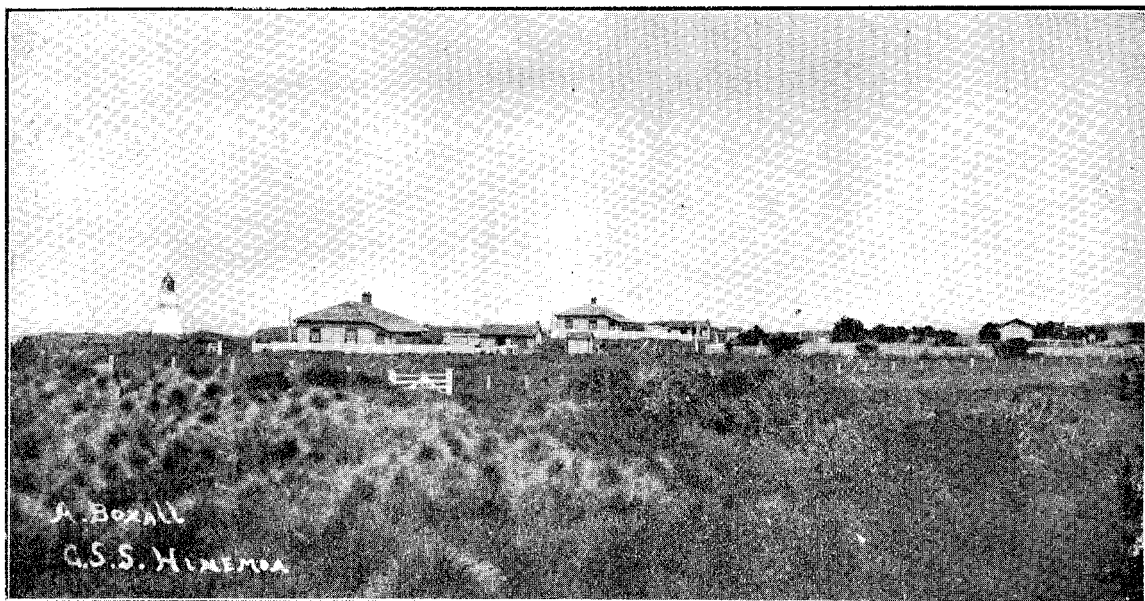
Date of Order.	Purpose of Order.
March 22	Approves plans of proposed deepening of Ngunguru River.
"	22 Approves plans of tide-deflector at Burke Street Wharf, Thames.
"	22 Approves plans of Gisborne Borough Council's proposed bridge over Waimata River.
"	22 Approves plans of wharf for Mauku Road Board at Waiau Pa, Manukau Harbour.
"	22 Approves plans of timber-booms for Rangiora Timber Company at the Narrows, Hokianga Harbour.
"	22 Licenses Rangiora Timber Company to occupy foreshore at the Narrows, Hokianga Harbour, as site for booms.
"	22 Licenses Mrs. B. Mill to occupy foreshore at Purakanui as site for camp buildings.
"	22 Vests management of Howick Wharf in Howick Township Road Board, and prescribes dues for wharf.
"	28 Amends regulations for election of members of Harbour Boards.
"	28 Makes provision for representation of certain districts of New Plymouth Harbour Board.
"	28 Approves plan of breastwork for J. McLaren, and authorizes construction of same on Wairoa River, Kaipara Harbour.
"	28 Approves plan of wharf for Auckland Harbour Board at Riverhead.
"	28 Approves plan of boat-shed for G. Denis in Evans Bay, Wellington Harbour.

*Approximate Cost of Paper.*—Preparation, not given; printing (1,500 copies, including illustrations and map), £100.

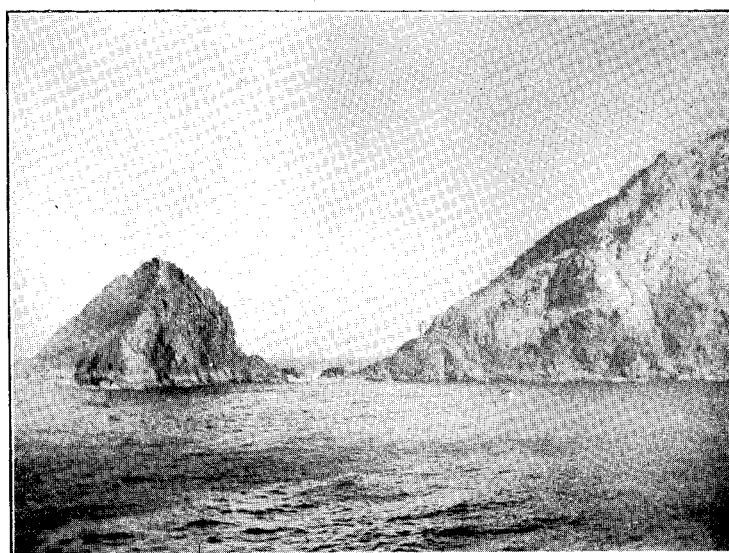
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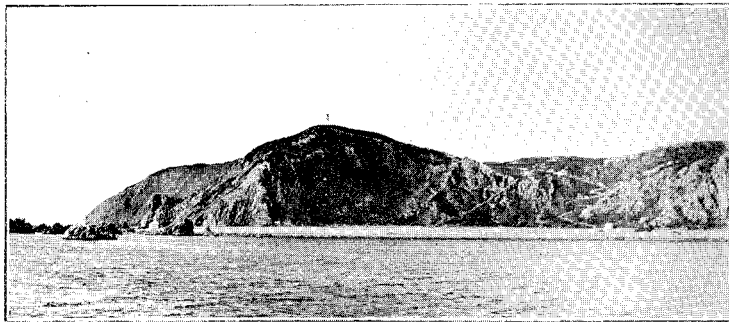




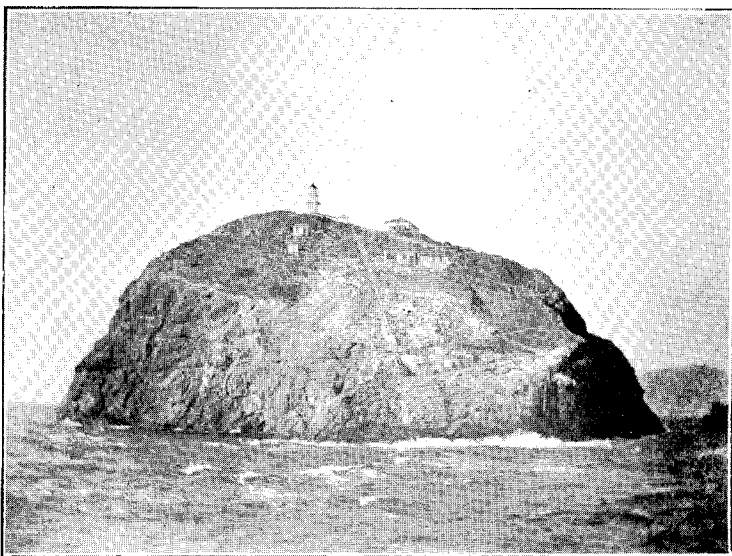
LIGHTHOUSE AND DWELLINGS, WAIPAPAPA POINT.



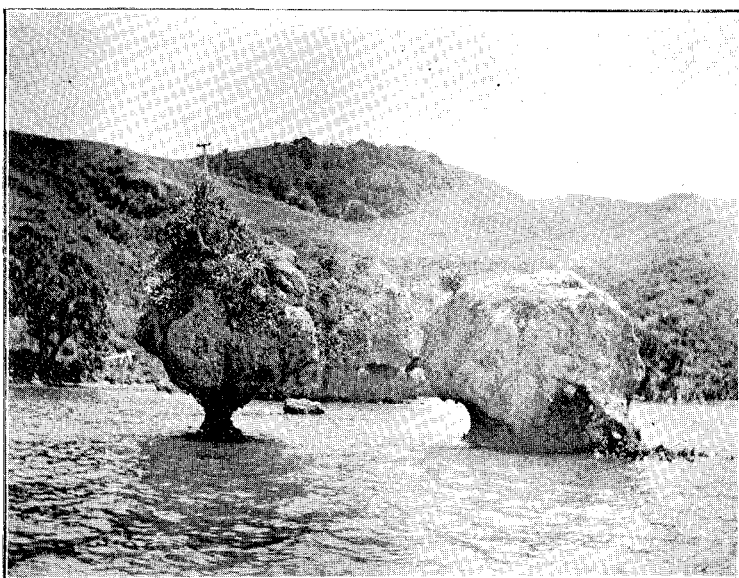
THE BROTHERS.—SOUTHERN LANDING.



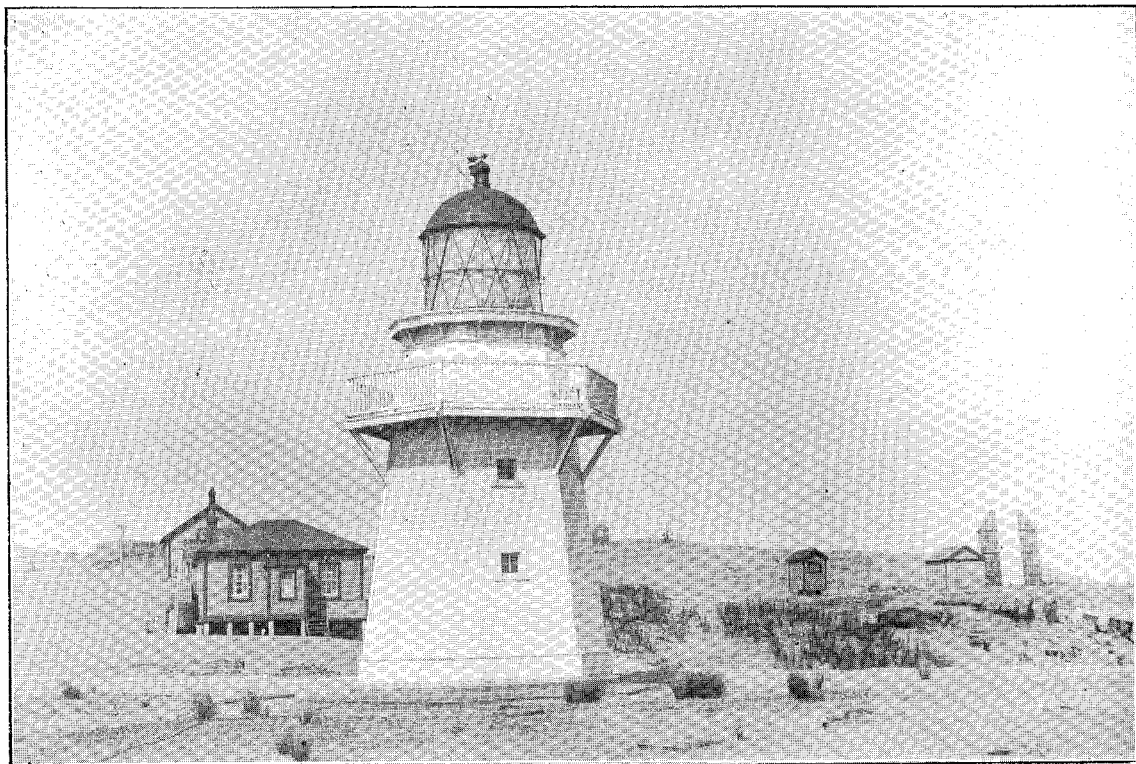
PENCARROW LIGHTHOUSE. BEARING S. 45° E.



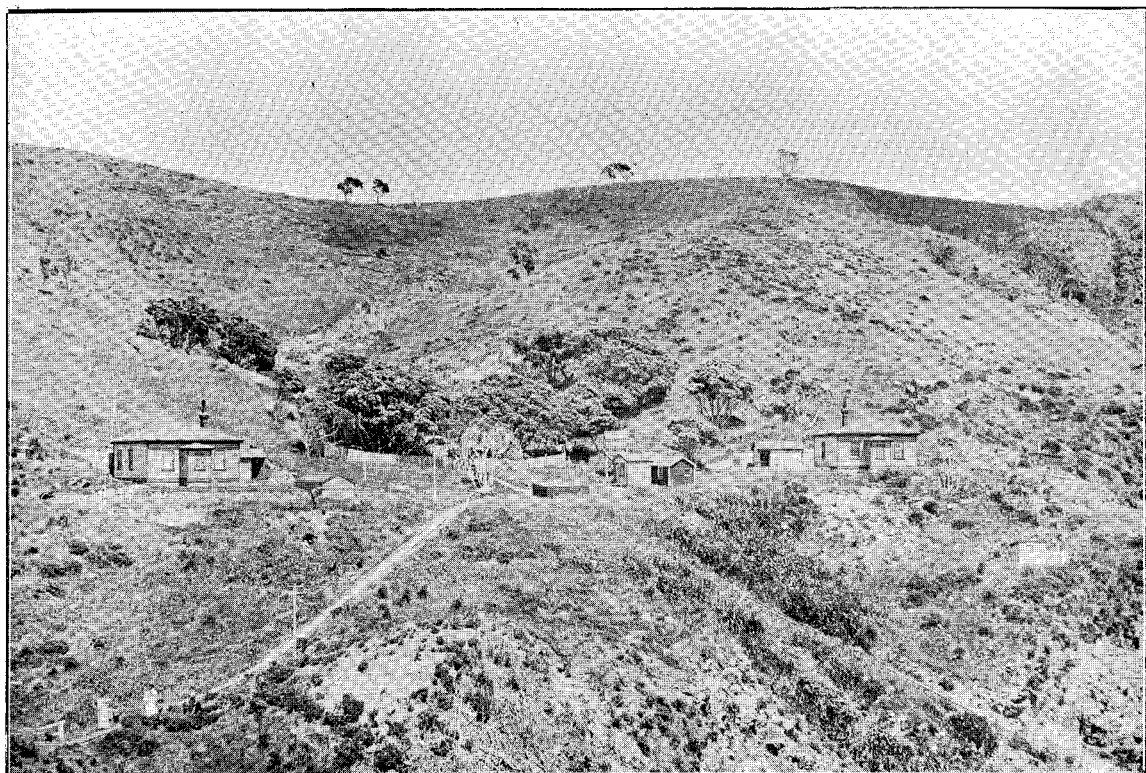
BROTHERS LIGHTHOUSE.



ROCKS AT WHANGAROA.

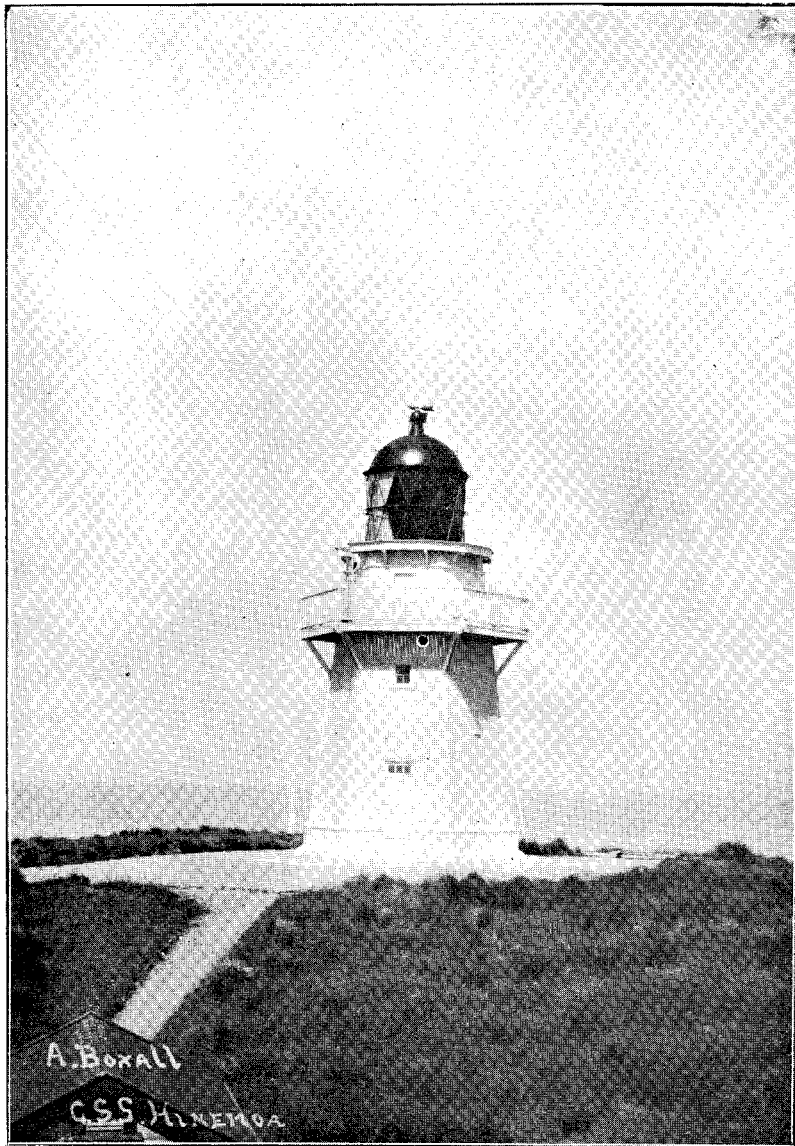


KAI PARA LIGHTHOUSE.



CUVIER ISLAND DWELLINGS.





WAIPAPAPA POINT LIGHTHOUSE.



# NEW ZEALAND WRECK CHART.

1st APRIL, 1912, to 31st MARCH, 1913.

Compiled from Official Records  
in the  
**MARINE DEPARTMENT.**



### SYMBOLS.

#### STRANDINGS.

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

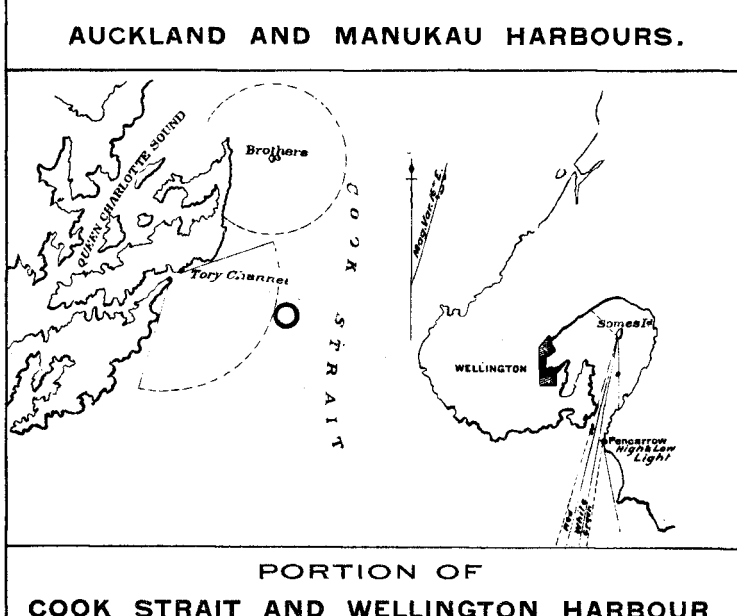
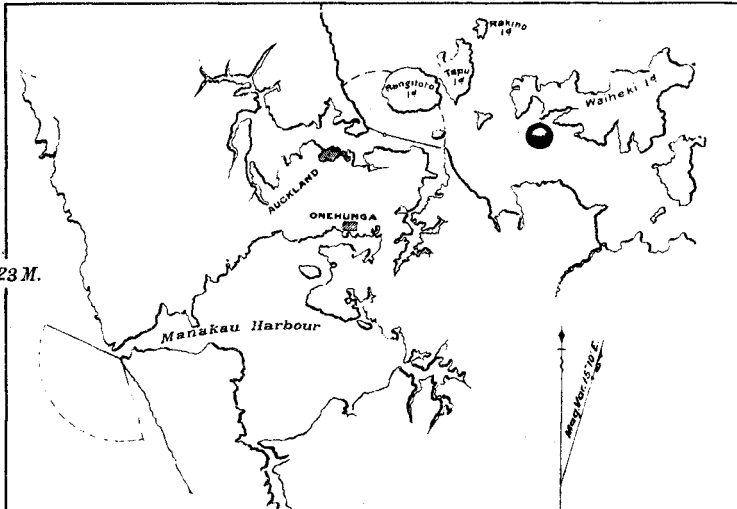
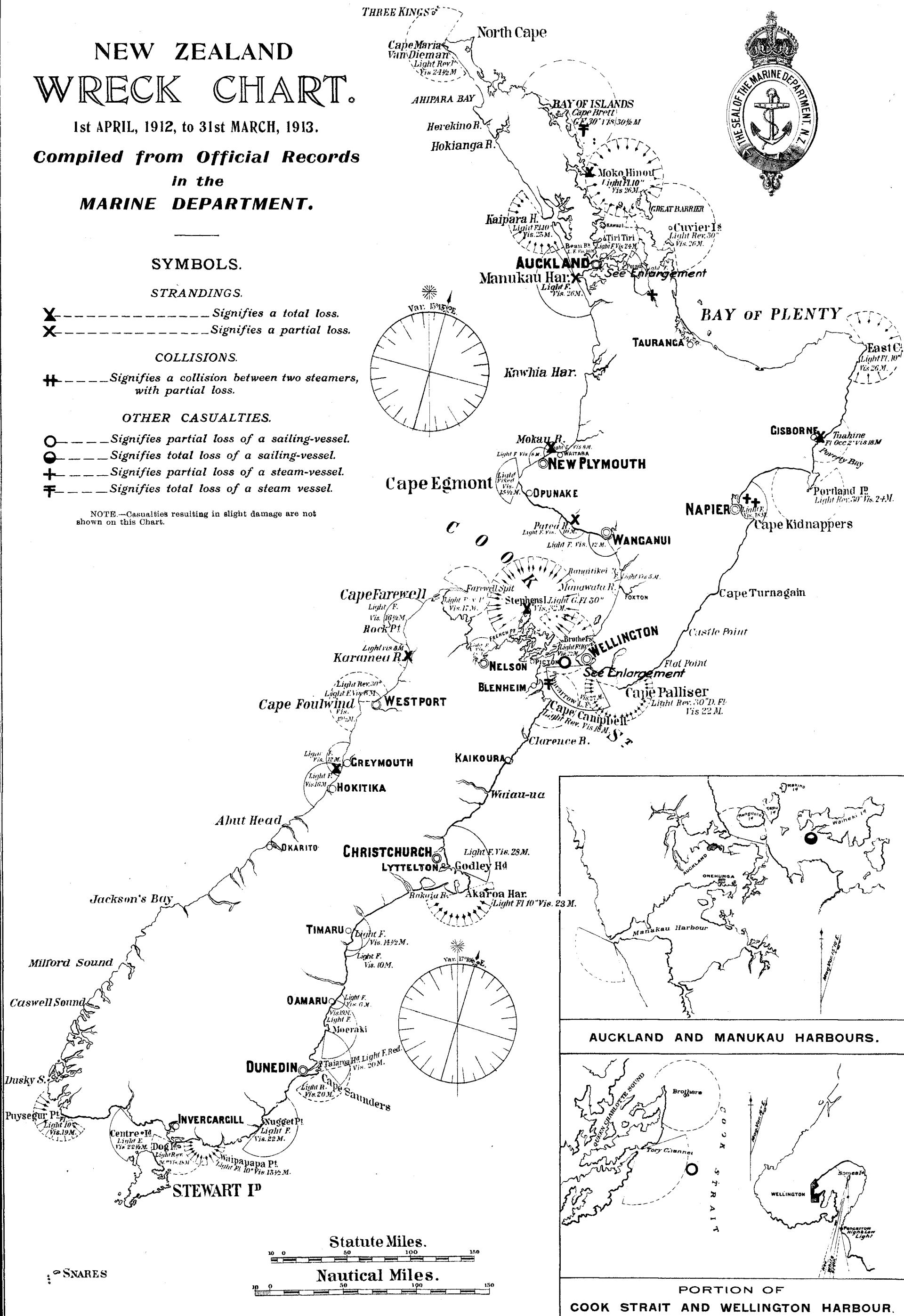
#### COLLISIONS.

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

#### OTHER CASUALTIES.

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

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



Statute Miles.

Nautical Miles.

SNARES

