

SESSION II.  
1906.  
NEW ZEALAND.

# MARINE DEPARTMENT.

(ANNUAL REPORT FOR 1905-6.)

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

MY LORD,—

Marine Department, Wellington, 20th August, 1906.

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

I have, &c.,

J. A. MILLAR,

Minister of Marine.

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

SIR,—

Marine Department, Wellington, 30th May, 1906.

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

*Shipping and Seamen.*—"The Shipping and Seamen Act Amendment Act, 1905," was assented to by His Majesty on the 16th February last, and it came into force on the 19th ultimo, on which date the Governor's Proclamation notifying the King's assent was published in the *New Zealand Gazette*. The extension of the time within which applications for masters' certificates of service could be received, provided for by this Act, has enabled the Department to issue a large number of these certificates to persons who had the qualifying service provided for by section 27 of the Act of 1903, but who did not apply for them within the time prescribed by that Act, and thus hardship has been avoided. When making the extension of time the Act also provided that the certificates of service granted under it must be for vessels of similar class, tonnage, and trade to those in which the applicants had performed their qualifying service, as the intention of the Act of 1903 was that they should only receive these certificates, which are given without examination, of such value as to entitle them to continue in similar employment to that in which they were engaged before the alteration of the law required their vessels to carry certificated masters. If they require anything more than this they can obtain certificates of competency by passing the prescribed examinations. The amending Act also provided for the issue of certificates of service to engineers of pleasure-yachts, missionary-ships, and fishing-boats, and of certificates of competency to second mates of home-trade ships. Certain other necessary amendments were made in the principal Act by the amending Act of 1905.

*Engagement and Discharge of Seamen.*—"The Shipping and Seamen Act, 1903," having made provision for a Registrar of Seamen, who is to keep a register of all persons who serve in ships subject to the Act, the Secretary of Marine has been appointed to that position; and all expired articles of agreement are now sent to his office to enable the register to be kept.

Appended is a return showing the number of seamen engaged and discharged. This work has been satisfactorily performed during the year. In pursuance of the power given by "The Shipping and Seamen Act, 1903," the Customhouses at all the ports except Auckland, Wellington, Lyttelton, and Dunedin have been declared to be Mercantile Marine Offices, and the principal officers of Customs have been appointed Superintendents of Mercantile Marine. This was not necessary at the four ports named above, as there are Mercantile Marine Offices and Superintendents separate from the Customs. Authority has been given to the Superintendents at the four principal ports to attend on board for the purpose of sanctioning the engagement and discharge of whole crews in cases where the vessels are lying in the streams or at a wharf a good distance from the shipping office, and a special charge is made for their attendance on board in such cases. With this exception, all engagements and discharges are required to be effected at the shipping offices. A return showing the amounts paid to disabled seamen under section 119 of the Act is also appended.

Prosecutions have been instituted and fines imposed for breaches of the law regarding seamen in the following cases—viz., the Master of the s.s. “Ayrshire” for carrying four seamen without putting them on the articles; the master of the schooner “Lily” and the master of the s.s. “Storm” for a similar breach of the law in respect of one seaman in each case, and the master of the s.s. “Sterling” for employing an unqualified fireman.

Proceedings were taken against the master of the barque “Onyx” for proceeding to sea from Wellington without a certificated second mate, and he was fined £20 and costs. A prosecution was also instituted against the master of the ship “Loch Garve” for a similar breach of the law, and he was fined £10 and costs. On appeal to the Supreme Court the conviction was quashed on the ground that the Act did not make it an offence for the master to go to sea without the officers required by it. In both these cases the officers required by the Act had been shipped, otherwise the vessels would not have obtained their clearance, and the second mates left between the time of the issue of the clearance and the time of the vessels sailing. In order to prevent cases of this kind occurring in future, provision was made in “The Shipping and Seamen Act Amendment Act, 1905,” that the master or owner of any ship who fraudulently engages or suffers to be engaged any duly certificated master, mate, or engineer to serve for the purpose only of enabling the ship to clear, and not for the purpose of the whole voyage, and every such officer who so engages himself, commits an offence; and the fact of quitting the ship before the commencement of the voyage is to be evidence of having been fraudulently engaged unless the contrary is shown. As this Act is now in force, similar cases will in future be punishable by fine.

The report of the Principal Examiner of masters and mates is appended hereto. For certificates of competency, 275 persons passed their examinations and 91 failed. Of those who passed 137 were masters, mates, and engineers of seagoing ships; 81 were masters and engineers of steamships plying within restricted limits; 5 were masters of fishing-boats and of cargo-boats up to 25 tons register; 1 was master of a sailing-vessel up to 25 tons register carrying passengers within restricted limits; 21 were engineers of seagoing ships propelled by oil-engines; and 30 were engineers of similar vessels plying within restricted limits. Certificates of service have been issued to 55 masters under section 27 of the Act of 1903.

It having become necessary to amend the regulations for the examination of masters and mates, advantage is being taken of the opportunity to consolidate them. Provision will also be made in them for the examination of second mates of home-trade ships, which is a new grade of certificate provided for by “The Shipping and Seamen Act Amendment Act, 1905.” Certain other alterations which are being made in the regulations are described in the Principal Examiner’s report.

Tables showing the names of persons who have received certificates, and the classes and grades of the certificates issued, are appended.

*Registration of Shipping.*—Appended are tables showing the vessels registered in New Zealand, and the number of men and boys employed.

*Survey of Ships.*—During the year certificates have been granted for 293 steamers, 34 oil-engine vessels, and 7 sailing-vessels. A return of such vessels is appended hereto. In addition to these a large number of vessels have been surveyed for seaworthiness. As regards sailing-vessels, the law only provides for the compulsory survey of those engaged in the intercolonial trade; but I think that it would tend to the safety of life and property if the sailing-vessels engaged in the coastal trade were subject to periodical survey. At present they do not come under any official inspection unless there is reason to believe that they are unseaworthy, and then a special order of detention for survey has to be made in each case.

New regulations for the adjustment of compasses have been made. These provide that the compasses of every foreign-going, intercolonial, and home-trade vessel shall be properly adjusted by a licensed adjuster, or by the master of the ship. The compasses of home-trade vessels, unless commanded by masters who hold foreign-going master’s certificates or who have passed the compass syllabus, are to be adjusted annually by licensed adjusters. Every foreign-going, intercolonial, and home-trade ship is to be provided with a compass-error register-book, which is to be examined by an Inspector who must have nautical experience and possess a foreign-going master’s certificate. The Superintendents of Mercantile Marine at Auckland, Wellington, Lyttelton, and Dunedin have been appointed Inspectors for this purpose.

Regulations are being prepared under section 220 of “The Shipping and Seamen Act, 1903,” respecting the loading and stowage of ballast on ships.

Prosecutions have been instituted and fines imposed in the following cases: viz., the master of the s.s. “Cygnet” for not keeping the life-belts in a condition fit for use, and the master of the barque “Quathlamba” for not keeping the life-saving appliances in proper condition.

*Coastal Dangers.*—The services of H.M.S. “Penguin” for the work of surveying the coast have been discontinued, and it is proposed that the work shall be taken up next spring by this Department. Inquiries are now being made for a suitable vessel, it being proposed to charter one for the purpose. An officer with experience in work of this nature should be obtained to have charge of the survey. It may be possible to obtain such an officer who has carried out similar work elsewhere and has at the same time had command of the surveying-ship. If this can be arranged the work would no doubt be carried out more economically and efficiently than would be the case if the surveyor was not also master of the surveying-ship.

Captain McDonald, of the s.s. “Waikare,” having reported that Bare Island is not correctly charted, Captain Bollons, of the s.s. “Hinemoa,” has taken observations, which show that the island lies one mile from the nearest point of the mainland, but that the contour of the coast-line in its vicinity is not accurately laid down. Both Captain Bollons, and Captain David, of the s.s. “Corinthic,” agree in making the bearing between Cape Kidnappers and Bare Island to be S. 1° E.

The New Zealand Nautical Almanac for 1906 was issued in December last, and there has been a good demand for it. The A, B, C, and D Tables, prepared by Captain Blackburne, Nautical Adviser to the Department, have been issued, and are now on sale in the colony and Great Britain. The publication has been well received and very favourably noticed in the Press.

*Wages and Effects of Deceased Seamen.*—The estates of sixteen seamen, amounting to £144 0s. 5d., have been dealt with during the year, and the sum of £104 14s. 7d. has been paid to relatives and other claimants. A list of the estates is appended hereto.

*Wrecks and Casualties.*—Attached are tables showing casualties to ships, and an analysis thereof. Those on the coasts of the colony numbered 55, representing 29,601 tons register, as compared with 64, of 32,536 tons register, in the previous year. The total wrecks within the colony were 6, of 1,686 tons register, as compared with 10, of 1,182 tons in the previous year. The number of lives lost was 22, as compared with 8 last year. Of these 21 were within the colony—viz., “Elsie,” s.s., 1; “Echo,” scow, 1; “Hawk,” scow, 1; “Anna,” ketch, 2; “Kapanui,” s.s., 6; “Oban,” scow, 3; and “Moana,” scow, 7.

Provision was made in “The Shipping and Seamen Act, 1903,” for rehearings and appeals in cases of inquiries into wrecks and other shipping casualties, and regulations have been made as to the procedure in such cases.

*Weather-forecasts.*—Captain Edwin has continued the work of forecasting the weather and issuing weather-reports and storm-warnings.

*Government Steamers.*—The “Hinemoa” carried out the work of attending to lighthouses and overhauling, cleaning, and relaying buoys until the middle of October last, when she was laid up for repairs in Auckland, and remained in the contractor’s hands until the end of January. She is now in good condition. She made a trip to the Auckland, Campbell, Antipodes, and Bounty Islands in February and March last for the purpose of searching for castaways and examining the depots which are maintained on those Islands. The depots at Port Ross, on the Auckland Islands, and at Perseverance Harbour, Campbell Island, were rebuilt. When the “Hinemoa” called at the Auckland Islands in May last year she picked up, in Carnley Harbour, the master and crew of twenty-one men belonging to the French barque “Anjou,” which was totally wrecked near Bristow Point on the 5th of the previous February. The men found the depot for castaways at Carnley Harbour, and lived there until picked up by the “Hinemoa,” using the stores put there for use in such circumstances. They also used some of the stores from the depot at Norman Inlet, to which they were directed by notices which were posted up in the Carnley Harbour depot. During the time the “Hinemoa” was undergoing repairs the “Tutanekai” was put into commission to carry on the lighthouse and other work. Besides the ordinary work on the coast, she visited the Kermadec Islands, and examined the depots there, rebuilding that on Curtis Island.

*Lighthouses.*—The keepers have carried out their duties in a satisfactory manner, and all the lights have been properly exhibited. They have been inspected by Captain Bollons when calling at them with stores and oil. During the year I have visited and inspected those at Godley Head, Jack’s Point, Moeraki, Taiaroa Head, Cape Saunders, Nugget Point, Waipapapa Point, Dog Island, Centre Island, and Puysegur Point, which were all found to be in good order and well kept.

The new tower at Cape Campbell has been completed, and the light was shown from it for the first time on the 15th October last. A new workshop has been built at this station, and repairs executed to the dwellings. The condition of the station is now such that, with the exception of the flagstaff which is to be erected shortly, no further work of importance should be required for some years. The following works have been executed at other stations:—

Cape Maria van Diemen: A new ladder at the tower has been erected.

Kaipara Head: A new cart and coal shed have been erected, and owing to the shifting sand being piled up round the landing-store by the wind it had to be moved to a better position.

Akaroa Head: New rings and rollers have been fitted to this light, and it is now working smoothly and well. The principal keeper’s house has been repaired.

Jack’s Point: A Matthews incandescent burner has been procured for this light, and also the necessary apparatus to make it an occulting light. It is necessary that this should be done, as it is found that at present ship’s lights and other lights in the neighbourhood are liable to be mistaken for it. The work of erecting the apparatus and new burner is now being carried out by Mr. Scott, the Department’s lighthouse artificer.

From reports which have been received it would appear to be advisable to adopt this kind of light generally for the New Zealand lighthouses. The oil is vaporised and produces a very brilliant light at a less expenditure of oil than the ordinary burners.

Moeraki: Wash-houses have been erected.

Taiaroa Head: New outbuildings have been erected.

Nugget Point: A schoolhouse for the keeper’s children has been erected. A new house for the principal keeper is badly needed, and it is recommended that provision for it should be made in this year’s estimates.

Puysegur Point: New rings and rollers have been fitted to the light.

Kahurangi: Eighteen acres of bush have been felled on the reserve, and this area has been fenced in and sown with grass to provide pasture for the station horse and the keepers’ cows and sheep.

During the year three lightkeepers have resigned, and one retired on compensation owing to ill health. Five new appointments have been made to fill these vacancies and one which existed at the beginning of the year.

The amount of light dues collected during the year was £29,443 11s. 2d., as compared with £29,310 16s. 3d. during the previous year. Attached is a statement showing the amount received at each port.

*Fog-Signals.*—The signal at Pencarrow Head has been worked in a satisfactory manner. A signal has been erected at Taiaroa Head, near the lighthouse, and is working satisfactorily. At the former cartridges are exploded every five minutes during fogs, and at the latter every six minutes. In both cases the automatic signals are controlled by the lightkeepers.

*Harbours.*—The harbours under the control of this Department have been maintained in an efficient manner, and the buoys and beacons in them have been kept in good condition. The s.s. "Hinemoa" has attended to most of the buoys, and she has erected new beacons at Tairua.

A new beacon, larger than those previously erected, has been built at the entrance to Kaipara Harbour, and has proved to be of great benefit to ships visiting that port. The old pilothouse at Pouto, which is occupied by the wife and family of the principal lightkeeper, and which is also used as a post and telephone office, has been repapered, and the chief boatman's house at the same place has been repaired. If a small light was established at Pouto it would be of great service to vessels plying between Helensville and the Wairoa River, and I recommend that provision for it be made in the current year's estimates. It could be attended to by the chief boatman, and therefore the cost of maintenance would only be the cost of the necessary oil, &c.

Captain J. C. Smith, who has been Harbourmaster, pilot, and Customs officer at this port since the 18th February, 1880, is retiring from the service on account of age, and Captain D. Savident, master of the barque "Hirotha," who has traded to Kaipara for several years, and is well acquainted with the harbour, has been appointed his successor. Captain Smith has been a faithful servant during the time he has been in the service.

The light at the entrance to Hokianga Harbour was not powerful enough to make an efficient light for the port, and a new port-light has therefore been supplied to take its place. A small tower to hold the new light is necessary. An oil-launch has been procured for the Harbourmaster's use, as this was necessary to enable him to carry out his duties properly. The flagstaff at the entrance has been put in good order.

At Manukau a new beacon has been erected at Shag Point in the harbour, and some rocks which impeded navigation below the wharf have been removed. Representations have been made by the Harbourmaster that the wharfage accommodation is insufficient, and these representations have been brought under the notice of the Railway Department, which owns the present wharf.

At Okarito a pipi-bank which impeded the approach to the wharf has been removed. The work was carried out by Captain Falconer with a party of men from the Submarine Mining Corps of the Defence Department. The bank was blown up by means of gelignite, and the current then washed the material away.

The sum of £2,000 1s. 3d. has been collected for pilotage and port charges in respect of harbours under the control of this Department, as compared with £1,639 12s. 7d. collected during the previous year.

A great many plans of harbour-works have been approved by the Governor in Council, and licenses have been issued for the occupation of sites for wharves and other works. A return showing such works and licenses is appended hereto.

*Fisheries.*—The regulations regarding fish and oysters have been amended on so many occasions that it has been deemed advisable to consolidate them, and this is now being done. The registration and licensing of sea-fishing boats and of boats engaged in taking oysters enables the Department to control the boats much better than was possible before the registration and licensing was made compulsory, and the Department has now information as to the number and tonnage of the boats used which could not formerly be obtained. A return showing the number of boats registered and licensed at the various ports at the end of December last is attached. This shows that the total number registered was 1,085 and licensed 1,068. At the end of the previous year the numbers were 787 registered and 773 licensed.

According to reports received from Inspectors of Fisheries there appears to be generally a good supply of fish obtainable.

In the Bay of Islands District during the year, flounders, schnapper, rock-cod, hapuka, barracouta, butterfish, and crayfish were plentiful, and in excellent condition. Mullet has not been plentiful; and the Inspector is of opinion that the only way to stop the overfishing and the disturbance of mullet during breeding-time is to close the canning factories during that period. Enormous quantities of sharks have frequented the bays along the coast of this district.

The Inspector considers that the fee for an annual license to take oysters should be increased to £5, as unless this is done the oyster-beds will when next opened be rushed by pickers, who will soon strip them. He also recommends that each picker should be limited to one sack of oysters per tide, or per day, and that stacking or paddocking should not be allowed.

At Hokianga schnapper, mullet, kahawai, flounders, whitebait, and rock-cod have been plentiful. There are eight smokehouses in the district and two canning factories, one of which was closed down during the year.

The Officer in Charge of Customs at Kaipara reports that the fishing in that harbour has been about the average during the past year, and that the principal fish caught for the market have been mullet, flounders, and schnapper. There are large numbers of kahawai in the harbour, but as there is no sale for them they are not fished for. Mullet have not been so plentiful as formerly, and very few large fish have been taken. There is a fish-preserving factory at Batley, at which about twenty thousand dozen mullet were canned during the year.

Oysters are found in small patchy lots scattered over the rocks in the estuary, but they are not so large or of such good quality as those found on the east coast. It will be advisable to close the beds for a time after the present season. About a hundred sacks of oysters were taken last season.

At Auckland schnapper, which is the principal fish caught, has been plentiful and there has been a good supply of flounders at the Thames. During the summer the fishermen on several occasions caught more flounders than there was a demand for, and had to give them away to the Maoris. Mullet, which is one of the principal fish in the district, has been scarce, and the Inspector is strongly of opinion that there should be a close season for this fish. There are five fish-curing establishments in Auckland, two at the Thames, one at Coromandel, and one at Kawau Island.

The principal fish caught in Manukau Harbour are mullet, schnapper, and flounders.

Most of the fish taken in Hawke's Bay are caught by trawlers, trawling being at present carried out in from 7 to 30 fathoms of water, there being ten steam and one oil-engine trawlers employed. Besides these, fifteen rowing-boats are engaged in fishing. The principal fish are flounders and gurnet, but besides these a large number of schnapper, moki, terakihi, and butterfish are caught. There are five smokehouses in the district.

The principal fish caught in Cook Strait and other Wellington fishing-grounds during the year have been warehou, schnapper, hapuka, blue-cod, and flounders.

There has been a scarcity of fish in Canterbury during the year, especially at Sumner, New Brighton, and Kaiapoi, and most of the fish sold by auction in Christchurch came from outside the district. There are three smokehouses in Christchurch and two in Lyttelton, but they were not all being used.

In the Otago District the principal centres of fishing are Catlin's, Molyneux, Taieri Mouth, Port Chalmers, Waikouaiti, Moeraki, and Oamaru, and the principal fish taken are flounders, hapuka, blue-cod, and trevalli; and it is stated that notwithstanding the unseasonable weather experienced much larger catches were taken than during the previous year. There has been a considerable improvement in the boats and gear used in the industry. There are thirty-nine smokehouses in the district, which have all been inspected during the year and found to be clean and sanitary in every respect. Besides these there is in Dunedin a fish potting and preserving works. The Inspector states that there are 827 persons employed in connection with the industry in the district, 359 being in fishing-boats, 111 in curing and preserving works, 285 in fish restaurants and retail shops, and 72 as fish-hawkers.

The principal fish caught by the Bluff fishermen are blue cod in Foveaux Strait and Stewart Island, and flounders in Bluff Harbour, and large quantities of oysters are taken from the beds in the Strait. There are five freezing-plants on the mainland and at Stewart Island.

Trawling for fish has been prohibited within a certain distance from the land between the mouth of the Waimakariri River and Okain's Bay.

During the year three persons have been fined for breaches of the regulations as to the registration and marking of fishing-boats and five for illegally taking trout when fishing for sea-fish and not returning them at once into the water.

Mr. C. C. Courtenay, Customs Officer, and nine members of the Police Force have been appointed Inspectors of Fisheries.

*Seals.*—The close season for seals has been extended up to the 30th June next, and it is proposed to further extend it. Two men have been fined £5 each for killing a seal at Waikouaiti.

*Salmon and Whitefish.*—Another shipment of 500,000 quinnat-salmon-ova and two million whitefish-ova has been procured from the United States. Mr. Ayson, Chief Inspector of Fisheries, went to San Francisco and brought the ova to the colony, and they arrived in first-class condition. 244,833 of the salmon-ova were hatched out at the Hakataramea Hatchery and 245,000 at Lake Ohau, the fry from the latter being liberated when they had absorbed the yolk-sac. The loss on the voyage and after arrival in the colony was thus only 10,167 ova. Half the whitefish were taken to Lake Kanieri and half to Lake Tekapo.

A fish believed to be a salmon having been caught in the Waitaki River was sent to this Department, which submitted it to Sir James Hector, a copy of whose report thereon is appended hereto. It will be seen that Sir James Hector reports that the fish was without a doubt a young specimen of the genus *Oncorhynchus*, which represents the genus *Salmo* on the North Pacific coast of North America and Eastern Siberia, and of which genus some of the specimens are popularly known in the market as Californian salmon, and that it is probably a quinnat, which is the kind of salmon introduced into the colony from the United States and which has been liberated from the Hakataramea Hatchery into the Waitaki River. Other fish believed to be salmon having been caught in the Hakataramea River, specimens were submitted to Sir James Hector, whose reports thereon are also appended.

Reports which have been received from the Chief Inspector of Fisheries, the Manager of the Hakataramea Salmon Station, the Secretary of the Waitaki and Waimate Acclimatisation Society, and the Collector of Customs at Oamaru with regard to other fish which have been caught and which are believed to be salmon are also appended.

During the year the following salmon have been liberated from the ponds at Hakataramea—viz., 73 five-year-old, 12,587 two-year-old, and 53,378 one-year-old quinnat, 34 four-year-old sockeye, and 55 three-year-old Atlantic. In addition to these 245,000 fry from this year's importation of ova have been liberated at Lake Ohau, making the number liberated during the year 311,147. At the end of the year the following fish were in the ponds—viz., 18 four-year-old sockeye, 131 three-year-old Atlantic, and 269 two-year-old, 21,737 one-year-old, and 244,833 fry from this year's importation of ova.

A site for rainbow-trout eyeing-station has been procured at Rotorua. It is now being fenced in and the necessary eyeing-shed, &c., are being erected. A quantity of ova will be collected and eyed at the station during the coming season.

*Portobello Marine Hatchery.*—A good deal of experimental work has been done by the Hatchery Board, and a large number of flounder-fry has been hatched and the fry liberated. Arrangements have been made for a shipment of live lobsters from the United Kingdom, and the Hatchery Board proposes to attempt to introduce crabs. The Board having proposed that inquiry should be made as to the feasibility of introducing turbot, herring, cod, or haddock from the United Kingdom, the High

Commissioner was instructed to make such inquiries, and he was told that if he was satisfied that it was feasible he was authorised to expend a small sum in sending out a trial shipment of any one or two of the kinds of fish referred to. The result of his inquiries is set forth in his memorandum of the 7th ultimo, which is appended hereto along with other correspondence relating to the hatchery and to the question of introducing suitable food-fishes.

*Oysters.*—The beds between Gull Point and Bream Tail, in the Auckland fishery, which were opened last season, furnished sufficient oysters to meet the demand. In fact, four of the boats which began to take oysters at the beginning of the season ceased operations before the end of the first month owing to the supply exceeding the demand.

Mr. Ayson, Chief Inspector of Fisheries, went to Auckland last month to examine the beds in the Hauraki Gulf in connection with the question of deciding as to the beds that should be opened this year, and as a result of his examination those between Mullet Point, north of Mahurangi, and Wanga Point, on the Whangaparoa Peninsula, and those between Cape Colville and Hautapu Point, on the Coromandel Peninsula, have been opened. It appears from his report that there is a good supply of oysters on Rangitoto Island, and therefore it would be advisable to open these beds later on in the season if it is found necessary to close those between Mullet Point and Wanga Point and between Cape Colville and Hautapu Point before the end of the season. Mr. Ayson also visited Great Barrier Island, and found that the beds, especially those at Port Fitzroy, are recovering from the overpicking which took place when they were last open. He did not, however, think that they should be opened this year, on account of the difficulty in supervising the picking, and recommended that they should be leased to the settlers before next season. This can be done under the provisions of "The Sea-fisheries Act Amendment Act, 1903," or the oysters could be picked and sold by the Department. The adoption of either one or the other of these systems would prevent the depletion of the beds. The best plan would, in my opinion, be for the Department to pick the oysters itself, as this would tend to conserve the beds and at the same time would yield a profit.

The closing of most of the beds in the Hauraki Gulf during the last few years has enabled them to recover, and if care is taken to prevent overpicking in future there should be a constant supply. Inspector Bennett states that the beds on Waiheke, Ponui, Rangitoto, and Pakiho Islands, and on parts of Motutapu, are in better condition than they have been during the last twenty-five years. There should be considerable further improvement in the near future, as Mr. Ayson states that he observed an unusually large number of young oysters from this season's spawning, showing that there has been an exceptional fall of spat; and the same state of things was observed in the Bay of Islands.

None of the beds in the Northern fishery, which extends from the North Cape to Whangaruru, have been opened this season. After completing the examination of the Hauraki Gulf beds, Mr. Ayson proceeded to the Bay of Islands and inspected the beds there, and both he and Mr. Stephenson, the local Inspector, recommended that they should be kept closed. The oysters in the Kerikeri section of the fishery are in good condition, but Mr. Ayson considers it would be inadvisable to open these beds, as it is certain that a very large number of gum-diggers and other inexperienced pickers would take out licenses, and that it would be practically impossible to prevent them ruining the beds. This is another instance in which picking by the Department would be the means of insuring a larger supply of oysters for the public and at the same time of conserving the beds.

An inspection which has been made of the beds in the Hokianga Harbour shows that the rock-oysters are becoming depleted, although there is still a fair supply of mangrove oysters. It has therefore been decided to close them, and also the beds in Herekino and Whangape Harbours and Ahipara Bay, as they, too, are getting depleted.

The annual license fee to take oysters in the North Island has been increased from £1 to £1 10s.

Several prosecutions for breaches of the law in respect to oysters have been taken in the Auckland District, and fines have been imposed.

The survey of the oyster-beds in Foveaux Strait has been carried out by Mr. Hunter, Customs Officer at the Bluff, and a copy of his report is appended hereto. This report shows that oysters are plentiful in the Strait.

The quantity of Foveaux Strait oysters exported to Australia during the year ended the 31st December last was 303,771 dozen, valued at £2,530.

I have, &c.,

GEORGE ALLPORT.

The Hon. the Minister of Marine, Wellington.

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

Office of the Principal Examiner of Masters and Mates,

Customhouse, Wellington, 4th May, 1906.

I HAVE the honour to submit my annual report on the examination of masters and mates in New Zealand.

The work has been carried out by the Examiners at the four principal ports in a satisfactory manner. The total number of examinations held in the colony during the past year is almost exactly the same as in the previous year, the very slight increase being due to the new grade of examination for master of fishing-boat or cargo-vessel, which came into force during the current year. During the last two or three years Auckland has had a considerable increase in the number of examinations, while the number of candidates for examination in Wellington has latterly been decreasing, and this year there have been little more than half the number in Wellington than Auckland has had. As usual, there have been comparatively few examinations held in either Lyttelton or Dunedin.

In the Consolidated Amended Regulations relating to the Examination of Masters and Mates (which will shortly come into force, and which became necessary by the new Shipping and Seamen Acts), provision has been made by the Hon. the Minister of Marine for allowing the time served in vessels trading in the extended river limits to count as sea service towards qualifying for a certificate as an officer in vessels trading on the New Zealand coast. In my last report attention was drawn to the unfair position in which the deck hands of vessels trading in extended river limits were placed by being practically precluded from promotion in the vessels they served in. This position will in future be rectified by the amended regulations.

When consolidating and amending these regulations advantage was taken of this opportunity to make some small alterations and additions in the home-trade examinations as follows:—

“Second mates and mates will be required to find the distance from a point or light by the methods shown in the ‘New Zealand Nautical Almanacs’ of 1904 or 1905, on pages 119 and 120, or on pages 79 and 80 of the A, B, and C Azimuth Tables published by the Marine Department.

“A mate will be required to know the general tide, bar, harbour, and storm signals to be used at all New Zealand ports, as given in the ‘New Zealand Nautical Almanac.’

“Master.—(a.) To find by means of Table F on page 121 of the ‘New Zealand Nautical Almanac’ of 1904 or 1905, or by Table H on page 81 of the A, B, and C Azimuth Tables, the distance from an object when abeam by the distance run between the beam-bearing and any other bearing before or abaft the beam.

“(b.) To set the course when at a known distance from an object to pass any required distance from it by aid of the traverse table. (See example on page 121 of the ‘New Zealand Nautical Almanac,’ or on page 81 of the A, B, and C Azimuth Tables.)

“(c.) To find the true bearing of the sun and deviation of the compass by time azimuth tables.

“(d.) In working the problem marked (b) and (f) in the new regulations (correction to apply to soundings, and to find latitude by meridian altitude of the sun) the ‘New Zealand Nautical Almanac and Tide-tables’ will be used, all the examples of soundings being set in future for places on the New Zealand coast.

“(e.) The problem for finding the deviation of the compass from the observation of the sun when on the meridian will in future be discontinued, as it is impracticable in these latitudes.”

The problem for finding the deviation of the compass from a bearing of the pole-star (Q. 10 in Appendix L of the Regulations) was dropped out of the syllabus when setting new examination-papers after my arrival in Wellington, as it could not be put into practice in this colony.

The new problem for second mate, and those mentioned as (a) and (b) for master, are very simple, as will be seen by a reference to the A, B, and C Azimuth Table-book, on pages 79 to 81, where the problems are explained and illustrated. So far as the mates are concerned, the principal work of the problem is to convert an interval of time into distance according to the speed of his ship. In problem (a) for master, he must multiply this distance by a decimal factor taken from a small table, “H,” in the book. Problem (b) for master is taken out at sight from the traverse table.

The officer can thus find his distance from a point of land, or a light, or set his course to pass the required distance off, without leaving the deck, or reference to any chart.

For problem (c), the Marine Department have lately published very complete Azimuth Tables for the moderate price of 3s., under the title “A, B, and C Azimuth Tables.” By the aid of this work the true bearings of the sun, moon, planets, and all the bright stars may be found at any hour of the day or night by the use of only about half a dozen figures. Candidates will be allowed to use this work or any other tables that will solve the problem within half a degree.

When masters of home-trade vessels have made themselves acquainted with this last-mentioned problem they should have no difficulty in checking the deviation of their own ships’ compasses, by bearings of the sun at any time of the day when the altitude is suitable.

The above-mentioned changes will come into operation on and after 1st September, 1906. They have already been published in the *New Zealand Gazette*.

I have, &c.,

H. S. BLACKBURN.

#### ACCLIMATIZATION OF SALMON AND WHITEFISH.

SIR,—

Petone, 9th December, 1905.

The fish you have submitted to me is without doubt a young specimen of the genus *Oncorhynchus*, which represents the genus *Salmo* on the North Pacific coast of North America and Eastern Siberia, and of which genus some of the species are popularly known in the market as the Californian salmon.

It is a male fish, passing into the grilse stage, and has evidently been to the salt water, as it has cast its smolt scales and acquired a brilliant silvery dress, bluish-grey on the back, and pure silvery-white on the sides and beneath, the fins being pale olive-brown, margined on the upper edge with black. The dorsal fin has thirty faint spots, and on the sides are a few black X spots above the lateral line and in front of the dorsal. It is a very elegant fish, with a conical, slightly blunt, and tumid head and snout, devoid of scales in its present stage. The body is only slightly compressed, and is deepest and widest just before the dorsal fin. The run of the tail is beautifully tapered, and expanded to form the base of the caudal fin, which is deeply cleft. These last characteristics at once distinguished this fish from any of the trout I have seen in New Zealand as far as external appearance goes; but the possession of sixteen rays in the anal fin and the presence of a soft, free, scale-like appendage in the axil of the ventral fin and more than half the length of the fin removes it from the genus *Salmo* to that of *Oncorhynchus*. It is almost impossible to determine the species in the grilse stage, as the information on the subject



is very imperfect, and in this case the strength of the preserving fluid used has been excessive and has damaged the internal soft parts of the specimen; but from the small size of the scales, which are twelve to fifteen to the inch, it is probably *O. quinnat*. Although plump in outward appearance, the fish was singularly free from fat in its interior, and the pyloric caeca were hardly developed, so that it must be looked upon as a fish out of condition. The liver is smaller than should be, weighing only  $\frac{1}{4}$  oz., testes rudimentary; stomach and gut empty, the former having strong longitudinal folds. The teeth are very small and slender, and are present on the jaws, tongue, and roof of the mouth.

*Oncorhynchus quinnat*. — Grilse stage, male.—Length, with tail, 20.5 in.; weight, 2 lb. 12 oz.; greatest girth, 10 in.; greatest height, 3.5 in.; greatest width, 2.3 in.; length of head, 4.1 in.; length of snout to orbit, 1.4 in.; length of maxillary, 2 in.; length to dorsal fin, 8 in.; length of base of dorsal, 2 in.; height of dorsal fin, 1.5 in.; length of first dorsal ray, 2.4 in.; space from dorsal to adipose fin, 4.5 in.; length of base of adipose fin, 0.4 in.; height of adipose fin, 0.6 in.; space from adipose fin to caudal fin, 2.4 in.; length of outer caudal rays, 3.7 in.; length of middle caudal rays, 1.4 in.; length of pectoral fin, 2.9 in.; length of base of pectoral fin, 0.8 in.; length of ventral fin, 2 in.; length of axil scale, 1.1 in.; length of base of anal fin, 2.5 in.; length of longest ray of anal fin, 1.8 in.; height of tail at base of caudal fin, 2 in.; height of tail at base in advance of caudal fin, 1.2 in.

Fin-ray formula: B, 14; D, 12; A, 16; R, 15; V, 11; L, lat., 130; L, trans.,  $\frac{22}{4}$ . Note.—B = gill-rays, D = dorsal fin, A = anal fin, P = pectoral fin, V = ventral fin, L, lat. = line of perforated scales along the side of the body, L, trans., = number of scales counted obliquely above and below the lateral line where opposite to the dorsal fin.

The specimen is very interesting from its being, so far as I am aware, the first authentic take of a true salmon after returning from the sea in the Southern Hemisphere. It has been placed in the museum.

Yours, &c.,

JAMES HECTOR.

The Secretary, Marine Department.

SIR,—

Petone, 6th June, 1906.

The fish sent from the Hakataramea is a true Pacific salmon (*Oncorhynchus quinnat*), being a female about 16 lb. weight. It had been so badly mauled about that the viscera could not be examined, the abdomen being full of clotted blood and loose masses of roe. The fish must have been ripe for spawning, but was in very poor condition. It looks like a king salmon from the Sacramento River breed, but it is not in a fit condition for examination. I understand that it is being skinned for Mr. Ayson.

I would like to get one of these fish in a fresh state for examination, and I might give you a full report on the whole subject for future reference.

Yours, &c.,

George Allport, Esq., Secretary for Marine.

JAMES HECTOR.

#### MEMORANDUM re SALMON.

Petone, 29th June, 1906.

According to your advice of 18th instant a box reached me on 15th instant containing three specimens curled up and packed in grass, but the fish had evidently been treated with some preservative before being packed. All the three fish had the distinctive characteristics of the sub genus *Oncorhynchus*, which includes all the species of salmon that are found in the North Pacific Coasts of America and Asia, and which breed in the rivers of that region. These particular specimens most resemble the *O. quinnat*, but they were not in a good condition for study. Five species of salmon are distinguished on the coast of California and British Columbia.

1. *O. quinnat*, or king salmon, spawns chiefly in Sacramento River and Columbia River. The "run" in these rivers takes place in early spring, and the fish ascend without feeding in some cases for a thousand miles before they spawn. The weight of this salmon in the Columbia averages 22 lb., but often reaches 70 lb.; in the Sacramento it averages 16 lb. After spawning it generally dies; and, in 1854, at the source of the Columbia River, 1,200 miles from the mouth and 2,000 ft. above the sea-level, I have seen the dead fish piled up in heaps for miles along the shores of the upper lakes. In its course that great river has many rocky falls and rapids, but it also passes through extensive lakes. The fish enter the river from the sea early in March, when they are caught in an immense profusion and in prime condition at the "Cascades," forty miles from the sea. I saw them piled up as mentioned at the source of the river on 22nd September, so that about seven months must be occupied in the ascent, at the rate of four to five miles per day. This is the most valuable salmon in Californian waters, but is only in good condition when in the sea or lower parts of the rivers.

2. *O. nerka*, blue back or Fraser River salmon, also known as the Sawqui (Sockeye, of fishermen): This salmon is found in all rivers north of the Columbia to Alaska, and on the Asian Coast south to Japan. In Fraser River the "main run" occurs in spring, and a second, the "fall run," in August and September, but they are taken on the banks in the estuary at other seasons. Their chief spawning-grounds are in small tributary streams to mountain lakes with temperature 45° Fahr. The flesh when in good condition is deep red: at spawning time it is pale and of less value for canning. Their weight is from 3 lb. to 8 lb. The other three species are of inferior importance to the foregoing, and only require mention.

The silver salmon, the dog salmon, the humpback salmon: These are all "fall" salmon, ascending only a short distance from the sea.

I will describe the specimens sent as I, II, III.

I.—A male fish 25 in. long, weighing 6 lb., almost black in colour, with deeply embedded scales in a tumid or spongy skin, two silvery patches on the gill-covers, and several large dull-red blotches on the sides of the body, black spots on the dorsal and upper part of the caudal fins. Head elongate, with



greatly developed jaw covered with powerful teeth. Body short in proportion to the height, owing to the great depth of the body in front of the dorsal fin, like a humpback salmon. Anal fin and lower part of caudal fin much lacerated, almost as if they had been gnawed away. Viscera crushed and engorged with blood, as if the fish had been artificially stripped. The crushed remains of the organs could not be recognised. Flesh lean and pale in colour. Pyloric cœca numerous, but exhausted and without any enveloping fat; evidently a kelt or male fish exhausted and mutilated by spawning struggles.

II.—A female, evidently of the same species as I, but slightly smaller, 22 in. long and 5½ lb. weight. Very elegant in form, with fine conical snout, and slender jaws with moderate teeth. Scales silvery, and not deeply embedded. Ventral and caudal fins much torn and destroyed. Viscera engorged with blood, with no ova present in the abdominal cavity, apparently having been discharged or stripped. Pyloric cœca small, ½ in. long, and over one hundred and twenty in number. General condition of fish lean, and quite unfit for food; flesh pale pink.

III.—A small male, 1½ lb. in weight and 17 in. in length. Head and body silvery, but darker on the back. Testes 6 in. in length, fully developed, and full of milt, which issued freely from the vent on pressure. Pyloric cœca numerous (over one hundred and twenty), but very small and without fat. General condition of body lean; flesh light coloured. Lower edge of caudal slightly abraded. Scales much rubbed off. A handsome little fish of the same appearance, except the absence of silvery scales, but more mature than the grilse I described in December last, which was caught at the mouth of the Waitaki.

The fishes I and II I judge to be in their fourth year, and No. III in its third year, but with all the three it is probably the first season in which they have made a run up the river to spawn. The specimens were too much damaged for preservation.

George Allport, Esq., Secretary for Marine.

JAMES HECTOR.

Wellington, 25th May, 1906.

As instructed by you, I have made further inquiry with regard to the result of the importation of salmors and whitefish, and I enclose herewith a report on the matter from the manager of the Hakataramea Salmon Station, and attached thereto a letter from the Secretary for the Waitaki Acclimatisation Society, also a letter from the Collector of Customs at Oamaru.

It would seem that quite a number of fish said to be similar to the one sent to the Department for identification have been caught last angling season in the Waitaki River, and some by fishermen in Oamaru Bay.

The information the manager gives about the specimen of sockeye salmon which he found caught against the *upper side* of the pound-net in the Hakataramea River on the 22nd instant is most encouraging and interesting. These salmon when mature would run up the rivers to spawn in the autumn months. I should think that the end of March and through April would be their spawning season in this hemisphere, and they would return down stream as "spent" fish in May. The fact that this fish had been up stream spawning proves that it had been to sea. The manager's emphatic statement that it is a sockeye salmon can, I think, be accepted as correct, for he has had a good many years experience with these fish. After I have had an opportunity of examining the specimen I will, however, report again to you about this fish.

With regard to whitefish, it is too soon to expect a definite result from the fish planted in Tekapo and Kanieri Lakes, and the fish will not be large enough yet to prove whether they are in the lakes by netting-tests. I may say that reports are current at Lake Kanieri similar to those mentioned by the manager about Tekapo—viz., that strange fish have been seen, and from the description given resembling whitefish. At Kanieri Lake these fish are reported as having been seen in the shallow water near the foot of the lake. From the evidence we have now there would seem to be no doubt that there are a good many quinnat, and possibly sockeye salmon, in the Waitaki River, and possibly round the coast; and we should expect to be able next season to handle several specimens.

With regard to whitefish, I have no doubt that a number of our lakes are suitable for this fish and that we shall be successful in acclimatising them.

The Secretary, Marine Department, Government Buildings.

L. F. AYSON.

SIR,—

Hakataramea Salmon Station, 22nd May, 1906.

In accordance with your instructions of the 8th instant, I have the honour to report on the results which have been obtained from the salmon and whitefish which have been liberated during the last five years, and I enclose herewith a letter from Mr. H. Mackintosh, Secretary of the Oamaru Acclimatisation Society, to whom I wrote for such information as might be in possession of his society. I might mention that these people, situated as they are, have greater opportunities for obtaining information on this subject than I have, and this letter bears out what has from time to time been published in the local papers.

As no doubt you are aware, rumours of supposed salmon being caught are frequent during the fishing season; as for the truth of some of these I have doubts, although in many cases it is quite possible that they are true salmon of some species. The two specimens in possession of the Oamaru Acclimatisation Society are, on the authority of Sir James Hector, sea-run quinnat salmon (*O. tshawytscha*).

While cleaning the pound-net which I have set at the mouth of the Hakataramea River to-day I caught on the top side of the net a fish about 16 in. in length, and which would if in proper condition weigh about 5 lb. This fish is undoubtedly a sockeye salmon (*O. Nerka*) which has been up the river for the purpose of spawning and was returning down stream. The fish was in a dying condition, being greatly covered with fungus. I now have it in formalin at the station. This, I think, should now set at rest all doubts as to them returning from the sea to spawn.

I am of opinion that as yet it is too soon to expect definite results, yet the report of salmon being both caught and seen would seem to show that some were about, and that if their importation be persevered with there is little doubt but that in a few years they will be well established.

With regard to the whitefish liberated in Lake Tekapo, I have not had any opportunities of ascertaining whether they have taken hold or not. This would be extremely hard to tell unless it were given a thorough trial, and this work would be well-nigh impossible yet, seeing that the fish would hardly have grown to a sufficient size for netting.

While at Lake Tekapo in January last refitting the temporary hatchery I was informed by two different persons that they saw on different occasions at the bridge where the Tekapo River flows out of the lake, a strange fish, and from the descriptions given me I am inclined to think that the fish seen were whitefish.

The Chief Inspector of Fisheries, Wellington.

I have, &c.,

CHAS. L. AYSON.

Waitaki and Waimate Acclimatisation Society, Waitaki Branch, Oamaru, 16th May, 1906.

SIR,—

I am in receipt of your letter of the 14th instant, and note contents. We are glad to be able to furnish you with information requested.

The work done by your Department, and well carried out by your father and self, we are glad to say is now beyond a doubt a success, as we have had numbers of sea-run salmon caught in the Waitaki and in the Oamaru Harbour by fishermen; they range in weight from  $3\frac{1}{2}$  lb. to  $5\frac{1}{2}$  lb., and have been caught these last two seasons. We sent one up to Wellington, which, after inspection by Sir J. Hector, was pronounced a true quinnat salmon. We have another in Dunedin being stuffed and mounted for the Christchurch Exhibition—about  $4\frac{1}{2}$  lb. We feel more than pleased at the success obtained by the Department. We as a society have been battling for thirty or forty years to reach what now is an accepted fact. Our means were not sufficient to keep up the supply, and we hope that the Department will set aside a good amount every year, knowing the boon it will be to the colony.

By the way, there is one suggestion I should like to make, that the Department should tag a number of each lot liberated—on dead fin (a little plate with a number representing the year)—and advise the different societies, and also Japan and America, so that we might find out their habits. This has been done at Home when I was a boy, and I am sure the information derived would be of great use. We wish you every success, and will help you all we can in this great work.

Yours, &c.,

Mr. C. L. Ayson.

HENRY MACKINTOSH, Secretary.

From the COLLECTOR, H.M. Customs, Oamaru, 23rd May, 1906, to L. F. AYSON, Esq., Chief Inspector of Fisheries, Wellington.

No. 46.

With reference to your telegram of the 22nd instant asking for information *re* fish supposed to be salmon which were caught in this district during the last fishing season, I have to state that I have made inquiries of the chairman of the Acclimatisation Society and others interested, and have to report as follows :—

These fish (salmon) are very scarce; so far as can be ascertained less than fifteen have been caught in the Waitaki River, and not more than five have been taken in nets by the fishermen in the Oamaru Harbour. I understand that in the latter case the fish were dead when hauled on to the beach, so that it was useless to return them again to the sea.

Only in one instance was a salmon forwarded to me for identification, and in this particular case I forwarded it to the Secretary of Marine, Wellington, on the 28th November, 1905. This sample was fully reported on by Sir James Hector, and was stated to be a true salmon.

T. M. CULLEN, Collector.

Wellington, 29th May, 1906.

THE two telegrams (enclosed herewith) from the manager of the salmon station at Hakataramea show that he has obtained two more specimens of salmon at the pound-nets set for capturing spawning trout. He does not say whether these are quinnat or sockeye. I have instructed him to keep a sharp look-out for others, and to forward the 16 lb. fish here in order to have it examined and mounted.

If these fish prove to be salmon, as I have no doubt they will, they will be the first fish of this species that have been known to have actually returned from the sea and ascended the rivers to spawn, and their acclimatisation in New Zealand waters may be considered to be an established fact.

L. F. AYSON,

The Secretary, Marine Department, Government Buildings.

Chief Inspector of Fisheries.

COPY OF TELEGRAM from CHARLES AYSON, Hakataramea, dated the 26th May, 1906.  
CAUGHT another large salmon on top side of nets, dead, to-day.

COPY OF TELEGRAM from CHARLES AYSON, Hakataramea, dated the 28th May, 1906.  
CAUGHT in pound-net yesterday large female quinnat salmon about 16 lb., very ripe, and in good condition, free from fungus or scars. Advise what best do with it. Splendid specimen for exhibition purposes.

## INTRODUCTION OF SEA-FISH.

Marine Fish-hatchery and Biological Station,  
Portobello, Dunedin, N.Z., 27th October, 1905.

SIR,—

In reference to your letter of the 26th ultimo (M. 2493/1905), and the request for a three-monthly report, I shall be glad to do what I can in the way of keeping the Minister of Marine informed of the work being done at the hatchery; but, as stated in my letter of the 19th ultimo, we have no secretarial assistance whatever, and these things take time to prepare.

I observe by yesterday's paper that Mr. Ayson leaves the colony to-day for America to receive and bring over ova. My Board would suggest that while in the States he be instructed to make inquiry and report as to the possibilities of introducing to these southern waters any of the fine food-fishes of the Atlantic and Pacific coasts, especially the striped bass.

A letter has been written to Doctor Fulton, Scientific Superintendent of the Scotch Fishery Board, to undertake a series of experiments with the view of ascertaining how long the hatching of the eggs of turbot and of herrings can be retarded. This research he was about to undertake for me some years ago, but the shifting of the station from Dunbar to the Bay of Nigg, Aberdeen, changed the whole plan of the Scotch Board's operations. The cost of the experiments was estimated as not exceeding £8. I have been informed by the United States Fish Commissioners that eggs of cod and of winter flounder can be retarded for forty-five days. If the time, as regards cod, turbot, or herring can be extended to fifty days with certainty, it ought to be possible to bring ova of one or other of these fishes to the colony by direct steamer.

No detailed report of the station has ever been circulated for public instruction. I propose to write such an account for the Otago Institute, together with reports of the scientific work attempted and accomplished by Professors Benham and Chilton, Mr. T. Anderton, the Curator, and myself. This, if printed, would bring the scheme before a very large circle of readers in the colony, from Auckland to the Bluff. The spreading of this knowledge would enable our Board to approach the various acclimatisation societies for grants in aid with much greater prospect of success than is the case at present. We could also arrange to get a couple of hundred or more copies separately printed for distribution. I question, however, whether the Council of the New Zealand Institute would agree to print so large a pamphlet, unless the Fish Hatchery Board paid a contribution towards the cost. I would therefore ask whether the Department would aid by a special grant, say, not exceeding £20, so as to enable us to get this report printed.

I believe, myself, that it would be money well spent. In connection with the work being done at the hatchery at present, the Curator is busy studying the hatching and development of the common flounder. He has great numbers of eggs and larvae in the hatching-boxes just now, and has already liberated in the bay over 260,000 young fry.

I have, &c.,

The Secretary, Marine Department, Wellington.

GEO. M. THOMSON, Chairman.

SIR,—

3rd November, 1905.

I have the honour to acknowledge the receipt of your letter of the 27th ultimo, and, in reply, to state that Mr. Ayson will be instructed to make inquiry when in the United States as to the possibilities and advisability of introducing into the colony any of the fine-food fishes of the Atlantic and Pacific coasts, especially the striped bass.

The Minister has authorised a grant not exceeding £20 towards the cost of printing the account of the station which you propose to write for the Otago Institute on the understanding that about 200 copies are printed separately for distribution, some of which should be supplied to this Department.

I have, &c.,

GEORGE ALLPORT, Secretary.

G. M. Thomson, Esq., Chairman, Marine Fish-hatchery and Biological Station, Portobello, Dunedin.

COPY OF TELEGRAM sent to L. F. AYSON, Esq., Chief Inspector of Fisheries, Auckland, 16th November, 1905, by SECRETARY, Marine Department, Wellington.

WHEN in United States please make inquiries as to the possibilities and advisability of introducing into colony any of fine food-fishes of Atlantic and Pacific coasts, especially striped bass.

Marine Fish-hatchery and Biological Station,  
Portobello, Dunedin, N.Z., 13th November, 1905.

SIR,—

I beg to inform you that I have by this outgoing San Francisco mail communicated with the manager of the Shaw, Savill, and Albion Company, London, and with Dr. E. J. Allen, Director of the Marine Biological Association of the United Kingdom, in regard to the shipment of live lobsters to New Zealand.

All arrangements have been left in the hands of these gentlemen, and we anticipate that the first shipment will be made by one of the first vessels on the berth at London for Port Chalmers direct.

The Marine Fish-hatchery Board would esteem it a favour if you would inform the High Commissioner for the colony of the projected shipment. Dr. Allen may be put to some slight expense in procuring the lobsters and in sending them up to London by a suitable man; and if those expenses could be reimbursed in London we would at once pay them here on learning the amount from you.

I trust this experiment will prove successful, and that ere long we shall be able to count the lobster as among the animals naturalised in the colony.

I have, &c.,

G. Allport, Marine Department, Wellington.

GEO. M. THOMSON, Chairman.

SIR,—

19th December, 1905.

I have the honour to acknowledge the receipt of your letter of the 13th ultimo, and, in reply, to state that the High Commissioner has been instructed to pay the expenses incurred in connection with the shipment of live lobsters to your Board. When the vouchers reach the colony copies will be transmitted to you so that a refund may be made.

I have, &amp;c.,

GEORGE ALLPORT, Secretary.

Geo. M. Thomson, Esq., Chairman Marine Fish-hatchery Board, Portobello.

SIR,—

Wellington, 19th December, 1905.

The Portobello Marine Fish-hatchery Board, Dunedin, is arranging with the manager of the Shaw, Savill, and Albion Company, and with Dr. E. J. Allen, Director of the Marine Biological Association of the United Kingdom, in regard to the shipment of live lobsters to the colony, and as Dr. Allen may be put to some small expense in procuring the lobsters and sending them up to London, and the Hatchery Board has no agent in England who could defray the expenses incurred, I shall be glad if you will be so good as to do this out of your General Imprest Account, and the Board will refund the amount on receipt of the vouchers by the Treasury.

I have, &amp;c.,

WM. HALL-JONES, for the Premier.

The High Commissioner for New Zealand, Westminster Chambers, 13 Victoria Street, London, S.W.

SIR,—

Marine Fish-hatchery and Biological Station,

Portobello, Dunedin, N.Z., 12th January, 1906.

I have the honour to report that the Marine Fish-hatchery Board met last Thursday to consider the question of proceeding with the introduction of desirable food-fishes from Britain. It was resolved to ask you to be good enough to communicate with the High Commissioner in London as to the introduction of one or more of the following kinds of fishes: Turbot, herring, cod, or haddock.

Before anything definite can be done in the way of making a shipment, information would have to be obtained on several points—*e.g.*, (1) whether the fish could be transported alive, and how far such an experiment could be intrusted to the engineers of the conveying steamers; (2) whether the ova of any of these could be brought out; (3) in the latter case, whether their hatching could be retarded sufficiently long to insure their arriving in the colony; (4) whether all these species of fish can be kept alive in sea-water when the temperature falls to 32° Fahr. These questions suggest themselves to the Board as the chief ones requiring solution before the actual experiment of obtaining the fish or their ova is undertaken.

I have already written to Dr. Fulton, Scientific Superintendent of the Scotch Fishery Board, on the subject of the retardation of fish-ova, and we would suggest that the High Commissioner communicate with him, with Dr. Allen, of the Marine Biological Laboratory, Plymouth (who is procuring the lobsters for the Board), and with Professor Herdman, of Liverpool University. Professor McIntosh, of St. Andrew's, is a leading authority on the subject in the Old Country, and Professor J. Cossar Ewart, of Edinburgh, is the gentleman who on a former occasion obtained herring-ova for New Zealand during the administration of Sir Julius Vogel and Sir Robert Stout.

In regard to the introduction of lobsters, it is thought probable that shipments may have to be repeated more than once before the experiment can be considered to be successful. The same will apply to the crab, which the Board propose to deal with as soon as possible.

The Board has been guided from the outset of its operations by the necessity of exercising caution in its work on account of the expense involved in the work contemplated, and has sought to acquire all possible information, both by inquiry and by experiment, before undertaking anything which necessitated much expenditure. It had a definite, but small, amount of funds to come and go upon, and it was desirous of keeping well within its means, so as not to break faith with the Government and come on them again for further liabilities.

The Board trusts that the move forward suggested by you may be eminently successful, and it will do all in its power to co-operate in making it so.

I have, &amp;c.,

GEO. M. THOMSON,

Chairman, Marine Fish-hatchery Board.

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

SIR,—

17th January, 1906.

I have the honour, by direction of the Minister of Marine, to acknowledge the receipt of your letter of the 12th instant, with reference to the question of introducing desirable food-fishes from Great Britain, and I am to forward herewith, for your information, copy of a communication which has been addressed to the High Commissioner on the subject.

I have, &amp;c.,

GEORGE ALLPORT, Secretary.

G. M. Thomson, Esq., Chairman, Marine Fish-hatchery and Biological Board, Dunedin.

SIR,—

Wellington, 15th January, 1906.

Adverting to my letter No. 705/149, of the 19th ultimo, on the subject of your paying expenses connected with a shipment of live lobsters for the Portobello Fish-hatchery Board, I have the honour to forward herewith copy of a communication which has been received from the Board in regard to the introduction into the colony of turbot, herring, cod, or haddock, and shall be glad if you will make inquiries on the points suggested therein. If, as a result of your inquiries, you are satisfied that it is

feasible to introduce the fish into the colony, you are authorised to expend a sum not exceeding £100 in sending out a trial shipment of any two of the kinds of fish mentioned in the first paragraph of the Fish-hatchery Board's letter.

They should be sent by steamer calling first at Port Chalmers, and I understand that the New Zealand Shipping Company and the Shaw, Savill, and Albion Company will be pleased to assist in the matter.

I have, &c.,

WM. HALL-JONES, for the Premier.

The High Commissioner for New Zealand, Westminster Chambers, 13 Victoria Street, London, S.W.

MEMORANDUM from the HIGH COMMISSIONER to the Hon. the PREMIER.

Westminster Chambers, 13 Victoria Street, London, S.W., 7th April, 1906.

*Marine Department.—Shipments of Fish or Ova.*

REFERRING to the Hon. the Minister's letter No. Marine 05/2993 (349/150), of the 15th January last, respecting the introduction into the colony of turbot, herring, cod, or haddock, I now beg to report that letters were forwarded to each of the experts mentioned in the enclosure to the Hon. the Minister's letter before mentioned asking for information as to the probability of successful shipments being effected. Replies have been received from all except Professor J. Cossar Ewart, who has not answered my letter of the 27th February or a letter of reminder sent on the 21st March.

Except in the case of the herring—and even in that success appears doubtful—the experts practically agree that the successful shipment of ova is quite unlikely. They would apparently prefer sending live fish in place of ova, except perhaps as regards the herring.

With respect to live fish, the experts all agree in thinking turbot might be successfully transported, and possibly small cod or codling. Haddocks might be tried, though loss would be considerable, whilst herring is most unlikely to meet with success.

As there is considerable diversity of opinion in this matter, I have decided to refer the replies to the Hon. the Minister for consideration. I shall accordingly be glad of instructions in the matter, more particularly with reference to the particular expert whom the Hon. the Minister would prefer to be engaged to advise upon the collection of the fish or ova and its care during the voyage to New Zealand—that is, supposing it should be decided to make such shipments.

I may add that the sum mentioned—not exceeding £100—may not be sufficient, as these special shipments of ova or fish sometimes entail considerable expense.

I enclose copy of my letter and the replies received from Dr. Fulton, Professor McIntosh, Professor Herdman, and Dr. Allen. It will be noted that the latter's reply also refers to the shipment of lobsters, concerning which the Hon. the Minister, in his letter No. 05/2993 (705/149), of the 19th December last, desired me to reimburse Dr. Allen for any expense to which he might be put in procuring and sending the lobsters to London. As will be seen, shipment will not take place to Otago before May next.

W. P. REEVES.

13 Victoria Street, Westminster, S.W., 27th February, 1906.

Dr. Fulton, F.R.S.E., Scientific Superintendent of the Scotch Fishery Board, 101 George Street, Edinburgh.

SIR,—

I am directed by the High Commissioner to state that he has been requested by his Government to make inquiries as to the practicability of introducing into New Zealand consignments of turbot, herring, cod, or haddock, and, if so, to arrange for a trial shipment of any two of these kinds of fish.

Before making any definite arrangements the High Commissioner is desired to ascertain if possible the following information:—

- (1.) Whether the fish could be transported alive, and how far such an experiment could be intrusted to the engineers of the conveying steamers.
- (2.) Whether the ova of any of these could be brought out.
- (3.) In the latter case, whether their hatching could be retarded sufficiently long to insure their arriving in the colony.
- (4.) Whether all these species of fish can be kept alive in sea-water when the temperature falls to 32° Fahr.

The High Commissioner will esteem it a favour if you can oblige him with any information on the above points to enable him to come to a decision as to sending trial shipments to New Zealand.

I am, &c.,

W. KENNAWAY.

[Similar letter sent to Professor G. C. Ewart, Professor Herdman, and Professor McIntosh and Dr. Allen, with additions *re* lobster.]

SIR,—

The University of Liverpool, 5th March, 1906.

I have been away from home, which has delayed my answer to your letter of the 27th February, 1906.

In answer to your four questions, my opinion is,—

1. The turbot, cod, and haddock could probably be transported alive; the herring, I think, could not. The business could not, I think, be intrusted to the engineers of the steamers. The fish would have to be personally conducted, as they were when Mr. Dannevig imported plaice from this coast to Australia.

2. I think the ova might be taken safely if kept at a low temperature—nearly freezing-point; but it would be very desirable to make some experiments here on the vitality of the ova under such conditions before actually trying them. I think the herring might be better for this purpose than the others.

3. The incubation-period of most of these ova is fourteen to seventeen days, but I think it might be delayed sufficiently by keeping at a low temperature.

4. These fish usually live at a temperature higher than you state (32° Fahr.); but the cod at least goes north into colder water, and I do not think that a fall to 32° Fahr. would necessarily be fatal.

The sending of plaice to Australia (New South Wales, I think), has, I believe, been quite successful, and I think the experiments the High Commissioner thinks of trying have a fair chance of success, and are well worth attempting.

The High Commissioner for New Zealand.

Yours, &c.,

W. A. HERDMAN.

SIR,—

Gatty Marine Laboratory, St. Andrew's, 2nd March, 1906.

I have to acknowledge your letter of the 27th ultimo, concerning the practicability of introducing into New Zealand consignments of turbot, herring, cod, or haddock.

Before replying to the foregoing, I hope a careful survey of the local fishes has been made, and by various methods of fishing, so that the resources of the colony are fully understood and critically tested. A knowledge of the nature of the bottom (*e.g.*, rocky or sandy) in the localities where the experiments will be carried out, the nature of the pelagic (floating) animals, as well as those on the bottom, should also be carefully obtained. The average temperatures of the sea-water at various seasons should also be known, as well as the trend of the chief currents.

1. There should be no insuperable difficulty in transporting the fishes from Britain round the Cape to New Zealand, especially if "welled" vessels are employed. Herrings would require to be acclimatised to their altered circumstances, just as those from the Baltic to St. Andrew's, the fishes in the latter case having been conveyed in fresh water. In a "welled" vessel, however, salt water would be better. Turbot are very hardy.

If the engineers were duly instructed in regard to their duties to the fishes, the kind of food to be used, and the strict attention to hygiene, they might do. It is certainly an expensive method to send out a trained scientist, or a practical assistant trained in a "marine laboratory."

2. The ova of the herring offer the most likely field for the experiment in transportation; but I could not promise success. It would be a great strain on an attendant, and, after all, the risks of the young on arrival would further complicate the experiment. It was formerly tried, if I remember rightly, in the case of Australia. It might again be exhaustively experimented with if there is a strong feeling in regard to it.

I do not think that the question of attempting to transport the ova of turbot, cod, or haddock need at present be considered. The pelagic eggs of these do not readily lend themselves to such experiments.

3. The eggs of the herring are exceedingly hardy (having been hatched here more than once after sixteen hours' exposure to the air in a boat), but whether they can be retarded for more than two months is doubtful.

The question in regard to the other fishes has been answered.

4. In our experience most fishes in tanks and vessels die when such are frozen.

I should not suppose, however, that a "welled" vessel need experience this condition in its passage round the Cape to New Zealand: so long as the "well" is not frozen, the fishes should survive.

I am, &c.,

Walter Kennaway, Esq., 13 Victoria Street, S.W.

W. LE M. JURTSK.

SIR,—

The Laboratory, Citadel Hill, Plymouth, 2nd March, 1906.

I beg to acknowledge the receipt of your letter of the 27th February with reference to the shipment of live lobsters to New Zealand. I have been in communication with the Shaw, Saville, and Albion Company on the subject, and they now inform me that they will not be able to take the lobsters to Otago before May, as their steamer leaving this month is taking out trout-ova to the Otago Acclimatisation Society. When the lobsters have been shipped, I will send you, as requested, an account of any expenses that may have been incurred.

With regard to the second part of your letter, I think that consignments of turbot would in all probability be successful; but there would be little chance of success with the herring, cod, or haddock. Perhaps some small codling might be managed, but I am practically sure that it would be useless to try herring, as we have never been able, even in the large tanks in our aquarium, to keep them for any length of time.

I do not think that any attempt to deal with the ova at the present time would be practicable, as all attempts to rear the larvæ of these fishes to the adult form under artificial conditions have failed.

With regard to your fourth question, from my experience in our aquarium, I am inclined to think that a fall of temperature to 30° Fahr. would be fatal to all the species named, though I have no direct observations to go upon. We have noticed that in the coldest winter weather the death-rate in the tanks is increased.

I am, &c.,

The High Commissioner for New Zealand.

E. J. ALLEN.

SIR,—

417 Great Western Road, Aberdeen, 14th March, 1906.

On returning from the Continent I find your letter of the 27th ultimo, regarding the introduction of European fishes into New Zealand. In reply to the queries you put, it has to be pointed out that the fish mentioned differ very much as to their power to withstand altered conditions: it ought not to be difficult to transport turbot, if small; cod also, or codling, would also be capable of being taken,

I think, without great loss; but the loss with haddock, and, still more, with herring, would probably be large. I do not think the experiment could be intrusted to the engineers, but would require the constant supervision of a skilled assistant, as its success depends on strict attention to numerous small details. With regard to (2), the eggs of all except the herring are floating, and the mechanical difficulties of dealing with them would be very great. The eggs of the herring might be taken under proper conditions. With regard to (3), the hatching of the eggs could, I think, be retarded sufficiently long to insure their arriving in the colony. With regard to (4), it is not probable that the fishes would resist a temperature of 32° Fahr. throughout the voyage, and a temperature considerably higher would be necessary. Eggs, however, would require a low temperature—about 32° Fahr.—and they can resist it.

On the general question, I may be permitted to make a few observations, such as I have made quite recently to Mr. George Thomson, the Superintendent of the hatchery in New Zealand, who wrote to me on the subject. I do not favour the attempt to introduce the fish in the egg-state if they can be introduced as fish. Apart from difficulties in dealing with them, an enormous supply would be required to render success probable, for the eggs or the newly hatched fry would have to be at once put into the sea, and under ordinary circumstances one could not expect more than an extremely small proportion to survive to reproductive size—not more, perhaps, in the case of the turbot or the cod, than two or three per million eggs. It is different with fresh-water fishes—as the trout or salmon—where the number of eggs related to the survival of one individual is small, and where the eggs and the young fish can be kept under observation. In the case of the herring, however, it may be found best to deal with the eggs.

At least as important in any such experiment as the arrangements for carrying out the fish are the arrangements for dealing with the fish when they arrive; and I presume this would be carefully attended to. The plan ought to be to take out small fishes of the kinds described and to keep them, it may be for a few years, in tanks or otherwise until they reach maturity and spawn. Their eggs could then be hatched in the hatching apparatus and the fry turned out in suitable places, and the process repeated each year.

Before anything is done or expense incurred, I would recommend that the Government of New South Wales should be fully consulted. A few years ago the Agent-General, the late Mr. Copeland, came to Aberdeen with reference to introducing European fishes to the colony. The experiment was made by Mr. H. Dannevig, now the Superintendent of Fish-culture at Sydney, and he ought to be able to give more valuable information on the subject than anybody else.

I am, &c.,

T. WEMYSS FULTON.

Walter Kennaway, Esq., Secretary to the High Commissioner for New Zealand, Westminster Chambers, London, S.W.

SIR,—

Wellington, 6th April, 1906.

I have the honour to report that in accordance with your instructions while in America I made inquiry with regard to the possibility of introducing some new food-fishes from that country, special inquiry being made with regard to the striped bass.

On this matter I consulted with Commissioner Bowers, Drs. Smith and Everman, and Mr. Tibcomb, of the United States Bureau of Fisheries, Washington; Dr. Townsend, Director of the New York Aquarium; Dr. Sherwood, Ichthyologist for the Museum of Natural History, New York; Professor Prince, Commissioner of Fisheries for Canada; and Professor Jordan, of California.

The general opinion of these gentlemen was that the striped bass was one of the very best fishes to try to introduce into New Zealand waters, while at the same time it should be one of the easiest to transport. The North Atlantic cod and shad were also mentioned as desirable fishes, but it was considered that their transportation would be a very difficult matter.

Owing to the character of the eggs of the striped bass, it is not considered possible to transport them any great distance; but it is thought that the young fish can be safely sent to New Zealand. The young fish are said to be remarkably hardy, and stand confinement well. The American experts recommend taking the fish as young as they can be caught, and that they should be confined in suitable tanks for a few weeks before being shipped. By treating the fish in this way they are hardened and used to confinement and artificial food, and the weaker fish are weeded out before being put on board ship.

Dr. Townsend, who has had a large experience in holding these fish in confinement in his aquarium-tanks, says that, being anadromous in their habits, they can be kept in either fresh or salt water for a long time. Most of the specimens in the New York Aquarium have been there over two years.

Dr. Jordan says that while he considers them to be one of America's best food-fishes, they also afford excellent sport for the angler in the bays around the coast and in the tideways of rivers. They are taken with rod and line, ground and spinning bait being used. They enter the rivers for the purpose of spawning, and, like the salmon, do not feed in fresh water. This fish is indigenous to the Atlantic Coast of America, its range being from about lat. 50° to 30°, or from New Brunswick to the Escambia River, on the coast of Florida. About the year 1876 a number of young fish were transported to the Pacific coast and liberated near the mouth of the Sacramento River. In 1880 Dr. Jordan reported that several specimens had been caught along the coast, and at the present time they are one of the most plentiful and favourite fish in the San Francisco market. In the market they usually run from about 3 lb. to 25 lb. in weight, but specimens running up to 50 lb. and 60 lb. are frequently caught. I think this is a fish that should do remarkably well in the coastal waters of the colony, and would recommend that it should be introduced.

The expert authorities mentioned in this report commended the New Zealand Government for trying to acclimatise the quinnat and sockeye salmons and whitefish, and strongly recommend persevering with these fish.

I have, &c.,

L. F. AYSON,

The Secretary, Marine Department, Wellington.

Chief Inspector of Fisheries.



## REPORT ON OYSTER-BEDS IN FOVEAUX STRAITS.

SIR,—

H.M. Customs, Bluff, 2nd February, 1906.

Having received your instructions through the Collector of Customs, Invercargill, to proceed with the survey of the oyster-beds in Foveaux Strait, I engaged the s.s. "Despatch" upon the terms submitted to and approved of by you—viz., £6 12s. per diem, the owners to find crew and all appliances.

I had with me Messrs. Whealler and Coupar, as master and engineer respectively, both of whom have had over twenty years' experience in oystering, their local knowledge being of great assistance in locating the beds, also in giving general information in regard to them when discovered, &c.

The Harbourmaster also kindly lent me the Board's station pointer, with which instrument I was able to locate the positions more accurately on the chart with sextant angles.

Captain Barber, late of the barque "West Australia," also formed one of the party, and he gave valuable assistance in checking bearings and angles.

I found the s.s. "Despatch" suitable in every respect, her steam-power and handiness in moving from one bed to another greatly facilitating the work.

We commenced surveying on the 16th January, and completed the work on the 30th January, being altogether employed seven days.

A number of days between the dates stated, we were unable to do anything on account of boisterous weather.

We found the beds extending eleven miles W.S.W. from Waipapapa to ten miles E.S.E. from Centre Island (with broken intervals between), a distance of twenty-five miles. Oysters were found most abundantly by following the trend of the current. This will be seen by glancing at the chart, and is probably accounted for by the spawn being carried along by the tide and deposited where food is most likely to accumulate. Large quantities of dead shells are to be found on most of the beds, more so on those which have been worked continuously, and upon beds where the current does not run so strong. As oystermen always deposit their cultch—i.e., refuse—upon the bed from which the oysters are taken no doubt it helps to swell the accumulation of dead shell. Oysters also have a dangerous enemy in the shape of a species of starfish, commonly called "five fingers." This fish has a body of about 1 in. to 1½ in. in diameter, with legs or tentacles averaging about 6 in. in length. When the oyster-shell is open for the purpose of feeding, these fish insert a tentacle (probably unintentionally) which, being of a very brittle nature, breaks off, and leaves the oyster exposed, thereby killing it. Large numbers of the above species of starfish are to be found on the beds, most particularly where dead shells are abundant. The depth of water ranges from thirteen fathoms on the easternmost bed to twenty-four fathoms on the westernmost.

I have numbered the beds consecutively 1 to 12 for the sake of reference, and I may state that the supply of oysters is inexhaustible.

The following is a brief description of the beds individually, the dates given as to discovery, &c., being approximate :—

*Bed No. 1, or East Bed.*

Length, 4½ miles, by 2¼ miles wide; average depth, 12 fathoms. Discovered about 1888, and worked during the open season for the first seven or eight years, then, on account of the oysters becoming small, left idle for several years. (I may state that as the oyster-merchants refuse to take small oysters, and as they are unfavourably received by the public, there is no likelihood of those engaged in the oyster-fishing bringing small ones into port.) Oysters found on this bed are now large and of good quality, and are noted for keeping longer than any others. This may be accounted for by the water being more shallow than on other beds. As many as four thousand dozen have been caught by one craft in a day. Small oysters were found on the outskirts, the bed apparently increasing in all directions.

*Bed No. 2, or Ruapuke Bed.*

Length, 2 miles, by ¾ mile wide; average depth, 13½ fathoms. Discovered about 1892. Oysters are of a good quality, although quantities of dead shells are found, and abundance of starfish.

*Bed No. 3, or Dog Island Bed.*

Length, about 3½ miles, by 1¾ miles wide; average depth, 15 fathoms. Discovered about 1898. Oysters of a good quality, and medium size. The bed has been worked occasionally since found.

*Bed No. 4.*

Length, 2 miles, by 1¼ wide; average depth, about 14 fathoms. Discovered about 1880. The oysters on this bed are of a poor quality, and great quantities of dead shells and seaweed were found. No oysters were taken off it for over twenty years.

*Bed No. 5.*

Length, about 4½ miles, by 2¾ miles wide; average depth, 17 fathoms. Discovered in 1885. The bed has been worked occasionally during the open seasons. Oysters are large, and of a good quality, and the bed is more free from dead shells than the preceding ones.

*Bed No. 6.*

Length, about  $2\frac{1}{2}$  miles, by 1 mile wide ; average depth, 17 fathoms. Discovered about 1889. This bed is really a continuation of No. 5 bed.

*Bed No. 7.*

Length, about  $2\frac{1}{4}$  miles, by 1 mile wide ; average depth, 18 fathoms. Discovered about 1882, and worked for several seasons. It was then abandoned on account of the oysters being small, and the rough nature of the bottom.

*Bed No. 8, or Half-moon Bay Bed.*

Length, 1 mile, by  $\frac{1}{2}$  mile wide ; average depth, about 23 fathoms. Was discovered about 1870, and was one of the earliest worked. Very few oysters were found, the bed appearing to be overgrown with seaweed, &c. In the early days two hundred dozen was considered a fair day's catch off this bed.

*Bed No. 9, or Port William Bed.*

Length,  $\frac{1}{2}$  mile, by  $\frac{1}{2}$  mile wide. Was discovered shortly after No. 8. Owing to the rough nature of the bottom, it was impossible to get the exact area, dimensions here given being only approximate. Quantities of dead shells were found, the oysters appearing to have died off considerably.

*Bed No. 10.*

Length, about 7 miles, by 2 miles wide. Discovered during the present survey, on the 27th January, 1906. Although oysters were known to exist in that direction, the bed had never been previously located. The oysters found there were in excellent condition, and remarkably free from dead shells, &c. This, no doubt, will be a favourite bed in the near future.

*Bed No. 11.*

Length,  $1\frac{1}{2}$  miles, by  $\frac{1}{2}$  mile wide ; average depth, about 20 fathoms. Discovered recently. Oysters are of poor quality, with large quantity of dead shells. Owing to its great distance from the Bluff this bed is never likely to become popular.

*Bed No. 12.*

Length,  $2\frac{1}{2}$  miles, by 1 mile wide ; average depth, about 20 fathoms. Discovered on the last day of this survey. The oysters are of a good quality, though small. It is probably a newly formed bed.

We found, generally, quantities of dead cockle-shells on the northern side, and quantities of seaweed on the southern side. The oysters found on the outskirts of all the beds were in clusters, and smaller than those in the middle of the beds. This clearly demonstrated that the beds are extending in all directions.

There is no doubt that oysters are to be found by following the trend of the current further to the westward than the beds marked on the chart, but as the s.s. "Despatch" was required for the oyster-  
ing at the beginning of February, we were unable to make a more extensive survey. However, beds at a greater distance than those already located are never likely to become popular.

Trusting that the foregoing report will meet with your approval,

I have, &c.,

The Secretary, Marine Department, Wellington.

R. C. HUNTER

RETURN showing AMOUNTS paid to DISABLED SEAMEN, under Section 119 of "The Shipping and Seamen Act, 1903," for Year ended 31st March, 1905.

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.
			£ s. d.
Anderson, E. .. ..	Totara, scow .. ..	Inflammation of stomach .. ..	6 16 0
Aasen, I. .. ..	T. K. Tobiasen .. ..	Beriberi fever .. ..	46 18 0
Andstrom, J. .. ..	Wakatu, s.s. .. ..	Inflammation of bladder .. ..	7 0 0
Anderson, C. .. ..	Margaret, scow .. ..	Injured finger .. ..	10 0 0
Brown, W. .. ..	Baden Powell, s.s. .. ..	Injuries varicose veins .. ..	24 10 8
Beaton, J. .. ..	Welcome, schooner .. ..	Pleurisy .. ..	7 8 8
Bell, R. .. ..	Elizabeth Graham, barque .. ..	Broken thigh .. ..	31 12 0
Burns, F. .. ..	Clansman, s.s. .. ..	Severe cold and results .. ..	21 4 4
Balding, C. .. ..	Rarawa, s.s. .. ..	Stomach hurt .. ..	20 6 0
Bridson, J. .. ..	Pateena, s.s. .. ..	Injured knee .. ..	7 16 0
Burnett, J. .. ..	Te Kapu, s.s. .. ..	„ foot .. ..	5 4 0
Campbell, R. .. ..	Tokomaru, s.s. .. ..	Pleurisy .. ..	7 7 0
Campbell, R. .. ..	Muritai, s.s. .. ..	Injured ankle .. ..	1 5 8
Carriek, F. .. ..	Baden Powell, s.s. .. ..	Sprained foot .. ..	12 0 3
Casey, J. .. ..	Rotomahana, s.s. .. ..	Poisoned finger .. ..	8 11 0
Castel, A. .. ..	Wanaka, s.s. .. ..	Internal injuries .. ..	7 8 8
Clausen, C. .. ..	Seagull, scow .. ..	Crushed hand .. ..	11 1 4
Clooney, P. F. M. .. ..	Rakanoa, s.s. .. ..	Injured arm .. ..	4 4 0
Constance, W. .. ..	Rarawa, s.s. .. ..	Finger-nail torn off .. ..	6 14 0
Coyle, J. .. ..	Moeraki, s.s. .. ..	Bruised back .. ..	6 15 2
Doncaster, E. J. .. ..	Star of Australia, s.s. .. ..	Broken thigh .. ..	31 11 6
Dalgarino, J. .. ..	Navua, s.s. .. ..	Poisoned hand .. ..	20 7 10
Daniels, W. .. ..	Ngapuhi, s.s. .. ..	Injured toe .. ..	8 6 4
Davis, M. .. ..	Star of Australia, s.s. .. ..	Appendicitis .. ..	19 16 0
Donovan, J. .. ..	Paeroa, s.s. .. ..	Broken collarbone .. ..	15 3 0
Enright, M. .. ..	Wimmera, s.s. .. ..	Injured ear .. ..	1 6 10
Errickson, A. .. ..	Welcome, schooner .. ..	Enteric fever .. ..	40 3 4
Evans, W. .. ..	Stella, s.s. .. ..	Hurt back .. ..	6 15 10
Ferris, J. .. ..	Talune, s.s. .. ..	Poisoned hand .. ..	30 1 4
Ferara, V. .. ..	Cygnat, s.s. .. ..	Broken rib .. ..	Passage to port of discharge.
Fisher, D. .. ..	Storm, s.s. .. ..	Crushed finger .. ..	8 4 6
Ganse, F. .. ..	Zelateur, ship .. ..	Hurt side .. ..	2 6 6
Graham, F. .. ..	Muritai, s.s. .. ..	Top taken off finger .. ..	26 0 0
Hall, S. .. ..	Defender, s.s. .. ..	Rheumatic fever .. ..	8 18 6
Halliday, J. .. ..	Volador, barque .. ..	Broken leg .. ..	13 13 0
Hanward, F. .. ..	Endeavour, schooner .. ..	Typhoid .. ..	20 6 8
Hannah, J. .. ..	Pukaki, s.s. .. ..	Enteric fever .. ..	25 19 8
Hayes, J. .. ..	Arahura, s.s. .. ..	Injured hand .. ..	16 16 4
Hopkins, R. .. ..	Rarawa, s.s. .. ..	Bruised hand .. ..	8 8 0
Hull, R. .. ..	Poharu, s.s. .. ..	Appendicitis .. ..	31 10 0
Hurst, F. .. ..	Star of Australia, s.s. .. ..	Diseased elbow .. ..	13 11 0
Janson, K. E. .. ..	Lizzie Taylor, schooner .. ..	Broken arm .. ..	35 16 2
Jerome, D. .. ..	Rotomahana, s.s. .. ..	Sprained ankle .. ..	11 9 6
Jones, T. .. ..	Waverley, s.s. .. ..	Crushed fingers .. ..	Passage to port of discharge.
Kirk, W. .. ..	Victoria, s.s. .. ..	Inflammation of lungs .. ..	10 4 0
Kruger, C. .. ..	Taviuni, s.s. .. ..	Burnt hand .. ..	6 1 4
Kyle, R. .. ..	Stormbird, s.s. .. ..	Injured leg .. ..	21 5 0
Landreth, F. .. ..	Hawke's Bay, s.s. .. ..	Dysentery .. ..	12 16 0
Lake, C. .. ..	Moonah, ketch .. ..	Hurt shoulder .. ..	6 0 6
Lang, C. .. ..	Eliza Firth, brigantine .. ..	Renal rupture .. ..	Still in hospital.
Malley, J. .. ..	Wellington, s.s. .. ..	Broke two ribs .. ..	17 7 6
Marks, Miss J. .. ..	Rarawa, s.s. .. ..	Scalded foot .. ..	11 0 0
Maskell, J. .. ..	Maheno .. ..	Injured .. ..	5 8 2
Miffen, R. .. ..	Monowai, s.s. .. ..	Bruised leg .. ..	7 9 10
Moore, J. .. ..	Corinna, s.s. .. ..	Muscular rheumatism .. ..	7 5 0
Mouat, H. .. ..	„ .. ..	Fractured skull .. ..	8 18 0
Mudie, J. .. ..	Rakanoa, s.s. .. ..	Cut leg .. ..	20 13 4
Murphy, J. .. ..	Navua, s.s. .. ..	Strained back .. ..	20 7 10
McConnell, J. .. ..	Rotomahana, s.s. .. ..	Injured leg .. ..	37 2 4
McGiffen, J. .. ..	Somerset, s.s. .. ..	„ ankle .. ..	6 19 8
McKeon, J. .. ..	Hawke, schooner .. ..	Sprained ankle .. ..	33 1 6
McKenzie, R. .. ..	Moeraki, s.s. .. ..	Syncope .. ..	28 18 0
McKinnon, G. A. .. ..	Monowai, s.s. .. ..	Appendicitis .. ..	29 1 0
McLennan, D. .. ..	Navua, s.s. .. ..	Pneumonia .. ..	9 14 10
McLeod, N. .. ..	Rona, barque .. ..	Crushed foot, causing decay of bone .. ..	28 6 8
Napoleon, S. .. ..	Akaroa, s.s. .. ..	Strained back .. ..	9 17 6
Nelson, C. .. ..	Casabianca, ship .. ..	Senile decay .. ..	12 2 8
Newlove, W. .. ..	Mangapapa, s.s. .. ..	Pneumonia .. ..	15 17 4
Oakland, S. .. ..	Mokoia, s.s. .. ..	Sprained wrist .. ..	16 11 6
Perham, J. .. ..	Paparoa, s.s. .. ..	Diseased elbow .. ..	Still in hospital.
Pratt, A. .. ..	Wakatu, s.s. .. ..	Injured right arm .. ..	21 6 4
Pratt, W. .. ..	Rakanoa, s.s. .. ..	Crushed hand .. ..	4 17 10
Pierens, J. .. ..	Tanawai, s.s. .. ..	Finger put out of joint .. ..	7 0 4
Regan, R. .. ..	Warrimoo, s.s. .. ..	Pleurisy .. ..	23 12 4
Reid, D. .. ..	Selwyn Craig, barquentine .. ..	Both feet hurt .. ..	10 0 6
Robinson, C. .. ..	Rotoiti, s.s. .. ..	Heart failure .. ..	48 4 4
Rout, G. .. ..	Muritai, s.s. .. ..	Rupture .. ..	(Since dead.)
Sambergh, F. .. ..	Hawke, scow .. ..	Scalded foot .. ..	11 17 0
Selstrom, C. F. .. ..	Kahu, s.s. .. ..	Injured eye .. ..	7 3 0
Smith, B. .. ..	Hauptiri, s.s. .. ..	Inflammation of bowels .. ..	5 6 4
Smith, C. .. ..	Moura, s.s. .. ..	Crushed finger .. ..	23 17 0
Smith, J. M. .. ..	Wootton, s.s. .. ..	Crushed finger .. ..	13 8 8
Smith, H. .. ..	Hauroto, s.s. .. ..	Injured right leg .. ..	Still laid up.
Schmidt, A. .. ..	Rarawa, s.s. .. ..	Crushed finger .. ..	6 19 0
Sinclair, J. .. ..	Morning Light, s.s. .. ..	Sprained foot .. ..	7 15 0
Sparks, G. .. ..	Waikare, s.s. .. ..	Influenza .. ..	7 14 2
			3 10 8
		Carried forward .. ..	£1,235 16 7

RETURN showing AMOUNTS paid to DISABLED SEAMEN—*continued*.

Name of Seaman.	Name of Vessel.	Nature of Injury or Illness.	Amount paid for Wages, Maintenance, &c.
			£ s. d.
		Brought forward ..	1,235 16 7
Strachan, W. ..	Himitangi, s.s. ..	Sprained leg ..	15 9 4
Strilbey, R. ..	Glenelg, s.s. ..	Jammed finger ..	2 17 8
Sundstrom, W. ..	Star of Ireland, s.s. ..	Inflammation of knee ..	5 16 0
Swan, J. ..	Maheno, s.s. ..	Crushed hand ..	9 8 10
Swindley, J. ..	Victoria, s.s. ..	Cold and fever ..	12 3 0
Symes, W. ..	Rarawa, s.s. ..	Injured hand ..	6 19 8
Thompson, J. ..	Echo, scow ..	Bruised ankle ..	17 9 6
Thomson, J. ..	Hawea, s.s. ..	Sprained ankle ..	4 15 0
Thompson, J. ..	Hawea, s.s. ..	" ..	6 6 6
Thomas, C. ..	Te Anau, s.s. ..	Poisoned hand ..	12 14 6
Toole, J. C. ..	Kanieri, s.s. ..	Broken rib ..	15 7 0
Tornblom, K. ..	Rotomahana, s.s. ..	Rupture ..	35 15 0
Treanor, H. ..	Somerset, s.s. ..	" ..	8 7 6
Tullock, T. ..	Moana, s.s. ..	Injured foot ..	43 10 0
Turner, T. ..	Rotoiti, s.s. ..	Bruised back ..	5 10 8
Welcome, J. ..	Taieri, s.s. ..	Injured back ..	5 14 3
Warnock, J. ..	Brisbane, s.s. ..	Hurt by fall ..	13 6 0
Wheatley, J. H. ..	Te Kapu, s.s. ..	Injured foot ..	6 18 0
Whelan, W. ..	Moeraki, s.s. ..	Pleurisy ..	13 17 2
White, H. ..	Stella, s.s. ..	Heart strain ..	0 18 8
White, T. ..	Ngapuhi, s.s. ..	Fractured rib ..	13 18 10
Whyte, J. ..	Kaituna, s.s. ..	Lung disease ..	5 4 0
Wildman, E. M. ..	Alexander, s.s. ..	Crushed finger ..	8 6 8
Williams, E. ..	Kent, s.s. ..	Broken arm ..	32 16 2
Wishart, D. ..	Waikare, s.s. ..	Bruised back ..	8 7 10
		Total ..	£1,547 14 4

## RETURN of CERTIFICATES of SERVICE, as MASTERS, issued during the year ended 31st March, 1906.

Name of Person.	Class of Certificate.	Date of Issue.	No.
		1905.	
George Foster ..	Restricted ..	17 April ..	2705
William Spargo ..	Home trade ..	" ..	2706
Henry George Fenn ..	Restricted ..	" ..	2707
Robert Caven ..	" ..	" ..	2708
Joseph Eddy ..	Home trade ..	" ..	2709
Kimo Kimo Pepene ..	Restricted ..	" ..	2710
Martin Johnson ..	" ..	" ..	2711
John Ross ..	" ..	" ..	2712
Murdoch Stuart ..	Home trade ..	" ..	2713
Benjamin Bern ..	" ..	" ..	2714
John Leonard Anderson ..	Restricted ..	" ..	2715
Richard Henry Eddy ..	" ..	" ..	2716
Joseph George Morris ..	Home trade ..	" ..	2717
James Lowndes ..	Restricted ..	" ..	2718
Alfred Anderson ..	" ..	" ..	2719
Albert Edward Ragg ..	" ..	" ..	2720
William Biddick ..	" ..	" ..	2721
Norman Matheson ..	Home trade ..	" ..	2722
William Pelley ..	Restricted ..	" ..	2723
Frank Allen ..	" ..	" ..	2724
Francis Edward Wills ..	Home trade ..	" ..	2725
Robert Dudley ..	" ..	" ..	2726
Edwin McGerney ..	Restricted ..	" ..	2727
Thomas Clifford ..	Home trade ..	" ..	2728
Samuel Clare ..	Restricted ..	" ..	2729
Richard Perry ..	" ..	" ..	2730
James Edward Quinn ..	Home trade ..	" ..	2731
Robert Caldwell Miller ..	Restricted ..	" ..	2732
William John Copeland ..	" ..	" ..	2733
Hihi Rawiri ..	" ..	" ..	2734
Peter Higham ..	" ..	" ..	2735
George Wright ..	" ..	" ..	2736
John James Jackson ..	" ..	" ..	2737
Johan Emil Isedor Johanson ..	Home trade ..	" ..	2738
William Hanning ..	" ..	" ..	2739
Edwin John Tall ..	" ..	" ..	2740
Charles William Bradshaw ..	" ..	" ..	2741
Joseph Moura ..	Restricted ..	" ..	2742
Frank Andrews ..	" ..	" ..	2743
John G. M. Gibbs ..	Home trade ..	" ..	2744
William Robertson ..	" ..	" ..	2745
Thomas Gilroy ..	" ..	" ..	2746
Frank Roderique ..	" ..	" ..	2747
Thomas Clark Urwin ..	" ..	" ..	2748
Charles Waterford Attrill ..	Restricted ..	" ..	2749
Richard Evanson Beamish ..	" ..	" ..	2750
Richard Hugh Dixon ..	Home trade ..	" ..	2751
George Henry Preston ..	" ..	" ..	2752
Henry John Roderique ..	" ..	" ..	2753
William Bolasses Dixon ..	" ..	" ..	2754
James Piercy ..	Restricted ..	" ..	2755
David Joseph Draffin ..	" ..	" ..	2756
Edward Insley ..	Home trade ..	" ..	2757
George William Leaity ..	" ..	" ..	2758
Edwin McGerney ..	" ..	" ..	2759

RETURN showing the TOTAL ORDINARY EXPENDITURE of the MARINE DEPARTMENT during the Financial Year ended the 31st March, 1906.

Nature of Expenditure.	Details.	Totals.	Grand Totals.
	£ s. d.	£ s. d.	£ s. d.
Salaries of Head Office Staff .. .. .	..	1,504 4 1	1,504 4 1
Harbours:—			
Manukau,—			
Salaries .. .. .	468 0 0		
House-rent .. .. .	24 0 0		
New beacon .. .. .	74 19 6		
Repairs to dwellings .. .. .	70 2 4		
Contingencies .. .. .	116 14 3		
Russell,—		753 16 1	
Contingencies .. .. .	..	9 13 0	
Hokianga,—			
Salaries .. .. .	328 0 0		
Repairs to flagstaff .. .. .	36 1 6		
Contingencies .. .. .	31 5 0		
Kaipara,—		395 6 6	
Salaries .. .. .	508 5 5		
House-rent .. .. .	28 0 0		
New beacons .. .. .	14 15 0		
Contingencies .. .. .	100 5 7		
Opunake,—		651 6 0	
Salary .. .. .	..	25 0 0	
Foxton,—			
Salary .. .. .	170 0 0		
Contingencies .. .. .	35 12 8		
Mokau,—		205 12 8	
Salary .. .. .	40 0 0		
Grant for snagging punt .. .. .	45 0 0		
Wairau,—		85 0 0	
Salary .. .. .	145 0 0		
Additions to house .. .. .	23 2 0		
Contingencies .. .. .	20 14 6		
Havelock,—		188 16 6	
Grant for wharf .. .. .	300 0 0		
Contingencies .. .. .	2 13 9		
Motueka,—		302 13 9	
Salary .. .. .	10 0 0		
Contingencies .. .. .	13 13 6		
Waitapu,—		23 13 6	
Salary .. .. .	25 0 0		
Maintenance of lights .. .. .	50 0 0		
Sundries .. .. .	6 15 3		
Collingwood,—		81 15 3	
Salary .. .. .	35 0 0		
Removal of snags .. .. .	8 17 6		
Contingencies .. .. .	5 4 0		
Karamea,—		49 1 6	
Salary .. .. .	60 0 0		
New signal-box, &c. .. .. .	75 0 0		
Contingencies .. .. .	32 10 0		
Okarito,—		167 10 0	
Salary .. .. .	75 0 0		
Removal of pipi bank .. .. .	509 3 8		
Cutting channel in bar .. .. .	29 0 0		
Contingencies .. .. .	22 13 0		
Okuru,—		635 16 8	
Signalling .. .. .	20 0 0		
Contingencies .. .. .	12 0 0		
Little Wanganui,—		32 0 0	
Signalling .. .. .	21 0 0		
Removal of snags .. .. .	4 19 0		
Waikawa,—		25 19 0	
Salary .. .. .	10 0 0		
Contingencies .. .. .	2 17 6		
Riwaka,—		12 17 6	
Maintenance of lights .. .. .	..	20 0 0	
Picton—			
Contingencies .. .. .	..	4 5 0	
Kawhia,—			
New beacon .. .. .	16 8 0		
Maintenance of lights .. .. .	59 6 3		
Puponga,—		75 14 3	
Contingencies .. .. .	..	8 13 6	
Rangitikei,—			
Contingencies .. .. .	..	18 4 10	
Stores, repairs to buoys, and sundries .. .. .	..	561 7 9	
Carried forward .. .. .	..	..	4,334 3 3
			5,838 7 4

RETURN showing the TOTAL ORDINARY EXPENDITURE of the MARINE DEPARTMENT—*continued.*

Nature of Expenditure.	Details.	Totals.	Grand Totals.
	£ s. d.	£ s. d.	£ s. d.
Brought forward.. .. .	..	..	5,838 7 4
<b>Lighthouses :—</b>			
Salaries of keepers .. .. .	9,342 0 7		
Oil .. .. .	1,678 0 2		
Stores and contingencies .. .. .	3,628 10 5		
Keepers' travelling-expenses .. .. .	147 3 5		
Lighthouse artificer .. .. .	220 0 0		
		..	15,015 14 7
<b>Superintendents of Mercantile Marine :—</b>			
Salaries .. .. .	1,140 12 4		
Assistance .. .. .	318 0 0		
Contingencies .. .. .	202 13 1		
		..	1,661 5 5
<b>Fisheries :—</b>			
Protection of fish and oysters,—			
Salaries .. .. .	566 11 7		
Travelling-expenses .. .. .	154 16 4		
Contingencies .. .. .	92 15 0		
		814 2 11	
Import of salmon-ova .. .. .	257 2 11		
Import of whitefish-ova .. .. .	322 18 7		
<b>Hakataramea Salmon-hatchery,—</b>			
Salaries .. .. .	292 0 0		
Contingencies .. .. .	107 8 7		
Supply of fish-ova and acclimatisation of fish, animals, &c. .. .. .	141 17 4		
Collection, &c., of rainbow trout-ova .. .. .	91 3 3		
Survey of Foveaux Strait oyster-beds .. .. .	55 4 0		
		1,267 14 8	
Grant to Portobello Fish-hatchery .. .. .	250 0 0		
Grant to Hokitika Fish-hatchery .. .. .	27 5 0		
		277 5 0	
<b>Weather-reporting :—</b>			
Salary .. .. .	350 0 0		
Contingencies .. .. .	72 13 10		
		..	422 13 10
			25,297 3 9
Less credits to vote .. .. .	..	..	130 5 9
			25,166 18 0
<b>Government steamers :—</b>			
Working-expenses, s.s. "Hinemoa" .. .. .	7,167 5 3		
Repairs and renewals, s.s. "Hinemoa" .. .. .	3,644 12 1		
Working-expenses, s.s. "Tutanekai" .. .. .	4,339 5 5		
		15,151 2 9	
Less amount of freights, passages, &c. .. .. .	..	482 9 1	
			14,668 13 8
<b>Miscellaneous services :—</b>			
Coastal buoys and beacons .. .. .	129 2 8		
Survey of coast by H.M.S. "Penguin," to 31st March, 1904 .. .. .	7,267 7 8		
Departmental travelling-expenses .. .. .	13 7 11		
"N.Z. Nautical Almanac" .. .. .	200 0 0		
A, B, and C Azimuth Tables .. .. .	65 0 0		
Checking overcrowding of steamers and legal expenses .. .. .	317 4 0		
Charts and books .. .. .	138 12 5		
Examination of masters and mates—contingencies .. .. .	37 16 0		
Inquiries into wrecks and casualties .. .. .	184 15 8		
Survey of unseaworthy ships .. .. .	1 1 0		
Relief of distressed seamen .. .. .	81 3 8		
Fog-signals .. .. .	235 13 3		
Removal of snags, Lake Mahinapua and south creeks .. .. .	126 19 2		
Improving and protecting entrance to Waikouaiti River .. .. .	38 0 0		
Charter of s.s. "Aorere" to Karamea .. .. .	35 5 0		
Boiler test-gauges and apparatus .. .. .	79 4 0		
Sundries .. .. .	456 11 2		
		9,407 3 7	
Less credits to vote .. .. .	..	339 13 5	
			9,067 10 2
<b>Grand Total .. .. .</b>	<b>..</b>	<b>..</b>	<b>48,903 1 10</b>

RETURN showing the COST of MAINTENANCE of the NEW ZEALAND LIGHTHOUSES, and the QUANTITY of OIL consumed at each, during the Year ended the 31st March, 1906.

Name of Lighthouse.	Salaries.	Oil.		Stores and Contingencies.	Totals.
		Gallons consumed.	Value.		
	£ s. d.	Gals.	£ s. d.	£ s. d.	£ s. d.
Cape Maria van Diemen .. .. .	355 17 3	921	66 3 11	(*)135 4 1	557 5 3
Moko Hinou .. .. .	323 12 4	859	61 14 9	127 7 8	512 14 9
Tiritiri .. .. .	237 7 10	685	49 4 8	57 14 2	344 6 8
Bean Rock .. .. .	160 0 0	..	3 8 9	23 4 5	186 13 2
Ponui Passage .. .. .	181 4 8	80	5 15 0	38 9 4	225 9 0
Cuvier Island .. .. .	309 6 8	1,330	95 11 10	145 14 4	550 12 10
East Cape .. .. .	308 1 2	860	61 16 3	117 16 7	487 14 0
Portland Island .. .. .	356 4 2	732	52 12 3	88 9 11	497 6 4
Napier Bluff .. .. .	20 0 0	Gas	9 10 6	0 10 6	30 1 0
Cape Palliser .. .. .	281 3 8	880	63 5 0	73 2 0	417 10 8
Pencarrow Head .. .. .	254 3 4	883	63 9 4	168 0 6	485 13 2
Somes Island .. .. .	140 0 0	648	46 11 6	23 12 6	210 4 0
Cape Egmont .. .. .	280 0 0	578	41 10 11	79 6 8	400 17 7
Manukau South Head .. .. .	219 1 2	561	40 6 5	(b)295 11 0	554 18 7
Manukau South Head leading-lights .. .. .	..	162	11 12 11	4 14 5	16 7 4
Manukau North Head leading-lights .. .. .	100 0 0	231	16 12 1	30 5 6	146 17 7
Kaipara Head .. .. .	225 0 0	572	41 2 3	141 11 1	407 13 4
Brothers .. .. .	414 5 2	737	52 19 5	(c)181 19 1	649 3 8
Tory Channel leading-lights .. .. .	90 0 0	160	11 10 0	6 4 3	107 14 3
Cape Campbell .. .. .	243 1 0	564	40 10 9	(d)127 0 2	410 11 11
Godley Head .. .. .	257 4 0	524	37 13 3	(e)72 8 6	367 5 9
Akaroa Head .. .. .	270 0 0	552	39 13 6	(f)130 8 6	440 2 0
Jack's Point .. .. .	160 0 0	176	12 13 0	(g)49 17 9	222 10 9
Moeraki .. .. .	256 8 0	564	40 10 9	(h)95 14 9	392 13 6
Taiaroa Head .. .. .	270 0 0	626	44 19 11	(i)94 5 10	409 5 9
Cape Saunders .. .. .	260 0 0	654	47 0 1	64 11 9	371 11 10
Nugget Point .. .. .	363 15 10	942	67 14 2	(j)143 0 3	574 10 3
Waipapapa Point .. .. .	250 0 0	624	44 17 0	57 5 7	352 2 7
Dog Island .. .. .	301 18 1	810	58 4 4	100 17 7	461 0 0
Centre Island .. .. .	304 15 2	870	62 10 7	105 19 1	473 4 10
Puysegur Point .. .. .	338 3 11	921	66 3 11	(k)298 18 11	703 6 9
Hokitika .. .. .	12 0 0	Gas	10 17 0	0 16 6	23 13 6
Cape Foulwind .. .. .	247 18 4	573	41 3 8	(l)62 7 6	351 9 6
Kahurangi Point .. .. .	352 13 4	977	70 4 5	(m)184 19 7	607 17 4
Farewell Spit .. .. .	390 0 0	650	46 14 5	96 11 7	533 6 0
Nelson .. .. .	290 0 0	240	17 5 0	30 10 10	337 15 10
French Pass .. .. .	170 0 0	164	11 15 9	39 19 4	221 15 1
Stephen Island .. .. .	348 15 6	1,705	122 10 11	133 18 5	605 4 10
Totals .. .. .	9,342 0 7	23,015	1,678 0 2	3,628 10 5	14,648 11 2

(\*) Of which £13 1s. 1d. is for repairs. (b) Of which £254 17s. 7d. is for repairs. (c) Of which £75 16s. 8d. is for provisions. (d) Of which £34 15s. 6d. is for repairs. (e) Of which £24 is for repairs. (f) Of which £71 7s. 7d. is for repairs. (g) Of which £7 7s. 11d. is for repairs. (h) Of which £12 18s. 4d. is for repairs. (i) Of which £43 11s. is for repairs. (j) Of which £45 4s. 2d. is for repairs. (k) Of which £137 18s. 2d. is for repairs. (l) Of which £7 14s. 8d. is for repairs. (m) Of which £62 is for clearing bush on lighthouse reserve.



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† .. .. .	3,853 17 11
Moko Hinou .. .. .	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
Stephen Island .. .. .	9,349 9 11
Cape Palliser .. .. .	6,243 16 1
East Cape .. .. .	7,594 8 8
Kahurangi Point .. .. .	9,145 18 1
Jack's Point .. .. .	1,204 10 9
Cost of telegraph cable to Tiritiri .. .. .	1,085 19 6
Miscellaneous and unallocated .. .. .	1,322 2 2
Total .. .. .	£191,840 12 1

\* 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, &c., received under  
the Shipping and Seamen Acts, the Merchant  
Shipping Act, the Sea-fisheries Acts, and the  
Harbours Acts, at Ports under the Marine  
Department during the Year ended 31st March,  
1906.

Nature of Receipts.	Amount.
	£ s. d.
Shipping and Seamen Acts:—	
Fees for engagement and discharge of sea-	2,606 9 1
men, and sale of forms .. .. .	
Survey of steamers and sailing-vessels .. .. .	1,850 15 0
Measurement of ships .. .. .	41 6 0
Examination of masters, mates, and	302 2 6
engineers .. .. .	
Light dues .. .. .	29,443 11 2
Sundries .. .. .	241 18 4
Merchant Shipping Act .. .. .	220 13 0
Harbours Acts:—	
Pilotage and port charges .. .. .	2,000 1 3
Sundry receipts .. .. .	390 9 2
Sea-fisheries Acts .. .. .	384 14 6
Total .. .. .	37,482 0 0

RETURN showing the AMOUNT of LIGHT DUES  
collected during the Year ended 31st March,  
1906.

Port.	Amount collected.
	£ s. d.
Auckland .. .. .	10,751 15 7
Onehunga .. .. .	191 9 11
Whangarei .. .. .	144 12 2
Russell .. .. .	22 10 5
Mangonui .. .. .	5 17 4
Whangaroa .. .. .	2 18 4
Hokianga .. .. .	19 2 3
Kaipara .. .. .	267 9 1
Thames .. .. .	76 3 5
Coromandel .. .. .	14 9 2
Tauranga .. .. .	32 0 5
Poverty Bay .. .. .	629 5 2
Napier .. .. .	762 0 5
New Plymouth .. .. .	250 3 7
Waitara .. .. .	59 12 8
Wanganui .. .. .	148 11 9
Patea .. .. .	15 9 6
Wellington .. .. .	6,762 12 4
Wairau .. .. .	21 9 6
Pictou .. .. .	459 5 4
Nelson .. .. .	426 18 2
Westport .. .. .	679 17 9
Greymouth .. .. .	310 18 4
Hokitika .. .. .	4 12 1
Lyttelton .. .. .	2,570 4 2
Timaru .. .. .	444 3 6
Oamaru .. .. .	146 4 7
Dunedin .. .. .	1,757 3 11
Bluff and Invercargill .. .. .	2,466 10 4
Total .. .. .	£29,443 11 2

RETURN showing the AMOUNT of PILOTAGE,  
PORT CHARGES, &c., collected during the Year  
ended 31st March, 1906.

Name of Port.	Pilotage.	Port Charges, &c.	Total.
	£ s. d.	£ s. d.	£ s. d.
Auckland* .. .. .	746 17 3	7,089 2 2	7,835 19 5
Onehunga .. .. .	.. .. .	211 10 6	211 10 6
Hokianga .. .. .	94 0 3	6 4 10	100 5 1
Kaipara .. .. .	125 0 3	1,103 15 6	1,228 15 9
Thames* .. .. .	114 0 4	.. .. .	114 0 4
Gisborne* .. .. .	6 0 0	1,344 2 2	1,350 2 2
Wairoa* .. .. .	116 17 6	4 2 6	121 0 0
Napier* .. .. .	1,102 5 5	5,359 0 4	6,461 5 9
New Plymouth* .. .. .	84 15 1	203 0 8	287 15 9
Waitara* .. .. .	108 3 2	111 3 9	219 6 11
Wanganui* .. .. .	491 5 0	52 16 1	544 1 1
Patea* .. .. .	62 2 5	15 15 0	77 17 5
Foxton .. .. .	245 0 3	.. .. .	245 0 3
Wellington* .. .. .	186 9 8	12,842 7 8	13,028 17 4
Wairau .. .. .	214 9 8	.. .. .	214 9 8
Nelson* .. .. .	2,357 16 2	318 2 6	2,675 18 8
Hokitika* .. .. .	.. .. .	45 9 6	45 9 6
Lyttelton* .. .. .	9,525 6 8	7,206 9 6	16,731 16 2
Timaru* .. .. .	2,822 18 4	3,586 4 10	6,409 3 2
Oamaru* .. .. .	.. .. .	2,060 3 1	2,060 3 1
Dunedin* .. .. .	9,070 16 0	6,882 8 1	15,953 4 1
Invercargill* .. .. .	.. .. .	.. .. .	.. .. .
Bluff* .. .. .	3,729 18 0	2,123 19 8	5,853 17 8
Totals .. .. .	31,204 1 5	50,565 18 4	81,769 19 9

\* Harbour Board revenue.

† Tonnage rate on cargo.

RETURN of ESTATES of DECEASED SEAMEN received and administered in pursuance of the Provisions of "The Shipping and Seamen Act, 1903," during the Year ended 31st March, 1906.

Name of Seaman.	Balance to Credit of Estate on 31st March, 1905.	Amount received.	Amount paid.	Balance to Credit of Estate on 31st March, 1906.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
— Neilson .. .. .	2 15 0	..	..	2 15 0
Bennet Lissing .. .. .	10 0 6	..	..	10 0 6
Thomas Devine .. .. .	3 3 6	..	..	3 3 6
H. S. Molvig .. .. .	26 3 6	..	20 15 0	5 8 6
Fred Berger .. .. .	10 13 5	..	5 17 6	4 15 11
Frank Rouse .. .. .	..	14 7 2	14 7 2	..
Kenneth McKenzie .. .. .	..	16 9 0	16 9 0	..
Andrew Gray .. .. .	..	6 8 2	..	6 8 2
John Fullen .. .. .	..	8 10 9	8 10 9	..
J. P. Coulson .. .. .	..	9 17 6	..	9 17 6
C. Jackman .. .. .	..	16 13 4	16 13 4	..
H. H. Smith .. .. .	..	1 0 6	1 0 6	..
W. Newlove .. .. .	..	4 3 8	4 3 8	..
Edward Robinson .. .. .	..	41 15 0	..	41 15 0
Eric Anderson .. .. .	..	7 11 0	7 11 0	..
J. McAlister .. .. .	..	2 15 0	..	2 15 0
F. McNeil .. .. .	..	2 15 0	..	2 15 0
Name unknown (late cook, "Hoanga") .. .. .	..	2 7 8	..	2 7 8
— Hodder .. .. .	..	9 6 8	9 6 8	..
Totals .. .. .	52 15 11	144 0 5	104 14 7	92 1 9

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, 1906.

No. of License.	Date of Issue.	Name of Licensee.	Port of Residence.	Date of Expiry of License.
27	18 July, 1905	Richard Groombridge Butt.. .. .	Wellington ..	20 July, 1906.
28	20 June, "	Edward Wheeler .. .. .	" ..	12 Aug., "
31	20 Dec., "	Archibald Kennedy .. .. .	" ..	21 Dec., "
34	23 Feb., 1906	Thomas Fernandez .. .. .	Auckland ..	18 Dec., "
36	11 Aug., 1905	Hugh Paterson .. .. .	Dunedin ..	11 Aug., "

RETURN of LICENSED ADJUSTERS of COMPASSES in New Zealand.

Date of Issue.	Name of Licensee.	Address.
9 April, 1896	Frederick Macbeth .. .. .	Dunedin.
15 " "	Robert Strang .. .. .	"
5 May, "	George Urquhart Thomson .. .. .	"
11 Dec., "	William Bendall .. .. .	Wellington.
27 April, 1897	Frederic 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 Heddleston 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 .. .. .	"

RETURN of STEAMERS and OIL-ENGINE VESSELS to which CERTIFICATES of SURVEY were issued in  
NEW ZEALAND during the Year ended 31st March, 1906.

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 Num- ber of following Classes of Crew Law requires to be carried.				Remarks.
							Able Seamen.	Firemen.	Trimmers.	Greasers.	
Admiral ..	82	28	..	Compound ..	Screw ..	River ..	..	..	..	..	
Advance ..	..	8	..	Non-condensing	" ..	" ..	..	..	..	..	
Advance ..	40	30	..	Oil-engines ..	" ..	Home trade ..	2	..	..	..	
Ahuriri ..	31	17	..	Compound ..	" ..	Extended river	..	..	..	..	
Akaroa ..	43	28	54	" ..	" ..	Home trade ..	2	1	..	..	
Albany ..	8	8	..	Non-condensing	" ..	River ..	..	..	..	..	
Alert (Auckland) ..	..	1½	..	" ..	" ..	" ..	..	..	..	..	
Alexander ..	185	..	295	Compound ..	Twin-screw	Home trade ..	4	3	..	..	
Alexandra ..	73	30	..	Non-condensing	Paddle ..	River ..	..	..	..	..	
Antrim ..	35	17	..	Condensing ..	Screw ..	" ..	..	..	..	..	
Aorere ..	49	16½	70	Compound ..	" ..	Home trade ..	2	1	..	..	
Aotea (Auckland) ..	89	15	..	Oil-engines ..	" ..	" ..	2	..	..	..	
Aotea (Auckland) ..	157	33	..	Compound ..	" ..	River ..	..	..	..	..	
Awaroa ..	..	3	..	Non-condensing	Stern-wheel	" ..	..	..	..	..	Towing.
Awarua ..	54	32	211	Condensing ..	Paddle ..	Home trade ..	2	2	..	..	
Baden Powell ..	92	..	162	" ..	Screw ..	" ..	2	2	..	..	
Beatrice ..	8	10	..	Non-condensing	" ..	Extended limits	..	..	..	..	Fishing-vessel.
Ben Lomond ..	33	15	..	Compound ..	" ..	River ..	..	..	..	..	
Blanche ..	18	9	..	Non-condensing	" ..	Extended river	..	..	..	..	
Bravo ..	11	..	..	Oil-engines ..	" ..	" ..	..	..	..	..	First survey; fish- ing-vessel.
Britannia ..	108	40	..	" ..	Paddle ..	River ..	..	..	..	..	
*Canopus ..	835	250	1,109	Triple-expansion	Screw ..	Home trade ..	7	3	2	3	
Canterbury ..	..	24	..	Non-condensing	Twin-screw	Extended river	..	..	..	..	
Charles Edward ..	145	48	204	Compound ..	" ..	Home trade ..	4	2	..	..	
Chelmsford ..	79	24	58	" ..	Screw ..	" ..	2	1	..	..	
Clausman ..	379	90	590	" ..	" ..	" ..	5	3	..	..	
Clara ..	..	2½	..	Condensing ..	" ..	River ..	..	..	..	..	Launch.
Claymore ..	92	54	..	Compound ..	" ..	Extended river	..	..	..	..	
Clyde ..	..	40	..	" ..	Stern-wheel	River ..	..	..	..	..	
Condor ..	122	24	..	" ..	Screw ..	" ..	..	..	..	..	
Corinna ..	820	141	995	" ..	" ..	Home trade ..	7	3	2	3	
Coromandel ..	68	25	..	" ..	" ..	River ..	..	..	..	..	
Countess ..	84	28	..	" ..	" ..	" ..	..	..	..	..	
Cygnets ..	66	43	164	" ..	" ..	Home trade ..	2	2	..	..	
*Daphne ..	..	1	..	Non-condensing	" ..	River ..	..	..	..	..	
Defender ..	117	36	144	Compound ..	" ..	Home trade ..	4	2	..	..	
*Despatch ..	24	20	..	" ..	" ..	Extreme limits	..	..	..	..	Fishing-vessel.
Dingadee ..	393	80	367	" ..	Twin-screw	Home trade ..	5	3	..	..	Since sold out of colony.
Doto ..	19	13	..	" ..	Screw ..	Extended river	..	..	..	..	Fishing-vessel.
Duchess ..	95	81	..	Triple expansion	" ..	River ..	..	..	..	..	
Duco ..	25	60	..	" ..	" ..	Extended river	..	..	..	..	
Durham ..	54	24	..	Compound ..	" ..	Extended limits	..	..	..	..	
Eagle ..	133	70	..	" ..	Paddle ..	River ..	..	..	..	..	
Echo ..	98	60	..	Oil-engines ..	Screw ..	Home trade ..	2	..	..	..	
Edina ..	4	6	..	Non-condensing	" ..	River ..	..	..	..	..	Towing only.
Eliza ..	..	3	..	" ..	" ..	" ..	..	..	..	..	"
Elsie ..	15	8	..	" ..	" ..	Extended limits	..	..	..	..	
Elsie Evans ..	6	20	..	Oil-engines ..	" ..	" ..	..	..	..	..	
Emma Sims ..	61	32	..	" ..	" ..	Home trade ..	2	..	..	..	
Endon ..	12	5	..	Compound ..	" ..	Extended river	..	..	..	..	Fishing.
Energy ..	15	16	48	" ..	" ..	Home trade ..	1	1	..	..	
*Erin ..	..	4	..	Non-condensing	" ..	River ..	..	..	..	..	Towing and cargo only.
Erskine ..	98	35	..	Compound ..	" ..	" ..	..	..	..	..	Westport dredge.
Ethel J. ..	20	16	..	" ..	" ..	" ..	..	..	..	..	
Express ..	36	25	150	Compound ..	" ..	Home trade ..	2	2	..	..	Fishing-vessel.
Eva ..	7	20	..	Oil-engines ..	" ..	River ..	..	..	..	..	First survey.
Eveline ..	..	8	..	Non-condensing	" ..	" ..	..	..	..	..	
Fairburn ..	68	40	..	Oil-engines ..	" ..	Home trade ..	..	..	..	..	First survey.
Fairy ..	33	15	..	Non-condensing	" ..	Extended river	..	..	..	..	Fishing-vessel.
Falcon ..	..	6	..	" ..	" ..	" ..	..	..	..	..	
Fanny ..	55	30	138	Compound ..	" ..	Home trade ..	2	2	..	..	
Fingal ..	22	..	48	" ..	" ..	" ..	..	..	..	..	
Fire Float ..	..	13	..	Non-condensing	" ..	River ..	..	..	..	..	Fire float and towing
Freetrader ..	94	30	..	" ..	Stern-wheel	" ..	..	..	..	..	
Gael ..	55	20	..	Compound ..	Screw ..	Extended river	..	..	..	..	
Gannet ..	15	6	..	Condensing ..	" ..	" ..	..	..	..	..	
Gertie ..	119	59	319	" ..	Twin-screw	Home trade ..	4	3	..	..	
Glenelg ..	156	75	263	Compound ..	Screw ..	" ..	4	3	..	..	
Goldfinch ..	..	12	..	Non-condensing	" ..	River ..	..	..	..	..	Fishing-vessel.
Gordon ..	9	12	..	Compound ..	" ..	Extended river	..	..	..	..	
Gosford ..	57	30	..	" ..	" ..	River ..	..	..	..	..	
Greyhound ..	83	50	..	Oil-engines ..	" ..	Home trade ..	2	..	..	..	
Hamurana ..	24	3	..	Non-condensing	" ..	River ..	..	..	..	..	Launch.
Hauipiri ..	452	88	506	Compound ..	" ..	Home trade ..	6	3	..	..	

\* Surveyed twice.

RETURN of STEAMERS and OIL-ENGINE VESSELS to which CERTIFICATES of SURVEY were issued, &c.—*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.	
Hauroto ..	1,276	253	1,234	Compound ..	Screw ..	Foreign trade ..	8	3	2	3	
Hawea ..	1,114	104	922	Triple expansion ..	" ..	" ..	7	3	2	3	
Heathcote ..	94	35	..	Compound ..	" ..	River ..	..	..	..	..	Hopper barge.
Hercules ..	14	12	..	Oil-engines ..	" ..	" ..	..	..	..	..	First survey; lighter.
Himitangi ..	149	45	224	Compound ..	" ..	" ..	4	2	..	..	
Hinemoa ..	8	6½	..	Non-condensing ..	" ..	" ..	..	..	..	..	Launch.
Hirere ..	32	16	..	Compound ..	Twin-screw ..	" ..	..	..	..	..	
Huia (Auckland) ..	200	60	..	Oil-engines ..	Screw ..	Home trade ..	5	..	..	..	
Huia (Thames) ..	..	8	..	Non-condensing ..	" ..	River ..	..	..	..	..	Towing only.
Huia (Wellington) ..	69	23	120	Compound ..	" ..	Home trade ..	2	2	..	..	
Ida ..	12	10	..	Non-condensing ..	" ..	Extended river ..	..	..	..	..	
Invercargill ..	123	50	221	Compound ..	" ..	Home trade ..	4	2	..	..	
Ithaca ..	13	9	..	" ..	" ..	Extended river ..	..	..	..	..	
Ivy ..	10	5	..	Oil-engines ..	" ..	River ..	..	..	..	..	First survey; lighter.
Jane Douglas ..	75	22	71	Compound ..	" ..	Home trade ..	2	1	..	..	
J.D.O. ..	88	28	..	" ..	" ..	Extended river ..	..	..	..	..	Dredging and towing.
John Anderson ..	36	20	..	" ..	" ..	" ..	..	..	..	..	
John Townley ..	85	40	..	" ..	Twin-screw ..	" ..	..	..	..	..	Cargo only.
Kao ..	147	60	..	Oil-engines ..	Screw ..	Home trade ..	4	..	..	..	First survey.
Kahu ..	99	40	211	Compound ..	" ..	" ..	2	2	..	..	
Kahutai ..	..	3½	..	" ..	" ..	River ..	..	..	..	..	First survey; yacht.
Kaipara ..	..	4	..	Quadruple expansion ..	" ..	" ..	..	..	..	..	
Kaituna ..	1,246	200	1,046	Triple expansion ..	" ..	Foreign ..	7	3	2	3	First N.Z. survey.
Kamona ..	903	117	736	" ..	" ..	Foreign trade ..	6	3	..	..	
Kanieri ..	115	20	177	Compound ..	" ..	Home trade ..	4	2	..	..	
Kapanui ..	75	32	..	" ..	" ..	Extended river ..	..	..	..	..	
Kapiti ..	80	35	180	" ..	" ..	Home trade ..	2	2	..	..	
Kapui ..	30	30	..	" ..	" ..	Extended river ..	..	..	..	..	
Karamea ..	12	..	25	" ..	" ..	Home trade ..	1	1	..	..	Formerly Snark.
Karoro ..	52	17	..	" ..	" ..	River ..	..	..	..	..	
Kate ..	..	5	..	Non-condensing ..	" ..	" ..	..	..	..	..	
Katikati ..	27	8	..	Condensing ..	" ..	" ..	..	..	..	..	
Kawatiri ..	..	2½	..	Non-condensing ..	" ..	" ..	..	..	..	..	Launch.
*Kawau (Kaipara) ..	37	15	..	Compound ..	" ..	Extended river ..	..	..	..	..	
Kawau (Auckland) ..	53	20	..	" ..	" ..	" ..	..	..	..	..	
Kennedy ..	131	43	199	" ..	Twin-screw ..	Home trade ..	4	2	..	..	
Kestrel (Auckland) ..	203	43	..	" ..	Screw ..	River ..	..	..	..	..	First survey.
..	..	14	..	" ..	" ..	" ..	..	..	..	..	First N.Z. survey.
Kia Ora ..	157	65	366	" ..	Twin-screw ..	Home trade ..	4	3	..	..	
Kia Ora (Waikato) ..	..	24	..	Non-condensing ..	Stern-wheel ..	River ..	..	..	..	..	Towing only.
Kilmorey ..	..	1½	..	" ..	Screw ..	" ..	..	..	..	..	
Kina ..	..	25	..	Oil-engines ..	" ..	Extended river ..	..	..	..	..	First survey; fishing-vessel.
Kini ..	702	130	679	Triple expansion ..	" ..	Home trade ..	6	3	..	..	
Kiripaka ..	75	24	108	Compound ..	" ..	" ..	2	2	..	..	
Kittawa ..	708	120	747	" ..	" ..	" ..	6	3	..	..	
Kiwi ..	..	3	..	Condensing ..	" ..	River ..	..	..	..	..	
Koonya ..	663	115	735	Triple expansion ..	" ..	Home trade ..	6	3	..	..	
Kopu ..	..	13	..	Non-condensing ..	Paddle ..	Extended river ..	..	..	..	..	Towing only.
Kopuru ..	28	20	..	" ..	Screw ..	River ..	..	..	..	..	
Koroi ..	..	9½	..	Quadruple expansion ..	" ..	" ..	..	..	..	..	First survey.
Kotahi ..	9	18	..	Oil-engines ..	" ..	Extreme limits ..	..	..	..	..	Fishing-vessel.
Kotiti ..	42	14	..	Compound ..	" ..	Extended river ..	..	..	..	..	
Kotuku ..	..	..	..	" ..	" ..	" ..	..	..	..	..	
Kuaka ..	33	90	..	Oil-engines ..	Screw ..	Extended river ..	..	..	..	..	
Lady Barkly ..	39	20	84	Compound ..	" ..	Home trade ..	2	1	..	..	
*Lily (Nelson) ..	23	7	..	" ..	Twin-screw ..	Extended river ..	..	..	..	..	
*Little George ..	4	4	..	Non-condensing ..	Screw ..	River ..	..	..	..	..	
*Little Jack ..	..	1½	..	" ..	" ..	" ..	..	..	..	..	Yacht.
Lomen ..	..	6	..	Compound ..	" ..	" ..	..	..	..	..	First survey.
Lo ay ..	68	35	..	" ..	" ..	" ..	..	..	..	..	
Lyttelton ..	39	80	..	" ..	Paddle ..	Extended river ..	..	..	..	..	Tug.
Lyttelton ..	..	14	..	Non-condensing ..	Twin-screw ..	" ..	..	..	..	..	
Maheno ..	24	60	..	Oil-engines ..	Screw ..	River ..	..	..	..	..	First survey.
Mahutu ..	11	13	..	" ..	" ..	" ..	..	..	..	..	Towing only.
Mana (Wellington) ..	77	25	133	Compound ..	" ..	Home trade ..	2	2	..	..	
Mana (Westport) ..	51	90	..	" ..	Paddle ..	River ..	..	..	..	..	Tug.
Manapouri ..	1,288	300	1,559	" ..	Screw ..	Foreign trade ..	8	6	3	3	
Manaroa ..	..	24	139	" ..	" ..	Home trade ..	2	2	..	..	
Manchester ..	366	160	..	" ..	" ..	Extended river ..	..	..	..	..	Dredge.
Mangapapa ..	87	28	201	" ..	" ..	Home trade ..	2	2	..	..	

\* Surveyed twice.

RETURN of STEAMERS and OIL-ENGINE VESSELS to which CERTIFICATES of SURVEY were issued, &c.—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.	
Manuka ..	2,784	357	4,135	Triple expansion	Twin-screw	Foreign trade	11	9	6	3	First N.Z. survey.
Manukau ..	45	15	..	Compound ..	Screw ..	Extreme limits	..	..	..	..	
Manurere ..	..	3½	..	Quadruple expansion	" ..	River ..	..	..	..	..	First survey.
Manuwai ..	94	30	..	Non-condensing	Stern wheel	" ..	..	..	..	..	
Maori ..	118	60	128	..	Screw ..	Foreign trade	4	2	..	..	
Mapourika ..	718	130	1,186	Triple expansion	" ..	Home trade ..	7	3	2	3	
Mararoa ..	1,381	530	3,425	" ..	" ..	Foreign trade	8	9	6	3	
Maru ..	..	4	..	Non-condensing	" ..	Extended river	..	..	..	..	Fishing - vessel ; formerly " Miranda."
Mascotte (Auckl'd)	..	3	..	" ..	" ..	River ..	..	..	..	..	First survey.
Mascotte (Waikato)	..	5	..	" ..	" ..	" ..	..	..	..	..	
Matuku ..	..	4	..	Non-condensing	" ..	" ..	..	..	..	..	
Mavis ..	..	4½	..	" ..	" ..	" ..	..	..	..	..	
May ..	..	3	..	" ..	" ..	" ..	..	..	..	..	Towing only.
May Howard ..	55	45	..	Oil-engines ..	" ..	Home trade ..	2	..	..	..	
Mere Mere (Waikato)	..	3	..	Non-condensing	" ..	River ..	..	..	..	..	Yacht.
Mere Mere (Kaipara)	..	1½	..	" ..	" ..	" ..	..	..	..	..	
* Moa ..	95	33	181	Compound ..	" ..	Home trade ..	2	2	..	..	
Moana ..	6	7	..	Non-condensing	" ..	River ..	..	..	..	..	First survey.
Moerangi ..	16	27½	..	Oil-engines ..	" ..	" ..	..	..	..	..	
Mokoia ..	2,154	255	3,596	Triple expansion	" ..	Foreign trade	10	9	6	3	
Motara ..	..	4	..	Non-condensing	" ..	River ..	..	..	..	..	Towing only
Moturoa ..	10	10	..	" ..	" ..	" ..	..	..	..	..	
Mountaineer ..	66	50	..	Compound ..	Paddle ..	" ..	..	..	..	..	
Moura ..	1,247	275	1,930	Triple expansion	Twin-screw	Foreign trade	8	..	..	..	
Mullogh ..	46	15	..	Vertical ..	Screw ..	Extended river	..	..	..	..	Fishing-vessel.
Murihiku ..	369	70	564	Triple expansion	Twin-screw	Home trade ..	4	3	..	..	First N.Z. survey ; dredge.
Muritai (Auckland)	133	45	257	Compound ..	Screw ..	" ..	4	3	..	..	
* Muritai (Hokianga)	..	8	..	Non-condensing	" ..	River ..	..	..	..	..	
Naomi II. ..	9	19	..	Oil-engines ..	" ..	Extended river	..	..	..	..	
Napier ..	48	30	89	Compound ..	" ..	Home trade ..	2	1	..	..	Fishing-vessel.
Natone ..	50	24	..	" ..	" ..	River ..	..	..	..	..	First N.Z. survey.
Naumai ..	29	12	..	" ..	" ..	" ..	..	..	..	..	
Nautilus ..	29	18	65	" ..	" ..	Home trade ..	1	1	..	..	
Navua ..	1,813	220	2,224	Triple expansion	Twin-screw	Foreign trade	9	9	3	3	First N.Z. survey.
Ngapuhi ..	299	160	686	" ..	" ..	Home trade ..	5	3	..	..	
Ngunguru ..	54	17	65	Compound ..	Screw ..	" ..	2	1	..	..	
Nina ..	7	2	..	" ..	" ..	River ..	..	..	..	..	Towing only.
No. 121 ..	394	100	..	" ..	Twin-screw	Extended river	..	..	..	..	Dredge.
No. 222 ..	502	120	557	" ..	" ..	Home trade ..	5	3	..	..	
Norval ..	50	20	..	Oil-engines ..	Screw ..	Extended river	..	..	..	..	Cargo and towing only.
Ohinemuri ..	73	26	121	Compound ..	" ..	Home trade ..	2	2	..	..	
Ohura ..	34	60	..	Condensing ..	Twin-screw	River ..	..	..	..	..	
Omawi ..	14	20	..	Oil-engines ..	Screw ..	" ..	..	..	..	..	Lighter.
Ongarue ..	10	65	..	" ..	" ..	" ..	..	..	..	..	
* Onslow ..	16	14	..	Compound ..	Twin-screw	Home trade ..	1	1	..	..	
Opawa ..	64	18	56	" ..	Screw ..	" ..	2	1	..	..	
Oreti (Wellington)	117	50	192	" ..	" ..	" ..	4	2	..	..	
Oreti (Invercargill)	14	3	..	Non-condensing	" ..	River ..	..	..	..	..	Lighter, first survey.
Orewa ..	37	17	..	Compound ..	" ..	" ..	..	..	..	..	
Osprey ..	138	70	..	" ..	Paddle ..	" ..	..	..	..	..	
Paeroa ..	46	15	66	" ..	Screw ..	Home trade ..	2	1	..	..	
Pania ..	27	11	45	" ..	" ..	Extended river	..	..	..	..	Fishing-vessel.
Pareora ..	355	71	425	Triple expansion	" ..	Home trade ..	5	3	..	..	
Pateena ..	550	250	1,768	Compound ..	" ..	" ..	6	6	2	3	
Pearl ..	9	6	..	Non-condensing	" ..	River ..	..	..	..	..	Towing only.
Pelorus ..	18	12	..	Oil-engines ..	" ..	Extended river	..	..	..	..	
Pelican ..	1	57	256	Triple expansion	Twin-screw	Home trade ..	1	3	..	..	
Penguin ..	517	180	831	Compound ..	Screw ..	" ..	6	3	2	3	
Petone ..	388	82	565	Triple expansion	" ..	" ..	4	3	..	..	
Phantom ..	18	11	140	Compound ..	" ..	" ..	1	2	..	..	Fishing-vessel.
Phoenix ..	6	5	..	Non-condensing	" ..	River ..	..	..	..	..	
Pilot (Napier)	11	13	..	Compound ..	" ..	Extended river	..	..	..	..	Fishing vessel.
Pilot (Dunedin)	27	15	..	Triple expansion	" ..	River ..	..	..	..	..	
Pitoitoti ..	24	13½	..	Condensing ..	" ..	" ..	..	..	..	..	
Planet ..	13	8	..	Non-condensing	" ..	" ..	..	..	..	..	
Plucky ..	29	40	274	Compound ..	" ..	Home trade ..	1	3	..	..	Tug.
Pohorua ..	749	128	660	Triple expansion	" ..	" ..	6	3	..	..	
Presto ..	..	3	..	Non-condensing	" ..	River ..	..	..	..	..	
Progress ..	200	50	145	Compound ..	" ..	Home trade ..	4	2	..	..	Dredge.
Pukaki ..	917	110	586	Quadruple expansion	" ..	" ..	6	3	..	..	

\* Surveyed twice.

RETURN of STEAMERS and OIL-ENGINE VESSELS to which CERTIFICATES of SURVEY were issued, &c.—*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.	
Purau ..	38	18	..	Compound ..	Twin-screw ..	River ..	..	..	..	..	
Putiki ..	157	60	367	" ..	Screw ..	Home trade ..	4	3	..	..	
Queen of the South ..	121	40	191	" ..	" ..	" ..	4	2	..	..	
Rakanoa ..	1,993	200	933	Triple expansion ..	" ..	Foreign trade ..	8	3	2	3	
Rarawa ..	460	140	1,203	" ..	" ..	Home trade ..	6	3	2	3	
Result (Napier) ..	18	10	..	Compound ..	" ..	Extended river ..	..	..	..	..	Fishing-vessel.
Rimu ..	144	95	521	Triple expansion ..	" ..	Home trade ..	4	3	..	..	
Rob Roy ..	34	16	..	Compound ..	" ..	Extended river ..	..	..	..	..	
Rosamond ..	462	90	410	" ..	" ..	Home trade ..	6	3	..	..	
Rothsay ..	8	4½	..	" ..	" ..	Extended river ..	..	..	..	..	
Rotoiti (Auckland) ..	..	2½	..	Triple expansion ..	" ..	River ..	..	..	..	..	
Rotoiti (Dunedin) ..	630	104	1,127	" ..	Twin-screw ..	Home trade ..	7	3	2	3	
Rotomahana (Auckland) ..	139	50	..	Compound ..	Screw ..	Extended river ..	..	..	..	..	
Rotomahana (Dunedin) ..	915	450	2,485	" ..	" ..	Home trade ..	7	9	3	3	
Rubi Seddon ..	349	60	..	Triple expansion ..	Twin-screw ..	River ..	..	..	..	..	Dredge.
Ruru ..	11	10	..	Compound ..	Screw ..	" ..	..	..	..	..	
Savaii ..	31	16	..	Condensing ..	" ..	Extended river ..	..	..	..	..	Fishing-vessel.
Settler ..	8	7	..	Compound ..	" ..	River ..	..	..	..	..	First survey.
Shamrock ..	60	120	..	Oil-engines ..	" ..	Home trade ..	2	..	..	..	
Sir Wm. Wallace ..	..	..	..	Compound ..	" ..	River ..	..	..	..	..	Fishing-vessel.
Sonoma ..	..	13	..	Non-condensing ..	" ..	" ..	..	..	..	..	
Southern Cross ..	403	117	526	Triple expansion ..	" ..	Foreign trade ..	6	3	..	..	Missionary vessel.
Speedwell ..	31	10	..	" ..	" ..	River ..	..	..	..	..	Towing only.
Squall ..	133	60	268	Compound ..	Screw ..	Home trade ..	4	3	..	..	First N.Z. survey.
Stella ..	157	90	250	" ..	" ..	" ..	4	3	..	..	
Sterling ..	26	39	294	" ..	" ..	" ..	1	3	..	..	Tug.
Storm ..	186	70	268	" ..	" ..	" ..	4	3	..	..	
Stormbird ..	137	40	231	" ..	" ..	" ..	4	2	..	..	
Sumner ..	94	35	..	" ..	" ..	River ..	..	..	..	..	Hopper barge.
Swan ..	16	10	..	Non-condensing ..	" ..	" ..	..	..	..	..	
Sylph ..	5	8	..	" ..	" ..	" ..	..	..	..	..	Towing only.
Taiari ..	1,071	155	747	Triple expansion ..	" ..	Home trade ..	7	3	..	..	
Tainui ..	46	20	..	Non-condensing ..	Paddle ..	River ..	..	..	..	..	
Tainui ..	87	24	169	Compound ..	Screw ..	Home trade ..	2	2	..	..	
*Takapuna (Auckland) ..	58	20	..	Non-condensing ..	Paddle ..	River ..	..	..	..	..	
Takapuna (Dunedin) ..	472	165	1,337	Compound ..	Screw ..	Home trade ..	6	6	3	3	
Talune ..	1,370	255	1,987	Triple expansion ..	" ..	" ..	8	6	3	3	
Tangaroa ..	110	70	..	Compound ..	Twin-screw ..	Extended river ..	..	..	..	..	
Tangihua ..	20	15	..	" ..	Screw ..	River ..	..	..	..	..	
Taniwha (Auckland) ..	191	40	..	" ..	Twin-screw ..	Extended river ..	..	..	..	..	
Taniwha (Timaru) ..	16	16	..	Non-condensing ..	Screw ..	" ..	..	..	..	..	Dredge.
Tarakihi ..	..	4	..	" ..	" ..	River ..	..	..	..	..	Towing only.
Tarawera ..	1,269	250	1,535	Compound ..	" ..	Home trade ..	8	6	3	3	
Tarewai ..	7	6	..	Non-condensing ..	" ..	River ..	..	..	..	..	
*Tasman ..	87	38	225	Compound ..	Twin-screw ..	Home trade ..	2	2	..	..	
Taviuni ..	910	135	1,021	Quadruple expansion ..	Screw ..	Foreign trade ..	7	3	2	3	
Tawera (Waikato) ..	..	8	..	Non-condensing ..	" ..	River ..	..	..	..	..	
Tawera (Auckland) ..	44	40	..	Oil-engines ..	" ..	" ..	..	..	..	..	
Tawera (Te Anau) ..	..	25	..	Non-condensing ..	" ..	" ..	..	..	..	..	
Te Anau ..	1,028	250	1,245	Compound ..	" ..	Home trade ..	8	3	2	3	
Te Kapu ..	50	25	99	" ..	" ..	" ..	2	1	..	..	
Terranora ..	199	94	271	" ..	Paddle ..	" ..	4	3	..	..	
*Theresa Ward ..	9	95	484	Triple expansion ..	Screw ..	" ..	1	3	..	..	
Thistle ..	77	90	..	Oil-engines ..	Twin-screw ..	Extended river ..	..	..	..	..	
Thomas King ..	70	16	..	Non-condensing ..	Screw ..	" ..	..	..	..	..	Dredge.
Timaru ..	211	78	299	Compound ..	Twin-screw ..	Home trade ..	4	3	..	..	
Tongariro ..	4	8	..	Non-condensing ..	Screw ..	River ..	..	..	..	..	
Torgauten ..	197	18½	100	Compound ..	" ..	Home trade ..	4	2	..	..	
Toroa ..	174	91	460	Triple expansion ..	" ..	Foreign trade ..	4	3	..	..	
Taukau ..	..	2	..	" ..	" ..	River ..	..	..	..	..	
Tuariki ..	7	8	..	Oil-engines ..	Twin-screw ..	Extended river ..	..	..	..	..	
Tuatea ..	58	28	278	Compound ..	Screw ..	Home trade ..	2	3	..	..	First survey.
Tu Atu ..	30	48	..	Oil-engines ..	Twin-screw ..	Extended river ..	..	..	..	..	
Tui ..	..	6½	..	Non-condensing ..	Screw ..	River ..	..	..	..	..	Towing only.
Tuna (Gisborne) ..	..	14	..	Compound ..	Twin-screw ..	Extended river ..	..	..	..	..	Cargo only.
Tuna (Kaipara) ..	..	3½	..	" ..	Screw ..	River ..	..	..	..	..	Towing only.
Uliera ..	..	3½	..	Non-condensing ..	" ..	" ..	..	..	..	..	Cargo and towing only.
Vaite ..	93	30	..	Oil-engines ..	" ..	Foreign trade ..	2	..	..	..	
Vanora ..	11	30	..	" ..	" ..	Home trade ..	1	..	..	..	Yacht.
Victoria ..	92	50	..	Non-condensing ..	Paddle ..	River ..	..	..	..	..	
Victory ..	..	4	..	" ..	Screw ..	" ..	..	..	..	..	

\* Surveyed twice.

RETURN of STEAMERS and OIL-ENGINE VESSELS to which CERTIFICATES of SURVEY were issued, &c.—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.	
Vivid ..	6	13	..	Non-condensing	Screw ..	River ..	..	..	..	..	Cargo only.
Waiapu ..	57	15	..	Oil-engines ..	" ..	Foreign trade ..	2	..	..	..	
Waihi ..	63	20	172	Compound ..	" ..	Home trade ..	2	2	..	..	
Waikare ..	1,901	229	2,429	Triple expansion	" ..	Foreign trade ..	9	9	3	3	
Waikato ..	56	14	..	Non-condensing	Paddle ..	River ..	..	..	..	..	Cargo only.
Waimarie (Auckland)	159	48	..	Compound ..	Screw ..	Extended river	..	..	..	..	
Waimarie (Wanganui)	65	26	..	Non-condensing	Paddle ..	River ..	..	..	..	..	
Wainui ..	411	95	642	Compound ..	Screw ..	Home trade ..	6	3	..	..	
Waiora ..	..	..	66	" ..	" ..	River ..	..	..	..	..	Cargo only.
Waiotahi ..	168	56	266	" ..	Twin-screw	Home trade ..	4	3	..	..	
Wairere ..	41	80	..	Non-condensing	Paddle ..	River ..	..	..	..	..	
*Wairoa (Nelson) ..	48	20	48	" ..	Screw ..	Home trade ..	2	1	..	..	
*Wairoa (Kaipara) ..	63	40	..	Condensing ..	" ..	" ..	2	2	..	..	First N.Z. survey.
Wairua ..	..	..	66	Compound ..	" ..	River ..	..	..	..	..	
Wairuna ..	2,530	396	1,974	Triple expansion	" ..	Foreign trade	10	6	3	3	
Waitangi (Auckland)	34	62	414	Compound ..	Twin-screw	Home trade ..	2	3	..	..	
Waitangi (Kaipara)	..	5	..	" ..	Screw ..	River ..	..	..	..	..	Towing and fishing. First survey.
Waitohi ..	18	10	..	" ..	" ..	Extended river	..	..	..	..	
Waiwera (Kaipara)	..	6	..	" ..	" ..	River ..	..	..	..	..	
Waiwera (Henley)	..	16	..	Oil-engines ..	Screw ..	" ..	..	..	..	..	
Waiwiri ..	..	7½	..	Non-condensing	" ..	Extended river	..	..	..	..	Cargo only.
Wakapai ..	..	10	..	Compound ..	" ..	River ..	..	..	..	..	
Wakaterere ..	157	140	..	" ..	Paddle ..	Extended river	..	..	..	..	
Wakatu ..	95	23	157	" ..	Screw ..	Home trade ..	2	2	..	..	
Wanaka ..	1,572	280	1,140	Triple expansion	" ..	Foreign trade	8	3	2	3	Cargo only.
Warkworth ..	24	10	..	Oil-engines ..	" ..	River ..	..	..	..	..	
Warrimoo ..	2,076	490	3,795	Triple expansion	" ..	Foreign trade	10	9	6	3	
Wasp ..	..	1	..	Non-condensing	" ..	River ..	..	..	..	..	
Wave ..	..	1½	..	" ..	" ..	" ..	..	..	..	..	Pleasure yacht.
Waverley ..	93	25	93	Compound ..	Twin-screw	Home trade ..	2	1	..	..	
Weka (Auckland)	86	27	..	" ..	" ..	River ..	..	..	..	..	
Weka (Napier) ..	53	20	90	" ..	Screw ..	Home trade ..	2	1	..	..	
Wellington ..	279	90	434	" ..	" ..	" ..	5	3	..	..	Tug. Dredge.
Westland ..	8	64	450	Condensing ..	Paddle ..	" ..	2	3	..	..	
Whakarire ..	449	120	655	Compound ..	Twin-screw	" ..	5	3	..	..	
Whangape ..	1,901	230	1,121	Triple expansion	Screw ..	Foreign trade	8	3	2	3	
*Whati ..	..	1½	..	Non-condensing	" ..	River ..	..	..	..	..	Fishing-vessel. Towing only.
Winona ..	11	8	..	Compound ..	" ..	Extended river	..	..	..	..	
Yankee Doodle ..	..	12	..	" ..	Stern-wheel	River ..	..	..	..	..	
Young Bungaree ..	47	35	133	" ..	Screw ..	Home trade ..	2	2	..	..	

\* Surveyed twice.

The compulsory-manning schedule of the Act does not apply to steamers and oil-engine vessels plying within river and extended-river limits.

RETURN of INTERCOLONIAL SAILING-SHIPS to which SURVEY CERTIFICATES were issued during the Year ended 31st March, 1906.

Name of Vessel.	Tons Register.	Class of Certificate.	Minimum Number of Seamen required by Law to be carried.			Remarks.
			Able Seamen.	Ordinary Seamen.	Boys.	
Alexander Craig ..	520	Foreign-going ..	7	1	2	Formerly "Kathleen Hilda." First survey in New Zealand.
Clan McLeod ..	646	" ..	8	1	2	
Defiance ..	199	" ..	4	..	1	
Elverland ..	361	" ..	6	1	1	
Ganymede ..	569	" ..	7	1	2	
Onyx ..	396	" ..	6	1	1	
Pendle Hill ..	222	" ..	5	1	1	



RETURN of MASTERS, MATES, and ENGINEERS to whom CERTIFICATES of COMPETENCY were issued during the Year ended 31st March, 1906.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Henry Montague Garrick.. ..	Master, ordinary ..	Foreign trade ..	23 May, 1905 ..	878
Henry Hamill .. ..	First mate ..	" ..	23 " " ..	951
Richard Garsdale Holmes .. ..	Second mate ..	" ..	23 " " ..	978
William Whiteford .. ..	" ..	" ..	23 " " ..	979
Alan Hamilton Macdonald .. ..	" ..	" ..	29 " " ..	980
William Sutton Gordon .. ..	" ..	" ..	29 " " ..	981
Richard Newing .. ..	First mate ..	" ..	12 June, " ..	982
William Knowles .. ..	Second mate ..	" ..	26 " " ..	983
Hereward Wilfred Doucette Bold .. ..	First mate ..	" ..	28 " " ..	984
William Bernard Robertson .. ..	Second mate ..	" ..	28 " " ..	984
Thomas Vivian Hill .. ..	" ..	" ..	3 July, " ..	985
Leonard Robertson .. ..	" ..	" ..	15 " " ..	986
James McKenzie .. ..	First mate ..	" ..	15 " " ..	955
Oscar Thimoteus Pettersson .. ..	Second mate ..	" ..	27 " " ..	987
Maurice Evan Morris .. ..	" ..	" ..	1 Sept., " ..	988
James Baldwin .. ..	First mate ..	" ..	5 " " ..	989
Gustav Herman Petersen .. ..	" ..	" ..	7 Oct., " ..	966
William Donald Darling .. ..	Second mate ..	" ..	18 " " ..	990
Ivan Vasta .. ..	" ..	" ..	26 " " ..	991
Thomas Bartlett Sewell .. ..	First mate ..	" ..	2 Nov., " ..	992
George Percy Evans .. ..	Mate ..	" ..	15 " " ..	993
Donald Hastings Cambridge .. ..	" ..	" ..	15 " " ..	994
John Dowell .. ..	Master ..	" ..	23 " " ..	995
Charles Wilson Cumming .. ..	" ..	" ..	11 Dec., " ..	996
Gilbert Manson .. ..	Second mate ..	" ..	20 " " ..	997
John Sinclair Stuart .. ..	" ..	" ..	23 " " ..	998
Andrew Risk Stewart .. ..	First mate ..	" ..	2 Feb., 1906 ..	999
Caleb Charles Williams .. ..	Second mate ..	" ..	17 " " ..	1000
George Walton Somerwill .. ..	First mate ..	" ..	28 " " ..	1001
John Farrell .. ..	Second mate ..	" ..	28 " " ..	1002
Henry Warren Johnston .. ..	Master ..	Home trade ..	23 May, 1905 ..	5493
Charles Anderson .. ..	" ..	" ..	23 " " ..	5497
Arthur Percy Gibson .. ..	Mate ..	" ..	23 " " ..	5543
James Smith .. ..	" ..	" ..	23 " " ..	5544
Edward Martin Knudsen .. ..	" ..	" ..	23 " " ..	5545
Robert Scollay .. ..	" ..	" ..	29 " " ..	5546
Walter Nicholas .. ..	Master ..	" ..	6 June, " ..	5517
John McDonald Etheridge .. ..	" ..	" ..	13 July, " ..	5547
Ernest Albert Burton .. ..	Mate ..	" ..	27 " " ..	5548
William McIntosh .. ..	" ..	" ..	4 Aug., " ..	5549
Robert Jackson Fowler .. ..	" ..	" ..	9 " " ..	5550
Samuel Jones .. ..	" ..	" ..	9 " " ..	5551
Hans Johansen .. ..	" ..	" ..	23 " " ..	5552
Thomas Coupar .. ..	" ..	" ..	24 " " ..	5553
Hemen Walter Vile .. ..	" ..	" ..	16 Sept., " ..	5554
William Gordon Scott .. ..	" ..	" ..	3 Oct., " ..	5555
Desmonde Ryall Probert .. ..	" ..	" ..	14 " " ..	5556
Alfred Sandston .. ..	Master ..	" ..	18 " " ..	5475
John Williams .. ..	" ..	" ..	19 " " ..	5526
William Arthur Wildman .. ..	" ..	" ..	3 Nov., " ..	5518
Mons Monson .. ..	Mate ..	" ..	14 " " ..	5557
Lars Larsen .. ..	" ..	" ..	28 " " ..	5558
James McDonald .. ..	Master ..	" ..	4 Jan., 1906 ..	5481
Donald Joseph Teixeira .. ..	Mate ..	" ..	24 " " ..	5559
Charles Daniel .. ..	Master ..	" ..	29 " " ..	5534
Frederick Jervase Lyons Radford .. ..	" ..	" ..	29 " " ..	5560
Louis Belmont Vasta .. ..	Mate ..	" ..	2 Feb., " ..	5561
Charles U. F. A. Greenberg .. ..	Master ..	" ..	9 " " ..	5394
Henry Sauer .. ..	Mate ..	" ..	21 " " ..	5562
Donald Rae .. ..	" ..	" ..	28 " " ..	5563
William John Grigg .. ..	" ..	" ..	15 March, " ..	5564
Sofus Anton Miller .. ..	Master ..	" ..	23 " " ..	5529
Walter Thomas Brigden .. ..	" ..	" ..	29 " " ..	5515
Andrew McDougall .. ..	" ..	River trade ..	23 May, 1905 ..	3410
Ernest Paterson Saunders .. ..	" ..	" ..	23 " " ..	3411
William Sinclair Coutts .. ..	" ..	" ..	23 " " ..	3412
George Herbert Baxter .. ..	" ..	" ..	29 " " ..	3413
John George Langton .. ..	" ..	" ..	29 " " ..	3414
William McKegg .. ..	" ..	" ..	26 June, " ..	3415
Philip Robert Going .. ..	" ..	" ..	28 " " ..	3416
Henry Richard Morse .. ..	" ..	" ..	10 July, " ..	3417
James Duncan Campbell .. ..	" ..	" ..	18 " " ..	3418
Bert Arthur Meyenberg .. ..	" ..	" ..	7 Aug., " ..	3419
Richard Jones .. ..	" ..	" ..	6 Sept., " ..	3420
Frederick Hadfield .. ..	" ..	" ..	6 " " ..	3421
William Henry Dawson .. ..	" ..	" ..	15 " " ..	3422
Hemen Walter Vile .. ..	" ..	" ..	4 Oct., " ..	3423
John Coleman .. ..	" ..	" ..	4 " " ..	3424
Thomas Samuel Joyce .. ..	" ..	" ..	26 " " ..	3425
Cecil Arnold Vause .. ..	" ..	" ..	2 Nov., " ..	3426
Benjamin Bright .. ..	" ..	" ..	2 " " ..	3427
William Ernest Tye .. ..	" ..	" ..	16 " " ..	3428
Edward Jackson .. ..	" ..	" ..	28 " " ..	3429
James William Patterson Thomson .. ..	" ..	" ..	4 Dec., " ..	3430
Robert Scollay .. ..	" ..	" ..	11 " " ..	3431

RETURN of MASTERS, MATES, and ENGINEERS to whom CERTIFICATES of COMPETENCY were issued during the Year ended 31st March, 1906—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
George Howe Cook .. .. .	Master .. .. .	River trade .. .. .	29 Jan., 1906 .. .. .	3432
Edmund Joseph Reisterer .. .. .	" .. .. .	" .. .. .	27 March, " .. .. .	3433
John Frederick Anderson .. .. .	" .. .. .	" .. .. .	27 " .. .. .	3434
Archibald Gray .. .. .	3rd-class engineer .. .. .	Foreign trade .. .. .	12 May, 1905 .. .. .	793
John McLeod Aikman .. .. .	" .. .. .	" .. .. .	12 " .. .. .	794
James Alexander Wilson .. .. .	" .. .. .	" .. .. .	12 " .. .. .	795
William Douglas Mathieson .. .. .	" .. .. .	" .. .. .	12 " .. .. .	796
George Cunningham .. .. .	" .. .. .	" .. .. .	12 " .. .. .	797
John Anderson .. .. .	" .. .. .	" .. .. .	12 " .. .. .	798
Alister Strother Colvin .. .. .	" .. .. .	" .. .. .	12 " .. .. .	799
Gerhard George Mueller .. .. .	1st-class engineer .. .. .	" .. .. .	23 " .. .. .	258
Edward Looney, jun. .. .. .	2nd-class engineer .. .. .	" .. .. .	23 " .. .. .	582
Charles Weir .. .. .	1st-class engineer .. .. .	" .. .. .	23 " .. .. .	800
William McMillan .. .. .	3rd-class engineer .. .. .	" .. .. .	23 " .. .. .	801
Robert Bernard Gerring .. .. .	" .. .. .	" .. .. .	23 " .. .. .	802
Eric Tasman Pybas .. .. .	" .. .. .	" .. .. .	23 " .. .. .	803
James Austin Taylor .. .. .	" .. .. .	" .. .. .	23 " .. .. .	804
David Hay Kirkwood Jones .. .. .	" .. .. .	" .. .. .	23 " .. .. .	805
Fred Collier Cuff .. .. .	" .. .. .	" .. .. .	23 " .. .. .	806
Alexander Fraser Foster .. .. .	" .. .. .	" .. .. .	23 " .. .. .	807
Harford Albert Edwin Magrath .. .. .	" .. .. .	" .. .. .	23 " .. .. .	808
Samuel de Beer .. .. .	" .. .. .	" .. .. .	6 June, .. .. .	809
Michael Joseph McConville .. .. .	" .. .. .	" .. .. .	16 " .. .. .	810
William Stephen .. .. .	" .. .. .	" .. .. .	16 " .. .. .	811
John McLean .. .. .	1st-class engineer .. .. .	" .. .. .	16 " .. .. .	812
William Earnshaw .. .. .	2nd-class engineer .. .. .	" .. .. .	30 " .. .. .	536
Charles Edward Tomlinson .. .. .	3rd-class engineer .. .. .	" .. .. .	17 July, .. .. .	813
Frederick Charles Alexander Hadicke .. .. .	" .. .. .	" .. .. .	26 " .. .. .	814
John Senior Reynolds Woodhouse .. .. .	" .. .. .	" .. .. .	1 Aug., .. .. .	815
Ernest Escott Brooking .. .. .	" .. .. .	" .. .. .	4 " .. .. .	816
Hugh Walker .. .. .	" .. .. .	" .. .. .	14 " .. .. .	817
James Allen Knowles .. .. .	" .. .. .	" .. .. .	14 " .. .. .	818
Charles Brebner .. .. .	" .. .. .	" .. .. .	14 " .. .. .	819
Andrew John Monat .. .. .	" .. .. .	" .. .. .	14 " .. .. .	820
John William Watson .. .. .	" .. .. .	" .. .. .	17 " .. .. .	821
S. Sendalg Hutton .. .. .	" .. .. .	" .. .. .	17 " .. .. .	822
George Wilson .. .. .	" .. .. .	" .. .. .	17 " .. .. .	823
Joseph Fraser Hurst Alexander .. .. .	" .. .. .	" .. .. .	31 " .. .. .	824
John McLeish Maxwell .. .. .	" .. .. .	" .. .. .	31 " .. .. .	825
William Reid Douglas .. .. .	" .. .. .	" .. .. .	31 " .. .. .	826
Hector McKenzie .. .. .	" .. .. .	" .. .. .	31 " .. .. .	827
Joel Barnett Moss .. .. .	2nd-class engineer .. .. .	" .. .. .	1 Sept., .. .. .	692
William Dan Berry .. .. .	3rd-class engineer .. .. .	" .. .. .	13 " .. .. .	828
Lorne Murphy .. .. .	" .. .. .	" .. .. .	19 " .. .. .	829
William Bampton Morgan .. .. .	" .. .. .	" .. .. .	19 " .. .. .	830
John James Cowan .. .. .	" .. .. .	" .. .. .	19 " .. .. .	831
Donald Stuart Darcy Harris .. .. .	" .. .. .	" .. .. .	19 " .. .. .	832
Alexander Ross .. .. .	" .. .. .	" .. .. .	19 " .. .. .	833
George John Stitt .. .. .	1st-class engineer .. .. .	" .. .. .	21 " .. .. .	515
John William McLaren .. .. .	3rd-class engineer .. .. .	" .. .. .	26 " .. .. .	834
Alexander Dove Pirie .. .. .	" .. .. .	" .. .. .	9 Oct., .. .. .	835
John Bruce .. .. .	2nd-class engineer .. .. .	" .. .. .	9 " .. .. .	686
Frank Carter .. .. .	3rd-class engineer .. .. .	" .. .. .	9 " .. .. .	836
Arthur Fred Priddey .. .. .	" .. .. .	" .. .. .	9 " .. .. .	837
Cecil Nicholson Willis .. .. .	" .. .. .	" .. .. .	9 " .. .. .	838
James Jeffries .. .. .	" .. .. .	" .. .. .	19 " .. .. .	839
John Greengrass .. .. .	" .. .. .	" .. .. .	8 Nov., .. .. .	840
John Stitt .. .. .	" .. .. .	" .. .. .	8 " .. .. .	841
Harry Anderson .. .. .	" .. .. .	" .. .. .	16 " .. .. .	842
Nigel Guthrie .. .. .	" .. .. .	" .. .. .	16 " .. .. .	843
Thomas Wilfred Fletcher Garlick .. .. .	" .. .. .	" .. .. .	16 " .. .. .	844
Clayton Dudley Hall .. .. .	" .. .. .	" .. .. .	16 " .. .. .	845
Herbert England Schmidt .. .. .	" .. .. .	" .. .. .	23 " .. .. .	846
David Findlay .. .. .	" .. .. .	" .. .. .	2 Dec., .. .. .	847
Charles Wallace Saunders .. .. .	" .. .. .	" .. .. .	2 " .. .. .	848
James Gibson Bannatyne .. .. .	1st-class engineer .. .. .	" .. .. .	2 " .. .. .	342
Donald Dudley Potts .. .. .	3rd-class engineer .. .. .	" .. .. .	4 " .. .. .	849
Ernest Wilson Mackley .. .. .	" .. .. .	" .. .. .	12 " .. .. .	850
Douglas William Soundy .. .. .	" .. .. .	" .. .. .	12 " .. .. .	851
John Alex. MacArthur .. .. .	" .. .. .	" .. .. .	19 " .. .. .	852
William Edwin Hodgson .. .. .	" .. .. .	" .. .. .	28 " .. .. .	853
Peter McKivatt .. .. .	" .. .. .	" .. .. .	5 Jan., 1906 .. .. .	854
Alfred George Fordham .. .. .	" .. .. .	" .. .. .	5 " .. .. .	855
William John White .. .. .	1st-class engineer .. .. .	" .. .. .	18 " .. .. .	404
Ernest Alexander Edgar Binns .. .. .	2nd-class engineer .. .. .	" .. .. .	24 " .. .. .	662
Charles Evers Bell .. .. .	3rd-class engineer .. .. .	" .. .. .	25 " .. .. .	856
James Patterson Fyffe .. .. .	" .. .. .	" .. .. .	25 " .. .. .	857
John Forbett .. .. .	" .. .. .	" .. .. .	25 " .. .. .	858
Hathen Wallace Houghton .. .. .	" .. .. .	" .. .. .	25 " .. .. .	859
Gilbert Stuart Mitchell .. .. .	" .. .. .	" .. .. .	29 " .. .. .	860
Leo Minetti Amodeo .. .. .	" .. .. .	" .. .. .	2 Feb., .. .. .	861
Peter Dawson .. .. .	" .. .. .	" .. .. .	2 " .. .. .	862
Walter Edwin Hughes .. .. .	" .. .. .	" .. .. .	2 " .. .. .	863
James Cable .. .. .	" .. .. .	" .. .. .	9 " .. .. .	864
Henrich Franz Vosseler .. .. .	" .. .. .	" .. .. .	9 " .. .. .	865
Charles Maurice Baker .. .. .	" .. .. .	" .. .. .	9 " .. .. .	866

RETURN of MASTERS, MATES, and ENGINEERS to whom CERTIFICATES of COMPETENCY were issued during the Year ended 31st March, 1906—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Ivo Roydon Gilmour .. .. .	3rd-class engineer ..	Foreign trade ..	9 Feb., 1906 ..	867
James Tenick Dennison .. .. .	" ..	" ..	9 " " ..	868
Robert Marshall Hern .. .. .	" ..	" ..	9 " " ..	869
George Luke .. .. .	" ..	" ..	9 " " ..	870
Gerald Hillsdon Hutton .. .. .	" ..	" ..	2 March, " ..	871
Francis Henry .. .. .	1st-class engineer ..	" ..	6 " " ..	426
Robert Mackay .. .. .	3rd-class engineer ..	" ..	22 " " ..	872
Edward Manihera .. .. .	" ..	" ..	22 " " ..	873
Charles Thomas Brown .. .. .	" ..	" ..	22 " " ..	874
Gresley Haswell Wood .. .. .	" ..	" ..	22 " " ..	875
James Hutton .. .. .	2nd-class engineer ..	" ..	22 " " ..	679
Claude Ernest Burgess .. .. .	Engineer ..	River trade ..	22 May, 1905 ..	1971
Charles Fletcher Hewitt .. .. .	" ..	" ..	23 " " ..	1972
George Isaac Allen .. .. .	" ..	" ..	23 " " ..	1973
George Herbert Baxter .. .. .	" ..	" ..	23 " " ..	1974
Arthur Underwood .. .. .	" ..	" ..	29 " " ..	1975
Joseph Ford .. .. .	" ..	" ..	29 " " ..	1976
Preston Henry Hutton Harold Webber .. .. .	" ..	" ..	29 " " ..	1977
John Vincent Riesterer .. .. .	" ..	" ..	29 " " ..	1978
William Archibald Smeed .. .. .	" ..	" ..	29 " " ..	1979
Charles William Partington .. .. .	" ..	" ..	29 " " ..	1980
Walter Cobourne .. .. .	" ..	" ..	29 " " ..	1981
Peter James Hughes .. .. .	" ..	" ..	29 " " ..	1982
Andrew Ernest Kusabs .. .. .	" ..	" ..	29 " " ..	1983
Bertie Edmund Colson .. .. .	" ..	" ..	17 July, " ..	1984
William Thomas Bloy .. .. .	" ..	" ..	17 " " ..	1985
Thomas Augustus Franks .. .. .	" ..	" ..	20 " " ..	1986
William Higgins .. .. .	" ..	" ..	8 Aug., " ..	1987
Joseph Horne .. .. .	" ..	" ..	8 " " ..	1988
William Henry Skidmore .. .. .	" ..	" ..	8 " " ..	1989
Willie Hodge .. .. .	" ..	" ..	20 Sept., " ..	1990
Peter Drumgool .. .. .	" ..	" ..	20 " " ..	1991
Edward de Jersey .. .. .	" ..	" ..	9 Oct., " ..	1992
William Bishill .. .. .	" ..	" ..	9 " " ..	1993
Alfred James Sutton .. .. .	" ..	" ..	9 " " ..	1994
Alfred Stanton .. .. .	" ..	" ..	9 " " ..	1995
Walter James White .. .. .	" ..	" ..	9 " " ..	1996
Henry Neil Roche .. .. .	" ..	" ..	9 " " ..	1997
Arthur George Schmidt .. .. .	" ..	" ..	9 " " ..	1998
Arthur Cecil Bowman .. .. .	" ..	" ..	9 " " ..	1999
Richard Stott .. .. .	" ..	" ..	10 " " ..	2000
John Owen .. .. .	" ..	" ..	9 " " ..	2001
Arthur Ernest Dryden .. .. .	" ..	" ..	14 " " ..	2002
Frederick John Stratford .. .. .	" ..	" ..	23 Nov., " ..	2003
David Perano .. .. .	" ..	" ..	18 Dec., " ..	2004
Charles Campbell Hall Gibbons .. .. .	" ..	" ..	25 Jan., 1906 ..	2005
William Henry Jackson .. .. .	" ..	" ..	25 " " ..	2006
Joseph William Hindley .. .. .	" ..	" ..	25 " " ..	2007
Edward Morrison Mackie .. .. .	" ..	" ..	25 " " ..	2008
Ernest Walter Hallett .. .. .	" ..	" ..	25 " " ..	2009
Thomas Stevenson Drake .. .. .	" ..	" ..	25 " " ..	2010
Robert Bryant .. .. .	" ..	" ..	25 " " ..	2011
Peter Pearson .. .. .	" ..	" ..	25 " " ..	2012
Alfred Stephen Amy .. .. .	" ..	" ..	25 " " ..	2013
William Harris .. .. .	" ..	" ..	9 Feb., " ..	2014
John Walsh .. .. .	" ..	" ..	9 " " ..	2015
John Bain Munro .. .. .	" ..	" ..	10 March, " ..	2016
David Henry Clarkson .. .. .	" ..	" ..	12 " " ..	2017
George John Vazey .. .. .	Marine engine-driver ..	" ..	23 May, 1905 ..	129
George Samuel Lapwood .. .. .	" ..	" ..	23 " " ..	130
George Edward King .. .. .	" ..	" ..	10 Oct., " ..	132
Halstead Kennett .. .. .	" ..	" ..	4 Nov., " ..	133
Thomas Brown Alfred Daniel .. .. .	" ..	" ..	5 Dec., " ..	134
Otto Rudolph Neumann .. .. .	" ..	" ..	29 Jan., 1906 ..	135
John Arthur Harwood McLeod .. .. .	2nd-class oil engineer ..	Sea-going ..	23 May, 1905 ..	42
Alfred Owen Grundy .. .. .	" ..	" ..	23 " " ..	43
Charles Smith .. .. .	" ..	" ..	23 " " ..	44
George William Twigden .. .. .	1st-class oil engineer ..	" ..	23 " " ..	45
David Henry Monson .. .. .	2nd-class oil engineer ..	" ..	5 Sept., " ..	46
Percival Henry Leigh .. .. .	" ..	" ..	5 " " ..	47
Charles Stuart Laird .. .. .	" ..	" ..	19 " " ..	48
Edgar Major Brown .. .. .	" ..	" ..	19 " " ..	49
William Innes .. .. .	" ..	" ..	19 " " ..	50
Frederick Going .. .. .	1st-class oil engineer ..	" ..	19 " " ..	51
Bernhard George Booth .. .. .	2nd-class oil engineer ..	" ..	4 Dec., " ..	52
Edwin John Tall .. .. .	" ..	" ..	12 " " ..	53
Noble Albert Jamieson .. .. .	" ..	" ..	30 Jan., 1906 ..	54
Thomas James Evans .. .. .	" ..	" ..	30 " " ..	55
Charles James Taw .. .. .	" ..	" ..	30 " " ..	56
Neil McCallum .. .. .	" ..	" ..	30 " " ..	57
William James Blacklock .. .. .	" ..	" ..	30 " " ..	58
Albert Bagley .. .. .	" ..	" ..	30 " " ..	59
John Arthur Harwood McLeod .. .. .	1st-class oil engineer ..	" ..	2 Feb., " ..	60
Owen Tudor McLeod .. .. .	" ..	" ..	2 " " ..	61
Alfred Owen Grundy .. .. .	" ..	" ..	2 " " ..	62

RETURN of MASTERS, MATES, and ENGINEERS to whom CERTIFICATES of COMPETENCY were issued during the Year ended 31st March, 1906—*continued*.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Frank Duckworth .. .. .	Oil engineer ..	River-trade ..	29 May, 1905 ..	27
William Edwards .. .. .	" ..	" ..	7 July, " ..	28
Isaac James Bradley .. ..	" ..	" ..	8 Aug., " ..	29
John William Sutherland ..	" ..	" ..	4 Sept., " ..	30
David Jones .. .. .	" ..	" ..	6 " " ..	31
Harry Green Wilkinson ..	" ..	" ..	18 " " ..	32
Richard Evans .. .. .	" ..	" ..	18 " " ..	33
William James Robb .. ..	" ..	" ..	18 " " ..	34
Albert Bagley .. .. .	" ..	" ..	18 " " ..	35
John Osborn Ewing .. .. .	" ..	" ..	18 " " ..	36
Thomas John Wesley Mathews ..	" ..	" ..	18 " " ..	37
Philip Robert Going .. ..	" ..	" ..	18 " " ..	38
Henry Webber .. .. .	" ..	" ..	31 Oct., " ..	39
Bertram William Newstead Wilkinson ..	" ..	" ..	5 Dec., " ..	40
Albert Edward Blandford ..	" ..	" ..	29 " " ..	41
Archibald Clark .. .. .	" ..	" ..	25 Jan., 1906 ..	42
Henry Harmond Calcott ..	" ..	" ..	25 " " ..	43
Leonard England Schmidt ..	" ..	" ..	25 " " ..	44
Charles Symonds .. .. .	" ..	" ..	25 " " ..	45
Allan Leslie Gatland .. ..	" ..	" ..	25 " " ..	46
Robert Henderson .. .. .	" ..	" ..	25 " " ..	47
James Leach .. .. .	" ..	" ..	25 " " ..	48
James Matthew Phillips ..	" ..	" ..	21 Feb., " ..	49
Robert Goldie .. .. .	Master ..	Fishing or cargo boat ..	16 Nov., 1905 ..	1
Thomas Augustus Franks ..	" ..	Fishing-boat ..	12 Dec., " ..	2
Alexander Watchlin .. ..	" ..	Fishing or cargo boat ..	9 March, 1906 ..	3
Daniel Bonner .. .. .	" ..	" ..	10 " " ..	4
George Howe Cook .. .. .	" ..	Sailing-vessel, restricted limits, passengers ..	4 Jan., " ..	1

RETURN showing the NUMBER of MASTERS, MATES, and ENGINEERS examined in New Zealand during the Year ended the 31st March, 1906, distinguishing 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	17	20	37	4	5	9	6	6	12	2	1	3	..	..	..	29	32	61
Home-trade masters and mates	17	6	23	10	12	22	5	..	5	1	3	4	..	..	..	33	21	54
River-steamers masters ..	17	2	19	6	2	8	..	..	..	5	1	6	..	..	..	28	5	33
Sea-going engineers (steam) ..	22	6	28	7	3	10	10	2	12	29	3	32	7	3	10	75	17	92
" (other mechanical power than steam)	18	..	18	2	1	3	..	..	..	1	..	..	1	..	..	21	1	22
River-steamers engineers ..	29	5	34	8	3	..	..	..	..	2	1	3	7	3	10	46	12	58
River engineers (other mechanical power than steam)	17	1	18	3	..	3	1	..	1	4	..	4	5	..	5	30	1	31
Marine-engine drivers ..	..	..	4	..	..	..	..	..	..	..	..	..	3	..	3	7	..	7
Master, fishing-boat or cargo-vessel up to 25 tons register	..	..	..	5	2	7	..	..	..	..	..	..	..	..	..	5	2	7
Master, sailing vessel, restricted limits	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Totals .. .. .	142	40	182	45	28	73	22	8	30	44	9	53	22	6	28	275	91	366

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, 1906.

Port.	Engagements and Discharges in Foreign Trade.				Engagements and Discharges in Home Trade.				Engagements and Discharges for Restricted Limits.				Total Engagements.		Total Discharges.		Grand Totals.	
	Number of Seamen engaged.	£ s. d.	Number of Seamen discharged.	£ s. d.	Number of Seamen engaged.	£ s. d.	Number of Seamen discharged.	£ s. d.	Number of Seamen engaged.	£ s. d.	Number of Seamen discharged.	£ s. d.	Number of Seamen.	£ s. d.	Number of Seamen.	£ s. d.	Number of Seamen.	£ s. d.
Auckland	1,307	96 9 6	1,255	86 18 6	2,661	168 1 0	2,460	158 2 0	943	57 7 0	912	55 4 0	4,911	321 17 6	4,627	300 4 6	9,538	622 2 0
Dunedin and Port Chalmers	2,596	184 10 6	2,611	183 9 0	1,199	79 7 6	1,176	77 18 0	..	..	..	..	3,795	263 18 0	3,787	261 7 0	7,582	525 5 0
Greymouth	24	1 11 6	26	1 13 0	187	13 13 0	158	11 9 6	..	..	..	..	211	15 4 6	184	13 2 6	395	28 7 0
Hokitika	..	..	..	..	16	1 4 0	12	0 18 0	..	..	..	..	16	1 4 0	12	0 18 0	28	2 2 0
Invercargill	72	5 8 6	34	2 8 0	26	1 6 0	26	1 6 0	..	..	..	..	26	1 6 0	26	1 6 0	52	2 12 0
Kaipara	84	6 6 0	69	4 14 0	50	3 15 0	49	3 9 0	..	..	..	..	122	9 3 6	83	5 17 0	205	15 0 6
Lytelton	370	27 15 0	253	18 19 6	1,431	107 6 6	1,412	105 18 0	..	..	..	..	221	15 8 0	215	15 2 6	436	30 10 6
Napier ..	29	2 3 6	21	1 2 0	120	6 19 0	116	6 2 6	40	2 5 0	38	2 5 0	1,811	135 16 6	1,673	125 9 6	3,484	261 6 0
Nelson ..	..	..	..	..	648	42 8 6	617	40 11 0	2	0 3 0	6	0 6 0	650	42 11 6	623	40 17 0	1,273	83 8 6
New Plymouth	..	..	1	0 1 6	5	0 7 6	6	0 9 0	..	..	..	..	5	0 7 6	7	0 10 6	12	0 18 0
Oamaru..	7	0 10 6	3	0 4 6	11	0 16 6	10	0 15 0	..	..	..	..	18	1 7 0	13	0 19 6	31	2 6 6
Patea ..	..	..	..	..	20	1 10 0	19	1 8 6	..	..	..	..	30	1 10 0	19	1 8 6	39	2 18 6
Pictou ..	6	0 10 6	7	0 10 6	69	5 0 0	57	4 5 6	..	..	..	..	75	5 10 6	64	4 16 0	139	10 6 6
Poverty Bay	9	0 13 6	6	0 9 0	107	6 3 6	130	6 19 6	..	..	..	..	116	6 17 0	136	7 8 6	252	14 5 6
Russell ..	..	..	..	..	1	0 1 6	..	..	..	..	..	..	1	0 1 6	..	..	1	0 1 6
Tauranga	..	..	..	..	1	0 1 6	2	0 3 0	..	..	..	..	1	0 1 6	..	..	3	0 4 6
Thames..	..	..	..	..	13	0 19 6	16	1 4 0	..	..	..	..	13	0 19 6	16	1 4 0	29	2 3 6
Timaru ..	38	2 17 0	18	1 7 0	71	5 5 6	61	4 10 6	..	..	..	..	109	8 2 6	79	5 17 6	188	14 0 0
Wairau ..	..	..	..	..	20	1 9 6	14	1 0 6	..	..	..	..	20	1 9 6	14	1 0 6	34	2 10 0
Waitara	..	..	..	..	13	1 6 0	8	0 16 0	..	..	..	..	13	1 6 0	8	0 16 0	21	2 2 0
Wanganui	16	1 4 0	14	1 1 0	148	9 7 0	156	9 18 0	..	..	..	..	164	10 11 0	170	10 19 0	334	21 10 0
Wellington	1,115	75 3 0	888	53 5 6	2,225	132 11 6	2,227	134 16 0	..	..	..	..	3,840	207 14 6	3,065	188 1 6	6,405	395 16 0
Westport	23	1 14 6	19	1 8 6	203	12 18 0	190	12 1 6	..	..	..	..	226	14 12 6	209	13 10 0	435	28 2 6
Totals ..	5,696	406 17 6	5,175	357 11 6	9,382	611 0 0	9,068	594 9 6	995	60 10 0	964	58 7 0	16,073	1,078 7 6	15,207	1,010 8 0	31,280	2,088 15 6

## 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
Moko Hinou ..	1st order dioptric	Fixed	..	Red, to show over Columbia Reef.	Stone	Timber	18 June, 1883
Tiritiri ..	2nd "	Flashing	10"	White .. ..	Iron	"	1 Jan., 1865
Ponui Passage ..	5th "	"	..	White, with red arc over Flat Rock	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
Cape Palliser ..	2nd order dioptric	Fixed	..	Red, to show over Bull Rock.	Iron	Timber	27 Oct., 1897
Pencarrow Head ..	2nd "	Revolving	*	White .. ..	"	"	1 Jan., 1859
Cape Egmont ..	2nd "	Fixed	..	" .. ..	"	"	1 Aug., 1881
Manukau Head ..	3rd "	"	..	" .. ..	Timber	"	1 Sept., 1874
Kaipara Head ..	2nd "	Flashing	10"	" .. ..	"	"	1 Dec., 1884
Brothers ..	2nd "	Fixed	10"	" .. ..	"	"	24 Sept., 1877
Cape Campbell ..	2nd order dioptric	Fixed	..	Red, to show over Cook Rock.	Timber	Timber	1 Aug., 1870
Godley Head ..	2nd "	Revolving	1'	White .. ..	Stone	Stone	1 April, 1865
Akaroa Head ..	2nd "	Fixed	..	" .. ..	Timber	Timber	1 Jan., 1880
Jack's Point ..	4th "	Flashing	10"	" .. ..	Iron	"	1 July, 1904
Moeraki ..	3rd "	Fixed	..	" .. ..	Timber	"	22 April, 1878
Taiaroa Head ..	3rd "	"	..	" .. ..	Stone	Stone	2 Jan., 1865
Cape Saunders ..	2nd "	Revolving	1'	Red .. ..	Timber	Timber	1 Jan., 1880
Nugget Point ..	1st "	Fixed	..	White .. ..	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
Stephen Island ..	1st "	Group flashing	†	White .. ..	"	"	29 Jan., 1894

\* Flashing twice every half-minute, with interval of three seconds between flashes.  
every half-minute.

† Two flashes in quick succession

## RETURN showing Number of FISHING-BOATS REGISTERED and LICENSED at each Port during Year ended 31st December, 1905.

Port.	Number registered.	Number licensed.	Port.	Number registered.	Number licensed.
Auckland .. ..	205	191	Brought forward ..	701	687
Blenheim .. ..	5	5	Nelson .. ..	48	48
Bluff .. ..	86	86	New Plymouth ..	17	17
Dunedin and Port Chalmers ..	92	92	Oamaru .. ..	46	46
Gisborne .. ..	2	2	Patea .. ..	..	..
Greymouth .. ..	6	6	Picton .. ..	25	25
Hokianga .. ..	8	8	Russell .. ..	54	54
Hokitika .. ..	4	4	Tauranga .. ..	3	3
Invercargill .. ..	49	49	Thames .. ..	46	46
Kaipara .. ..	25	25	Timaru .. ..	10	10
Lyttelton .. ..	184	184	Wanganui .. ..	4	1
Mangonui .. ..	8	8	Wellington .. ..	110	110
Napier .. ..	27	27	Westport .. ..	21	21
Carried forward ..	701	687		1,085	1,068

TABLE showing, for the Year 1905, the Number and Tonnage of Registered Vessels (exclusive of River Steamers) of the Colony of New Zealand which were employed wholly in the Home Trade, partly in the Home and partly in the Foreign Trade, and wholly 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 over.		Totals.		
	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.	
	Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.		Men and Boys.
In the Home (Coastal) Trade only—																															
Sailing ..	942,761	190	594,442	234	6	841	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Steam ..	771,996	320	554,000	391	304	4,471	415	7	1,685	127	62,250	88	73,193	178	21,019	46	21,293	66	32,169	85	21,832	77	1,028	50	11,269	52	23,473	62	..	..	..
Totals	1,714,757	510	1,148,442	625	365	3,124	456	7	1,685	127	62,250	88	73,193	178	21,019	46	21,293	66	32,169	85	21,832	77	1,028	50	11,269	52	23,473	62	..	..	..
Partly in the Home and partly in the Foreign Trade—																															
Sailing ..	..	..	..	..	..	4	725	32	1	275	10	1	396	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Steam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	..	..	..	..	..	4	725	32	1	275	10	1	396	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
In the Foreign Trade only—																															
Sailing ..	10	170	12	..	..	2	308	14	9	2,301	82	3	969	31	41,946	46	21,044	23	53,310	65	..	..	..	..	..	..	..	..	..	..	..
Steam ..	1	17	5	1	93	6	3	446	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	11	187	17	1	93	6	5	754	53	9	2,301	82	3	969	31	41,946	46	21,044	23	53,310	65	..	..	..	..	..	..	..	..	..	..
Grand Totals..	1824,944	527	1158,535	631	456	6,791	541	17	4,261	219	103,615	120	115,139	224	52,632	80	85,265	163	53,648	141	76,277	213	6,683	182	911,662	413	47,187	176	820087	697432	96,7264,336

TABLE showing the Number and Tonnage of Sailing and Steam Vessels which remained upon the Register of the Colony of New Zealand on the 31st December, 1904; of those added to and deducted from the Register during the Year 1905; and of those which remained upon the Register on the 31st December, 1905.

	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, 1904 .. .. .	332	44,515	42,275	249	112,907	67,607	581	157,422	109,882
Added to the Register,—									
Vessels registered for the first time—									
(a.) New vessels built at a port in the United Kingdom .. .. .	..	..	..	6	8,387	4,884	6	8,387	4,884
(b.) New vessels built at ports in British possessions .. .. .	10	473	407	14	1,757	988	24	2,230	1,395
(c.) Purchased from foreigners .. .. .	1	531	486	..	..	..	1	531	486
Vessels transferred from ports in the United Kingdom .. .. .	2	442	394	4	7,836	5,111	6	8,278	5,505
Vessels transferred from ports in British possessions .. .. .	4	736	682	6	981	534	10	1,717	1,216
Vessels registered <i>de novo</i> .. .. .	3	165	137	3	411	201	6	576	338
Tonnage added on remeasurement .. .. .	..	1	..	..	..	..	..	1	..
Total added .. .. .	20	2,348	2,106	33	19,372	11,718	53	21,720	13,824
Struck off the Register,—									
Vessels wrecked or otherwise lost .. .. .	6	2,508	2,309	2	204	121	8	2,712	2,430
Vessels broken up or unfit for use .. .. .	2	139	139	4	540	367	6	679	506
Vessels transferred to ports in the United Kingdom .. .. .	..	..	..	1	640	393	1	640	393
Vessels transferred to ports in British possessions .. .. .	2	175	171	..	..	..	2	175	171
Vessels sold to foreigners .. .. .	..	..	..	2	2,637	1,674	2	2,637	1,674
Vessels registered <i>de novo</i> .. .. .	4	189	168	2	352	227	6	541	395
Tonnage deducted on remeasurement or alteration (without re-registry) .. .. .	..	5	18	..	..	..	..	5	18
Total deducted .. .. .	14	3,016	2,805	11	4,373	2,782	25	7,389	5,587
Vessels on Register on 31st December, 1905 .. .. .	338	43,847	41,576	271	127,906	76,543	609	171,753	118,119

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, 1905.

Ports.	Sailing Vessels.			Steam Vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland .. .. .	216	19,568	18,081	116	15,580	8,992
Napier .. .. .	7	575	562	20	2,312	1,442
Wellington .. .. .	23	3,689	3,472	35	7,109	3,851
Nelson .. .. .	10	301	280	12	1,437	814
Lyttelton .. .. .	27	4,873	1,710	10	2,583	1,097
Dunedin .. .. .	42	13,508	13,192	72	97,990	59,881
Invercargill .. .. .	13	1,333	1,279	6	895	466
Totals .. .. .	338	43,847	41,576	271	127,906	76,543

RETURN showing the ORDERS IN COUNCIL which have been issued during the Year ended 31st March, 1906.

Date of Order.	Purpose of Order.
1905.	
April 10	Prescribes oyster-license fee for North Island.
" 10	Varies rules as to life-saving appliances on Home-trade vessels.
" 10	Approves deviation in plan of new N. breakwater, Greymouth.
" 10	Licenses J. O. Masefield to occupy foreshore as wharf-site, Batley, Kaipara.
" 10	Approves plans of E. Knewstubb's proposed boat- and slip-way, Otago Harbour.
" 10	Licenses E. Knewstubb to occupy foreshore, Otago Harbour.
" 10	Approves plans of James Park's proposed wharf and shed, Okarito.
" 10	Licenses James Park to occupy foreshore, Okarito.
" 29	Approves plans of Napier Harbour Board's proposed extension to Breakwater Wharf.
" 29	Appoints trustees for Kawhia Wharf.
" 29	Approves plans of Joseph Fell's shed and slip, Kohukohu, Hokianga.
" 29	Licenses Joseph Fell to occupy foreshore, Kohukohu, Hokianga.
" 29	Approves plans of drainage-sewer outfall at Anderson's Reef, Dunedin.
" 29	Extends close season for seals.
May 22	Authorises Wellington Harbour Board to reclaim land as site for boatsheds.
" 22	Approves plan of Havelock Town Board's proposed wharf.



RETURN showing the ORDERS IN COUNCIL which have been issued during the Year ended  
31st March, 1906—*continued.*

Date of Order.		Purpose of Order.
1905.		
May	22	Licenses Havelock Town Board to occupy foreshore as wharf-site.
"	22	Approves plan of Moffett Bros.' proposed wharf and tramway, Waikawa.
"	22	Licenses Moffett Bros. to occupy foreshore, Waikawa.
"	22	Approves plan of proposed wharf of Maraetai Bricks, Limited.
"	22	Licenses Maraetai Bricks, Limited, to occupy foreshore as wharf-site.
"	22	Approves Westport Harbour Board expending sum for improved accommodation at receiving-shed.
June	8	Approves plans of proposed reclamation, Waterloo Quay North.
"	8	Approves plans of Alpha Sawmills Timber and Shipping Company's proposed booms, Gisborne.
"	26	Approves plans of Wellington Harbour Board's proposed extension of Jervois Quay staging.
"	26	Licenses George Swain to occupy foreshore, Kaipipi Bay, Stewart Island, as wharf-site.
"	26	Fixes dues for Waitemata County Council's Waiwera wharf.
July	6	Appoints members of Westport Harbour Board.
"	6	Appoints members of Greymouth Harbour Board.
"	18	Approves plans of works near Harrington Point, Otago Harbour.
"	24	Approves modified plans of Auckland Harbour Board's proposed reconstruction of Queen Street Wharf.
Aug.	2	Appoints member of Westport Harbour Board.
"	4	Approves plans of construction of breastwork outside concrete face-wall, Waterloo Quay, Wellington Harbour.
"	7	Approves plans of Napier Harbour Board's proposed wharf, Western Pier, Inner Harbour.
Sept.	4	Approves plans of Woolston Borough Council's proposed bridge over Heathcote River.
"	11	Approves Napier Harbour Board's plans of proposed wharf-extension in ferro-concrete.
"	11	Approves plans of Sounds Co-operative Dairy Company's proposed wharf, Paradise Bay, Pelorus Sound.
"	11	Licenses Sounds Co-operative Dairy Company to occupy foreshore, Paradise Bay, Pelorus Sound.
"	18	Approves plans of Dive and Ramsay's proposed booms, Mangamuka River, Hokianga Harbour.
"	18	Licenses Dive and Ramsay to occupy foreshore, Mangamuka River, Hokianga Harbour.
"	18	Extends close season for seals.
"	25	Grants land to Gisborne Harbour Board for purposes of "The Harbours Act, 1878."
"	25	Vests management of Whangaroa Wharf in County Council and prescribes dues.
Oct.	9	Fixes dues for White-pine Company's Wharf, Wairoa River, Kaipara.
"	16	Approves plans of proposed graving-dock, Wellington Harbour.
"	16	Approves plans of works at Calliope Dockyard, Auckland Harbour.
"	16	Approves plans of Messrs. Cording and Petley's proposed boatshed and skids, Worsler Bay.
"	30	Revokes Order in Council licensing G. J. Black to occupy foreshore, Akaroa Harbour.
"	30	Vests management of Wainui Wharf in Akaroa County Council and prescribes regulations therefor.
"	30	Approves plan of Waipu River Board's proposed improvement works.
Nov.	4	Approves plan of proposed extension of Ferry Jetty, Wellington Harbour.
"	4	Revokes Order in Council fixing Waipu Wharf dues and fixes other dues.
"	4	Licenses New Zealand Land Association to occupy foreshore, Raglan Harbour, as wharf-site.
"	27	Licenses Tokomaru Farmers Co-operative Company to occupy foreshore as site for boatshed.
"	27	Approves plans of F. A. Whitaker's proposed bathing-house, Howick.
"	27	Licenses F. A. Whitaker to occupy foreshore as site for bathing-house.
Dec.	11	Revokes Order in Council approving construction by Napier Harbour Board of timber wharf on east side of Western Mole, and approves plan of same in ferro-concrete.
"	11	Approves plans of Messrs. Watkins Bros.' proposed booms, Waitemata River, Raglan Harbour.
"	11	Licenses Watkins Bros. to occupy foreshore as site for booms, Waitemata River, Raglan Harbour.
"	19	Revokes Order in Council licensing New Brighton Lifeboat and Fishing Association to occupy foreshore, New Brighton, as site for boatshed.
"	19	Revokes Order in Council licensing George Tolerton to occupy foreshore, Whangaroa Harbour.
"	29	Prohibits trawling between Waimakariri River and Okain's Bay.
"	29	Appoints member of Westport Harbour Board.
"	29	Vests management of Te Akau Wharf in Raglan County Council, and prescribes dues for same.
"	29	Makes regulations and fixes dues for Kaipara wharves controlled by Hobson County Council.
"	29	Approves plans of C. C. H. Gibbons's proposed additions to wharf, &c., Wairoa River, Kaipara Harbour.
"	29	Licenses C. C. H. Gibbons to occupy foreshore, Wairoa River, Kaipara, as site for log-slip and additions to wharf.
1906.		
Jan.	8	Appoints members of Greymouth Harbour Board.
"	12	Makes regulations for controlling traffic on Lake Rotorua and management of wharves, and prescribes dues for same.
"	17	Approves plans of M. Babich's proposed oyster-storage beds, Ballena Bay, Wellington Harbour.
"	23	Revokes Order in Council licensing John Wigmore to occupy foreshore, Manukau Harbour, as site for timber booms.
"	23	Vests Upper Omaha Wharf in Rodney County Council and fixes dues for same.
"	23	Approves plans of Karamea Sawmilling Company's proposed wharf, Karamea.
"	23	Licenses Karamea Sawmilling Company to occupy foreshore, Karamea, as wharf-site.
"	23	Approves plans of G. B. Watson's proposed wharf near Pakawau, Golden Bay.
"	23	Licenses G. B. Watson to occupy foreshore near Pakawau, Golden Bay, as wharf-site.
"	23	Approves plans of proposed mill and wharves for Mitchelson Timber Company, Whangape Harbour.
"	23	Licenses Mitchelson Timber Company to occupy foreshore, Whangape Harbour, as site for mill and wharves.
Feb.	2	Revokes Order in Council licensing George Penney to occupy foreshore, Whangaroa.
"	8	Amends regulations and dues for Kaikoura Wharf.
"	17	Revokes Order in Council licensing William Downes to occupy foreshore, Whangaroa, as site for boatshed.
"	27	Licenses Kauri Timber Company to occupy foreshore, Hokianga Harbour, and fixes dues for Kohukohu Wharf.
March	1	Authorises reclamation of land at Freeman's Bay, Auckland Harbour.
"	1	Fixes light dues for port of Hokianga.
"	3	Revokes Order in Council licensing George Swain to occupy foreshore, Kaipipi Bay, Stewart Island, as wharf-site.
"	3	Approves plans of George Swain's proposed wharf, Kaipipi Bay, Stewart Island.
"	3	Licenses George Swain to occupy foreshore, Kaipipi Bay, Stewart Island, as wharf-site.
"	3	Approves plan of proposed extension of Jetty Street Wharf, Otago Harbour.
"	19	Approves plan of proposed widening of road, and authorises construction of sea-wall, Mangonui.

# RETURN of ACCIDENTS to SEAMEN and Others on board Ship reported to MARINE DEPARTMENT during the Financial Year ended 31st March, 1906.

Date of Accident.	Name of Vessel, Port of Registry, and Official No.	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.
1905.					
April 8	Kamona, s.s., Dunedin, 101486	John McIvor, A.B. Edward Chatham, A.B.	Concussion .. ..	Queen's Wharf, Wellington	John McIvor went on board under the influence of liquor and fell down the bridge-ladder and was conveyed to the hospital, where he was found to be suffering from concussion of the brain. In conveying McIvor from the "Kamona" across the deck of the "Kumara" to the wharf Edward Chatham fell between the two ships, head downwards. He was extricated and carried to the hospital, where he remained four days.
" 24	Moeraki, s.s., Dunedin, 101488	J. Coyle, fireman	Bruised back .. ..	At sea ..	While J. Coyle, fireman, was engaged in the stokehold a large iron rake fell on his back, inflicting a nasty bruise.
May 2	Awaroa, s.s. .. ..	F. Berger, fireman	Drowned .. ..	Dargaville ..	Deceased fell off the s.s. "Gosford" into the water and was drowned. Verdict: Accidentally drowned.
" 3	Monowai, s.s., Dunedin, 84497	R. Miffin, trimmer	Leg jammed .. ..	Port Chalmers ..	The crew were engaged at fire and boat drill, and when swinging the boat inboard he got his leg jammed between the chock and the boat, inflicting a bad strain.
" 24	Hauroto, s.s., Dunedin, 84479 ..	H. Smith, fireman	Injury to left side and toes of left foot .. ..	At sea ..	H. Smith, fireman, about breakfast-time, sat on the edge of an open hatchway and fell down to the between-deck, causing injury to his left side and toes of his left foot.
" 25	Echo .. ..	J. Thomson, A.B.	Ankle injured .. ..	Dunedin ..	J. Thomson, A.B., was slinging timber when one of the fitches or boards slipped as he was making up the sling and struck him on the ankle. He was sent to the hospital for treatment.
June 8	Moura, s.s., Dunedin, 101726 ..	T. Tulloch, lamps and A.B.	Foot injured .. ..	At sea ..	While T. Tulloch was cleaning the skylight over steering-gear his foot slipped and came in contact with the engine, and caused an injury to his foot. He was sent to the hospital on arrival in Auckland.
" 8	Moana, s.s., Dunedin, 101479 ..	C. Smith, fireman	Foot injuries .. ..	At sea ..	C. Smith met with an accident through a firebar falling on and injuring his foot. He was sent to the hospital on arrival in Auckland.
" 8	Moana, s.s., Dunedin, 101479 ..	T. Fern, second cook	Side injured .. ..	At sea ..	Through the rolling of the ship T. Fern received a severe fall, injuring his side.
" 10	Endeavour .. ..	J. Newman, A.B.	Injury to third finger of left hand ..	Whakatane ..	J. Newman, when stowing some wire away, a jagged end of some injured his finger, causing inflammation, which necessitated his discharge on arrival at Auckland.
" 12	Canopus, s.s., Dunedin, 101490	William Innes, second engineer	Right knee injured .. ..	Lytelton ..	While working at the dynamo, W. Innes, second engineer, injured his knee, and went ashore for medical treatment.
" 12	Gem, Auckland, 66577	H. Harding, A.B.	Left hand injured .. ..	Ngunguru ..	While Harding was working the winch the handle flew round and struck and injured his left hand.
" 12	Rotomahana, s.s., Dunedin, 75224	J. McConnell, A.B.	Leg injured .. ..	Wellington ..	J. McConnell, A.B., slipped and fell on the after-deck, injuring his leg. He received medical attendance and went on with the ship.
" 13	Ngapahi, s.s., Auckland, 102329	W. Daniels, A.B.	Toe injured .. ..	Whangarei ..	While landing a winch (cargo) the clutch slipped and fell on his left foot, injuring his toe.
" 14	Moonah, Sydney, 112546 ..	C. Lake, A.B.	Shoulder hurt .. ..	Auckland ..	While C. Lake was going down the hatchway he fell into the hold, hurting his shoulder.

RETURN OF ACCIDENTS TO SEAMEN and Others on board Ship reported to MARINE DEPARTMENT, &c.—*continued.*

Date of Accident.	Name of Vessel, Port of Registry, and Official No.	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.
1905. June 14	Muritai, Auckland, 89319	R. Campbell, A.B.	Knee injured	At sea	When shifting cases of kerosene on deck he struck his knee. At time injury appeared slight, but became worse, and man had to be discharged and sent to hospital, Wellington.
"	Wakanui, s.s., Plymouth, 108566	P. Wallace, steward	Effects of fall	Lyttelton	P. Wallace, ship's steward, accidentally fell down the steerage-ladder and was attended to by ship's doctor.
"	Waikare, Dunedin, 101480	D. Wishart, fireman	Back injured	At sea, between Hobart and Bluff	Thrown by roll of vessel against stokehole-ladder, injuring his back.
"	Wellington, s.s., Auckland, 40324	J. Malley, trimmer	Two ribs broken	At sea	J. Malley, trimmer, fell down the engine-room companion and broke two of his ribs.
July 14	Taieri, s.s., Dunedin, 95210	Henry Mouatt, A.B.	Fractured skull	Wellington	Supposed that he fell down fore-castle-ladder.
"	Glenelg, Auckland, 76187	R. Matyke, A.B.	Left knee injured	Wharf, Auckland	While walking along wharf taking a line to a pile, Matyke struck left knee against a pile with such force that he had to be discharged for medical treatment.
July 31	Hikurangi (scow), Auckland	A. Hohnberg, A.B.	Left arm injured	At sea, Hauraki Gulf	Hikurangi collided with scow Rata; Hohnberg thrown against galley, injuring arm, and necessitating discharge for medical treatment.
Aug. 8	Volador	John Halliday, second mate	Leg broken	Wharf, Wellington	While timber being slung log fell and broke left leg below knee; Mr. Halliday removed to hospital.
"	Muritai, Auckland, 89319	Thomas Graham, fireman	Little finger, right hand	Onehunga	While greasing machinery injured finger, necessitating discharge and medical treatment.
"	Rarawa, s.s., Auckland, 115207	R. Hopkins, seaman	Injury to head	Onehunga	While unhooking a block from end of derrick it slipped from man's hands, and in falling struck his head, inflicting a nasty cut; discharged for medical treatment.
"	Rarawa, s.s., Auckland, 115207	C. Baldrey, A.B.	Blow in groin	Wharf, New Plymouth	When heaving vessel alongside wharf the rope surged on the winch, and the bight Baldrey was holding struck him in the groin, causing a swelling which necessitated his discharge for medical treatment.
"	Elizabeth Graham, Sydney, 56539	Robert Bull, A.B.	Fractured tibia, right leg	Latitude 27° 44' S., longitude 164° 46' E.	While loosing upper foretop-sail, fell backward, striking and breaking ratlines of fore-rigging in descent, and then fell overboard, whence he was rescued.
"	Star of Australia, Belfast, 110507	E. Y. Doncaster	Broken thigh	Wharf, Lyttelton	While going on board he fell between wharf and ship; taken to casual ward, Lyttelton Hospital.
"	Rotomahana, Dunedin, 75224	G. Retty	Slight injury	Between Wellington and Lyttelton	While screwing up a port he stepped on an empty locker door, and slightly injured himself.
Sept. 4	Rotomahana, Auckland, 75119	J. Jerome, greaser	Left ankle sprained	At sea, near Auckland	While greasing tail-rods he slipped on grating and sprained left ankle, and had to be discharged.
"	Rakanoa, Dunedin, 101477	J. Mudie, greaser	Gash on thigh	Wharf, Auckland	While at work in stokehole a firebar slipped from others in a sling, and struck him on right leg, inflicting a nasty gash, which necessitated discharge and removal to hospital.
"	Storm, s.s., Lyttelton, 118090	D. Fisher, seaman	Fingers broken	Wharf, Onehunga	While driving steam-winch his fingers, left hand, were caught between rope and barrel, causing a nasty fracture.
"	Pateana, s.s., Launceston, 79262	John Briton, steward	Injury to knee	At sea	Slipped in cross alley-way; sent to hospital, Dunedin, 27th.

RETURN OF ACCIDENTS TO SEAMEN and Others on board Ship reported to MARINE DEPARTMENT, &c.—*continued.*

Date of Accident.	Name of Vessel, Port of Registry, and Official No.	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.
1905. Sept. 28	Manchester (dredge), Lyttelton, 97813	John Eckmann, dredgehand	Drowned .. ..	Near wharf, Lyttelton ..	Boat in which deceased was in charge of moorings while dredge went away with load of spoil; on return propeller swamped boat, and Eckmann was drowned. Two buoys thrown to him, but he failed to reach them. After swimming a while, he sank. Dredge fouled moorings and drew boat under her stern, smashing her up.
Oct. 21	Hawk (scow), Melbourne, 82084	John McKeon, seaman..	Sprained right ankle .. ..	Onehunga ..	Fitting a strop on main boom, slipped and fell to deck and sprained right ankle, necessitating discharge for medical treatment.
" 21	Navua, s.s., Dunedin, 117583 ..	A. Castel, seaman ..	Internal .. ..	Auckland ..	Whilst discharging sugar he was struck by a sling, jamming him against a stanchion, injuring him internally. Discharged for medical treatment.
Nov. 3	Poharua, s.s., Dunedin, 98061	E. Millar, A.B.	Not stated .. ..	Timaru ..	Jumped on a hatch which was not secured, and fell into hold 30 ft. to 40 ft.; at first refused, but afterwards saw doctor, and on his advice stayed home a trip, refusing to go into hospital.
" 3	Wimmera, s.s., Melbourne, 120722	M. J. Enright, trimmer	Ear .. ..	Lyttelton ..	As he was going into the fore-castle he slipped and fell down the ladder; ordered to hospital by doctor; no blame attached to any one.
" 13	Mokoia, s.s., Dunedin, 101483	P. Oakland, A.B.	Sprained wrist .. ..	Auckland Wharf ..	Fell on deck from No. 3 crane and sprained wrist, necessitating discharge for medical treatment.
Nov. 21	Hawk (scow), Auckland, 102337	F. Samburgh, cook ..	Scalded foot .. ..	.. ..	Scalded foot while vessel lying at Whangape.
Dec. 1	Maheno, Dunedin, 117588 ..	J. Swan, trimmer ..	Hurt finger .. ..	At sea .. ..	While closing ash-pit door, allowed it to fall on finger.
" 1	Cygnut, Lyttelton, 91893 ..	V. Ferarar, steward ..	Broke rib .. ..	Lyttelton Wharf ..	While stepping on board he slipped and fell on the rail, breaking one rib.
" 1	Wakanui, s.s., Plymouth, 108566	Alfred McDonald, fireman	Drowned .. ..	Dunedin Harbour ..	Inquest held and verdict returned to effect that deceased met death by drowning, but no evidence to show how.
" 4	Wakanui, s.s., Plymouth, 108566	R. Martin, A.B.	Dislocated hip .. ..	Wharf, Dunedin ..	Fell on deck and dislocated hip; removed to hospital; probably able to rejoin ship in nine days.
" 19	Cygnut, s.s., Lyttelton, 91893 ..	John Etheridge, mate ..	Bruised leg .. ..	Lyttelton Harbour ..	A piece of timber fell out of the slings during unloading, and struck Etheridge on right leg, giving him a nasty bruise.
" 23	Rarawa, s.s., Auckland, 115207	A. Schmidt, greaser ..	Crushed forefinger .. ..	Onehunga Bar ..	While employed greasing, forefinger caught in valve-gear; discharged for medical treatment.
" 27	Glenelg, s.s., Auckland, 76187	R. Skibley, seaman ..	Forefinger crushed .. ..	Wharf, Auckland ..	While tipping coal-tubs, forefinger of right hand crushed, necessitating discharge for medical treatment.
" 28	Ngapuhi, s.s., Auckland, 102329	T. White, seaman ..	Injured left ribs .. ..	Between Auckland and Whangarei ..	Slipped in stokehole.
1906. Jan. 6	Totara (scow), Auckland, 78398	Eric Anderson ..	Inflammation of stomach .. ..	Whangarei ..	Sent to hospital, Whangarei, 6th January, 1906; died 31st January, 1906.
" 15	Baden Powell, s.s., Wellington, 112552	Thomas Carrick, fireman	Hurt right foot .. ..	En route to Lyttelton ..	Slipped on stokehole-plates and hurt foot; unable to walk.
" 17	Karamea, s.s., Southampton, 110264	Henry Lees, fireman ..	Drowned .. ..	Port Chalmers ..	He walked off end Port Chalmers wharf, and was drowned; every effort made to save him, without success, and harbour afterwards dragged for two days without avail.

## RETURN OF ACCIDENTS TO SEAMEN and Others on board Ship reported to MARINE DEPARTMENT, &amp;c.—continued.

Date of Accident.	Name of Vessel, Port of Registry, and Official No.	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.
1906. Jan. 18	Taiari, s.s., Dunedin, 95210 ..	James Houston, fireman	Abscess right leg	At sea ..	When turning ventilators he slipped and struck leg against a bolt, causing an abscess to form, which requires opening and man lying up for four or five days.
"	Stella, s.s., Auckland, 60402 ..	W. Evans, seaman	Injury to back ..	Auckland ..	While assisting to put lifeboat into chocks, the fall carried away and boat came down on man's back, causing injury necessitating medical treatment.
"	Tongariro, s.s., Plymouth, 111356	William G. Swan, third cook	Drowned ..	Wellington ..	Body found floating in Wellington Harbour. Deceased had been absent from the ship for about seven days before vessel's departure from colony, and had taken his effects with him.
"	Eliza Firth, Lyttelton, 59540 .. Morning Light, Lyttelton, 89368	Charles Laing, A.B. .. James Sinclair, A.B. ..	Hernia .. Injured ankle ..	On board Eliza Firth Lyttelton ..	Stated to be caused by lifting timber.
"	Rarawa, s.s., Auckland, 115207	Miss Marks, stewardess ..	Scalded right foot	Onehunga Wharf ..	While sculling ship's boat, slipped off thwart and hurt his ankle.
Feb. 4	Waverley, s.s., Nelson, 69012 ..	Thomas Jones, second mate	Middle finger right hand & badly crushed, and two fingers slightly injured	Waitui Bay, between Nelson and Wellington	Some one left a bucket of scalding water outside her door, and in stepping out she put her right foot into it, scalding the foot severely.
"	Tramp (scow), Auckland, 102344	F. Pelley, seaman ..	Bruised left foot	Chamberlain Island	While putting the anchor on the rail, with the assistance of a seaman, the hand was crushed. Accident caused by pitching of the sea making the anchor slip.
"	Kaipara, s.s., Plymouth, 114630	Walter Broyd, trimmer	Injury to back and scalp wound ..	Lyttelton Wharf ..	While assisting to jack logs the jack slipped and fell on right foot.
"	Zelateur (barque), Auckland, 117622	F. Gause ..	Bruised left side	Helensville ..	Stepped over edge of hatch in 'tween-decks, over which tarpaulin spread; tarpaulin gave under his weight, and man fell into hold about 25 ft. below.
"	Rarawa, s.s., Auckland, 115207	J. Olney, fireman	Twisted right knee	Between New Plymouth and Onehunga	While breaking down coal in hold he fell on a shovel, bruising side, and had to be discharged for medical treatment.
"	Elizabeth Graham (barque), Sydney, 56539	Edwin Watkins, boy ..	Right leg broken	Wellington Wharf	While tending fires man fell owing to rolling of ship, and twisted right knee; continued working but knee got too painful and he was discharged for medical treatment.
"	Rotomahana, Auckland, 75119	Joseph Pea, seaman ..	Injury right foot	Thames ..	While carrying bucket of water along 'tween-deck Watkins fell into lower hold.
Mar. 5	Wootton, s.s., Sydney, 112500	John Smith, second engineer	Top of third finger right hand cut off, and middle finger crushed	Off Greymouth ..	While slinging cases on wharf one fell on right foot, injuring it, though not seriously; foot since started to fester, and man discharged for medical treatment.
"	Pohorua, Dunedin, 98561	J. Paris ..	Cut hand ..	Greymouth ..	While feeling the eccentric-straps vessel gave a roll and his fingers were jammed and injured, top of third finger being taken off.
"	Endor (cutter)	C. Shears, seaman ..	Drowned ..	Foveaux Strait ..	While drawing a bucket of water from the seacock he cut his hand on the brass guard, and was discharged for medical treatment.
					Verdict of Coroner's jury: That the said death occurred while Shears was working the tiller during a gale on 31st March, 1906, at West Cape, Chalky Sound, by means of a rope slipped round the tiller, and accidentally fell overboard and was drowned; no blame attachable to any one, and all reasonable means were used so save him.

## SUMMARY of CASUALTIES to SHIPPING reported to the Marine Department during the Financial Year ended the 31st March, 1906.

Nature of Casualty.	Casualties on or near the Coasts of the Colony.						Casualties outside the Colony.						Total Number of Casualties reported.					
	Steamers.			Sailing-vessels.			Total within Colony.			Steamers.					Sailing-vessels.			Total outside Colony.
	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	1	7	7	4	1,640	7	5	1,647	7	..	..	2	3,834	..	..	7	5,481	7
Partial loss	3	256	..	1	196	..	4	452	..	..	..	..	..	..	..	4	452	4
Slight damage	..	..	..	2	427	..	2	427	..	..	..	..	..	..	..	2	427	2
No damage	18	17,382	..	7	1,209	..	25	18,591	..	..	..	..	..	..	..	25	18,591	25
Total strandings	22	17,645	..	14	3,472	7	36	21,117	7	..	..	2	3,834	..	..	38	24,951	38
Foundered,—																		
Total loss	..	..	..	1	39	3	1	39	3	..	..	..	..	..	..	1	39	1
Capsized,—																		
Partial loss	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Collisions,—																		
Partial loss	1	63	6	1	77	..	2	140	6	..	..	..	..	..	..	2	140	2
Slight damage	..	..	..	1	199	..	1	199	..	..	..	..	..	..	..	1	199	1
No damage	1	92	..	..	..	..	1	92	..	1	2,715	..	..	..	..	2	2,807	2
Total collisions..	2	155	6	2	276	..	4	431	6	1	2,715	..	..	..	..	5	3,146	5
Fires,—																		
Partial loss	2	6,007	..	..	..	..	2	6,007	..	..	..	..	..	..	..	2	6,007	2
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	4	1,242	..	4	484	..	8	1,726	..	..	..	..	..	..	..	8	1,726	8
Total casualties to shipping	30	25,049	6	21	4,271	10	51	29,320	16	1	2,715	..	3	834	..	54	35,869	54
Loss of life only	1	15	1	3	266	4	4	281	5	..	..	..	1	230	1	5	571	5
Total number of casualties reported	31	25,064	7	24	4,537	14	55	29,601	21	1	2,715	..	3	4,124	1	59	36,440	59

## RETURN of WRECKS and CASUALTIES to SHIPPING reported to the Marine Department from the 1st April, 1905, to the 31st March, 1906.

Date of Casualty.	Vessel's Name, Age, and Class.	Btg.	Registered Tonnage	Number of		Nature of		Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew	Passengers.	Cargo.	Casualty.		Direction.	Force.		
1904. Oct. 13	Defender, 4 years	Ketch ..	117	10	..	Timber	Loss of mast and sails	4 miles N. of Stephen's Island	S.E.	Gale ..	On voyage from Greymouth to Lyttelton heavy squall struck ship, carried away mizenmast with sail set. Mast recovered, but sails lost	James Jamieson.
Nov. 15	Waipua, 23 years	Scow ..	42	3	..	..	Stranded; total loss	Jones's Bay, near Tokaitu Point	..	..	No inquiry necessary. Owner did not consider her worth expense of refloating	D. W. McKenzie.
1905. Feb. 5	Anjou (French), 5 years	Barque	1642	22	..	Wheat	Stranded; total loss	Near Bristow Point, Auckland Islands	N.	Light breeze.	Vessel was on voyage from Sydney to Falmouth; and, owing to thick, foggy weather, no observation could be got for forty-eight hours prior to the stranding, and land was not seen until ship was within 200 yards. Master tried to go about, but wind fell almost calm—cut off by high cliffs—and she struck the rocks, hanging by the bows. Crew got away at 5 a.m. next day, and remained on the island until the 7th May, when they were removed by "Hinemoa"	A. Le Tellac.
" 26	Elsie, s.s.	..	15	..	..	..	..	Between Putahuia and Watonih Point, Pelorus Sound	..	..	That Richard John Coster came to his death by accidentally falling overboard, no blame being attachable to any one	Eugenie Charles Ferano.
Mar. 3	Emma Sims, 10 years	Auxiliary ketch	61	5	..	Timber	Grounding; partial loss	N. Beach, Karamea, near Nelson	W.	Moderate	Casualty primarily caused by s.s. "Te Kapu" grounding when towing "Emma Sims"; oil-engines latter failed to act, preventing her from returning up river. There appears to have been water on bar for "Te Kapu," drawing slightly more than "Sims," but possessing superior power	Alfred Kemp.
April 1	Defender, s.s., 4 years	Ketch ..	117	10	..	Sheep ..	Stranded; partial wreck	North Spit, inside bar Manawatu River	W.	Light ..	Casualty caused through insufficient depth of water on bar. Damage to ship probably caused by striking a submerged snag	James Jamieson.
" 8	Whakatane, s.s., 5 years	Schooner	3786	..	..	General	Stranded; no damage	Between Maori Kaik and Harrington Point, Otago Harbour	..	Squally	Vessel's helm hung when being put over to starboard, and before it righted she touched very slightly, the bottom being mud and sand.	Leonard George Silba.
" 8	Gannet, s.s. ..	..	10	2	4	General	Stranded; partial loss	Between Pig Island and south shore Queen Charlotte Sound	..	..	Heavy sea and dense rain squalls were encountered, and vessel, being under reduced steam, was driven on to rocks.	Thomas W. J. C. Bowden.
" 8	Ururoa, 5 years	Schooner	196	9	..	Timber	Stranded; partial loss	Tairua River	S.	Light ..	Vessel, while in tow of s.s. "Onslow," grounded in channel	David Andrew Sharp.
" 8	Riwaka, s.s.} ..	..	19	3	100	Nil ..	Stranded; no damage	Entrance to Nelson Harbour	N.E.	Moderate	The stranding of the "Riwaka" was occasioned by meeting the s.s. "Wairoa" at the entrance of Nelson Harbour, between Haulshore Island and Arrow Rock. Neither of the captains were to blame, and stranding was not the result of negligence	George Melville Ruston.

# RETURN of WRECKS and CASUALTIES to SHIPPING reported to the Marine Department—continued.

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	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.		
'1905. April 15	Volador, 20 years	Barquentine	197	8	Timber	Loss of mizen-mast	..	200 miles off New Zealand coast, on voyage from Newcastle to Wellington	N.W.	Moderate gale	A heavy squall struck the ship and broke off the mizenmast some feet from the deck	John Pearson.
" 17	Hauptiri, s.s., 18 years	Schooner	452	32	General	Damage to purser's room	..	Off Black Head, East Coast, North Island	S.S.E.	Gale ..	A heavy sea broke on board when lying-to off Black Head and carried away the woodwork of the purser's room on deck, port side	Charles Frederick Backstrom.
" 21	Zelateur, 13 years	Barque	524	11	Timber	Stranded; re-floated	..	Eastern bank, Mercury Bay	S.W.	Strong	While being towed down Whitianga River took the ground, and was refloated making water	W. H. Heayea.
May 1	Progress, 28 years	Scow ..	49	4	Coal ..	Stranded; total loss	..	Peni Peni Beach, North Head, Tauranga	E.	Hard blow	Vessel, on voyage Ngunguru to Matata, owing to bad weather, had to put into Tauranga; in trying to run in missed stays, and became unmanageable	Patrick B'onnfield.
" 6	Moeraki, s.s., 3 years	Schooner	2715	85	General	Collision; no damage	..	Abreast of Inner South Head, Sydney Harbour	W.S.W.	Light ..	Vessel collided with a small steamer, name unknown	George Crawshaw.
" 8	Devonport, 27 years	Barque	290	10	Ballast	Loss of life ..	1	On voyage from Melbourne to Kaipara	S.	Gale ..	Wife of master, Sundberg, fell overboard and was drowned. Inquiry: result, no one to blame	Thore Vindician Sundberg.
" 8	Lizzie Taylor, 13 years	Ketch ..	77	5	Timber	Loss of sails, and damage to rudder	..	Off Kaikoura	S.E.	Gale ..	Damage, £100; caused by heavy weather ..	Anton Peterson.
" 14	Neptune, 26 years	Barquentine	343	10	Ballast	Stranded; total loss	..	North Spit, Kaipara, 5 miles from North Head	W.S.W.	Strong	Vessel, on voyage Wellington to Kaipara, went on the bar at latter place, and was totally wrecked. Court found master should not have taken bar at time, but waited later in day: no necessity take bar. Master found guilty of imprudence, as tide ebbing, light bad; and he did not wait for signals or directions. Certificate suspended for three months	Robert McKenzie Cliffe.
" 20	Elverland, 8 years	Barquentine	361	11	Railway iron	Stranded; slight damage	..	Western edge, Tory Shoal, Kaipara Harbour	S.	Moderate breeze	Casualty caused through hugging edge of bank too close	S. R. Savory.
June 1	Ngaru, 7 years	Schooner	66	5	Timber	Stranded; slight damage	..	Petane Beach, Napier	E.	Gale ..	Casualty caused through vessel being anchored on a lee shore when a gale of wind sprung up, accompanied with a heavy sea	Francis Fletcher.
" 2	Putiki, s.s., 1 year	Schooner	171	17	Produce	Loss of propeller-blades	..	6 miles east of Point Gibson	S.E.	Strong breeze	While on voyage from Lyttelton to Wellington the propeller was stripped of all the blades; no explanation could be given as to their loss as the ship did not come in contact with any hard substance.	Frederick Dewhurst



## RETURN of WRECKS and CASUALTIES to SHIPPING reported to the Marine Department—continued.

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	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.		
1905. June 8	Rangi ..	scow ..	86	5	None ..	Stranded; partial loss	..	5 miles east of Slipper Island, Bay of Plenty	N.E.	Gale ..	Vessel on voyage Gisborne to Auckland ..	W. M. Burke.
" 15	Emerald, 25 years	Barque	745	15	General merchandise and coal	Stranded; total wreck	..	About 2½ miles north from North Spit, entrance to Kaipara	N.W.	Squally, dirty	Vessel on voyage Newcastle to Kaipara. Master found to have committed error of judgment, and to pay costs inquiry, £9	John Bursnell.
" 20	Baden Powell, s.s., 5 years	Schooner	92	13	Timber	Stranded; re-floated	..	Foxton River, Manawatu	..	Calm ..	Foxton to Lyttelton; stranded across stream; current appears to have swept away mud-bank, allowing vessel to swing round end for end, and back into steep bank lower down river, thus crushing rudder. Reasonable and proper steps taken to avoid casualty	W. M. Muir.
" 29	Echo ..	Scow ..	99	8	Timber	Loss of life ..	1	50 miles from Kaipara Heads	S.W.	Strong	Vessel on voyage Kaipara to Dunedin. Andrew Grey, A.B., fell overboard and was lost. Sea was rough, but vessel not labouring heavily	Charles Ludovic Olsen.
July 7	Tawera, 8 years	Fore-and-aft schooner, auxiliary	44	5	General	Stranded; no damage	..	Entrance to Turanganui, Poverty Bay	S.	Gale ..	Ebb tide, strong, caught vessel port side, slewed her round; towline, being under vessel, caught her propeller, rendering her helpless; southerly seas forced her on to the weather side of groin and thence on to sandy beach	Frederick Palmer.
" 20	Himitangi, s.s., 6 years	Schooner	149	15	Coal ..	Grounded; no loss	..	South Spit, inside bar Manawatu River	S.W.	Moderate breeze	On voyage Greymouth to Foxton, grounded South Spit, inside bar, owing to insufficient depth of water on bar	S. Clark.
" 25	La Bella, 12 years	Barquentine	365	9	Oats ..	Grounded; no loss	..	Near Dog Island, Bluff	E.	Very light	Vessel, on voyage Bluff to Auckland, after being towed outside Bluff, grounded on rock near Dog Island. No damage apparent to diver who examined her; and pumps, after being sealed twenty-four hours, showed vessel tight, and proceeded on voyage	George Mylius.
Aug. 10	Dredge 222, 24 years	Dredge	502	30	None ..	Grounded; no damage	..	Dunedin Harbour, Upper	..	Fine, clear	Dredge got aground in harbour, and in getting off carried away stern line, which fouled propeller and caused master to lose control of vessel, which ran into s.s. "Waimate," moored at wharf	J. A. Findlay.
Sept. 6	Paraora, s.s., 9 years	Schooner	355	17	Ballast	Grounded; no damage	..	1 to 1½ miles W. Farewell Spit	W.	Light ..	On voyage Wellington to Greymouth, vessel touched very slightly on Farewell Sands; no damage; proceeded on voyage. Cause of accident was that course was not altered sooner	Felix Black.
" 19	Rose Casey, s.s., 27 years	Schooner	81	10	Timber	Grounded; partial loss	..	Month Jacob's River, Southland	S.E.	..	In crossing the bar, the pin on top end of eccentric rod dropped out, stopping vessel's progress, and causing her to settle down on bar, where she sprang a leak and filled	F. J. Duncan.

# RETURN OF WRECKS AND CASUALTIES TO SHIPPING reported to the Marine Department—continued.

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Number of		Nature of		Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
			Crew	Passen- gers.	Cargo.	Casualty.		Direction.	Force.		
1905. Sept. 24	Moana, 5 years	Schooner	7	..	Ballast	Capsized; total loss	Mokau ..	W.	Gale ..	Casualty occurred through the captain anchoring in a wrong position; and when gale came on he could not get vessel out, and she apparently capsized, all hands being lost	E. Jones.
" 27	Turakina, s.s., 3 years	Schooner	102	..	Produce	Fire	Wellington Wharf ..	..	..	While vessel lying alongside, wool and flax found to be on fire in No. 4 hold, 'tween decks. Cause uncertain, probably spontaneous combustion	Frances Forbes.
" 29	Hawk, 4 years	Scow ..	7	..	Ballast	1 life lost; shipped sea	Hokianga Bar ..	S.W.	Hard ..	While crossing bar a sea swept the captain (McDermott) overboard, and he was drowned. Casualty might have been avoided if vessel had stood to sea as instructed by signals	Bernard McDermott.
" 29	Karamea, s.s., ..	Cutter ..	3	..	Rock ..	Stranded; slight damage	North Spit, Nile River, Buller County	S.W.	Light ..	While on trip Westport to Charleston a sea struck vessel and washed her 3 ft. on one side of channel; stern swung into bank and struck gravel, stripping all blades off propeller. Damage to vessel reported as slight	Alfred Casson.
Oct. 19	Kaituna, s.s., 1 year	Schooner	26	..	Coal	Touched ground	1½ miles from Point Pillar, Farewell Spit	N.E.	Fresh breeze	While on voyage from Newcastle to Wellington vessel touched ground. Ship appears to have made too much leeway, which was not allowed for by the master. If the lead had been used he would have found his position, and the casualty would not have happened	John McDrewette.
" 19	County of Ayr, 42 years	Barque, iron, sail	15	..	Timber	Stranded; total loss	Danger Reef, Shag Point, Otago ●	N.E.	..	Vessel sailed from Dunedin for Lyttelton; wind N.E. and variable; thick weather came on, and she made short tacks up the coast instead of keeping out to sea, finally going ashore as stated. Master and first officer severely censured and ordered to pay costs of inquiry	William Tulloch.
Nov. 6	Mapourika, s.s., 7 years	Schooner	40	..	..	Fire	Alongside Railway Wharf, Wellington	..	Calm ..	Fire took place in third engineer's room, starboard side; supposed to have been caused by explosion of kerosene lamp left burning when engineer left his room to post a letter. Some of his clothes and the woodwork of the room charred. Unavoidable accident	Charles Clift.
" 8	Thistle, 14 years	Barque	30	..	Timber	Stranded; total wreck	Palmerston Island, South Pacific Ocean	S.S.E.	Moderate	Master guilty of an error in judgment in altering vessel's course at midnight, thus bringing her nearer the Islands	Edmund England.

RETURN OF WRECKS AND CASUALTIES TO SHIPPING reported to the Marine Department—*continued.*

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	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.		
1905. Nov. 21	Corinna, s.s. ..	Schooner	812	20	Produce	Struck reef; partial loss	..	Chaffer's Passage, Wellington	N.	Fresh breeze	Master justified in coming through Chaffer's passage in daytime and in favourable weather, and Court sees no reason to make any recommendation as to non-use of passage, that being a matter in discretion of master. Court also of opinion that master not guilty of negligence while navigating passage, but appears to have been, for some reason unknown to him, and not disclosed to Court, slightly nearer to shore than he thought he was. No order as to costs	Sydney Janos.
"	Stormbird, s.s.	Schooner	129	13	General	£30 loss	..	36 miles S. of Wanganui River	W.N.W.	Fresh	Propeller-blades all dropped off between Wanganui and Wellington. Ship did not strike anything. Unavoidable accident	Peter McIntyre.
"	Zealandia, s.s., 7 years	Schooner	1736	67	General	Stranded; no damage	..	West side, Glasgow Wharf, Napier Harbour	N.W.	Gale	Cause of casualty was that telegraph from the bridge to engine-room was out of order. No damage to ship.	George Frederick Entwistle.
"	Anna, 30 years	Ketch ..	28	4	..	..	2	Foveaux Strait	..	..	Coroner's inquiry: Master William Hanning and seaman John Joss swept overboard by seas and drowned	William Hanning.
"	Patea, s.s., 11 years	Schooner	550	38	General	Breakdown of engines	..	1 mile N.N.E. of Walker Rock, off Cape Jackson	N.W.	Fresh breeze	High-pressure valve guide-bracket broke, and engines stopped for 1½ hours, vessel drifting towards the Brothers; direction, S.E. Repairs temporarily made and ship brought to Wellington. Unavoidable accident	Samuel Kennedy.
Dec. 5	Huita, s.s. ..	Schooner	69	9	Wool	Lost 3 propeller-blades	..	Wanganui ..	S.E.	Light	Ship struck submerged snag going down Wanganui River and broke off all propeller-blades, 3 in number. Unavoidable accident	A. Dowell.
Dec. 16	Jap ..	Scow ..	199	8	..	Collision with scow Rambler	..	Cloudy Bay	N.W.	Squally	Collision caused by schooner "Jap" being taken aback when in stays by a "willie-waugh" and the anchor not bringing the schooner up when let go. Casualty might have been avoided if "Jap" had attempted to anchor to lee of other two schooners	Thomas Norris.
"	Rambler ..	Scow ..	77	4	Railway material	Collision, partial loss	..	Entrance to Patea River	W.	Moderate	Stranding caused by a bar of sand formed across the entrance of river by westerly gales	F. W. Cox.
"	Kapiti, s.s., 3 years	Schooner	80	10	Coal	Stranded; no damage	..	Inside North Head, near Devonport, Auckland Harbour	S.W.	Light	Court found that casualty was caused by the negligent and improper navigation of the master of the "Kapiti." His certificate was suspended for 12 months, and he was ordered to pay costs of inquiry	William James Southgate.
"	Kapanui, s.s., 7 years	Fore-and-aft.	63	8	General	Collision; partial	6	..	..	..	..	James Mewett.
"	Claymore, s.s., 3 years	Schooner	92	11	General	Collision; no damage	..	..	..	..	..	..

RETURN of WEEKS and CASUALTIES to SHIPPING reported to the Marine Department—continued.

Date of Casualty.	Vessel's Name, Age, and Class.	Reg.	Register Tonnage	Number of		Nature of		Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passen- gers.	Cargo.	Casualty.		Direction.	Force.		
1905. Dec. 31	Oban, 9 years...	Scow	39	3	..	Coal	Partly submerged	Wellington Heads	N.	Moderate gale.	When being towed from Baring Head by the tug "Duco," the vessel sank suddenly by the head, and the three men on board were washed overboard and drowned according to statement of master and pilot, the cause of stranding is attributed to bad steering and inefficient propeller. Weight of cargo was about 117 tons, and ship was not loaded to within 6 in. of her Plimsoll mark	D. W. McKenzie.
" 31	Kapiti, s.s., 3 years	Schooner	80	10	..	Butter	Stranded; no loss	Patea River	W.	Moderate		F. W. Cox.
1906. Jan. 1	Marere, s.s., 4 years	Schooner	4159	56	..	General	Stranded; no damage	Bluff Harbour	S.W.	Moderate	Strong ebb tide canted vessel	J. C. Felgate.
Feb. 2	Te Kapu, s.s. .	Schooner	50	6	..	General	Grounded; no damage	Karamea	S.W.	Light	The scow "Haere," not following the tug, touched the bank, causing steamer to take the ground	J. G. Gilbertson.
" 20	Maheno, turbine, less than 1 year	Schooner	3276	116	307	General	Grounded; no damage	Bluff Harbour	..	Strong gale	While going alongside Bluff Wharf, towline parted and vessel drifted alongside sand-bank through force of gale	Robert Neville.
" 22	Jessie Nicol, 34 years	Schooner	93	7	..	General	Bowsprit carried away	Between Bluff and Macquarie Island	S.W.	Hard gale	Bowsprit carried away in heavy gale	P. J. Ewing.
Mar. 13	Tuariki	Oil-launch	7	2	4	Timber	Sunk	Pelorus Sound	..	Squally	Struck by squall	Peter Johnson.
" 17	Haere, 3 years	Schooner	99	5	..	Sawn timber.	Stranded; no damage	Karamea River	W.N.W.	Slight	Tug which had vessel in tow grounded inside the bar, and "Haere," having lost steerage-way, was pulled on to the end of the spit when the tug got a strain on again. Unavoidable accident	Christian Stenersen.
" 29	Alexander, s.s., 2 years	Schooner	185	16	1	Ballast	Stranded; no damage	Collinet Point, Elmslie Bay, French Pass	S.E.	Squally	Error in judgment in estimating distance of ship from land	William Arthur Wildman.

RETURN showing the number of NOTICES to MARINERS relating to Matters within the Colony issued by the Marine Department during the Year ended 31st March, 1906.

Port or Place.			Subject of Notice.
Akaroa	..	..	Alteration to fixed light.
"	..	..	Changes during alterations to light.
Auckland	..	..	Alteration in position of Railway Wharf lights.
"	..	..	Light on Rangitoto Island.
Bare Island	..	..	Incorrectly charted.
Bluff	..	..	Removal of buoys in harbour.
Cape Campbell	..	..	Erection of iron tower and alteration of light from flashing to fixture.
French Pass	..	..	Buoy on Middle Bank, Current Basin.
Greymouth	..	..	Dredge's position in river.
"	..	..	Alteration to leading lights on bar.
Hauraki Gulf	..	..	Gull Point beacon erected on outer rock.
Invercargill	..	..	New River bar shoaling.
Kaipara	..	..	Alteration to buoys, Wiaroa River.
"	..	..	Buoy on Tory shoal adrift.
Karamea River	..	..	New signal flagstaff erected.
Manukau Harbour	..	..	Re-erection of beacon.
Otago Harbour	..	..	Black port-hand pile beacon.
"	..	..	Alterations to lights.
"	..	..	Entrance by main channel only.
Puysegur Point	..	..	Repairs and alterations to light.
"	..	..	Alterations completed and flash resumed.
Queen Charlotte Sound	..	..	Rock off Long Island.
Tuahine Point	..	..	Exhibition of light.
"	..	..	Lighthouse destroyed by fire.
Vulcan Point, Otago	..	..	Floating target adrift.
Wakatahuri, Forsyth Bay	..	..	Telephone station established.
Wanganui	..	..	Lights on Harbour Board's dredge.
Wellington	..	..	Defence Department's two buoys moved to Kau Bay.
"	..	..	Gas-buoy placed on Falcon shoal.
"	..	..	Position of Harbour Board's dredge.
General	..	..	"New Zealand Nautical Almanac" published.
"	..	..	New Zealand Azimuth Tables published.

*Approximate Cost of Paper.*—Preparation, not given; printing (1,800 copies), £69 7s. 6d.

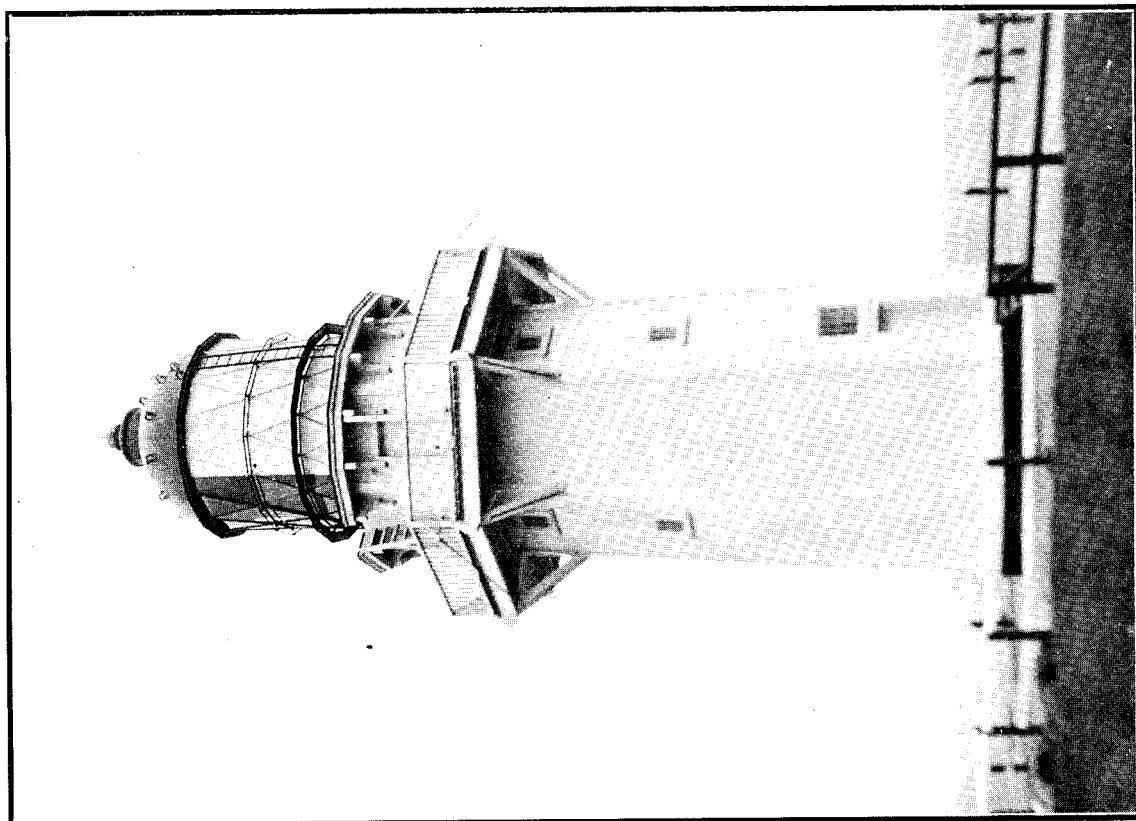
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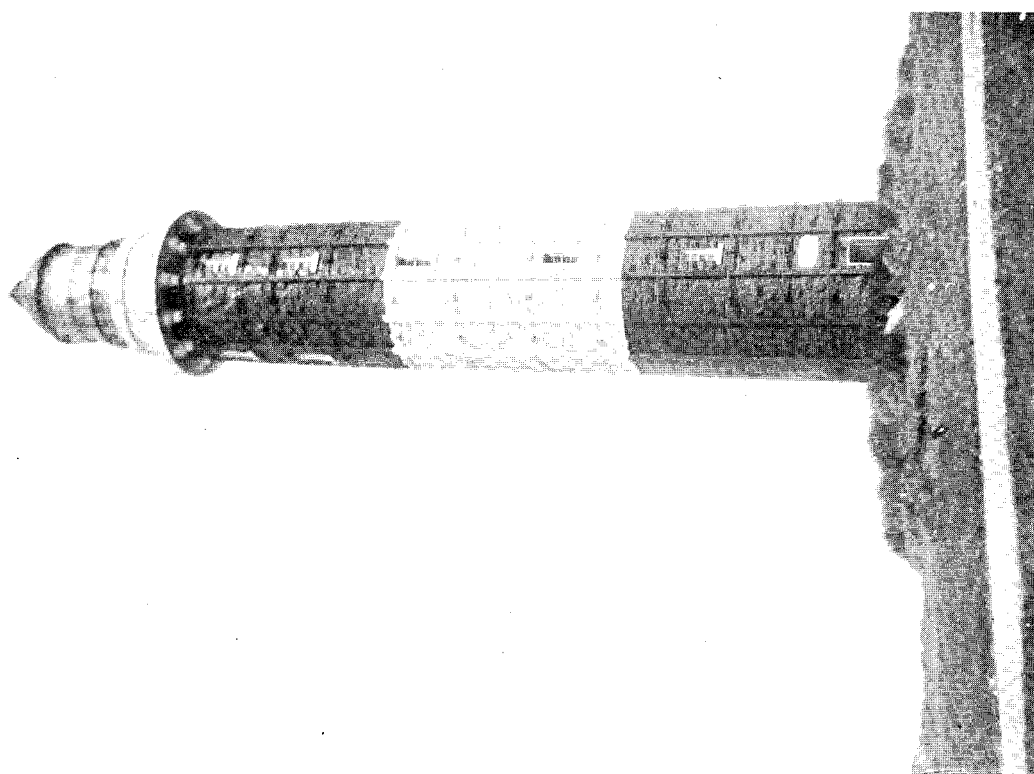


MOERAKI LIGHTHOUSE.





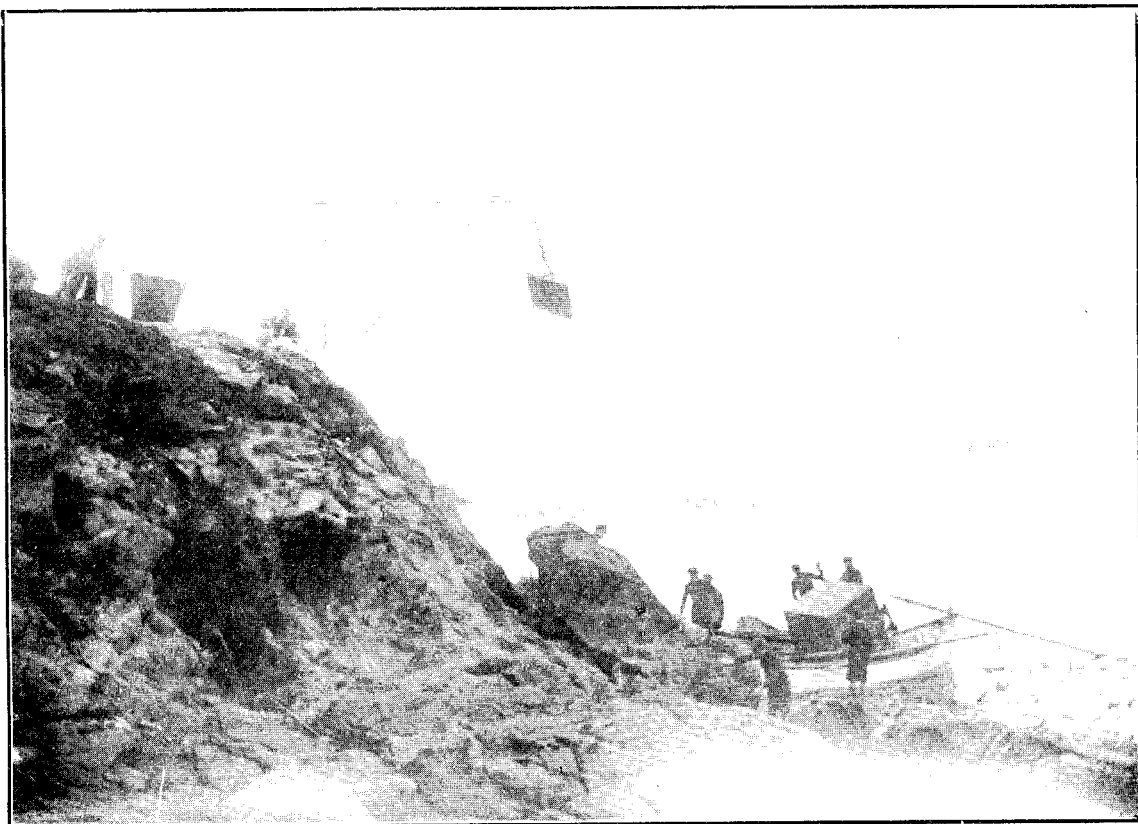
PUYSEGUR POINT LIGHTHOUSE.



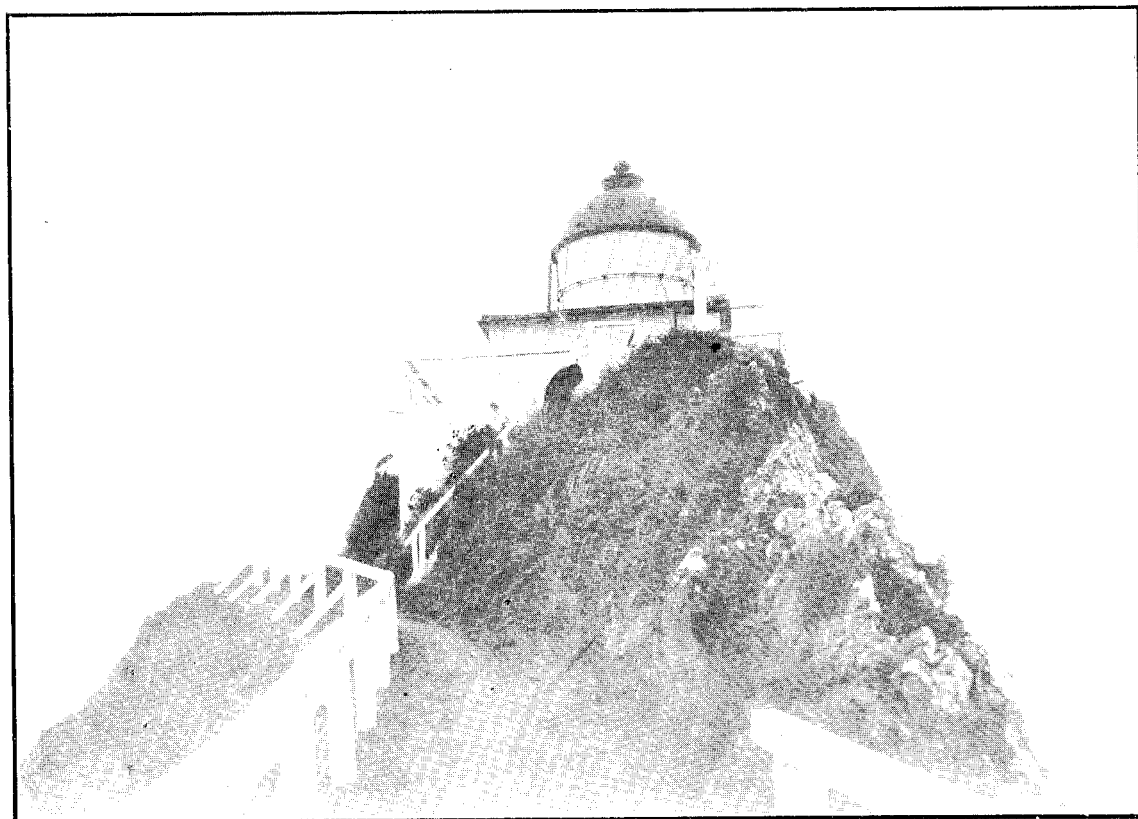
DOG ISLAND LIGHTHOUSE.





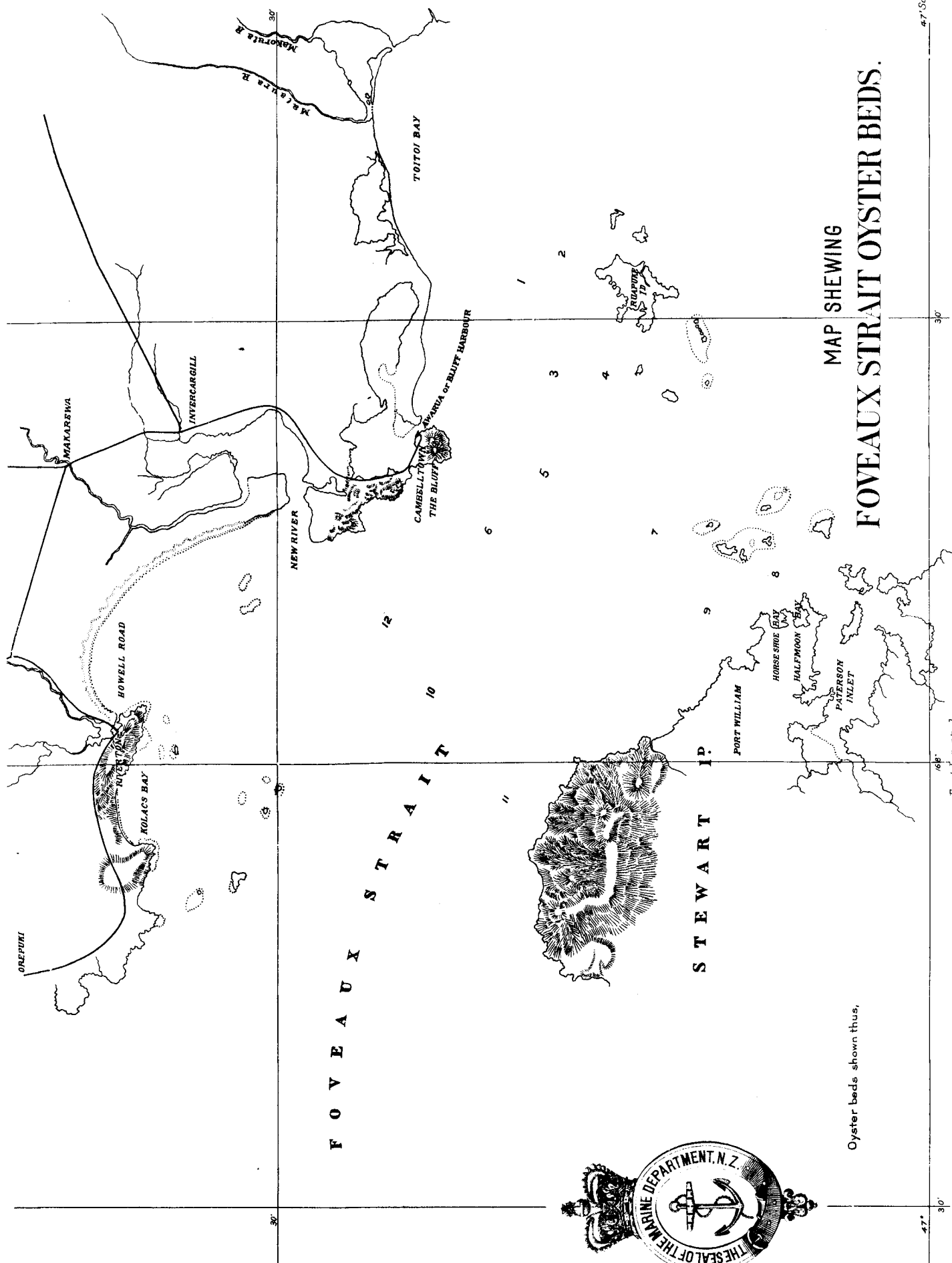


LANDING AT MOERBAI

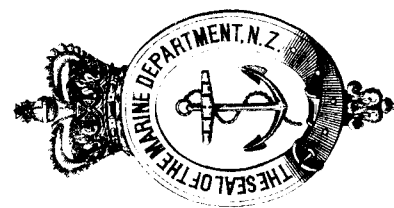


NUGETT POINT





Oyster beds shown thus,



By Authority : John Mackay, Government Printer.



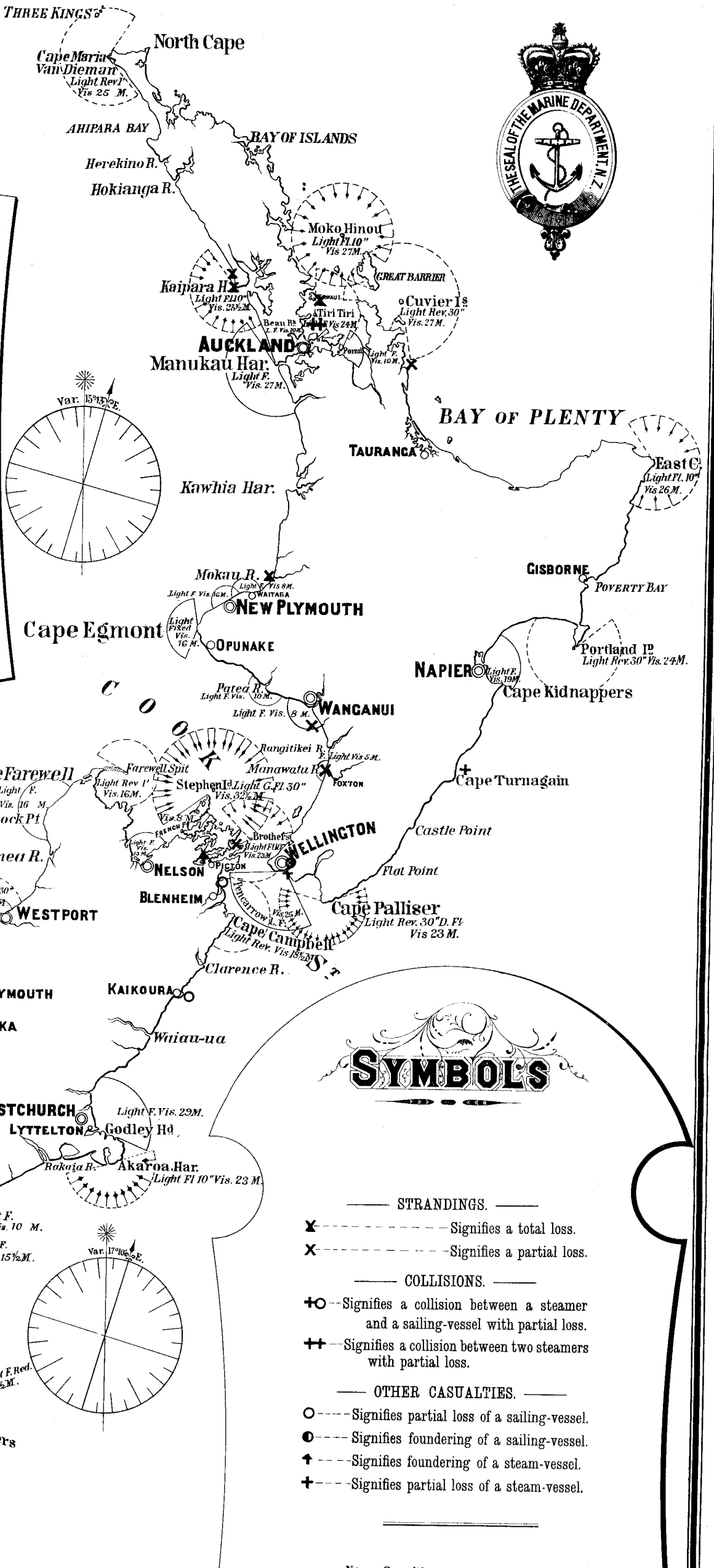
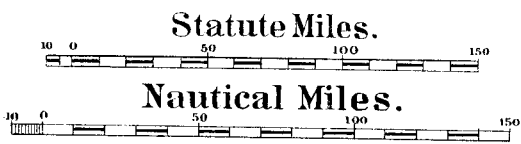


# NEW ZEALAND WRECK CHART

1ST APRIL, 1905 TO 31ST MARCH, 1906,

Compiled from Official Records

in the  
**Marine Department**



## SYMBOLS

- STRANDINGS. —
- X ——— Signifies a total loss.
- X ——— Signifies a partial loss.
- COLLISIONS. —
- +O — Signifies a collision between a steamer and a sailing-vessel with partial loss.
- ++ — Signifies a collision between two steamers with partial loss.
- OTHER CASUALTIES. —
- O ——— Signifies partial loss of a sailing-vessel.
- ——— Signifies foundering of a sailing-vessel.
- + ——— Signifies foundering of a steam-vessel.
- + ——— Signifies partial loss of a steam-vessel.

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

• SNARES

