1896.NEW ZEALAND.

D E P A R T M E N T.MARINE

(ANNUAL REPORT FOR 1895-96.)

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

My Lord,— Marine Department, Wellington, 31st July, 1896. 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.,

WM. HALL-JONES,

Minister of Marine.

His Excellency the Right Hon. the Earl of Glasgow, &c., Governor of New Zealand.

The Secretary to the Minister of Marine.

Marine Department, Wellington, 30th May, 1896.

Sir.---I have the honour to make the following report on the administration of this department during the financial year ended the 31st March last :-

Lighthouses.-Further tests have been made of the mineral colza oil referred to in my last report. The tests were carried out at Pencarrow Head Lighthouse, both with one of the ordinary paraffin burners altered for the purpose and with a Douglas burner obtained from Tasmania, but the results were not altogether satisfactory. Messrs. D. and C. Stevenson, of Edinburgh, who are engineers to the Northern Board of Lighthouses, have been asked to design a suitable burner, and to forward sufficient to enable the oil to be used at five lighthouses, so that it may be thoroughly tested before deciding to adopt it for use at all our lighthouses.

Last session Parliament voted a further sum of £800 for repairs to lighthouses and keepers' dwellings, and this has enabled many necessary works, principally repairs to dwellings, to be executed. It has, however, been found impossible to do all the repairs that are required with the money available, and it will therefore be necessary to ask for a further vote for the purpose. The works at the southern stations have been carried out under the direction of the lighthouse artificer, and those at Tiri-Tiri, which consisted of extensive repairs to the dwellings, were executed by a party of workmen under the charge of the department's carpenter, who also had charge of the construction of a tramway from near the landing-place to the top of the hill at Pencarrow Head. A new house for the principal keeper at Nelson is now in course of erection under contract, and improved accommodation for the assistant-keeper has been provided by moving the small house

hitherto occupied by him and attaching it to what has hitherto been the principal keeper's house. At the French Pass the red arc of the light has been altered so that the red and white arcs cut exactly on the buoy which marks the dangers off the Beef-barrel Rocks. The light on the beacon in the Pass has not been extinguished during the year. A sum of £81 18s, has been expended in planting native trees along the Pass side of the lighthouse reserve. Owing to the exposed position of the reserve it was found necessary to protect the trees by erecting fences round them. When the trees grow up the beauty of the lighthouse side of the Pass will be much improved.

On the night of the 12th August last the assistant-keeper at Pencarrow Head was found asleep on watch. In consequence of his previous good record during a long period of service, and of the fact that he was suffering from influenza at the time, he was not dismissed from the Lighthouse Service, but his salary was reduced by £10 a year, and he was not distinsed from the highlighted situated. During the year two keepers resigned, and two appointments were made to fill the vacancies thus caused. It was anticipated that the new tower at Farewell Spit would have been erected during the past summer, but, owing to the contractors failing to supply the iron tower within the prescribed time, the work of erection has not yet been put in hand.

The new landing on the south side of the Brothers has been completed, and has already pre-vented the delay of the "Hinemoa" on one occasion, when the sea was too rough to enable the stores, &c., to be landed at the ordinary landing-place on the northern side. The new landing-1—H. 15.

place at Godley Head has been completed, and has been found to considerably lessen the labour and danger of landing stores and oil at that station.

Early in last year the department ordered the lanterns and apparatus for the proposed lighthouses at Capes Palliser and Kidnappers, and requested the Public Works Department to proceed with the erection of the tower and dwellings, &c., at the former place. The lanterns have recently arrived in the colony, and the apparatus is expected shortly, so that as soon as the necessary buildings are erected at Cape Palliser that light can be erected and exhibited.

After carefully considering the question of establishing fog-signals at some of the lighthouses where fogs are most prevalent, it was decided to procure one of Slaughter's cotton-powder signals. The Agent-General in London has accordingly been instructed to procure one, and it is intended to erect it at Pencarrow Head, so as to practically test its suitability for use at our lighthouses where fogs are prevalent. The cost of the signal in England will be $\pounds 250$; and the cartridges, of which 1,000 have been ordered, cost 1s. each. The necessary building and the erection of the signal will cost about £100.

The Victorian Government having revived the question of the erection of a lighthouse on the Snares, the Marine Engineer and the Nautical Adviser to the department proceeded to that place in February last, and made a further examination as to the best site. The result of their examination was that they reported that, in their opinion, the site selected in January, 1891, by the delegates who represented New South Wales, Victoria, Tasmania, and New Zealand-the colonies which agreed to contribute towards the cost of the erection and maintenance of the light-was the best one available. The Government has conveyed this opinion to the three Australian Governments mentioned, and has suggested to them that this site should be approved, and that the erection of the lighthouse should be proceeded with.

It has been decided that the work of inspecting the lighthouses under the control of this department is to be performed by Captain Allman, the Nautical Adviser to the department. He has inspected those in the South Island and Cook Strait, and will visit those in the North when the "Hinemoa" makes her next northern trip. His report on the stations he has visited, and his suggestions as to new lighthouses, is appended hereto. Light Dues.—The sum of £15,562 5s. 3d. was collected for light dues during the year, as com-

pared with £16,299 10s. 8d. for the previous year, being a decrease of £733 5s. 5d.

Harbours.—The work of cleaning and overhauling the buoys and attending to the beacons in most of the harbours which are under the control of the department has been performed by the "Hinemoa." That vessel has also overhauled the buoys in the Whangarei Harbour, as the local Hindhoa. That vessel has also overhalted the budys in the whangarel Harbour, as the local Harbour Board does not possess the necessary appliances for doing the work. The Board is to pay for the material used in the overhaul. At Russell, Mr. Henry Stephenson, who holds the office of Signalman and Inspector of Fisheries, has been appointed Harbourmaster, in order to give him the necessary power to direct vessels and boats where to anchor, and to see that the law affecting the harbour is enforced. Mr. John Sinclair, the Harbourmaster at Port Robinson, has been appointed Wharfinger at that place.

The contract with the Northern Union Steamboat Company for the use of a steamer to overhaul the buoys in Kaipara Harbour, and to perform such other harbour-work as may be required by the Harbourmaster, for £240 a year, having expired, it became necessary to make a fresh arrangement. The company was unwilling to enter into a new contract for less than £340 a year, and as there was no other steamer at Kaipara which was available to do the work the department had to agree to the company's terms, and a contract for the performance of the work during 1896 for that sum has been entered into. It would be advisable, before the end of the year, to consider the question as to whether, after the expiration of this contract, the arrangement with the company shall be renewed, or whether it would not be better for the department to procure a suitable steamlaunch of its own. The Harbourmaster considers that the latter course would be the more satisfactory one. His duties as Customs Officer and Inspector of Fisheries, as well as those of Harbourmaster, require that he should have the means of getting about the harbour more frequently than he can under the present arrangement. Probably a suitable launch driven by an oil- or gasoline-engine could be procured, and a launch of this kind could be worked very inexpensively. At the beginning of August last, Mr. James P. Low, Harbourmaster and Pilot at Nelson, who

joined the Nelson Harbour staff on the 28th February, 1860, was taken ill, and was granted leave of absence until the end of September, which, on account of the state of his health, was subsequently extended until the end of December. On the expiration of his leave he was still unfit to resume duty, and, as it appeared from the report of two doctors who examined him that it was not likely that he would be again fit for active duty, the Government felt that the only course open for them was to retire him from the service on the compensation allowed by "The Civil Service Act, 1866." This was accordingly done. Mr. Low was a faithful officer during his long period of service, and the department extremely regretted that the state of his health necessitated his retirement. During his absence on leave the Westport Harbour Board courteously allowed Captain F. W. Cox, its Assistant Harbourmaster and Tugmaster, to act as Mr. Low's substitute, and on the latter's retirement he was appointed to fill the vacancy.

The masters of most of the Union Steamship Company's steamers trading to Nelson having adopted the practice of taking their vessels into and out of the port without a pilot, the harbour revenue derived from pilotage suffered to such an extent as to render it necessary to raise revenue by other means in order to defray the expenses of the harbour. Accordingly it was decided to impose port charges and harbour-light dues on all vessels visiting the port, and, although the revenue derived from the new charges, combined with that received as pilotage, is not so large as that formerly received as pilotage alone, still it will be sufficient to meet the expenses of the port, as, owing to the smaller number of vessels requiring the services of a pilot, the department has been able to dispense with the services of two of the crew of the pilot boat, thereby making a saving of £240 a year. Α

permanent light has been established on the beacon on Haulashore Island, at the entrance to the harbour; and signals to indicate the depth of water at the entrance both by day and night have been established. These signals are shown by the lightkeepers from the flagstaff on the Boulderbank, near the lighthouse.

Considerable changes have taken place in the entrance to Manukau Harbour, and the beacons on the North Head have been altered to suit the changes. One of the beacons has been done away with, and, pending a proper trial with two beacons instead of three, the erection of the new beacons has been deferred. The buoys have been overhauled and cleaned by the "Hinemoa."

A return showing the licenses issued for the occupation of foreshore and the authorities given for the erection of wharves, &c., is appended hereto.

Oyster-fisheries .- An Act to amend "The Sea-fisheries Act, 1894," was passed by Parliament during last session, and provision was made in it to remedy the two defects in the law mentioned in my last report; that is, it has been made an offence to have oysters in possession, or sell them, during the close season, although they may have been actually taken from the beds during the open season; and provision was made to empower the Governor to fix the areas of foreshore to be included in oyster-bed leases. Several applications have been received for leases of the beds in Manukau Harbour, and steps are being taken to divide them into suitable areas. As soon as this has been done, the leases will be disposed of by public auction for a period of ten years. Applications for leases of the beds at Great Barrier and Waiheke Islands have been made by settlers at those places; but as the law now stands the owners or occupiers of adjoining lands can only obtain leases of beds by being the highest bidders at auction, or being the highest tenderers, as all leases are required to be disposed of by public auction or tender. One reason which settlers give for desiring to lease the beds adjoining their holdings is that some of the licensed pickers who now use them are in the habit of stealing their stock.

After careful inquiry as to the state of the beds in the North, it was decided to keep those in the Hauraki Gulf, Whangarei Harbour, and the southern subdivision of the northern oyster fishery closed for at least another season, as the oysters in them are not yet fit to be taken. The beds in the middle and northern subdivisions of the northern fishery-that is, those between the Waitangi River, in the Bay of Islands, and the North Cape—are therefore the only ones on the east coast of the Auckland District which are open this season; but it is considered that these beds and those in Kaipara Harbour which have been opened will be able to meet all requirements. Last season Last season 7,654 sacks of oysters were taken from the middle and northern subdivisions of the northern district. Of this quantity, about 4,650 sacks were exported from the colony, and the balance used for home consumption. The Inspector, who has made a careful inspection of the beds, reports that they are in very good condition. As soon as the Manukau leases are disposed of the beds in that harbour will be available for taking oysters.

The following licenses to occupy foreshore for the purpose of forming artificial beds have been issued during the year: A. Maule, 48 acres, Pelorus Sound; P. Ewing, 4 acres, Hitaua Bay, Tory Channel; Duncan and Jones, 20 acres, Orongo Bay, Bay of Islands; Lane and Brown, 20 acres, Wahapu Bay, Bay of Islands.

During the year petitions were received from oyster-dealers, -pickers, and others in Auckland and Wellington, praying that the export of rock-oysters from the colony might be prohibited; but, as it appeared that this would only restrict the taking of oysters without there being any necessity for it, the request was not acceded to.

On the 11th April, 1895, D. McBrierty and J. Williamson were each fined £1 and costs for taking oysters in Manukau Harbour, in which the beds were closed. On the 17th of the same month Ernest Peel was fined £1 and costs for taking oysters in a closed district. The boat and gear used in committing the offence, which were forfeited under the provisions of "The Sea-fisheries Act, 1894," were returned to him on his paying a further sum of £1. On the 23rd April, 1895, R. Angelo was fined £1 and costs for taking oysters in Manukau Harbour.

On the 2nd December last, two days after the oyster season closed, a quantity of oysters were seized in shops in Wellington, but proceedings were not taken against the owners. It was not considered advisable to do so, as the provision of the law allowing oysters to be sold for fourteen days after the season closed, provided they were taken in the open season, was only repealed by "The Sea-fisheries Act Amendment Act, 1895."

Sea-fisheries.—Representations having been made to the department that it was necessary for the protection of mullet that the close season, which only applied to a portion of Kaipara Harbour, should be extended to include the whole of that harbour, this was done, after inquiry had been made into the matter. After the issue of the order prescribing the close season, it was strongly urged that there was no real necessity for it, and that, if it were kept in force, the mulletcanning industry would be very injuriously affected. Sir James Hector was therefore asked to proceed to Kaipara to make inquiry as to the necessity or otherwise for the close season. After taking evidence on the spot, he advised that the order should be revoked, and that the original close season for only a portion of the harbour should be reverted to; and his advice was given effect to. Sir James afterwards made another visit to Kaipara, and also went to other places in the North, to make further inquiries as to the necessity for a close season for mullet, and the proper period for such season. As soon as his report is received the whole matter will be dealt with. It having been reported that the Natives at Kaeo were taking undersized mullet, the Inspector of Fisheries at Russell was sent to the place to look into the matter. He warned the Natives that they must discontinue the practice, and they promised to do so. Regulations have been made allowing the use, in the Provincial District of Canterbury, of

hand whitebait nets, with an opening of nine square feet.

A request was made by the Patea Harbour Board that net-fishing should be prohibited in the Patea River; but, after making inquiries into the matter, it was not deemed advisable to accede to this request.

Sergeant McGrath has been appointed Inspector of Fisheries at the Bluff, and Constable Sheary Inspector at Blenheim.

The seal-fisheries have been closed during the year, and it has been decided to extend the close season up to the 30th June, 1897. On the 20th February last, E. Morrison was fined £1 and costs for killing a seal which he found on the road at Gore Bay. On the 15th May, 1895, Andrew Paris was fined £1 and costs for selling undersized flounders

On the 15th May, 1895, Andrew Paris was fined £1 and costs for selling undersized flounders at Porirua. On the 27th July, E. Andrews and P. Garbes were prosecuted for having small bluecod in their possession in Wellington; the former was fined £1 and costs, but the charge against the latter was dismissed, the Magistrate stating that he would give him the benefit of the doubt. On the 12th August, a fisherman named Dorris was fined £10 and costs for taking small rock-cod in the Pelorus Sound. The fish were found by the Inspector at Wellington at a smoke-house in this town.

Weather Reporting.—Captain Edwin has carried out the duties of making daily weather forecasts, and of notifying such forecasts to the different parts of the colony in an efficient manner. These forecasts are of great service to shipmasters and others whose business is connected with shipping. He has also continued to perform the duties of Examiner of Masters and Mates. *Government Steamers.*—The "Hinemoa" has been kept fully employed during the year. She

Government Steamers.—The "Hinemoa" has been kept fully employed during the year. She has periodically visited the lighthouses with oil and stores, and has overhauled and cleaned the buoys on the coast and in the principal harbours under the control of this department. She also searched for and discovered the rock in Poverty Bay which the s.ss. "Anglian" and "Waihora" touched, and made surveys of other reported dangers on the coast. In addition to this work, she made a special trip to the Snares in connection with the selection of a site for a lighthouse there. She made two trips to the Snares, Auckland, Campbell, Antipodes, and Bounty Islands, and one trip to the Kermadee Islands, to search for castaways, and to inspect the dépôts of provisions and elothing which the department maintains at those islands. No castaways were found, and the dépôts had not been touched. During the trip which was made in October last some wreckage and a considerable quantity of wool were found along the beach at the Auckland Islands. The wreckage is believed to be a part of the French vessel "Marie Alice," which left Sydney on the 12th February, 1895, for Europe; and a portion of it has been sent by the vessel's agent here to the owners at Nantes, for the purpose of identification. During the year the "Hinemoa" steamed 27,365 miles, was 3,538 hours under steam, consumed 1,604 tons of coal, carried 2,298 tons of cargo, and cleaned, painted, and relaid 106 buoys. It must be borne in mind, in connection with the amount shown as the running-expenses of the vessel, that she carries a large quantity of cargo for other department which pays for services rendered. The Government having decided that Galagow, he left the "Hinemoa" on the 8th March last; and Captain Neale, who has for many years been first mate, was placed in command, Mr. Bollons, the second mate, taking the position vacated by him. The Stones' patent bronze propeller-blades referred to in my last year's report have been fitted on to the vessel with very satisfactory results

The "Stella," which had been laid up for a considerable time, was chartered on the 4th June last by Mr. Joseph Fleming, of Auckland, for the coastal trade in the Auckland District; but, as he failed to pay the amounts due under the charter, the Government had to take possession of the vessel on the 11th November. At the time the charter was determined the sum of £119 was owing to the crew as wages, and the department had to pay this amount to clear the vessel. She was shortly afterwards sold to Messrs. Jagger and Parker and Leyland and O'Brien, of Auckland, for the sum of £1,450; but an allowance of £46 5s. had to be made to the purchasers for fittings which were found to be missing.

On the 2nd July last the s.s. "Pilot" was sold by public auction for the sum of £470, and she is now plying in Kaipara Harbour.

Coastal Surveys.—The reported rock in Poverty Bay has been surveyed and buoyed, and search has been made for the rock off the Gable End Foreland which the s.s. "Monowai" touched. A shoal patch was discovered, and a further survey will be made the next time the "Hinemoa" is in the locality, if the weather is favourable.

Wrecks and Casualties.—A table showing an analysis of the casualties is appended hereto. Those on the coasts of the colony numbered thirty-seven, representing 21,060 tons, as against forty-one casualties, affecting 9,850 tons, in the previous year. The number of total wrecks within the colony, including a small steamer which was burnt and a sailing-vessel which foundered, was eight of 2,070 tons, as against thirteen vessels, of 2,049 tons, in the previous year. The number of lives lost was eight, as against 151 in the previous year. Of these, six were on or near the coasts of the colony—namely, four from the "Comet" (all hands), and one each from the s.s. "Waihi" and s.s. "Poherua." The lives lost beyond the colony were one each from the "Kathleen Hilda" and the "Coromandel."

Survey of Steamers.—I regret to have to report the death of Mr. W. M. Mowatt, the Principal Engineer Surveyor, and Principal Examiner of Engineers. He died suddenly from heart-disease on the 31st January last. He was a most capable and efficient officer, and one on whose ability and judgment the department placed great reliance. Mr. R. Duncan, who for some years past has been one of the Engineer Surveyors and Examiners of Engineers at Dunedin, has succeeded him. A report on the work done during the year is appended hereto. A request having been made for the issue of docking-certificates in the case of vessels which trade abroad, and which are docked in New Zealand during the currency of their passenger-certificates, it has been decided to grant such certificates when required by the owners at a charge of \pounds 5 in each case. In the case of a vessel which is surveyed for her passenger-certificate at the time of docking there is no necessity for a docking-certificate, as the twelve months' passenger-certificate covers the period for which the docking-

certificate would be in force. The proposed uniform system as regards the limits within which small restricted-limit steamers are allowed to ply has not yet been brought into operation, but it is intended to issue regulations on the subject at an early date. Proceedings were taken against the owner of the p.s. "Theodore" for running on Lake Wanaka without a certificate, and against the owner of the s.s. "Elsie" for plying in the Pelorus Sound without a certificated engineer. Fines were imposed in both cases.

Examination of Masters, Mates, and Engineers.—Eighty-seven candidates passed their examinations for certificates of competency and thirty-six failed. Of those who passed, fifty-eight were masters, mates, and engineers of sea-going vessels, and twenty-nine were masters and engineers of steamers plying within restricted limits. Seventeen certificates of service as Home-trade masters have been issued. Regulations have been made for the examination of engineers of steamships plying within restricted limits, and for marine engine-drivers. In the case of the former the examination will be more difficult than that hitherto in force for this class of certificate. The marine engine-driver's is a new class of certificate, provided for by "The Shipping and Seamen's Act Amendment Act, 1895.' New regulations for the examination of masters and mates have been made by the Board of Trade, and it is intended to make similar regulations in this colony, to come into force on the 1st January, 1898, that being the date on which the Board of Trade rules come into operation. The examinations will be much more difficult than those at present in force.

Relief of Distressed Seamen.—The sum of £165 15s. has been expended during the year on account of the relief of distressed seamen belonging to New Zealand vessels. Of this amount, £61 5s. was for the relief of the crew of the "Eillan Donan" at Noumea, and for passages to Sydney; £4 10s. was for passages of the crew of the "Sarah Pile," and £100 was paid to the owners of the "Alastor" for loss sustained in connection with the rescue of the crew of the "Indiana." A sum of £36 19s. 6d. was expended in replenishing the dépôts for castaways on the outlying islands, and £13 13s. was paid for a passage to England for the late carpenter of the "Dacca," of Dundee, which amount has been refunded by the Board of Trade. The sum of £6 10s. was expended in providing passages to Sydney for the crew of the barque "Grasmere" of that port. A claim for a refund of this amount has been made against the Government of New South Wales.

Wages and Effects of Deceased Seamen.—The estates of twenty deceased seamen, amounting in the aggregate to £175 5s., have been dealt with during the year, and, of these, eleven were new estates. The sum of £49 14s. 7d. has been paid to relatives and other claimants.

Marking Load-lines.—" The Shipping and Seamen's Act Amendment Act, 1894," having provided that the load-lines of vessels are to be fixed in accordance with the tables framed by the Load-line Committee of the Board of Trade, Collectors of Customs have been instructed to see that this is done, and New Zealand vessels are now being marked in accordance with these tables.

Deck Cargo—Regulations have been issued making provision as to the quantity of cargo and live-stock which vessels may carry on deck, and Collectors of Customs, who issue the licenses for the quantity allowed, have been instructed to see that the regulations and licenses are adhered to. In some cases friction occurred when the regulations came into force, but this is wearing off as masters and owners become accustomed to the rules. Collectors are authorised to call in expert advice as to the quantity to be allowed whenever they consider it necessary to do so; but this is not often required, as the regulations are very full and explicit.

Colonial Pilots.—Regulations have been made for the issue of licenses for colonial pilots—that is, pilots who take vessels from one port to another in the colony. Any person who prior to the 1st January, 1895, has either commanded a vessel of not less than 300 tons register, trading on the coasts of the colony, or has been engaged in piloting similar vessels trading on the coast, is entitled to a license without examination, provided that prior to the above date he held a certificate not lower than that of master, Home trade. In other cases applicants must pass the prescribed examination.

than that of master, Home trade. In other cases applicants must pass the prescribed examination. Examination of Able Seamen.—Regulations have been made for the examination of candidates for certificates as able seamen, and the Examiners of Masters and Mates have been appointed the examiners of such candidates; but so far no candidate has applied for examination. Under the Act which provides for the issue of these certificates, it is enacted that four years' service at sea before the mast qualifies a seaman for the rating of A.B. without examination, and this, combined with the fact that a man is entitled to ship in that capacity without producing certificates of discharge for the prescribed sea-service, provided he makes a statutory declaration that he is entitled to ship, is no doubt the cause of no candidates coming forward. Shipowners would, no doubt, find it to their advantage to encourage seamen to prove their competency by undergoing examination and obtaining these certificates.

Fees for Engagement and Discharge of Seamen.—The fees for the engagement and discharge of seamen have been considerably reduced, and the amount which the owner or master is entitled to retain from the wages of each man as a partial recoupment of the amount he has paid has been reduced from 1s. to 6d. in the case of a seaman, and from 1s. 6d. to 1s. in the case of an officer.

Adjustment of Compasses.—" The Shipping and Seamen's Act Amendment Act, 1895," having provided that the compasses of vessels built wholly or partly of iron are to be adjusted by adjusters licensed by the Minister of Marine, regulations have been made for the issue of licenses to adjusters, and providing that the adjustment shall be made at least once in every year. A register of licensed adjusters is to be kept by the Collector of Customs at each port, the names being arranged in alphabetical order. On an application for adjustment being made, the Collector requires the adjuster standing next in order for duty to make it.

Alterations in the Law.—During the last session of Parliament an Act to further amend "The Shipping and Seamen's Act, 1877," was passed. The following are its main provisions :— The master of every intercolonial and Home-trade ship is required to properly exercise his

The master of every intercolonial and Home-trade ship is required to properly exercise his crew in boat-drill at sea once in every month, and in the case of intercolonial ships at least once in the course of each round voyage. Two classes of certificates of competency are to be issued for engineers of steamships plying within restricted limits; one, which is called a "river engineer's certificate," entitles the holder to serve as engineer of a steamship plying within river or extended river limits; and the other, which is called a "marine engine-driver's certificate," entitles the holder to serve as engineer of a steamship fitted with non-condensing machinery, the area of cylinder or combined area of cylinder of propelling machinery of which does not exceed 200 circular inches, and plying only within harbours, rivers, and lakes, or other inland navigable waters.

Every ship built wholly or partly of iron is to have her compass adjusted by a licensed adjuster.

Authority is given for the Minister of Marine to fix the fees which the master of a vessel may deduct from the wages of his crew as a partial recoupment of the amount he has paid for their engagement and discharge.

Every vessel engaged in the coastal or intercolonial trade which carries at least five certificated able seamen is allowed to substitute two boys for every ordinary seaman she is required to carry.

The power of modifying the load-line rules has been transferred from the Minister of Marine to the Board of Trade. This change was required by the Imperial Government before the Queen's assent was given to "The Shipping and Seamen's Act Amendment Act, 1894."

I have, &c., W. T. GLASGOW, Secretary.

The PRINCIPAL EXAMINER of MASTERS and MATES to the SECRETARY, Marine Department. Wellington, 12th May, 1896. SIR,---

I have the honour to inform you that the regulations and instructions pertaining to the examination of masters and mates have been rigidly and satisfactorily carried out by the different Examiners at the various ports.

In Auckland the examinations are conducted by Captain Tilly, R.N., and Captain Robertson, Harbourinaster, Onehunga.

Captain Grey, formerly master of the Government steamer "Stella," and latterly Tide Surveyor in the Customs, Port Chalmers, was appointed Examiner for the Port of Otago in May, 1895; and for the convenience of shipping generally, as well as for examination purposes, the examination rooms were changed from Dunedin to Port Chalmers in the following month. The change, in my opinion, is a most desirable one, and has given general satisfaction to those interested.

Since Sir Arthur Douglas, Bart., resigned from the position of Examiner at Lyttelton in June last the position was vacant up to 1st May, 1896, when Captain Marciel, late of the Peninsular and Oriental Steam Navigation Company, was appointed Examiner. During the time there was no Examiner at Lyttelton the examinations were conducted either by Captain Grey or myself. This caused much inconvenience, as it necessitated one of us going there.

At Wellington the examinations are conducted by Captain Edwin, R.N., and myself. During the present year, in addition to other examinations, two candidates were examined and passed the voluntary examination in the laws of the deviation of the compasses of iron ships. These two examinations are the first of the kind that have taken place in the colony, and they form the necessary qualification required for a licensed adjuster of compasses.

Captain Bayldon, Harbourmaster at the Thames, conducts examinations for river certificates only, and according to the returns there has been a considerable falling-off in these examinations during the last twelve months. This, in my opinion, is a good sign, as it shows higher grades of certificates are preferred by mariners.

In conclusion, I wish to recommend that the new regulations issued by the Board of Trade, relating to the examinations of masters and mates, which come into force on the first day of January, 1898, should be adopted in New Zealand on the same date.

I have, &c.,

GEO. ALLMAN, Principal Examiner of Masters and Mates.

The Secretary, Marine Department.

The INSPECTOR of LIGHTHOUSES to the SECRETARY, Marine Department.

Wellington, 13th May, 1896.

Sir,-I have the honour to report that, in accordance with your instructions, I inspected the Cook Strait and southern lighthouses of New Zealand during the months of January and February last, and I also visited, in company with Mr. Hales, Engineer-in-Chief, the proposed site for a lighthouse at the Snares, and I agreed with him to recommend the location already selected by the Commissioners appointed for that purpose.

The result of my inspection is that I am pleased to be able to report that, almost without exception, the lighting apparatus and towers at the several stations are in capital order and well kept; also the keepers' dwellinghouses, with the exception of a few of the old buildings, which have deteriorated through age and exposure to the elements. These buildings referred to are now being put in order, and when completed will be in good condition. At all the stations I found the keepers to be a steady, reliable body of men, attentive to their duties, and apparently fully alive to the responsibility of their position. It is also gratifying to be able to state that they expressed them-selves generally as being well satisfied with the treatment accorded by the department, and in no instance was I called upon to listen to any complaint of importance.

Concerning electric and telephone communication with the various light-stations, I have much pleasure in stating that where communication has been established it has been of great service to the shipping community, for weather-reporting purposes, and for reporting passing vessels; also it has been of considerable use for departmental purposes. I would therefore recommend that all light-stations should be connected by telephone with the nearest telegraph-station where practicable.

During the year much has been done, with a view of perfecting and improving the lighting system on the coast and the harbour lights.

The lighting apparatus intended for Cape Palliser and Cape Kidnappers has arrived in Wellington, and is stored waiting the completion of their respective towers.

Leading lights have been provided for Mokau River, and the advisability of having leading lights at Hokianga is under consideration.

An iron cage has been added to the beacon off Haulashore Island, Nelson Harbour, and a more powerful light is now exhibited therefrom than hitherto; also signals to indicate the depth of water during flood-tide at the entrance of Nelson Harbour both day and night have been established, and are found to be of great service to mariners.

The Harbour Boards at Napier and Gisborne have provided leading lights for the convenience and safety of shipping at their respective ports.

Numerous surveys have been made of reported dangers, and buoys and beacons have been placed to mark them where required.

Plans have been executed for the introduction of an auxiliary light on the Brothers, for the purpose of guiding mariners when navigating in the vicinity of Walker Rocks, off Jackson's Head; also, at the request of the Hon. the Minister of Marine, plans were prepared for the introduction of a more suitable light for Bluff Harbour. I also reported favourably on the desirability of having Dog Island connected by cable, to enable passing vessels to be reported when the signalstation at the summit of Bluff Hill was obscured.

Soundings have been taken and borings made on Hope Shoal, off Ward Island, with a view of placing a light there, to be used instead of the one at present in use at Somes Island. Some time ago I held that the light would be better on Hope Shoal than on Somes Island. Since then the locality has been surveyed, and I have also made a further examination; and I am now of opinion that, if the power of the light on Somes Island was increased to that of a third- or fourthorder light, it would answer the purpose admirably for which it is intended. With a view of further improving Wellington Harbour, it may be deemed necessary at some future time to light the harbour by means of gas buoys.

In conclusion, I wish to make a few remarks concerning new light-stations. After the proposed lighthouse at Cape Palliser, Cape Kidnappers, and the Snares are constructed, it may be deemed necessary to add stations at other points on the New Zealand coast from time to time. These additional lights should, in my opinion, be erected in the following order, according to their importance :—

Rocks Point (between Westport and Cape Farewell).—This light has almost become a necessity in view of the large number of vessels in the coal-carrying trade which pass this locality. Kiourangi Shoal, carrying $3\frac{1}{4}$ fathoms of water, lies about ten miles north of Rocks Point, and is about five miles off the nearest coast-line. This shoal is a source of danger to all classes of shipping, but more particularly to larger vessels with heavy draft of water making the coast of New Zealand.

East Cape.—Situated between Gisborne and Auckland. This cape is the turning-point for all vessels bound to Auckland from the south part of New Zealand, and *vice versa*. There is at present no light on this part of the coast between Portland Island and Cuvier Island. The cape is distant 100 miles from Portland Island and 145 miles from Cuvier Island.

Kaikoura Peninsula.—This lies half-way between Wellington and Lyttelton. It was close to this Peninsula that the steamer "Duke of Buckingham" stranded a few years ago. North Cape.—This cape is situated at the north-east extremity of New Zealand, and is the

North Cape.—This cape is situated at the north-east extremity of New Zealand, and is the turning-point for all vessels coming from the westward bound to the east coast ports of the North Island, and vice versa.

Cape Brett.—This lies between the Moko Hinou light and the North Cape. The Cape is distant about sixty miles from Moko Hinou light and eighty miles from the North Cape. This light would be a guide to the Bay of Islands, as well as being a good coastal light.

light would be a guide to the Bay of Islands, as well as being a good coastal light. *Flat Point.*—About forty-five miles north-east of Cape Palliser. There are numerous outlying dangers here in the shape of sunken rocks, on which several steamers have struck. It is off this point that the course of vessels is usually altered for north and south.

Of these lights, the most pressing are Rocks Point and the East Cape.

I have, &c.,

The Secretary, Marine Department.

GEORGE ALLMAN, Inspector of Lighthouses.

H.—15.

The PRINCIPAL ENGINEER-SURVEYOR of STEAMERS to the SECRETARY of the MARINE DEPARTMENT. Office of Chief Inspector of Machinery, Wellington, 1st May, 1896. SIR,—

I have the honour to submit the following report of steamers surveyed, and for which certificates were issued under "The Shipping and Seamen's Act, 1877," during the financial year ended 31st March, 1896.

The following table shows the number of steamers engaged in the respective trades, their tonnage, horse-power, and fees payable :—

| Number. | Trade in which engaged. | Fees Payable. | Aggregate Registered Tonnage. | Registered Nominal Horse-power. |
|--|---|--|----------------------------------|------------------------------------|
| $\begin{array}{cccc} 23 & \ldots \\ 56 & \ldots \\ 128 & \ldots \end{array}$ | Foreign Home Trade River and Extended River | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 19,257 10,684 3,656 | 4,231 8,855 2,163 |
| 207 | | 1,180 0 0 | 33,597 | 9,749 |

For the 207 steamers shown above, 295 survey certificates were issued, that number of surveys having been made.

The question of granting yearly certificates to steamers fitted with non-condensing machinery is worthy of consideration, as nearly all these steamers are plying on lakes or rivers where fresh water is available, or they have conveniences on board for carrying fresh water. There is therefore no good reason for having steamers fitted with non-condensing machinery surveyed twice every year, as now required.

It is necessary that set times should be fixed for the examinations of marine engineers, so as to save the time both of examiners and candidates who wish to be examined.

Appended is a table giving names of steamers surveyed, tons register, horse-power, nature of machinery and propeller, also trade in which employed.

I have, &c.,

The Secretary, Marine Department.

ROBERT DUNCAN, Principal Engineer-Surveyor. RETURN of STEAMERS to which CERTIFICATES of SURVEY were issued in NEW ZEALAND during the Year ended the 31st March, 1896.

9

| | | | | ear ended the a | 518 | t March, 10 | 02 | ·0. | |
|---------------------------------------|-----|----------------------|--|---|-----|--------------------------|-----|-----------------------------------|---|
| Name of Vessel. | | Tons Re- gister. | Nominal Horse- power of Engines. | Nature of Engine | s. | Nature of Propeller. | | Class of Certificate. | Remarks. |
| Aburiri | | 31 | 17 | Compound | | Screw . | | Extended river. | |
| Akaroa | ••• | 43 | 28 | | •• | "• | • | Dimon " | Launch. |
| *Albany *Alert | ••• | 8 | 85 | Non-condensing ″ | ••• | . " | | River | Llaunen. |
| *Alexandra | ••• | 73 | 30 | , | •• | Paddle . | - 1 | " | |
| Alice Aorere | ••• | 8 49 | $\begin{vmatrix} 4\\ 16 \end{vmatrix}$ | Compound | ••• | Screw . | | Home trade. | " |
| Aorere Argyle | ••• | 126 | 45 | | ••• | | • | " | |
| Australia Awarua | •• | 260 100 | 77 80 | | ••• | Twin-screw. Paddle | | Foreign trade. Home trade | Tug. |
| Awarua *Beatrice | ••• | 8 | 10 | Non-condensing | | Screw . | 1 | Extended river. | |
| *Bella Ben Lomond | •• | $ 12 \\ 33 $ | 12 15 | Compound | •• | " · | - 1 | River." | |
| Birkenhead | •• | 55 | 16 | Non-condensing | ••• | Paddle . | | " | |
| Blanche | •• | 18 | $\frac{9}{40}$ | " | •• | Screw Paddle | | " | |
| *Britannia Brunner | •• | 108 333 | 40 95 | Triple expansion | •• | Screw | . | Home trade. | |
| *Canterbury | •• | 100 | 24 | Non-condensing | •• | Twin-screw. | - 1 | Extended river. | |
| Charles Edward Chelmsford | ••• | 123 70 | | | •• | Screw | - 1 | Home trade. | |
| Clansman | | 336 | 99 | " | •• | | • | " | 37 . 1 |
| *Clara *Clematis | •• | 5 | | Non-condensing | •• | Sternwheel . | : | Extended river River. | New vessel. |
| Corinna | ••• | 820 | 141 | Compound | ••• | Screw | • | Foreign trade. | |
| Coromandel | •• | 67 | 25 3 | Non-condensing | ••• | " · | | Extended river. River | Launch. |
| Cygnet *Despatch (Auckland) |) | | 6 | " | ••• | " •• | • | "••• | " |
| Dingadee | •• | 393 | 80 | | •• | Twin-screw Screw | | Home trade. | |
| *Douglas Duco | ••• | 55 26 | 20 60 | Condensing Triple expansion | ••• | Screw | | Extended river | Tug. |
| Durham | •.• | 53 | 30 | Compound | •• | " | | " | |
| Eagle *Echo | •• | 138 | 70 3 | Non-condensing | ••• | Paddle Screw | - | River | Launch. |
| *Effort | ••• | 13 | 12 | Compound | ••• | Paddie | | Extended river. | |
| Eliza Elizabeth | •• | | | Non-condensing | •• | Screw | | River Extended river | Fishing launch. |
| Elizabeth *Elsie | •• | 15 | 8 | | | | | " | |
| *Enterprise | •• | 61 | 30 4 | , | •• | Paddle Screw | | River. | Launch. |
| *Erin *Ethel J | ••• | 20 | 16 | Compound | ••• | <i>"</i> | - 1 | " | |
| Fairy | •• | 32 | 15 53 | - | •• | " | | Extended river. River | First survey. |
| Falcon Fanny | •• | 67 | 30^{-52} | Compound | ••• | <i>"</i> • • | | Home trade. | r not sarroy. |
| *Fingal | •• | 22 | 11 | | ••• | " . | | Extended river. Foreign trade. | |
| Flora Flower of Kent | •• | 838 | 180 | Compound | ••• | | - 1 | River | Launch. |
| *Freetrader | | 95 | 30 | | ••• | Sternwheel Twin-screw | | Home trade. | |
| Gairloch Glenelg | ••• | $211 \\ 156$ | 85 75 | * | ••• | Screw | | n naue. | |
| Grafton | •• | 322 | 123 | " | ••• | Twin-screw | | " | |
| Hauroto *Help | ••• | 1,276 | 250 $1\frac{1}{2}$ | Non-condensing | ••• | Screw . | | Foreign trade. River | Launch. |
| Herald | | 370 | 85 | | ••• | " . | . | Home trade. | |
| Hesketh Horeke | •• | 393 | 80 4 | Non-condensing | •• | Twin-screw Screw | | River ["] | Launch (formerly |
| | •• | | | - | | | | | " Miranda"). |
| Huia (Wellington) *Huia (Auckland) | •• | 90 | 25 8 | | ••• | "··· | 1 | Home trade. River. | |
| *Ida | ••• | 12 | 10 | | •• | " | • | " | |
| Invercargill | •• | 123 50 | $50 \\ 25$ | - | ••• | <i>"</i> | - 1 | Home trade. Extended river. | |
| *Invincible Iona | ••• | 159 | 65 | " | ••• | <i>"</i> | | Home trade. | T 1 |
| Irene | •• | | $\frac{2\frac{1}{2}}{8}$ | • · · | •• | <i>"</i> | | River | Launch. |
| Ivy Jane Douglas | •• | 75 | $\frac{8}{22}$ | Compound | ••• | " | | Extended river. | " |
| *Janet Nicoll | •• | 496 | 90 28 | | •• | " | | Home trade. Extended river | Tug. |
| J. D. O John Anderson | •• | 87 36 | $\frac{28}{25}$ | | ••• | " . | | " | I ug. |
| Kahu | •• | 99 | 40 | | •• | " • | | Foreign trade. Home trade. | l · · · · |
| Kanieri *Kate | •• | 115 | $20 \\ 5$ | Non-condensing | ••• | ,, · · | | River | Launch. |
| *Katikati | ••• | 27 | 8 | Condensing | •• | " • | • | Extended river. | |
| Katipo Kawatiri | | 285 | $\frac{1\frac{1}{2}}{70}$ | Compound ″ | ••• | · // · | : | Home trade. | " |
| *Kawau | ••• | 37 | 10 | " | •• | | | Extended river. | , in the second s |
| Kennedy | •• | 125 52 | $\frac{43}{15}$ | " | •• | Twin-screw. Screw | | Home trade. River. | 1. A |
| *Kina *Kiripaka | ••• | 72 | 20 | " | •• | " . | • | Home trade. | |
| *Kopuru | •• | 28 5 | $ \begin{array}{c} 20 \\ 120 \end{array} $ | Non-condensing Compound | ••• | | • | River. Home trade | Tug. |
| *Koputai *Kotuku | ••• | 41 | 40 | Non-condensing | | Three screws | 6 | River. | |
| Lady Barkly | •• | 39 | 20 | Compound | •• | Screw . | ••• | Extended river. | 1. miles |
| | | 1 | | l | | 1 | | <u> </u> | · |

* Surveyed twice, and in some cases three times.

RETURN of STEAMERS to which CERTIFICATES of SURVEY were issued, &c.—continued.

| Na | me. | | Tons Re- gister. | Nominal Horse- power of Engines. | Nature of Engines. | Nature of Propeller. | Class of Certificate. | Remarks. |
|---|------------|---------|---------------------|---|----------------------------|-------------------------|-------------------------------|--|
| Lily | | •• | 20 | 12 | Comp'd condensing | Twin-screw | Extended river. | |
| Little Georg | е | | 4 | 4 | Non-condensing | Screw | River | Launch. |
| *Lyttelton | •• | •• | 39 | 80 | Compound | Paddle | Home trade | Tug. |
| *Mahinapua Mana (Welli | | •• | $205 \\ 51$ | $\frac{80}{25}$ | | Twin-screw | Extended river | · · · |
| Manaia | ing ton) | ••• | 55 | 15 | " | <i>"</i> ··· | Home trade. | " |
| Manapouri | | | 1,020 | 300 | "••• | " | Foreign trade. | 1. Sec. 1. Sec |
| Manawatu | •• • • • | •• | 111 | - 38 | <i>"</i> ••• | " | Home trade. | |
| *Manukau | •• | · • • · | 45 | 15 | <i>"</i> "''''''' | | Extended river. | 4.4 |
| *Manuwai | •• | • • | 75 17 | 25 | Non-condensing | Sternwheel | River. Extended river. | |
| *Maori Mararoa | •• | •• | 1,380 | 530 | Triple expansion | , SOLEM | Foreign trade. | |
| *Matau | | | 50 | -40 | Non-condensing | Sternwheel | River. | 5 A |
| *Matuku | | •• | - 3 | 3 | | Screw | i) + 2 ^{2 4} + 4 | Launch. |
| Mawhera | •• | ••• | 340 | 75 | Compound | " •• | Home trade. | and a state of the |
| Mere Mere | •• | •• | | - 3 | Non-condensing | " •• | River. | |
| *Minnie Case Moa | | •• | 48 | 25 33 | Compound | " ··· | Home trade. | |
| *Mokoia | •• | ••• | 105 | 4 | Non-condensing | <i>"</i> •• | River | New launch. |
| Moss Rose | | | | - 8 | Condensing | | "····· | Launch. |
| Mountaineer | | ••• | 66 | -60 | Compound | Paddle | " | 1 - E - E |
| *Moutoa | •• | •• | | 5 | Non-condensing | Screw | TTomas two do | T of 12 |
| Murray | •• | •• | 90 48 | 25 30 | Compound | " •• | Home trade | Left the colony. |
| Napier *Nautilus | •• * | •• | 40 32 | 18 | " · · | " | Extended river | Yacht. |
| Neptune | •• | | 44 | 18 | " ··· | | Home trade. | |
| *Ngunguru | | | 54 | 12 | Condensing | | Extended river. | A second se |
| *Nile | •• | •• | 21 | 20 | Non-condensing | Paddle | " | ĺ |
| *Noko | •• ** | •• | 15 | 9 100 | Common d | Screw Twin-screw | " | Duodao |
| No. 121 [.] No. 222 | · • • | •• | 394 502 | 120 | Compound | | Home trade | Dredge. |
| Ohau | •• | | 411 | 92 | <i>"</i> • • | Screw | Foreign trade. | n |
| Ohinemuri | | | 73 | 26 | | | Home trade. | |
| Omapere | •• | •• | -352 | 80 | | | " | · · · · · |
| Onslow | • • • • • | •• | 16 | 14 | •• | Twin-screw | River. | |
| Orowaiti *Onoti | •• | ••• | 283 138 | 70 50 | <i>"</i> | Screw | Home trade. Foreign trade. | |
| *Oreti Osprey | •• | •• | 138 | 70 | " | Paddle | River. | |
| Ovalau | •• | ••• | 767 | 75 | Quadruple expans'n. | | Foreign trade. | |
| *Paeroa | •• | •• | 45 | 16 | Compound | " | Extended river. | |
| Paiaka | •• | •• | 10 | 10 | | | | Fishing vessel. |
| *Patiki | •• | •• | 37 | 22 | Non-condensing | Paddle | River. | Launch. |
| *Pearl *Pelorus | •• | •• | 9 18 | 7 12 | <i>"</i> | Screw | | Launen. |
| Penguin | •• * | ••• | 517 | 180 | Compound | | Home trade. | |
| *Phœnix | | •• | 6 | 6 | Non-condensing | " •• | Extended river | |
| Picton | •• | •• | 7 | 8 | | " •• | | |
| Pilot | •• | •• | | 13 | Compound | " | River | " |
| Pioneer Piraki | •• | •• | 5 10 | 5 | Non-condensing | " | Extended river. | · / · |
| *Planet | •• | •• | 13 | 8 | <i>H</i> • • • | " | Extended Hver. | |
| Plucky | | | 29 | 40 | Compound | " | Home trade | Tug. |
| Poherua | • • | •• | 749 | 128 | Triple expansion | " | Foreign trade. | 1 |
| Prince of W | ales | •• | 487 | 21 | Condensing | " ·· | Home trade | Meat-freezing |
| Ourson of the | South | | 121 | 40 | Compound | | 1 | vessel. |
| Queen of the *Result (Tau | | •• | 121 | 10 | Non-condensing | <i>n</i> ••• | Extended river. | |
| *Result (Nap | | ••• | 18 | 23 | " | <i>"</i> | " | 1 |
| Richmond | •• | •• | 475 | 105 | Compound | " ·· | Foreign trade. | T |
| Ripple Recommend | •• | •• | 469 | - 7 | Non-condensing Compound | " | River Home trade. | Launch. |
| Rosamond *Rose Casey | •• | ••• | 462 | 90 109 | Compound | | Extended river. | |
| *Rotokino | | | 1,304 | 135 | Quadruple expans'n | · · · · · | Foreign trade. | |
| Rotomahana | (Dunedi | | 901 | 450 | Compound | <i>"</i> | " | |
| Rotomahana | . (Aucklar | ıḋ) | 139 | 45 | " | ···· | Home trade. | · · · |
| *Scotchman | •• ** | •• | 30 | 10 | Non-condensing | · " ·· | Extended river. | 2.4 |
| *Sea Gull | •• | • • | 10 | 10 | ••••• | " •• | " •• | " |
| *Snark Southern Cr | 055 | · • • | 12 158 | 10 50 | Compound | " | Foreign trade. | |
| Staffa (Auck | | | 40 | 20 | Condensing | ·· ·· | Extended river. | |
| Staffa (Dune | | | | - 3 <u>1</u> | Non-condensing | <i>"</i> | River | " |
| Stella | •• | ••• | 157 | 90 | Compound | " ·· | Home trade. | |
| Stormbird | •• | | - 137 | 40 | Non condensing | " · · | Dimon" | |
| *Sylph *Tainui | •• | •• | 5 47 | 4 20 | Non condensing | Paddle | River River. | · // |
| Takapuna (I | Dunedin) | | 370 | 165 | Compound | Screw | Home trade. | · · · · · |
| *Takapuna (A | | | 58 | 20 | Non condensing | Paddle | River. | 1 |
| | •• | •• | 1,303 | 255 | Triple expansion | Screw | Foreign trade. | |
| Talune | ton | •• | 22 | -12 | Non-condensing | " •• | River. | 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - |
| Talune Tam O'Shar | | | | | | | 1 | |
| Talune Tam O'Shan *Tangihua | •• | ••• | 20 | 15 | Compound | | Foreign trade | |
| Talune Tam O'Shan *Tangihua Tarawera | •• | •• | 1,269 | -250 | Compound | | Foreign trade. | |
| Talune Tam O'Shan *Tangihua | •• | | | | | | | |

* Surveyed twice, and in some cases three times.

and the second sec

RETURN of STEAMERS to which CERTIFICATES of SURVEY were issued, &c.-continued.

| Name of Vessel. | • | Tons Re- gister. | Nominal Horse- power of Engines. | Nature of Engines. | Nature of Propeller. | Class of Certificate. | Remarks. |
|---------------------|--------------|---------------------|---|--------------------|-------------------------|--------------------------|--|
| Taviuni | * . | 010 | 135 | Quadruple expans'n | Screw | Hansima tua da | |
| m 1 | •• | 910 | 10 | Non-condensing | | Foreign trade. River | Launch. |
| m • 1 | •• | ••• | | Ų Ū | "" | River | Launch. |
| Te Aroha | •• | 50 | 14 | | 10 | . | |
| Tekapo | •• | 1,544 | 270 | Compound | Screw | Foreign trade. | |
| Tekapu | •• * | 50 | 25 | | - " •• | Extended river. | |
| Theodore | •• | 35 | 25 | Non-condensing | Paddle | River. | |
| Thomas King | • • | 70 | | • • • | Screw | Extended river | Dredge. |
| Timaru | | 211 | 78 | Compound | Twin-screw | Home trade | Tug. |
| Titiroa | •• | ••• | 3 | Non-condensing | Screw | River | Launch. |
| Tongariro | •• | 62 | 25 | , | Paddle | | |
| Torea | | 9 | 18 | Compound | Screw | Extended river. | |
| Tuakau | | | 2 | Non condensing | | River | |
| m | | | 61 | 2.04 condensing 11 | | | New vessel. |
| m | •• | •• | 14^{2} | Compound | Twin-screw | Extended river. | 110W 105901 |
| | •• | | 120 | Quadruple expans'n | | Foreign trade. | |
| Upolu | . • : | 700 | | | | | T 1 |
| Vesta | •• | | 3 | Non-condensing | | River | Launch. |
| Victoria | . • • | 92 | 50 | " | Paddle | Extended river, | |
| Victory | | ••• | 4 | | Screw | River | |
| Vivid | • • | 6 | 14 | | " | Extended river. | |
| Waihi | •• | 63 | 20 | Compound | " | Home trade. | |
| Waihora | | 1,269 | 250 | | " | Foreign trade. | |
| Waikato | | 56 | 20 | Non condensing | Paddle | River. | 1 |
| Wainui | • • | 391 | 95 | Compound | Screw | Home trade. | |
| Waiotahi | | 168 | 56 | | Twin-screw | ,, | |
| Wairere | | 27 | 80 | Non-condensing | Paddle | River. | and the second second |
| Wairoa (Auckland) | | 63 | 24 | Compound | Screw | Home trade. | |
| Wairoa (Napier) | •• | 48 | 20 | Condensing | | Extended river. | |
| | •• | | 10 | Non-condensing | | T.) | |
| Wairoro | •• | •• | 5 | Ç | ",, | | " |
| Waitangi | • • | ••• | | ···· | " | · // · · · · · · · · | D " |
| Waitapu | •• | 40 | 16 | Compound | " | Home trade | Burnt. |
| Waitara | •• | •• | 12 | Non-condensing | _ " | Extended river. | · · · · |
| Waitoa | •• | 27 | 16 | Compound | Twin-screw | " | |
| Waiwera (Auckland) | | | 8 - | " | Screw | River | Launch. |
| Waiwera (Lyttelton) | •• | 6 | 15 | | | Extended river. | and the second |
| Waiwera (Henley) (| | | . 7 | Non-condensing | " | River | <i>"</i> |
| Wakatipu | | 1,258 | 256 | Quadruple expans'n | | Foreign trade. | |
| Wakatu | | 95 | - 30 | Compound | | Home trade. | |
| Waverley | | 77 | 25 | w | Twin screw | ,, | and the second |
| Weka (Napier) | ••• | 53 | 20 | <i>"</i> | 0 | <i>"</i> | |
| | •• | 86 | 20 | | Twin-screw | River. | |
| Weka (Auckland) | • • | | | <i>"</i> • • | a | Home trade. | |
| Wellington | ••• | 279 | 90 | NT " 1 ** | Screw | | |
| Whangape | •• | •• | 6 | Non-condensing | | River | " |
| Yankee Doodle | •• | 6 | 12 | | Paddle | " •• | " |
| Zephyr | •• | 8 | 12 | | Screw | | " |

* Surveyed twice, and in some cases three times.

RETURN showing the CERTIFICATES of SERVICE issued to MASTERS, MATES, and ENGINEERS during the Year ended the 31st March, 1896.

| Name of 1 | Person. | | | : | Rank | • • • | Çlass of Certifi | cate. | Date of Issue. | No |
|------------------------|---------|---------|-------|----------|------|-------|------------------|-------|-----------------|------|
| | | | | | | | TT | | 4 April, 1895 | 265 |
| Joseph Wheeler | •• | •• | •• | Master | •• | • •• | Home trade | • • | 0.0.1 11 | 0.00 |
| William Lang | | • • • • | ••• | " | •• | •• | " | •• | 29 April, " | 0.00 |
| George Mayall | •• | • • | •• | " | •• | • • • | · // · | •• | 14 May, " | |
| William Turner | •• | •• | •• | " | •• | •• | · · · // | •• | 21 May, " | |
| James Biddick | •• | • • | | <i>"</i> | •• | | " | • • | 4 June, " | |
| Daniel Sullivan | •• | | | " | | | " | •• | 4 June, " | 266 |
| William Cinnamon | | •• | | " | •• | •• | " | | 10 June, " | 266 |
| James Pelley | | •• | · · · | " | | •• | " | | 10 June, " | 266 |
| George Buckley | | | | ,, | | | " | • • | 10 June, " | 266 |
| Solomon Finey | | • • | · · | | | | " | | 12 June, " | 266 |
| Peter Kino | | | | " | •• | | | | 5 July, " | 266 |
| oseph Silveria | | | | <i>"</i> | | | " | | 7 Aug., " | 266 |
| Edwin McDonald | | | | " | •• | | " | | 21 Aug., " | 267 |
| William Williams | | | | | | | | ••• | 9 Dec., " | 267 |
| Henry George Subritzky | •• | •• | •• | " | | | | | 19 Dec., " | 267 |
| | •• | •• | • •• | " | •• | | | | 10 D " | 267 |
| lfred Subritzky | •• | • • | ••• | | •• | •• | " | •• | 13 Jan., 1896 | 267 |
| John Mitchell Bernard | •• | •• | •• | " | •• | | ··· // ··· | ••• | TO 9 911., 1090 | 201 |

H.—15.

RETURN showing the Total Ordinary Expenditure of the Marine Department during the Financial Year ended the 31st March, 1896.

| Natu | re of Expe | enditure. | * | | | Details. | Totals. | Grand Tot | als. |
|--|----------------|-----------|----------|------|-----|---|--------------|-----------|------|
| | | | | | | £ s. d. | £ s. d. | £ | s. č |
| AD OFFICE :— Secretary, also Secret | ary and | Inspecto | r of Cus | toms | | | | | |
| Chief Clerk | •• | •• | •• | •• | | 300 0 0 | | | |
| Clerk | •• | •• | ••• | •• | •• | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | |
| Cadet Nautical Adviser, &c. | •• | •• | •• | •• | ••• | $53\ 17\ 9$ $400\ 0\ 0$ | | | |
| , | | | | | | | | 973 1 | .7 9 |
| RBOURS : Manukau, | | | | | | - | | | |
| Salaries | •• | | | | | 426 0 0 | | | |
| Contingencies | | | | •• | | 92 7 6 | | | |
| Signalmast | | •• | •• | •• | ••• | 98 8 3 | | | |
| Repairs to Heads Repairs to Polloc. | Wharf Whorf | •• | •• | •• | ••• | $egin{array}{cccccccccccccccccccccccccccccccccccc$ | | | |
| Russell,— | K 99118011 | •• | •• | •• | •• | 50 0 0 | 735 10 7 | | |
| Contingencies | •• | • • | •• | •• | | $5 \ 19 \ 10$ | 100 10 1 | • | |
| Hokianga,— | | | | | | 054 0 0 | 5 19 10 | | |
| Salaries Contingencies | •• | •• | •• | •• | •• | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | |
| Kaipara,— | •• | •• | •• | •• | •• | <u> </u> | 275 0 0 | | |
| Salaries | •• | •• | •• | •• | | 405 0 0 | | | |
| Subsidy to steam | | | | •• | ••• | 240 0 0 | | | |
| Contingencies Whangarei,— | •• | •• | •• | •• | | 2 18 3 | 647 18 3 | | |
| Grant for wharf a | t Urauh | art Bay | •• | | | 100 0 0 | 07110 0 | | |
| Opunake,—. | T | 0 | | | | | 100 0 0 | | |
| Salary | •• | •• | •• | •• | ••• | 25 0 0 | | | |
| Contingencies Foxton.— | •• | •• | •• | •• | ••• | 220 | 27 2 0 | | |
| Salary | | | | | [| 190 0 0 | 21 2 0 | | |
| Contingencies | | | •• | •• | ••• | 78 8 11 | | | |
| Rangitikei,— | | | | | - | | 268 8 11 | | |
| Salary Contingencies | •• | •• | •• | •• | •• | 36 0 0 | | | |
| Tauranga,— | • • | •• | •• | • • | •• | 1 13 11 | 87 18 11 | | |
| Contingencies | | •• | •• | | | 10 12 5 | 01 10 11 | | |
| Wairau,— | | | | | | | 10 12 5 | | |
| Salary | •• | •• | •• | •• | ••• | 145 0 0 | | | |
| Contingencies Picton,— | •• | •• | •• | •• | •• | 47 12 6 | 192 12 6 | | |
| Contingencies | •• | | | | | $11 \ 14 \ 2$ | 152 12 0 | | |
| Havelock,- | | | | | - | | 11 14 2 | | |
| Contingencies | •• | •• | •• | •• | ••• | 750 | | | |
| Nelson,— Salaries | | | | | ŀ | 729 2 5 | 750 | | |
| Contingencies | ••• | •• | •• | •• | •• | 362 13 11 | | | |
| Riwaka,— | | | | | - | | 1,091 16 4 | | |
| Salary | •• | •• | •• | •• | •• | 6 0 0 | | | |
| Waitapu,— Salary | | | | | - | 25 0 0 | 600 | | |
| Maintenance of li | onts ghts | •• | •• | •• | | 50 0 0 | | | |
| Contingencies | •• | •• | •• | | | 0 16 0 | | | |
| Collingwood,- | | | | | - | | 75 16 0 | | |
| Salary Contingencies | •• | •• | •• | •• | ••• | 18 15 0 | | | |
| Mokihinui,— | •• | •• | •• | •• | •• | 19 11 6 | 38 6 6 | | |
| Contingencies | | •• | | ••• | | 743 | 30 0 0 | | |
| Karamea,— | | | | | - | | 743 | | |
| Signalling vessels | | •• | •• | •• | •• | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | |
| Contingencies Okarito,— | •• | •• | •• | •• | •• | 9 1 1 | $32 \ 1 \ 1$ | | |
| Salary | • • | | | | | 50 0 0 | | | |
| Contingencies | •• | •• | •• | •• | | 37 5 0 | | | |
| Okuru,— | | | | | - | | 87 5 0 | | |
| Signalling vessels Waikawa,— | •• | •• | •• | •• | •• | 6 0 0 | | | |
| Salary | | | | | | 10 0 0 | 600 | | |
| Contingencies | •• | •• | ••• | •• | | |] | | |
| Mokau, | | | | | - | | 13 1 0 | | |
| Signalman | •• | •• | •• | • • | •• | | | | |
| Contingencies Whangateau, | • • | •• | •• | • • | •• | 26 5 5 | 96 19 0 | | |
| Grant for approac | h | | | ••. | | 12 10 0 | 86 18 9 | | |
| Contingencies | •• | •• | •• | | | 2 19 6 | | | |
| Little Wanganui, | | | | | - | | 15 9 6 | | |
| Signalling vessels Contingencies | | •• | •• | •• | •• | | | | |
| Gisborne. | •• | •• | •• | •• | •• | 19 18 3 | 81 8 3 | | |
| Erection of beacon | ıs | | | | | 72 4 11 | 01 0 0 | | |
| Waimakariri,— | | | | | - | | 72 4 11 | | |
| Grant for river-wo | rks | •• | •• | •• | •• | 85 0 0 | | | |
| Half-moon Bay,— | | | | | [- | 4 16 6 | 85 0 0 | | |
| - 1 [•] | • • | | | * * | • • | | | | |

RETURN showing the Total Ordinary Expenditure of the Marine Department-continued.

| Natu | re of Exp | oenditu | re. | | - | Details. | | Totals. | Grand To | otal | s. |
|----------------------------|--------------|---------|-----|-----------|------|-----------|------|----------------|----------|------|----|
| | | | | | | £s. | d. | £ s. d. | £ | s. | ċ |
| BBOURS-continued. | | | | | | | ł | | | | |
| Whakatane,- | | | | | | | | | | | |
| Removal of rocks | •• | •• | •• | •• | | 44 | 6 | | | | |
| | | | | | - | | | $4 \ 4 \ 6$ | | | |
| Pension of J. Heberley | Ŷ | •• | •• | • • | •• | 50 0 | 0 | 50 0 0 | | | |
| Śuoy chain | | | | | | $57 \ 17$ | 8 | | | | |
| Port lights | | | | •• | | 388 7 | 2 | | | | |
| Report on Westport tr | aining- | wall | | | | | 0 | | | | |
| General harbour conti | | | | | | 242 2 | | | | | |
| | | ~ | •• | | · | | | 738 7 9 | | | |
| GHTHOUSES : | | | | | 1 | | | | | | |
| Salaries of keepers | | | •• | | | 8,985 3 | 10 | | | | |
| Travelling-expenses of | keener | | | | | 89 10 | 8 | | | | |
| Oil | reoper | · · · | •• | ••• | | 1,430 4 | 3 | | | | |
| Stores and contingenc | ins | •• | •• | •• | •• | 3,316 1 | 5 | | | | |
| Pension of Mrs. Deck | 100 | | | | ••• | 24 0 | 0 | | | | |
| | •• | •• | •• | ••• | •• | 200 0 | | | | | |
| 0 | | | | | - | | | | 14,045 | 0 | |
| Departmental travelli | ng-expe | nses | •• | •• | •• | •• | _ | 85 6 5 | 85 | 6 | |
| Coastal buoys and bea | cons | •• | •• | •• | | •• | | 850 | . 8 | 5 | |
| ndries | | | | | | 191 19 | 11 | | 0 | 5 | |
| arts . | | | | | | 84 5 | 0 | | | | |
| quiries into wrecks and | eogualti | | | | | 154 10 | | | | | |
| ryey of unseaworthy shi | ng | 05 | •• | | | 13 0 | | | | | |
| lief of distressed New Z | | •• | | | | 202 14 | | | | | |
| elief of distressed seamer | | | | land) | | 36 10 | | | | | |
| | ` | | | , | | | | 683 1 0 | | | |
| ministration of Fisherie | es Acts,- | _ | | | | 105 0 | 10 - | | 683 | 1 | |
| Protection of fish | •• | •• | •• | •• | •• | 125 8 | | | | | |
| Protection of oysters | •• | •• | •• | •• | •• | $219\ 13$ | Ð | 345 2 3 | | | |
| amination of Masters a | nd Mate | es,— | | | . [| | | | 345 | 2 | |
| Salaries | •• | •• | •• | •• | | 128 7 | 8 | | | | |
| Contingencies | •• | •• | •• | •• | •• | 194 9 | 1 | | | | |
| | | | | | . - | | | $322 \ 16 \ 9$ | 000 | 10 | |
| eather Reporting | •• | •• | | •• | | •• | - | 300 0 0 | 322 | | |
| Stella," s.s.,— | | | | | | | - | | 300 | 0 | |
| | | | | | | | | $233 \ 18 \ 2$ | | | |
| Expenses | •• | •• | •• | •• | •• | •• | _ | 200 10 2 | 233 | 18 | |
| Iinemoa," s.s.,— | | | | | | | | | _50 | | |
| Wages, stores, provisio | | | •• | •• | •• | 7,129 14 | 3 | | | | |
| Less amount earn | ed by v | essel | •• | •• | •• | 253 1 | 6 | 0.000 10.0 | | | |
| | | | | | - | · ·- · | | 6,876 12 9 | | | |
| Cost of new propeller | •• | •• | •• | •• | •• | •• | | 49 13 10 | e 000 | 0 | |
| | | | | | | | - | | 6,926 | 6 | |
| | Total | • • • | | | | | | | £28,639 | 7 | - |
| | | | | | | •• | | •• | 220.009 | - 1 | |

RETURN showing the NUMBER of NOTICES to MARINERS relating to Matters within the Colony issued by the Marine Department during the Year ended the 31st March, 1896.

| Port or Place. | Subject of Notice. |
|---|--|
| Queen Charlotte Sound Queen Charlotte Sound Waimakariri River Napier Harbour Napier Harbour Thames River Croiselles Harbour Groiselles Harbour Raglan Harbour Poverty Bay Poverty Bay Greymouth Harbour Manukau Harbour Auckland Harbour Auckland Harbour Port Nicholson Nelson Harbour Nelson Harbour | Lightship replaced in position. Survey of passage between Jackson's Head and beacon. Position of Pirano Shoal, off Blackwood Bay. Signal that bar is not fit for vessels outward-bound. Extension of breakwater. Position and description of leading-lights, beacons, and buoys for approaching steamer and breakwater wharves. Light on Kopu Wharf (two notices). Position of Mace Rock. Position of rock on which s.s. "Anglian" and s.s. "Waihora" reported to have struck. Guides to anchorages and sailing directions. Position of Emma Spit and South Head Beach (two notices). Dredging channel leading to Quay Street Jetty No. 2. Light on Quay Street Jetty No. 2. Position of mine-field, Mahanga Bay. Alteration in position of bar-buoy. Harbour-lights and -signals. Position of dangers off Island. Beacons on Louie Rock and May Rock, Half-moon Bay. |
| | |

$\mathbf{14}$

RETURN of MASTERS, MATES, and ENGINEERS to whom CERTIFICATES of COMPETENCY were issued during the Year ended the 31st March, 1896.

| Name of P | erson. | | Rank. | . . | Class of Certificate. | Date of Issue. | N |
|---|---|---------|--|------|--|---|---|
| Iillel Fredrik Liljeblad | •• •• | •• | Master Ordinary | . | Foreign trade (rennewal) | - 8 May, 1895 | 7 |
| Villiam Walker | •• •• | • | " | . | | . 11 " " " | 5 |
| Peter Sutherland | •• •• | •• | First Mate | | " | 10 | |
| rthur Algernon Austen | | •• | Second Mate | | | . 18 " " ·· . 8July, " ·· | 7 |
| ouis Roy Villsam John Cranch | •• •• | ••• | Master Ordinary | | " (renewa |) 11 " " " | 7 |
| ron Gustaf Oberg | •• •• | •• | Second Mate | 1 | " | | $ \frac{7}{7}$ |
| lec Mitford Edwin | •• •• | •• | <i>"</i> | | " | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 7 |
| eorge Melville Ruxton | | | Master Ordinary | | · · · · · · · · · · · · · · · · · · · | . 20 " " | 5 |
| lexander James Kerr Gr | | •• | Second Mate | • | " | 4001 | 7 |
| | ·· ·· | •.•. | Master Ordinary | 1 | " | I TH NT | 7 |
| ionel Campbell Hugh W /illiam Troup | | •• | " | - 1 | " · · | 00 | . 7 |
| anley McCheyne Hopki | ins | | Second Mate . | | | . 4 Dec., " | 2 |
| rederick Graham Collar | d | •• | 17: unt Mate | I | • | 00 | $\begin{vmatrix} 7\\7 \end{vmatrix}$ |
| oderick McLean iel Taylor Robertson | •• •• | ••• | First Mate | | | . 23 . 4 Jan., 1896 | 6 |
| aurice Charles Yore | · • • • • • • • | • • • • | Second Mate | 1 | " | . 4 " " | 7 |
| arry Niel Cornwall | •• •• | | # *** | • | | . 24 " " | 7 |
| mes Francis Crawford | | •• | Martin Oudinanu | | 1 | . 28 <i>""</i> . 31 <i>""</i> | $\begin{vmatrix} 7\\ 4 \end{vmatrix}$ |
| scar Jarman hn McKenzie | • • • • • | •• | Master Ordinary Second Mate | | - | . 31 ″ · · · · · · · · · · · · · · · · · · | 7 |
| orge Alfred Sparks | •• | ••• | Master Ordinary | | | . 10 " " " … | 7 |
| nomas Tapin | | ••• | Second Mate | | | . 2 March, " | 2 |
| hn Rae | •• •• | •• | Only Mate | | | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 77 |
| mes Goulding chibald Hewitley Reed | ·· ·· | •• | Second Mate First Mate | | | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 7 |
| arles Thompson | ••• | ••• | Only Mate | | Foreign-going stear | <u> </u> | 7 |
| | | | • | | ship only | 1 37 | |
| lward Dorling | •• | • • | Second Mate . | - 1 | | . 1 Nov., " . 27 " " | 7 |
| thur Beard Iward Pearce | | ••• | Mate | | | . 19 April, " | . 58 |
| ter McIntyre | ••• | •• | // | | ,, | . 10 May, " | 53 |
| hn Broadbent Hall | •• | | "•• | • | " (renewa | | 58 |
| mes Jamieson | •• •• | ••• | Master | - î | | . 8 ". " | 58 58 |
| lward Dorling bert McKinlay | •••• | •• | Mate Master | | | . 15 " " | 58 |
| iomas Lethaby | ··· ·· | ••• | Mate | - 1 | " | . 19 " " | 53 |
| illiam Francis Stewart | •• | • • | Master | - 1 | | . 29 " " | 59 |
| on Gustaf Oberg | | •• | Mate | | " | . 17 Sept., " | 53 |
| eorge Henry Wood nomas Walton Myers | ••••• | •• | "···· | - 1 | · · · · | . 13 Nov., " | 58 |
| | •• •• | ••• | Master | - 1 | | . 21 " " | 58 |
| nomas Frederick Meyer | | | Mate | - 1 | " | | 53 |
| rederick Henwood | •• •• | •• | Master | | | . 23 . 31 Jan., 1896 | 58 58 |
| aurice Charles Yore manuel Silva | •• | •• | Mate | | <i>"</i> | . 2 March, " | 58 |
| to Edward Peterson | •• •• | ••• | <i>"</i> •••••• | | | . 6 " " | 58 |
| odfred Carlquest | ••• | •• | Master | | | . 25 June, 1895 | 32 |
| enneth Stuart | •• •• | •• | " •• •• | • | · · | . 23 Sept., " . 2 Oct., " | 32 32 |
| narles Riesop | •• •• | • • | <i>"</i> "••• | • | | 9 Dec., " | 32 |
| narles Stewart Wood hn James Peter McDou | ugall | ••• | <i>"</i> , | | <i>"</i> | 00 | 32 |
| arry Howard Gould | •••••• | •• | <i>"</i> •••••• | • | | . 23 " " | 32 |
| enjamin Williams | ••• | •• | <i>"</i> ••• | • | | . 15 Jan., 1896 . 23 " " | 32 32 |
| seph Patrick Stanaway | | • • | 2nd Class Engineer | | TT 1 1 | . 29 April, 1895 | 2 |
| erhard George Mueller | •• •• | •• | | | · · · · · · · · · · · · · · · · · · · | . 22 May, " | |
| thur Beddie | | | <i>"</i> | | | . 8 Aug., " | 2 |
| eorge McGregor | •• •• | •• | 1st Class Engineer | | " | . 18 " " ··· | |
| an Ingham Milnes | | •• | 2nd Class Engineer 1st Class Engineer | | | . 21 Nov., " . 21 " " | |
| illiam Bennett enry Upton | ••••• | •• | 2nd Class Engineer | | | 04 7 1000 | 2 |
| hn Paton Stephens | | | " | .] | | . 24 " " | 2 |
| narles McKirdy | •• •• | •• | 1st Class Engineer | | Th | . 11 Feb., " | 2 17 |
| ercy Eden Waddington | | •• | Engineer. | | and the second | . 29 April, 1895 21 May, " | 17 |
| mes Powell hn Robert Lindsay | - • • • • • • • • • • • • • • • • • • • | | <i>"</i> •••••• | | | . 29 " " " | 17 |
| iomas William John Ci | | | | | " | . 7 June, " | 17 |
| hn William Proctor | •• •• | •• | " •• • | | | . 10 " " | $17 \\ 17$ |
| arles Sutton Forge Fitzwilliam Stuar | rt MacLean | •• | " | | | . 14 " " . 15 July, " | 17 |
| hn McPhee | rt MacLean | ••• | // · · · | - 1 | | . 15 " " " … | 17 |
| chmond Frederick Wil | | | ,, | | | . 15 " " | 17 |
| thur John Ayers | | •• | " •• • | | 1 Ter | . 15 " " | $ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 $ |
| ederick William Meikl | .e | • • | | | - | . 7 Aug., " . 21 " " | 17 |
| omas Richard Wheele udlev Harris | r Harrhy | •• | <i>"</i> ······ | í | • | . 3 Sept., " | 17 |
| udley Harris amuel Godfrey Asher | •• •• | •• | ,, ,, | | | . 10 " " " … | 17 |
| ohn Brokenshire | •• •• | •• | "••••• | • | | . 3 Oct., " | 17 |
| illiam Frederic Meyen | - | •• | " | | the second se | . 8 " " · · · · · · · · · · · · · · · · · | $ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 $ |
| ealy James Best | •• •• | •• | <i>"</i> •• • | | | · 5 Nov., " · · | 17 |
| ames Bridgland homas Bradbury | •• •• | | ////////////////////////////////////// | 1 | | . 26 " " | 17 |
| rthur Norman Wakefiel | | · | "••• | | " | . 9 Dec., " | 17 |
| FULLE INOT HERE WEREINO | | | | | | , 31 Jan., 1896 | 1 |

* Local.

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, 1896.

| | | | Oil. | Stores | |
|---------------------------------------|----------------|-----------|----------------|-----------------------|-----------------|
| Name of Lighthouse. | Salaries. | Gallons | 1 | and | Totals. |
| | | consumed. | Value. | Contingencies. | |
| | | · | | | |
| • • • • • • • • • • • • • • • • • • • | £ s. d. | | £ s. d. | £ s. d. | £ s. d. |
| Cape Maria van Diemen | 365 16 8 | 975 | 67 0 7 | 98 7 0 | 526 4 3 |
| Moko Hinou | $379 \ 13 \ 6$ | . 883 | 60 14 2 | 143 9 1 | $583 \ 16 \ 9$ |
| Tiri-Tiri | 300 0 0 | 501 | 34 8 10 | <u>220 9</u> 9ª | 554 18 7 |
| Bean Rock | 160 0 0 | 88* | 5 10 0 | 1 19 4 | 167 9 4 |
| Ponui Passage | 160 0 0 | 76 | 546 | 4 14 1 | $169 \ 18 \ 7$ |
| Cuvier Island | 360 0 0 | 1,283 | 88 4 2 | 142 9 10 ^b | $590 \ 14 \ 0$ |
| Portland Island | 375 4 4 | 702 | 48 5 3 | $148\ 10\ 0$ | 571 19 7 |
| Napier Bluff | 20 0 0 | Gas | 13 7 9 | 5 0 0 | 38 7 9 |
| Pencarrow Head | $269 \ 14 \ 7$ | 946 | 65 0 9 | 245 11 10° | 580 7 2 |
| Somes Island | $156 \ 0 \ 0$ | 216 | 14 17 0 | 33 14 10 ^d | 204 11 10 |
| Cape Egmont | $282 \ 10 \ 0$ | 566 | 38 18 3 | 50 1 0 | 371 9 3 |
| Manukau Head | 253 0 9 | 535 | 36 15 7 | 48 19 7 | $338 \ 15 \ 11$ |
| Manukau South Head leading-lights | • • | 166 | 11 8 3 | 24 17 10 | 168 8 1 |
| Manukau North Head leading-lights | 120 0 0 | 176 | $12 \ 2 \ 0$ | 24 11 10 | 109 9 1 |
| Kaipara Head | $290 \ 0 \ 0$ | 555 | 38 3 2 | 45 18 7 | $374 \ 1 \ 9$ |
| Brothers | 534 8 9 | 707 | $48 \ 12 \ 2$ | 155 9 1 ^e | 738 10 0 |
| Tory Channel leading-lights | 90 0 0 | 170 | $11 \ 13 \ 9$ | 512 | $106 \ 14 \ 11$ |
| Cape Campbell | $304 \ 3 \ 4$ | 566 | $38 \ 18 \ 3$ | $113 0 4^{f}$ | 456 1 11 |
| Godley Head | $281 \ 13 \ 4$ | 526 | 36 3 3 | 253 1. 3¢ | 570 17 10 |
| Akaroa Head | $272 \ 2 \ 10$ | 643 | $44 \ 4 \ 2$ | $63 \ 14 \ 5$ | $380 \ 1 \ 5$ |
| Moeraki | $266\ 13\ 4$ | 518 | 35 12 3 | $48 \ 11 \ 5$ | 350 17 0 |
| Taiaroa Head | 269 3 4 | 554 | 38 1 9 | 35 15 0 | $343 \ 0 \ 1$ |
| Cape Saunders | 274 8 8 | 563 | $38 \ 14 \ 2$ | 38 0 0 | $351 \ 2 \ 10$ |
| Nugget Point | $266 \ 16 \ 0$ | 912 | $62 \ 14 \ 0$ | 84 18 11 ^h | 414 8 11 |
| Waipapapa Point | $272 \ 10 \ 0$ | 533 | $36 \ 12 \ 10$ | 51 10 2 | 360 13 0 |
| Dog Island | 380 0 0 | 800 | 55 0 0 | $224 \ 14 \ 10^{i}$ | $659 \ 14 \ 10$ |
| Centre Island | $367 \ 10 \ 0$ | 866 | 59 10 9 | 240 2 3i | 667 3 0 |
| Puysegur Point | 370 0 0 | 887 | 60 19 7 | 239 1 11 | 670 1 6 |
| Hokitika | $12 \ 0 \ 0$ | Gas | $14 \ 15 \ 0$ | $5\ 1\ 9$ | $31\ 16\ 9$ |
| Cape Foulwind | 280 0 0 | 512 | 35 4 0 | 125 15 7k | 440 19 7 |
| Farewell Spit | 382 3 0 | 598 | $41 \ 2 \ 3$ | $132 \ 9 \ 10^{1}$ | 555 15 1 |
| Nelson | $239 \ 11 \ 5$ | 250 | 17 3 9 | $24 \ 12 \ 8$ | 281 7 10 |
| Stephens Island | $420 \ 0 \ 0$ | 1,716 | 117 19 6 | $125 \ 14 \ 9$ | 663 14 3 |
| French Pass | 210 0 0 | 123 | 892 | 106 10 7 ^m | $324 \ 19 \ 9$ |
| Totals | 8,985 3 10 | 19,112 | 1,341 10 10 | 3,282 8 8 | 13,609 3 4 |

* Kerosene. ^a Expense for repairs, £175 18s. 11d. ^b Repairs, £40 13s. 5d. ^c Expense incurred on tramway, £184 0s. 11d. ^d Expense on Hope Shoal, £12 9s. 8d. ^e Repairs, £74 16s. 9d. ^f Fencing, £66 3s. 3d. ^g New landing, £208 5s. ^h Fencing. £39 6s. 6d. ^f Repairs, £109 3s. 4d. ^j Repairs, £115 11s. 7d. ^k Repairs, £34 14s. ^j Material for new tower, £82 9s, ^m Tree-planting, £81 18s.

RETURN of ESTATES of DECEASED SEAMEN received and administered in pursuance of the Provisions of "The Shipping and Seamen's Act, 1877," during the Year ended the 31st March, 1896.

| | Name of | Seaman | • | | | Balance to Credit of Estate on 31st March, 1895. | Amount received. | Amount paid. | Balance to Credit of Estate on 31st March 1896. |
|---|-----------------|-------------------|----------------------|-----|-----|--|--|---|--|
| Richard Ryan George Railey Henry Whatling | ••• | • • • • • • | •• | ••• | •• | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | £ s. d. | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | £ s. d. 9 14 4 |
| W. H. Judd Arthur Holmes Miss L. Grindrod Samuel Stewart Frank Anderson | •• | ••• •• •• | •• •• •• •• | ••• | •• | $\begin{array}{c}7 12 \\ 2 10 \\ 3 \\ 1 \\ 13 \\ 0 10 \end{array}$ | 750 3170 | $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 7 8 4 |
| Robert Chesterman Robert Redmond Mrs. Lucy Fotheringha M. Johnston | •• | •• | ••• | ••• | | | $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 3 1 6 0 15 6 | $\begin{array}{c} \cdot \cdot \\ 6 & 5 & 1 \\ 0 & 12 & 0 \end{array}$ |
| Andrew Luping W. Jorenge Mikal Larsen Ellis Thomas Tree | •• | •• | •• | ••• | ••• | | $\begin{array}{ccccc} 0 & 11 & 0 \\ 0 & 12 & 0 \\ 6 & 2 & 10 \\ 82 & 16 & 5 \end{array}$ | •• | $\begin{array}{ccccc} 0 & 11 & 0 \\ 0 & 12 & 0 \\ 6 & 2 & 10 \\ 82 & 16 & 5 \end{array}$ |
| William Cinnamon John McLeod Duncan Campbell A. McKechan | ••• •• •• | ••• ••• •• | • • • • • • • | •• | •• | | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ | 300 | $\begin{array}{c} 0 & 16 & 10 \\ 2 & 16 & 2 \\ 7 & 15 & 5 \end{array}$ |
| Totals | •• | •• | | •• | | 51 13 3 | 123 11 9 | 49 14 7 | 125 10 5 |

.

| Return | showing t | he Cost | of Erection of | of the |
|--------|-----------|-----------|----------------|--------|
| Ne | w Zealand | l Coastal | Lighthouses. | |

| Name of | Light | nouse. | | Cost of Ere | ctio | n. |
|---------------------|--------|-------------|-----|-------------|----------|----------|
| <u></u> | | | | £ | s. | d. |
| Pencarrow Head | | | •• | 6,422 | 0 | 4 |
| Nelson | | •• | | 2,824 | 8 | 9 |
| Tiri-Tiri | •• | •• | | 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 | | 5 |
| Moeraki | •• | •• | •• | 4,288 | 13 | 2 |
| Centre Island | | •• | •• | 5,785 | 19 | 0 |
| Puysegur Point | •• | •• | •• | 9,958 | | |
| Cape Maria van D | iemen | •• | •• | 7,028 | | 8 |
| Akaroa Head | •• | •• | •• | 7,150 | 6 | 5 |
| Cape Saunders | • • | •• | •• | 6,066 | 6 | 3 |
| Cape Egmont† | | •• | •• | 3,353 | | 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 |
| Stephens Island | :: . | | ·•• | 9,349 | 9 | 11 |
| Cost of telegraph c | able t | o Tiri-Tiri | | 1,085 | | 6 |
| Miscellaneous and | unall | ocated | ••• | 1,322 | 2 | 2 |
| Total | ••• | •• | •• | £167,651 | 18 | 6 |

| | Port. | | | Amount c | olle | cte |
|-----------------|--------|-----|-----|----------|-----------------|-----|
| | | | | £ | s. | đ |
| Auckland | | | | 4,511 | 16 | 2 |
| Onehunga | | | | 69 | 11 | 4 |
| Whangarei | | | | 66 | $\overline{16}$ | 5 |
| Whangaroa | | | | 3 | 13 | 1 |
| Russell | | | | 34 | | 8 |
| Mongonui | | | | ō | 16 | 8 |
| Hokianga | | | | 7 | 6 | - 8 |
| Kaipara | | ••• | | 147 | 12 | ğ |
| Thames | | • • | ••• | 74 | 4 | 11 |
| Coromandel | | | | 22 | 9 | Ē |
| Tauranga | | | | 26 | 5 | 1 |
| Poverty Bay | | | •• | 257 | 5 | |
| Napier | ••• | ••• | | 559 | | 4 |
| New Plymouth | •• | •• | •• | 98 | 14 | Ō |
| Waitara | | •• | •• | 17 | $\frac{1}{2}$ | |
| Wanganui | | | | 99 | 6 | |
| Patea | | | | 10 | ĭ | |
| Wellington | | | •• | 4,078 | | |
| Wairau | | | | 15 | 18 | 10 |
| Pieton | | | ••• | 150 | 0 | 4 |
| Nelson | | •• | ••• | 304 | ~ | 10 |
| Westport | | | ••• | 212 | 12^{10} | 10 |
| Greymouth | | | •• | 145 | 2 | -6 |
| Hokitika | | | •• | 4 | 9 | 7 |
| Lyttelton | | | ••• | 1,535 | | 1 |
| Fimaru | | | ••• | 231 | 0 | 6 |
| Damaru | •• | | ••• | 54 | 5 | 3 |
| Dunedin | •• | | ••• | 1,504 | ~ | 11 |
| Bluff and Inver | argill | •• | ••• | 1,317 | 10^{10} | -8 |
| Tot | al | | | £15,562 | 5 | |

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

| | showing | | | | | |
|--------|-------------|----------|--------|----------------------|--------|-------|
| Charge | es, &c., co | ollected | during | the | Year e | ended |
| the 31 | lst Marcl | ı, 1896. | . Ť | | | |

| RETURN showing the Fees, &c., received under |
|--|
| the Shipping and Seamen's Act, the Merchant |
| Shipping Act, and for Pilotage and Port |
| Charges, &c., during the Year ended the 31st |
| March, 1896. |

| Nature of Receipts. | | Amo | unț. | |
|---|--------|--------|------|----|
| Shipping and Seamen's Act : Fees for shipping and discharge of | f sea- | £ | s. | d. |
| men, and sale of forms | | 1,413 | 15 | 9 |
| Survey of steamers | •• | 1,138 | 11 | 0 |
| Measurement of ships | | 18 | 18 | 0 |
| Examination of masters, mates, | and | | | |
| engineers | • • | 122 | 11 | 6 |
| Light-dues | | 15,562 | 5 | 3 |
| Merchant Shipping Act | •• | 98 | 19 | 6 |
| Pilotage and port charges | | 2,220 | 15 | 10 |
| Sundry receipts under Harbours Acts | | 194 | 4 | 6 |
| Sea-fisheries Act | | 342 | 13 | 0 |
| Sundries | | 1,568 | 18 | 3 |
| Total | £ | 22,681 | 12 | 7 |

| Name of Port. | Pilot | age. | | Port Ch &c | arg | es, | Tot | al. | |
|---------------|--------|------|--------|---------------|----------|----------|--------|-----|----------|
| | £ | s. | đ. | £ | s. | d. | £ | s. | d. |
| Auckland* | 374 | 4 | 8 | 2,154 | 2 | 5 | 2,528 | 7 | 1 |
| Onehunga | 0 | 17 | 0 | | 15 | 3 | 69 | 12 | 3 |
| Hokianga | 18 | 1 | 0 | | | | 18 | 1 | 0 |
| Kaipara | 140 | · 6 | 10 | 699 | 5 | 1 | 839 | 11 | 11 |
| Thames* | 130 | 1 | 11 | 7 | 3 | 4 | 137 | 5 | 3 |
| Gisborne* | 49 | 13 | -7 | 627 | 16 | 9 | 677 | 10 | 4 |
| Wairoa* | 102 | 10 | 0 | 2 | 10 | 0 | 105 | 0 | 0 |
| Napier* | 538 | - 7 | 5 | 2,233 | 13 | 10 | 2,772 | 1 | 3 |
| New Plymouth* | 43 | 19 | | 108 | 10 | 6 | -152 | 10 | 0 |
| Waitara* | 44 | 0 | 1 | 62 | 16 | 1 | 106 | 16 | 2 |
| Wanganui* | 347 | 11 | 10 | | | | 347 | 11 | 10 |
| Patea* | 40 | 7 | 1 | 9 | 13 | 6 | 50 | 0 | 7 |
| Foxton | 117 | 8 | 1 | | | | 117 | 8 | 1 |
| Wellington* | 174 | 16 | 1 | 6,161 | 14 | - 7 | 6,336 | 10 | 8 |
| Wairau | 157 | 18 | 10 | | | | 157 | 18 | 10 |
| Nelson | 686 | 19 | 11 | 331 | -3 | 10 | 1,018 | 3 | 9 |
| Hokitika* | į . | | | ±6 | 9 | 1 | 46 | 9 | 1 |
| Lyttelton* | 4,038 | 0 | 2 | 3,261 | 12 | 2 | | 12 | 4 |
| Timaru* | 422 | 18 | 0 | 1,409 | 5 | 4 | | 3 | 4 |
| Oamaru* | 68 | 18 | 0 | 55 | 3 | 0 | 124 | 1 | 0 |
| Dunedin* | 5,528 | 11 | 5 | 3,989 | 15 | 1 | 9,518 | 6 | 6 |
| Invercargill* | 4 | 2 | 0 | 12 | 2 | 4 | 16 | 4 | 4 |
| Bluff* | 2,300 | 12 | 0 | 1,205 | 8 | 0 | 3,506 | 0 | 0 |
| Riverton* | • | • | | 6 | 14 | 0 | 6 | 14 | 0 |
| Totals | 15,330 | 5 | 5 | 22,453 | 14 | 2 | 37,783 | 19 | 7 |
| | Harbou | | | d noron | | | l | | |

* Harbour Board revenue.

RETURN showing the Amount of Light-dues collected during the Year ended the 31st March, 1896.

| a J | | | - | | | | | |
|--------|-------------|--------|----|------|---------|---------|-------------|---|
| | Descriptive | Return | of | New | Zealand | Coastal | Lighthouses | • |
| | | | 1 | Dent | | | | |

| Name of Lighthouse. | Order of Apparatus. | Description | Period of Revolv ing Light. | Colour of Light. | Tower built of | Dwellings built of | Date first lighted. |
|---|---|--|--------------------------------------|---|---------------------------|---------------------------|---|
| Cape Maria van (Diemen | 1st order dioptric | Revolving Fixed | 1' | White | Timber | Timber | 24 Mar., 1879 |
| Moko Hinou Tiri-Tiri | 1st order dioptric 2nd " | $\begin{array}{c} {\bf Flashing} \\ {\bf Fixed} \end{array}$ | 10" | White | Stone Iron | Timber ″ | 18 June, 1883 1 Jan., 1865 |
| Ponui Passage Cuvier Island | 5th <i>"</i> 1st <i>"</i> 2nd <i>"</i> | Revolving | 30″ | White and red White | Timber Iron Timber | " | 29 July, 1871 22 Sept., 1889 10 Feb., 1878 |
| Portland Island | •• | Fixed | •• | Red, to show over Bull Rock | | | |
| Pencarrow Head Cape Egmont Manukau Head Kaipara Head | 2nd order dioptric 2nd 3rd 2nd | " Flashing | 10″ | White " " | Iron Timber | Timber ″ | 1 Jan., 1859 1 Aug., 1881 1 Sept., 1874 1 Dec., 1884 |
| Brothers { | 2nd " " | Fixed | 10" | Red, to show over Cook Rock | " | " | 24 Sept., 1877 |
| Cape Campbell Godley Head Akaroa Head Moeraki | 2nd order dioptric 2nd " 2nd " 3rd " | Revolving Fixed Flashing Fixed | 10" | White " ·· ·· " ·· ·· | Timber Stone Timber | Timber Stone Timber | 1 Aug., 1870 1 April, 1865 1 Jan., 1880 22 April, 1878 |
| Moeraki Taiaroa Head Cape Saunders Nugget Point | 3rd " 3rd " 2nd " 1st " | Revolving Fixed | 1/ | Red White | Stone Timber Stone | Stone Timber Stone | 2 Jan., 1878 2 Jan., 1865 1 Jan., 1880 4 July, 1870 |
| Waipapapa Point Dog Island | 2nd " 1st order catadiop- tric | Flashing Revolving | 10″ | " · · · · · · · · · · · · · · · · · · · | Timber Stone | Timber Stone | 1 Jan., 1884 1 Aug., 1865 |
| Centre Island | 1st order dioptric | Fixed | | White, with red arcs over inshore dan- gers | Timber | Timber | 16 Sept., 1878 |
| Puysegur PointCape FoulwindFarewell Spit | 1st " 2nd " 2nd " | Flashing Revolving | 10" 30" 1' | White White, with red arc | 11 11 11 | "" " | 1 Mar., 1879 1 Sept., 1876 17 June, 1870 |
| Nelson | 4th " | Fixed | •• | over Spit end White, with red arc to mark limit of anchorage | Iron | " | 4 Aug., 1862 |
| French Pass | 6th " | " | ••• | Red and white, with white light on beacon | h. | | 1 Oct., 1884 |
| Stephens Island | 1st " | Group flashing | 2 flashes in quic | | -minute | " | 29 Jan., 1894 |

RETURN showing the Number of MASTERS, MATES, and ENGINEERS examined during the Year ended the 31st March, 1896, distinguishing the Number of Successful and Unsuccessful Candidates.

| | | | | | | | | . <u>(</u> | | | | | | <u>.</u> | | 1 | ! | |
|---|---------|---------|---------|---------|---------|----------------|---------|------------|--------|---------|---------|--------|---------|----------|--------|---------|---------|---|
| | A۱ | ıckla | ņđ. | We | llingt | on. | L | ttelt | on. | D | uned | in. | Oth | er Pl | aces. | | Fotal | в. |
| Class of Certificate. | Passed. | Failed. | Total. | Passed. | Failed. | Total. | Passed. | Failed. | Total. | Passed. | Failed. | Total. | Passed. | Failed. | Total. | Passed. | Failed. | Total. |
| Foreign - going masters and mates | 7 | 2 | 9 | 17 | 6_ | .23 | 4 | . 4. | 8 | | 4 | . 7. | | ••• | | 31 | 16 | 47 |
| Home-trade masters and mates River-steamer masters | 9 5 | 4 2 | 13 7 | 9 3 | 2 | $\frac{11}{3}$ | 1 | | 1 | | | | | | | 19 8 | 6 2 | $ \begin{array}{c} 25 \\ 10 \end{array} $ |
| Sea-going engineers River-steamer engineers | . 7 | 4 | ii | 4 3 | 1 1 | $5\\4$ | 5 | 3 | 8 | 4 1 | 3 | 4 4 | 5 | | 5 | 8 21 | 1 11 | 9 32 |
| Totals | 28 | 12 | 40 | 36 | 10 | 46 | 10 | 7 | .17 | 8 | 7 | 15 | 5 | •• | 5 | 87 | 36 | 123 |

| | RETURN | of | WRECKS | s and | | CASUALTIES to | to Shipping re | reported t | to the Marine Depar | tment, | Department, from the 1st | st April, 1895, to the 31st March, 1896. |)6. |
|---------------------|---------------------------|----------|-----------------|-------|------------------|-------------------------------|--|-----------------------------|--|--|--------------------------|--|-------------------------------|
| Date of | Name of Vessel, | ě | rəte. .93.81 | · | Number of | Ň | Nature of | Nurriber of | 2 Place where | | Wind. | Desirion of Connt of Louising Bo | Nomo of Master |
| Casualty. | also Age and Class | Kig. | igeA Tonn | .werd | Passen- gers. | Cargo. | Casualty. | Lives lost. | Casualty occurred. | Direc- tion. | Force. | Decision of Court of Inquiry, ec. | Name of Mayer |
| 1895. Jan. 6 | Ocean, 22 years | Schooner | | | • | : | Supposed foun- dered; total | : | Koro Island, Fiji | : | Hurricane | Ď | : |
| , 23 | Monowai, s.s., 5 years | Schooner | 2137 | 60 | 150 | General | loss Stranded; slight damage | : | 3 miles off land, and 4 miles south of Gable- | S.S.E. | Light | posed to have toundered. Vessel supposed to have touched on uncharted rock while drawing 21ft. aft, and being on | Michael Carey. |
| Feb. 6 | Clio, 23 years | Ketch | 81 | 9 | : | Cornsacks | Damaged by heavy seas; partial loss | : | end Foretand Off Kaikoura Peninsula | s.s.w. | . Strong gale | usual track of vessels Vessel caught in heavy gale, during which a tremendous see struck her, carrying away port rail, bulwarks, and six stanchions, and | John Moore. |
| March 16 | Anglian, s.s., 22 | Schooner | 1354 | 54 | 150 | General | Stranded; no | .: | Poverty Bay Roadstead | | Calm | tarpaulins off hatches Vessel touched on patch of stone or gravel | Philip Le Neven. |
| April '3 | Waihi, s.s., 13 years | Schooner | . 63 | 12 | Ω, | General | Loss of life only | | Cook Strait | : | Fresh breeze | A passenger named Blomfield was last seen by the mate on deck at 1.30 a.m.; but was missed on reaching Wellington, and could | W. North. |
| , 13 | Lily, 6 years | Ketch | 14 | က | : | lin | Foundered; par- tial loss | • | Picton Harbour | S.W. | Gale | not be tound Vessel was anchored in harbour, and, as she was making water by waves washing over her, crew endeavoured to save her by run- ning her ashore: but had barely got sail un- | Henry Berg. |
| | | | | | | | | | | | | when she lurched over, filled, and sank almost at once. Vessel was subsequently | |
| " 13 | Kestrel, 27 years | Ketch | 51 | ന | : | Timber | Stranded ; par- tial loss | • | North side of Okiwi Bay, Croiselles Har- bour | 5 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 | Storm | Unsuced again Vessel lying at anchor off Mill Wharf, when heavy gale sprang up. Both anchors were down; but she dragged until she went on houlder-heach | Henry Ashford Featherston. |
| , 13 | Reliance, 20 years | Ketch | 65 | 4 | : | Timber | Deck swept; damage to bulwarks, and loss of | : | About 20 miles off Amuri Bluff | Ś | Moderate gale | Damage caused through heavy weather | Robert McQuil- lan. |
| " 13 (supposed.) | Comet, 18 years | Ketch | | 4 | : | Produce | Supposed foun- dered; total loss | Supposed 4; all hands | Supposed in Cook Strait | : | : | Vessel left Lyttelton for Greymouth on 11th April, and has not since been heard of; she is supposed to have foundered during heavy weather which prevailed a few days after | Samuel Thomp- son. |
| April 15 | Rowena, s.s., 22 years | Schooner | 74 | : | : | lin | Stranded; slight damage | • | Kaiwarra Beach, Wel- lington Harbour | S.E. | Gale | Vessel broke away from her moorings in Wel- lington Harbour, where she had been laid up, with no one on board, and stranded on handh | : |
| May 3 | Waihora, s.s., 12 | Schooner | 1269 | 63 | 159 | General | Stranded; no | : | Poverty Bay | : | Light | Vessel fouched on uncharted rock or shoal, but | Robert Neville. |
| , 12 | A | Schooner | 3702 | 50 | : | New Zea- land pro- duce | ŝ | : | Western end of William Davie Bank, Bluff Harbour | ż | Moderate | Vessel touched lightly when coming up har- bour, through insufficient water | Alexander McDougall. |

H.—15.

19

H.—15.

| | Mama of Manton | THANKING TO BILLING | Thomas Angel Fry. | Ferdinand Holm | James Ramsay. | John Gibb. | John Sylva. | Joseph William Holdcroft. | Alexander Stuart Ewan. | | Alfred Haynes Sergent, | M. Morrissey. | M. MoKenzie. |
|--------------------------|-----------------------------------|---------------------|---|--|---|---|---|--|---|--|--|---|--|
| entcontinued. | Desision of Count of Lourisme Les | - | | l by ship's boats el leaving East London her windlass was ed away while heaving anchor. Master compelled to slip anchor, leaving it with 45 fathoms of chain at bottom of har- | Beamer fouled moorings of dredger when Ja | ouched a shallow patch amidst ten approaching landing. | e under full sail, went on reef in ther, about 3.30 a.m. No one was but the helmsman, and no look-out | was kept. Casualty caused by stress of weather and Jo heavy labouring of vessel with dead-weight cargo. | | collision. It was "Flora's" dufy to hold on her course, and the "Wakatipu" to keep clear. Master of "Wakatipu" ordered to pay costs of inquiry, amounting to £29 10s. | | other damage. Cargo shifted during heavy gale, causing con- siderable list, on account of which vessel M put into Auckland, discharged cargo, went into dock, restowed cargo, and resumed her | voyage. The second mate, Ellis Thomas Tree, was M washed overboard by heavy sea and lost |
| e Department- | Wind. | . Force. | Calm | Moderate | • | Light | Moderate | Gale | Light | | Storm | Gales | Strong |
| Marine | м | Direc- tion. | Ca | N.W. | N. | S.E. | N.E. | W.S.W. | | | N.W. | : | S.E. |
| BHIPPING reported to the | Place where | Casualty occurred. | Lat. 34° 51' S., long. 155° 47' E., on voyage from Newcastle. | N.S.W., to Wellington Buffalo Harbour, East London, South Africa | Buller River, Westport | Gordon's Landing, six miles south of Cape | Launappers Rangitoto Reef, en- trance to Auckland Harbour | 39' S., long. E.; on voyage ondon to Wel- | 300 or 400 yards inside Outer Rock, Barrett's Reef, entrance to Port Nicholson | · | Lat. 45°S., long. 60° E.; on voyage from Liver- | pool to Wellington Pacific Ocean; on voyage from Oregon, U.S.A., to Liverpool | Lat. 32° 20' S., long. 154° 35' E.; on voyage from Newcastle, N.S.W., to Auckland. |
| to SHIP | Number | Lives lost. | : | : | : | : | : | : | : | · · · · · · · · · · · · · · · · · · · | : | : | r-1 |
| I CASUALTIES | Nature of | Casualty. | Foundered; total loss | Loss of wind- lass, chain, and anchor | Loss of one pro- | periet-plade Stranded; slight damaged | Stranded ; total loss | Loss of spars and sails | Collision ; boat damaged | Collision; tri- | Damage by heavy sea; | partial loss Sprung a leak; partial loss | Loss of life only |
| WRECKS and | Na | Cargo. | Coal | Timber | Coal and | General | Coal | Cement & railway iron | General | General | General | Wheat & salmon | Coa,1 |
| of W | Number of | Passen- gers. | : | က | 38 | 10 | : | : | 94 | 73 | 1 | : | : |
| JRN | Num | .werD | = | 12 | 22 | 26 | ũ | 30 | 45 | ŝ | 27 | 23 | : |
| RETURN | .93.61 1978 | зізэЯ апоТ | 390 | 499 | 333 , | 283 | 59 | 1047 | 1258 | 838 | 1092 | 2058 | 520 |
| н | р Г | rug. | Barquen- tine | Barque | Schooner | Schooner | Schooner | Barque | Schooner 1258 | Schooner | Ship | Ship | Barque |
| | Name | Age and Class. | Zeno, 19 years | Genevie M. Tucker, 25 years | Brunner, s.s., | Ψı | Christina, 21 years | Weathersfield, 31 years | Wakatipu, s.s., 19 years | Ē | Pleione, 19 years, *100 A1 Lloyds | Rathdown, 5 years | Kathleen Hilda, 4 years |
| - | Date of | Casualty. | 1895. Sept. 6 | " 10 | " 19 | , 24 | , 28 | Oct. 12 | " 21 | " 21 | " 24 | " 24 | Nov. 3 |

H.- 15.

| Christian T. J. Andersen. | Walter Manning. | Joseph William Holderoft. | John Wilson. | Thomas Rawson. | Samuel Morison. | W. H. Kidd. | George William Banks. | Philip Charles Langlois. | Herbert Wild Boorman. | Lewis Williams. |
|---|------------------------------|--|--|--|--|--|--|---|---|--|
| While vessel being towed out of river a heavy C roller came just as she was on the bar, and, after lifting her, rolled away, causing her to | through poor tide, and being | st in being used keeping vessel ashore. Boats, which had in readiness to save life, lost thy to hoist them aboard again | ment in towards spended d to pay ring cir- inquiry, d period to one | old port-hole left open, and, being un- d, water flowed into and filled after- rument, necessitating beaching of | ty of errors of judgment in not rescutificiently to the south, and in g all hands and devoting his at- the steering. Mate not free from : altering ship's course without laster ordered to pay £17 5s., costs | Versel put into Lyttelton for assistance on W 27th December with cargo heated | Casualty caused by negligence on part of G master in wrougly marking ship's position on chart, and on part of second officer in not checking position so marked. Master ordered to pay £5 5s. costs, and second mate | ove-to under three lower topsails in gale; wind increased to hurricane and carried away all the topsails, and wer foretopsail-yand also brocke adrift. | tess of ult on | The second mate, James Jones, was washed L off from back ropes and bowsprit shrouds through ship plunging in head sea, and was lost |
| : | Fresh | Gentle breeze | E | E | Fresh breeze | : | Moderate | Hurricane | Squall | Fresh breeze |
| : | S.E. | S.W. | Callin | Ca lm | N.W. | : | : | N.W. | Shifting N.W. to S.W. | : |
| Bar of Hokitika River | Entrance to Inner Har- | Off Stephen's Island, Cook Strait | Oape Wanbrow, ² mile south of Oamaru light | South Head, Kaipara Harbour | Tom's Rock, near Sin- clair Head, Cook Strait | On voyage from New- castle, N.S.W., to San | or Manucusco On Warang Bank, west coast of Africa, on voyage from London to Auckland | Lat. 49° 5′ S., long. 167° 42′ E., on voyage from Kingston, S.A., to London | Fitzroy Bay, ³ / ₄ mile South of Pencarrow 1 Head, entrance to | 20 miles outside New- castle Heads, on voy- age from Newcastle, N.S.W., to Wellington |
| : | : | • | : | • | • | : | • | : | • | H |
| Stranded; par- tial loss | Stranded; no | Loss of boats and anchor | Stranded ; par- tial loss | Vessel filled and beached | Stranded; total loss | Cargo heated | Stranded; slight damage | Loss of sails and yard | Stranded; total loss | Loss of life only |
| Timber ' | General | Cement & railway iron | Frozen mutton | General | Coal | Coal | General | Wool and general | General | Coal |
| : | 23 | : | • | 45 | : - | : | : | : | • | • · |
| ين س | 37 | 20 | 4 | б | 12 | 33 | 56 | 23 | 20 | 16 |
| 66 | 517 | 1047 | 2425 | 138 | 424 | 2606 | 3661 | 1274 | 843 | 849 |
| Schooner | Schooner | Barque 1047 | Schooner | Pole | Barque | 4-masted barque | Brigantine 3661 | Ship | Barque | Barque . |
| Jessie Nicoll, 23 years | Å |) Weathersfield, 31 years | Fifeshire, s.s., 8 Years | Osprey, p.s., 9 years | , Grasmere, 30 Years | Hollinwood, 7 years | Rakaia, s.s., 1 year, 100 A1 | I Lake Superior, 26 years | Halcione, 27 years, *A1 | Coromandel, 20 y ears, A1 Lloyd's |
| Nov. 15 | , 26 | , 30 , | Dec. 8 | • 16 | " 25 | " 25 1006 | Jan. 5 | 9 * | \$ | , 31 |
| 4 | | | H . | | | | م. م | | | |

•

H.—15.

| | Name of Master . | John Edward Westrup. | John Edward Westrup | William J. New- ton. | Samuel Clark. | Frithjof Wilhelm Hultgren. | John Cuthbert. | Henry Williams. | James V. Bent- ley. |
|--------------------------------------|-----------------------------------|---|---|---|--|---|--|--|--|
| Dosision of Constants | Decision of Court of Inquiry, &c. | Vessel caught while on bar in a heavy breaker, causing her stern to strike heavily, carrying | away rudder, rudder-post, and shoe Vessel was on slip undergoing repairs, which were nearly completed. Fire was discovered about 2 a.m.; but evidence failed to disclose | While steaming full speed, thrust-shaft of starboard engine was found to have broken | Accident caused by propeller striking sunken | Vessel missed stays when trying to go about, and atherwards dragged her anohors and went ashore. The immediate cause of the casualty was the breaking of the jib-sheet | at a critical moment Vessel lost two propeller-blades; put back to Auckland (1,671 miles), went into dock, and put on four new blades | Loss of vessel mainly due to gross negligence on part of mate, and master wrong in going below without giving more definite instruc- | tions. Master ordered to pay ξS 8s. costs, and mate to pay balance, βS 11s., and his certificate suspended for six months An A.B. named Karl Kavander, while engaged aloft making fast the maintrysall, fell on to the deck about 8 a.m., and died from the effect of the injuries received about 5 p.m. same day, in Oamaru Hospital |
| Wind. | Force. | Light | Callm | Calm | Ca lm | Strong gale | : | Strong | : |
| Â | Direc- tion. | N.W. | Ca. | Ca | C _B | N.W. | : | 'n. | : |
| . Place where | Casualty occurred. | Bar of Patea River | On Patent Slip, Evans Bay, Wellington | Off Stephen's Island, Cook Strait | Dillon's Point, Wairau Birtor | Hind's Point, Welling- ton Harbour; about one mile N.N.E. from Pencarrow Light | Lat. 50° 5′ S.; long. 153° 26′ W. | Rock near Cape Tera- whiti | Off Moeraki |
| ther | Lives - lost. | • | • . • | : | : | • | : | • | · • |
| 86 Number of Nature of Num of | Casualty. | Stranded; par- tial loss | Fire on board; total loss | Thrust-shaft broken | Broken shaft; | Stranded; total loss | Loss of propel- ler-blades | Stranded ; total loss | Loss of life only |
| Ň | Cargo. | looW | Nil . | General | General | Railway iron | Frozen meat and N.Z. pro- | duce Railway iron | General |
| Number of | Passen- gers. | | • | 28 | : | : . | 10 | н | : |
| Num | W910 | 8 | : | 25 | 80 | 4 | 65 | 9 | • |
| ister 1859. | Tonr Regi | 40 | 40 | 239 | 44 | 65 | 3636 | 6 | 749 |
| , , , , , , , , | -9-11-1 1-11-1 | Schooner | Schooner | Schooner | Schooner | Ketch | Schooner 3636 | Schooner | Schooner |
| Name of Vessel, | Age and Class. | Waitapu, s.s., 9 years | Waitapu, s.s., 9 years | Mahinapua, s.s., 14 years | Neptune, s.s., 13 vears | Reliance, 21 years | Buteshire, s.s., 3 years | John Bell, 11 years | Poherua, s.s., 6 years |
| Date of | Casualty. | Jan. 28 | Feb. 8 | 14 | ~ IT | , 28 | March 10 | , 19 | . 25 |

to the Marine Danaw 2044 RETTIRN of WERCES and CASHALTER to SHIPPING

H.—15.

 $\mathbf{23}$

| Date of C | order. | Purpose of Order. |
|---------------|---|--|
| 1895— | | |
| April | 8 | Approves plans of J. H. Williams's wharf, Hawtrey Bay, Wellington. |
| " | $\frac{17}{25}$ | Prescribes minimum size or weight at which fish may be taken. Revokes Order in Council licensing F. Killick to occupy foreshore, New Brighton. |
| " | 25 | Extends time for election of chairman of Thames Harbour Board. |
| M″ | 29 | Approves plans of proposed groins in Waimakariri River. |
| May " | $\frac{6}{13}$ | Prescribes life-saving appliances for ships. Approves dredging operations above Merchandise Wharf, Westport. |
| " | $\overline{21}$ | Approves of Westport Harbour Board constructing water-service at Waimangaroa for Westport-Mok |
| | 28 | hinui Railway. Varia management of Akayaa mbawag in Akayaa Bayangh Caunail |
| " | $\frac{20}{28}$ | Vests management of Akaroa wharves in Akaroa Borough Council. Approves plans of drainage outfalls at Petone. |
| _ ″ | 28 | Prescribes dues and rates for Otamatea County Wharf at Pahi. |
| June | $\frac{4}{4}$ | Approves plans of R. and J. Mitchelson's booms, Wairoa River, Kaipara. Licenses R. and J. Mitchelson to occupy foreshore, Wairoa River, as site for booms. |
| " | 4 | Amends regulations fixing fees for licenses as colonial pilots. |
| | 11 | Approves plans of Northern Steamship Company's wharf and store, Ohiwa River. |
| " | $\frac{11}{18}$ | Licenses Northern Steamship Company to occupy foreshore, Ohiwa River, as site for wharf. Approves plan of passenger-steamers' wharf at Napier Breakwater. |
| " | 18 | Approves plan of landing place at Papakura, and authorises Edgar C. Jones to construct work. |
| т"і | 25 | Extends close season for seals. |
| July | $\frac{16}{23}$ | Appoints members of Greymouth Harbour Board. Appoints members of Westport Harbour Board. |
| " | 30 | Prohibits use of whitebait nets as set-nets in Waimakariri River. |
| " | 30 | Revokes Order in Council licensing J. Darrow to occupy foreshore, Kirikiri River. |
| " | 30 | Revokes Order in Council licensing Union Sash and Door Company (Limited) to occupy foreshore Waikahikatea River, Kaipara. |
| Aug. | 26 | Approves plans of Urquhart's Bay wharf, Whangarei. |
| Sept. | $\frac{2}{2}$ | Approves plan of E. R. Cardno's booms, Waima River, Hokianga. |
| " | 2 9 | Licenses E. R. Cardno to occupy foreshore, Waima River, as site for booms. Prescribes close season for mullet in Kaipara Harbour. |
| " | '9 ' | Vests management of Tea Point Wharf, Whangateau, in Omaha Road Board. |
| " | 9 9 | Approves plans of Mrs. J. A. Cooper's wharf, Collingwood. |
| " | 16 | Licenses Mrs. J. A. Cooper to occupy foreshore, Collingwood, as site for wharf. Declares land to be vested in Wellington City Corporation. |
| | 16 | Approves plans of J. P. Pratt's boatshed, Clyde Quay, Wellington. |
| " | $\begin{array}{c} 16 \\ 16 \end{array}$ | Approves plans of landing-stage for yachts, Sumner. |
| " | 16 | Approves plans of deep-water berth, Main Eastern Wharf, Bluff Harbour. Approves plan of W. Grant's wharf, Collingwood. |
| " | 16 | Licenses William Grant to occupy foreshore, Collingwood, as site for wharf. |
| " | 16 | Approves plan of J. Walker and Co.'s wharf, Collingwood. |
| " | $\frac{16}{23}$ | Licenses J. Walker and Co. to occupy foreshore, Collingwood, as site for wharf. Revokes approval of dredging in Buller River. |
| " | 23 | Approves 50ft. extension of lower western training-wall, Buller River. |
| " | 23 23 | Makes regulations as to whitebait-fishing. |
| ен " . | 23 | Approves plan of A. E. Harding's wharf, Wairoa River, Kaipara. Licenses A. E. Harding to occupy foreshore, Wairoa River, as site for wharf. |
| Oct | 14 | Approves plans of J. H. Williams's wharf additions, Hawtrey Bay, Wellington. |
| " | $14 \\ 14$ | Fixes port charges and harbour-light dues for Nelson. Appoints J. Sinclair to be person authorised to detain goods landed at Port Robinson until payment of |
| | 10 | expenses. |
| " | $\frac{19}{19}$ | Approves plans of Mrs. E. Drake's dwelling, Purakanui. Licenses Mrs. E. Drake to occupy foreshore, Purakanui, as site for dwelling. |
| " | 19 | Amends regulations for colonial pilots' licenses. |
| Nov. | 4 4 | Vests management of Aratapu Wharf in Kauri Timber Company. Vests management of Coromandel Wharf in Coromandel County Council, and fixes dues, &c., for same. |
| " | 4 | Consents to Timaru Harbour Board leasing Sections 1 to 12, reclaimed land. |
| " | 26 | Makes regulations for examination of able seamen. |
| " | $\frac{26}{26}$ | Fixes port charges and harbour-light dues for Nelson. Revokes close season for mullet in Kaipara Harbour, and prescribes close season for part thereof. |
| " | $\frac{20}{28}$ | Approves plans of Greymouth-Point Elizabeth Railway Company's bridge over Grey River. |
| Dec. | 14 | Appoints examiners of able seamen. |
| " | $rac{14}{14}$ | Vests management of Mongonui Mill Wharf in Kauri Timber Company. Approves further extension of lower western training-wall and dredging channel, Westport. |
| " | $\frac{14}{21}$ | Approves further extension of fower western training-wall and dredging channer, westport. Approves plan of J. B. Topp's landing-stage and boatshed, Kilbirnie. |
| " | 21 | Approves plans of Kauri Timber Company's wharves, Te Kopuru, Kaipara. |
| " | $\frac{21}{21}$ | Licenses Kauri Timber Company to occupy foreshore, Kaipara, as site for wharves. Approves plan of Harrison, Naismith, and Co.'s fish-cleaning sheds and tramway, Half-moon Bay. |
| N 1/ | $\frac{21}{21}$ | Licenses Harrison, Naismith, and Co. to occupy foreshore, Half-moon Bay, as site for fish-cleaning |
| 1896- | 10 | sheds and tramway. |
| Jan. | $\begin{array}{c} 10 \\ 10 \end{array}$ | Approves of Westport Harbour Board constructing goods shed at Waimangaroa Railway station. Fixes dues and rates for Little Omaha and Tea Point Wharves, Whangateau Harbour. |
| | 25 | Fixes dues and rates for Kauri Timber Company's wharf at Aratapu. |
| ." | 25 05 | Approves plans of Ngunguru Coal Company's wharves at Ngunguru. |
| Feb. | $\frac{25}{3}$ | Licenses Ngunguru Coal Company to occupy foreshore, Ngunguru, as site for wharves. Approves plan of R. Scollay's fish-cleaning shed, Half-moon Bay. |
| # · | 3 | Licenses R. Scollay to occupy foreshore, Half-moon Bay, as site for fish-cleaning shed. |
| " | $17 \\ 17$ | Approves plans of Buchanan and Heron's wharf, Dargaville, Kaipara. |
| " | $\frac{17}{17}$ | Licenses Buchanan and Heron to occupy foreshore, Kaipara, as site for wharf. Approves plan of Waiuku Boad Board's wharf, Okoheko Point, Manukau. |
| " | 17 | Licenses Waiuku Road Board to occupy foreshore, Manukau, as site for wharf. |
| " | 17 | Fixes dues and rates for Kauri Timber Company's wharves, Te Kopuru. |
| " | $\frac{20}{28}$ | Appoints John Hughes member of Westport Harbour Board. Approves plans of wharf extension, Half-moon Bay, and of wharf at Horse shoe Bay, Stewart Island. |
| " | 28 | Approves plan of small steamers' berth at Westport. |
| March | | Validates election of chairman of Thames Harbour Board. |
| | $rac{12}{12}$ | Approves plans of Leyland, O'Brien, and Co.'s booms, Wharekawa River. Licenses Leyland, O'Brien, and Co. to occupy foreshore, Wharekawa River, as site for booms. |
| " | | |
| " " | 12 | Approves of Westport Harbour Board constructing waiting-room at Granity Creek Railway-station. |
| | $rac{12}{12}$ | Approves further extension of lower western training-wall, and of dredging, Westport. |
| " | 12 | |

H.—15.

| Mature of County Setting receive. Colory Control County Contro County Control County | | | | | | Casualties on | ties on c | or near t | the Coasts | | of the Colony | γ. | _ | | | Casu | Casualties outside the Colony | tside the | Scolony | | | | Tota | Total Number | ų |
|---|---|---|---|---------------|-----------|-------------------|--------------|-----------|------------|-----------------|---------------|----------------------------------|-----------------------|--------------------|----------|-------------|-------------------------------|-----------|-------------|--------------------------|----------|--------------|----------|--|-----------------------|
| $\label{eq:constraints} \end{constraints} $ | | | | | Stear | mers. | | Sailing. | vessels. | | Potal w | ithin Colv | ony. | Sté | amers. | | Sailin | g-vessel | | otal out | side Col | | Casualt | of es repoi | ted. |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | Z | ature of Casualtie | Ś | ło, oł | | | .taol a9vi.l | | | Lives lost. | .slesseV | Топпаде. | Vo. of Lives lost. | to .of Vessels. | Топпаде. | Lives lost. | .sləssəV | | -12801 SOAT | 10.01 Vessels. | | .tsol sevi.I | Vessela, | Топляде. | Vo. of Lives lost. |
| | randings, Total wrecks Partial loss Slight damage No damage | | :::: | • | · · · · · | 582 632 842 | | ······ | | · · · · | | 1,972 2,776 2,632 6,842 | :::: | : : : | | :::: | :::: | :::: | · · · · · | مى : : : : | | . : : : : | | $\begin{array}{c} 1,972\\ 2,776\\ 6,293\\ 6,842 \end{array}$ | : : : : |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | Total stranding | •••• | | + | 1 | | 1 | 1: | <u> </u> : | | 4,222 | : | 1 | ,661 | : | : | | : | <u> </u> | ,661 | : | | 17,883 | : |
| | ounderings,— Total loss Partial loss | :: | :: | · · · : : | | | | | 58 14 | स | | 58 14 | 4: | :: | :: | :: | | 418 | :: | <u> </u> | 418 | | ന.⊣ | 476 14 | : |
| 6 \ldots < | | Total founderin | ngs | : | | | : | 5 | 72 | 4 | 70 | 72 | 4 | .: | : | : | 1 | 418 | : | 5 | | | 4 | 490 | |
| | illisions,— Slight damage No damage | | :: | :: | | 096 276 | :: | | | . : | 1 | 2,096 1,276 | :: | :: | | | | :: | :: | :: | | :: | | $2,096 \\ 1,276$ | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | Total collisions | | : | } | 372 | ; | | ! : | : | | 3,372 | | : | : | : | : | : | : | | : | : | | 3,372 | |
| | res,— Tutal loss Partial loss | :: | :: | :: | | 40 | | | | ::: | ; | 40 | . : | | | | 1 | | :: | ŕ | | | | 40 5,465 | |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | | Total fires | : | : | T | 40 | | • | : | : | - | 40 | : | | 3,859 | | i — | ,606 | : | | ,465 | : | 60 | 5,505 | : |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | iscellaneous, i to hull and ca breakdown of | ncluding dama£ rgo, leaks, loss o machinery | ge by heavy se of sails, &c., a. | eas nd | <u></u> | | . | 1 | | | <u> </u> | 2,542 | | · | , 990 | | | ,247 | : | | 1,237 | | | 16,779 | : |
| 23 17,629 2 14 3,431 4 37 21,060 6 4 11,510 14 13,640 2 18 25,150 2 55 | oss of life only | Total casualtie | s to shipping | :: | <u>.</u> | ļ | 67 | | 431 | 4 | <u> </u> | 0,248 812 | 40 | | 1,510 | :: | 1 | ,369 | r3 : | 1 | ,369 | 5 | <u> </u> | $\frac{44}{2},029$ | 1 |
| | | Total number ported | of casualties | | 1 | 629 | 67 | 1 | 431 | 4 | | 1,060 | 9 | 1 | 1,510 | | 1 | ,640 | 67 | 1.1 | ,150 | 67 | 1 | 46,210 | |

Price 9d.]

24

