1899. NEW ZEALAND.

MARINE DEPARTMENT.

ANNUAL REPORT FOR 1898-99.

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

My Lord,— Marine Department, Wellington, 26th June, 1899.

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 Ranfurly, Governor of New Zealand.

The SECRETARY to the MINISTER of MARINE.

Sir,—

Marine Department, Wellington, 8th May, 1899.

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.—The cost of maintenance of the lighthouses during the year was £12,987 13s. 6d., but this amount does not include any part of the expenses of the Government steamer which periodically visits the lighthouses with oil and stores. No new light has been exhibited during the year, but the work of erecting a lighthouse on East Cape Island is now being carried out by the Public Works Department. This light will be a second-order dioptric revolving white light, flashing at intervals of ten seconds, and will be a most useful light for vessels trading on the East Coast.

The apparatus for the second-order light which is to be erected on Somes Island has been received from England, and steps are being taken to proceed with the erection of the tower.

During the year the sum of £174 14s. 8d. has been expended on repairs to lighthouses, the main work being repairs to the Bean Rock Tower, which was in a bad state from natural decay. At Kaipara an additional room has been built to the principal keeper's house. The principal keeper at Cape Campbell having reported that the tower required repairs, it was inspected by the Marine Engineer, who recommended certain repairs, which are now being carried out under the direction of the lighthouse artificer. It is anticipated that it will be necessary to erect a new tower at this station in about four years' time.

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The erection of the Slaughter's Cotton-powder Fog-signal at Pencarrow Head was completed, and the signal was ready for use at the beginning of July last. On its completion it was tested by Captains Fairchild and Allman in the s.s. "Tutanekai." They reported that the first explosion took place when the vessel was two miles and a half distant, and that the sound was moderately loud, sharp, and quick. Afterwards explosions took place at intervals of fifteen seconds, and the sound increased up to seven miles, the reports being best when at a distance of from five to seven miles. There was, however, no fog at the time of this trial. The masters of vessels trading to Wellington have been asked to report to the department their experience of the signal, but so far the only report received is one from Captain Fisk, of the s.s. "Pania," who states that he was able to enter the harbour in a fog during the night of the 25th March last owing to seeing the flash and hearing the report of the signal, whereas he would have had to remain outside all night if the signal had not been working.

Pending further experience with the above apparatus it is proposed to supply the most important lighthouses with rockets for use in foggy weather, and the department is now in communication with the Victorian authorities on the subject of the rocket system in use in that colony, and is obtaining a few rockets for experimental use before ordering a supply from England. The

rockets in use in Victoria explode at a height of about 600 ft. above the sea-level, producing a sharp report which should be heard under favourable atmospheric conditions at a distance of from five to six miles.

A further communication has been received from the committee of Lloyd's on the subject of the committee's proposal to establish signal-stations at Cape Maria van Diemen, Farewell Spit, and The committee now desire that arrangements should be made for taking shipping reports experimentally at these lighthouses, in order to prove their utility or otherwise as reporting stations, and the department is now in correspondence with the committee with the view of making the necessary arrangements for this purpose.

The service has lost three keepers during the year—viz., Principal Keeper C. E. Johnston, who retired on compensation on account of bad health; Principal Keeper J. W. Cunningham; and Assistant Keeper F. W. Butler, jun., who resigned. The vacancies caused by these retirements

have been filled by promotions, and three new assistant keepers have been appointed.

The sum of £19,382 16s. 4d. has been collected for light dues during the year, as compared with

£17,851 8s. 7d. during the previous year, being an increase of £1,530 7s. 9d.

Harbours.—The buoys in the various harbours under the control of the department, and those marking dangers on the coasts, have been attended to by the Government steamers, as also the buoys in Whangarei Harbour, the Harbour Board in that case paying for the material used in the overhaul. Regulations have been made providing that in harbours under the control of this department boats carrying passengers while in tow of steamers or other vessels are to be licensed for the purpose by the Harbourmaster or other person appointed by the Minister. It was proposed to prohibit the practice, on the ground that it was of a dangerous nature, but as it was found that there was no power to do this it was deemed advisable to regulate it. Before any boat is licensed it has to be provided with certain equipments, and to have a certain capacity for each passenger.

It having come to the knowledge of the department that the Patea Harbour Board was removing stones from the foreshore and disposing of them for road-metal, the matter was inquired into, and the Board was informed that the department could not sanction the removal of the material except in cases where it is required by the Board for harbour-works. The Harbourmaster at Nelson having reported that changes for the worse had taken place in Nelson Harbour, especially at the bar, the Marine Engineer made an examination of the harbour, and furnished a report on the changes. It is also intended to get a report on the harbour from Mr. Leslie Reynolds. Mr. J. E. Fletcher, Harbourmaster at Collingwood, has resigned his appointment, in consequence of going to reside in England, and Mr. F. Stallard has been appointed to succeed him. Mr. Fletcher had filled the position without pay since the 12th January, 1883, and the thanks of the department are due to him for his services. Mr. W. Johnson, signalman at Karamea, has resigned, and Mr. W. Thompson has been appointed to perform the duties of the position.

Plans of a large number of harbour-works have been submitted for the approval of the Governor in Council, and in most cases the works have been sanctioned. A return showing the works authorised, and the licenses issued for the occupation of foreshore, is appended hereto.

The sum of £2,664 16s. 6d. has been collected for pilotage and port charges during the year in respect of the ports under the control of the department, as against £2,649 13s. 7d. in the previous year.

Oyster-fisheries.—It having been found that the unrestricted export of oysters taken in the North Island was having an injurious effect upon the beds, the export of those taken in that island has been prohibited. This will entail a loss of revenue to the department, as there was an export duty of 6d. per hundredweight on all North Island oysters exported from the colony. As "The Sea-fisheries Act, 1894," provides that the whole of the revenue derived from licenses to take oysters and from the lease of oyster-beds is to be paid to the local bodies, the department is now in the position of having to defray the cost of the administration of the Act without receiving any revenue under it. It has been suggested that if the annual license-fee of 10s. for each picker were abolished and a license-fee of £10 a year were charged for each boat used in taking oysters, this would be the best means of preventing the indiscriminate destruction of oysters; but after making full inquiry as to the probable effect of this change the department does not see its way to adopt the suggestion. The beds in the northern oyster-fishery are in good condition, but not quite fit for picking. They will therefore be kept closed during this season. The beds in the Hauraki Gulf are open, as their condition is good. As the export has been prohibited, these beds, with the leased areas in Manukau Harbour, and the beds in Hokianga and Kaipara Harbour, which are open, should meet all demands. The New Zealand Native Oyster-fisheries Company, at Wellington, which has a license to occupy about 412 acres of Porirua Harbour for oyster-culture, has applied for an alteration in the boundaries of its lease, in order to take in a part of the harbour which it is believed would be more suitable for oysters than its present area. Sir James Hector, who was asked to report on the advisability or otherwise of acceding to this request, has reported that the company's attempts to cultivate oysters have so far not been successful, and has recommended that the boundaries of the licensed holding should be altered so as to include foreshore better suited for ovster-culture. At the same time, he states that the portion of the harbour between the bridge and Brown's Point should not be included in the license, as the fishermen have built cottages and constructed boat-repairing equipments along the foreshore between these places, and it would not be right to interfere with them. The question of allowing the alteration is now under consideration. H. Shepherd and J. Simpson were prosecuted and fined—the former £1 and costs and the latter £1 10s. and costs—for taking oysters without licenses. No license has been issued for oyster-culture during the year, and Peter Ewing, of Hitaua Bay, Tory Channel, has surrendered his license.

Sea-fisheries.—The question of testing the fishing-grounds by experimental trawling has been under the consideration of the Government. Captain Neilsen, who was in charge of experimental

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trawling operations in New South Wales, offered his services in the first place, and then the owners of the trawler "Rita," of Napier, offered to charter that vessel to the department for the purpose, but after consideration the Government did not see their way to incur the necessary expenditure. There are now several trawlers regularly at work in Hawke's Bay, the industry having become quite an extensive one. As it was found that large quantities of small fish were being destroyed by being caught and killed in the trawls, Mr. Moorhouse, the Inspector of Fisheries for the Wellington District, was sent to Napier to see what could be done to prevent this. After going out in some of the trawlers while at work, and looking carefully into the matter, he recommended that the mesh of the body of the nets used should be 5 in., and the cod end $4\frac{1}{2}$ in., so as to give the small fish an opportunity of escaping. He also recommended that the minimum size at which flat fish could be taken should be 11 in. for soles and 10 in. for flounders, instead of 9 in. for both fish as at present. These recommendations are now under consideration.

Mr. L. F. Ayson, the Curator of the fish-ponds at Masterton, was sent by the Government to Europe and America early last year to obtain information respecting the introduction of suitable fresh- and salt-water fishes into New Zealand, and to inspect and report upon the principal fishhatcheries and acclimatisation establishments generally. He has recently returned to the colony, and has supplied valuable information to the Government. On his return he brought with him a consignment of two million white-fish ova from America. These he took to the West Coast, for the purpose of putting them into the Lake Kanieri hatchery; but, as the weather was very warm, notwithstanding that every precaution was taken, the eggs in some of the trays in each case had hatched out before being unpacked, and in the other trays they were so near hatching that they came out almost as soon as they were put into the water. The United States and the Canadian fish authorities recommend that these fish should be liberated in the water to be stocked as soon as they are hatched out, and this plan was adopted in this instance, the fish being put in the Kanieri Lake. The loss from the date of packing in America till arrival in Wellington was about 10 per cent.; from Wellington to the Kanieri hatchery, about 20 per cent.; and in the hatchery and in liberating, about 5 per cent.: a total loss of about 35 per cent. Some years ago a shipment of white-fish eggs was imported, and the fry were liberated in Lake Rotoiti, in the Nelson District. So far as can be ascertained, none of the fish have been caught, but steps are now being taken to ascertain for certain whether they exist in the lake. Mr. Ayson is now inspecting the site of the proposed fish-hatchery at Purakanui. Regulations have been made prohibiting the use of nets for taking whitebait in "paddocks." These "paddocks" are formed by constructing groins from the banks of rivers and streams, and making holes for the fish between the groins and banks. The fish were trapped in the "paddocks," so that very few could be caught above them.

The close season for seals has been extended up to the 30th June, 1900. The sea-lion skins which the master of the "Hinemoa" obtained at the Auckland Islands have been tanned, and are stated to be worth from 5s. to 7s. each. The oil from the animals is stated by experts to be suitable for making soft soap, and in a small proportion—say, about 5 per cent.—with tallow, for hard soaps.

It is valued at about 1s. a gallon, but there appears to be very little demand for it.

Application has been made for the lease of a sponge-bed at the Chatham Islands, and to enable it to be leased an Order in Council has been issued bringing sponge-beds under the provisions of "The Sea-fisheries Act, 1894," which provide for leasing by public auction or tender.

The following convictions were obtained for breaches of the law: J. Cordella was fined £2 and costs for selling a sealskin, and C. Georgeson, to whom it was sold, was fined £1 and costs for having it in his possession; J. Harmer was fined £1 and costs for selling undersized garfish; J. Oberhuber was fined £1 and costs for catching small flounders; and T. Knudson was fined £1 and costs for selling undersized flounders.

Weather Reporting.—Captain Edwin has continued to make and circulate daily weather fore-Arrangements are now being made for showing daily weather forecasts at Cape Maria van Diemen, Tiritiri, Cape Campbell, Farewell Spit, and Cape Foulwind lighthouses for the benefit of

passing vessels.

Examination of Masters, Mates, and Engineers .- A hundred and seventy persons passed their examinations for certificates of competency, and fifty-seven failed. Of those who passed, a hundred and twenty were masters, mates, and engineers of sea-going vessels, and fifty were masters and engineers of steamships plying within restricted limits. Twelve certificates of service were issued. The question has been raised as to the interpretation of the regulation prescribing the qualifications of a candidate for examination for a first mate's certificate. The regulation provides that he must show the following service:

(a.) One year in a capacity not lower than fourth mate of a foreign-going vessel whilst holding a second mate's certificate for foreign-going vessels; or

(b.) One year and a half in a capacity not lower than only mate in a home-trade or coasting vessel whilst holding a second mate's certificate for foreign-going vessels, or a mate's certificate for home-trade passenger-ship.

The Chief Examiner was of opinion that the service under (a) and (b) must be treated as alternative; but the interpretation placed upon the regulation by this department was that, if a candidate had insufficient service under (a), service under (b) could be added to it to make up sufficient to qualify him for examination. The matter was submitted for decision to the Board of Trade, whose regulation is identical with that in New Zealand, and the reply received bears out the department's view. It has also been ascertained that this interpretation is placed upon the regulation by the Marine Boards of Victoria, South Australia, and Queensland; but the interpretation which was put upon it by the Marine Board of New South Wales was that the service must be treated as alternative. It is doubtful from the reply received from Tasmania which interpretation was put on it in that colony. The office of Chief Examiner of Masters and Mates is at present vacant, but steps

are being taken to obtain a Chief Examiner from England.

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Attention having been drawn in Parliament to certain alleged irregularities in connection with the examination of masters and mates, shortly after the House rose inquiry was made, with the result that action was taken against Captain Allman, the Chief Examiner, for a breach of "The Shipping and Seamen's Act, 1877," in procuring a certificate as master, home trade, for one James Jones by falsely representing that he had passed the prescribed examination, whereas, so far as related to a portion of the examination, the answers had not been written by the candidate in the examination-room in the presence of the Examiner. The information was dismissed, the Chief Justice holding that the words making it criminal for any one by false representation to "obtain a certificate" for himself or for any other person did not apply to the defendant, who had made a false representation in order to enable the issue of a certificate to another person. Informations were laid against James Jones and George von Schoen for assisting in the false representations which procured the issue of a certificate of competency. That against the former was dismissed by the Magistrate on the grounds of insufficient evidence, and after the decision in Captain Allman's case the Crown Solicitor entered a nolle prosequi in the case against Von Schoen. Captain Allman, having admitted to the Government the truth of the alleged false representations, was dismissed from the Service on the 4th March last.

The certificate as home-trade master issued to James Jones has since been cancelled by the

Supreme Court.

Coastal Surveys and Dangers.—The position of the rock in Daggs Sound on which the s.s. "Tutanekai" touched has been fixed by Captain Bollons, of the "Hinemoa," and steps are being

taken to erect a beacon on Barclay Rock, Stewart Island.

Government Steamers.—I regret to have to report the death of Captain Fairchild, of the s.s. "Tutanekai," which was the result of an accident which occurred on board on the 4th July last whilst an engine was being shipped at Wellington. A pin in the lifting gear broke, and the shackle came down and struck him with such force that he died in a very short time from the injuries sustained. Captain Fairchild had been in the Government service, in command of various steamers, since the 9th July, 1864, and had rendered most valuable services, both during the Maori war and afterwards. A sum equal to one and a half year's salary was voted by Parliament for his widow, and this amount has been paid to her. On the 11th April, 1898, when the vessel was leaving the wharf at Westport with Volunteers, the mooring-rope broke, and took off the leg of Mr. Hunter, the chief officer, who, since his recovery, has been employed as Shipping Clerk in the Customs at Wellington. The "Tutanekai" has been mainly employed in carrying sleepers and other cargo for the Railway and Public Works Departments. Other work done by her has been the repairing of one of the Cook Strait cables; the conveyance of the men of the Defence Force who were sent to Hokianga at the time of the Native disturbance, from that place to Auckland, and Wellington when the trouble was over; a trip to the southern islands to search for the ketch "Gratitude," which was found wrecked at Macquarie Island; and the conveyance of His Excellency the Governor round the North Island. Alterations have been made in the vessel's deckhouse which make more deck-room for coaling, and a bridge has been built across from side to side to enable the master or officer in charge of the deck to see astern. Captain Post, who at the time of Captain Fairchild's death was in command of the "Hinemoa," has been appointed master of the "Tutanekai."

The "Hinemoa" has been employed mainly on the work of conveying oil and stores to the lighthouses, including the material, &c., for the new lighthouse which is being erected on East Cape Island, and in overhauling and cleaning harbour and coastal buoys. In addition to this work, she conveyed the Permanent Militiamen to Hokianga, and visited the southern islands and the Kermadec Islands for the purpose of looking for castaways, and inspecting the provision depots which are maintained on those islands. She has been supplied with a new funnel and a new winch, and has had her machinery overhauled. Captain Bollons was appointed master when Captain Post was transferred to the "Tutanekai."

Wrecks and Casualties.—A table showing the analysis of casualties to ships is appended hereto. Those on the coasts of the colony numbered forty, representing 11,550 tons, as against forty-eight, representing 20,357 tons, in the previous year. The total wrecks within the colony were six, of 367 tons, as against six, of 3,302 tons, in the previous year. The number of lives lost was eight, as against twenty-eight in 1897-98. Of these seven were on or near the coasts of the colony—viz., one from the "Aratapu" and six in the "Marmion." The life lost beyond the

colony was the result of an accident to the fourth engineer of the "Mapourika."

Inspection of Machinery.—The report of the Chief Inspector, which is appended hereto, shows work which has been done during the year. The work has so much increased that the the work which has been done during the year. inspection of a large number of land boilers and the survey of a good many steamers are in arrears; and, as there is not any prospect of the present staff being able to overtake the work, it is necessary that another Inspector should be appointed. I would strongly urge that this should be done without delay. If the appointment is made the new Inspector will be stationed in Canterbury, and, besides doing work in that district, he will be required to assist in Otago and elsewhere

when required.

Survey of Steamers.—The report of the Principal Engineer Surveyor is appended hereto. Regulations have been made prescribing the class of engineers to be carried by vessels fitted with oil-engines. The master of the s.s. "Waitangi," having carried passengers without a certificate to do so, was prosecuted and fined £1 and costs on each of two charges. Messrs. West and Meffin, owners of the s.s. "Edina," were proceeded against and fined for going beyond the limits allowed by the vessel's certificate, and carrying passengers when not authorised to do so. Mr. Snodgrass, the owner of the "Ripple," was fined £1 and costs for running his vessel without a certificate and a certificated engineer. Captain Grant, of the "Takapuna," was fined £10 and costs for carrying more passengers than authorised; and Captain Robertson, of the "Rotoiti," was fined the same amount for a similar offence.

Wages and Effects of Deceased Seamen. — The estates of eighteen seamen, amounting to £191 11s. 11d., were dealt with during the year. Of these, fifteen were new estates. The sum of

£159 13s. 1d. was paid to relatives and other claimants.

Engagement and Discharge of Seamen.—The question of appointing master mariners to take charge of this work at the four principal ports has again been under consideration, and it has been decided to appoint Superintendents of Mercantile Marine at these ports, who will perform the duties of engaging and discharging seamen, examination of candidates for masters' and mates' certificates, and also carry out any other duties that may be required of them. An advertisement inviting applications for the positions was inserted in the newspapers, and in response to it fortyseven applications have been received, and these are now under consideration. Mr. R. C. Hunter, formerly chief officer of the "Tutanekai," has acted as shipping clerk at Wellington since the 1st November last. On the arrival of the s.s. "Duke of Portland" at Wellington from Hobart in June last the master reported to the Collector of Customs that three of his men had deserted at Hobart, and asked the Collector to sanction their being written off the articles as deserters. This sanction was not, however, given, as, according to the provisions of "The Imperial Merchant Shipping Act, 1894," the shipping-master at Hobart was the proper person to sanction the writing-off. About a fortnight after the vessel's arrival one of the men reached this port in the s.s. "Ruahine," and reported that he had not deserted, but had been unable to rejoin his ship owing to having been locked up. As the master had not complied with the law at Hobart he was required, before he received his clearance to leave this colony, to deposit a sum of money to defray the cost of the man's maintenance until he obtained employment. When the "Tekoa" was about to sail from Wellington for London in May last two of her crew who were in gaol were taken on board by the police, but after being put on board the master did not keep them there, as the law required him to do, but allowed them to go ashore, and sailed without them. On his return to the colony proceedings were taken against him for a breach of the law, when he was fined £1 and costs. Proceedings were taken against Captain Mathieson, of the s.s. "Napier," for employing a seaman without entering into an agreement with him, and he was fined £1 10s. and costs. Captain Tinney, of the s.s. "Aorere," was fined 15s. and costs for a similar offence.

Three vessels have been detained for survey on account of alleged unseaworthiness during the year—viz., the "Opawa," "Linda Weber," and "Carnmoney." In the case of the "Opawa," three of the crew reported that the vessel's rigging was unsafe; but the Surveyors stated that such was not the case. The report of the Surveyors on the "Linda Weber" was that she was fit to proceed from Wellington to Auckland via Kaipara, and, as the owners wished to take her there for repairs, she was allowed to go. In the case of the "Carnmoney," in which the complaint was made by some of the crew, the report of the Surveyors was that the vessel was seaworthy. The barque "Alexa" arrived at the Bluff from Surprise Island with her load-line submerged. Proceedings

were taken against the master, and he was fined £1 and costs.

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

The CHIEF INSPECTOR OF MACHINERY to the SECRETARY OF the MARINE DEPARTMENT, Wellington.

> Office of Chief Inspector of Machinery, Queen's Chambers, Wellington, 4th April, 1899.

I have the honour to submit my annual report on the working of the Inspection of Machinery Act of 1882 during the financial year ended the 31st of March, 1899.

No explosion has occurred to a boiler during the year, and no accident with boilers causing bodily harm to any one has been reported to me. This is a very satisfactory record, and long may it continue. In the sister-colonies of Australia, more especially in New South Wales, the accidents are numerous, as reported in the daily papers, causing great destruction to property and to life and limb. In Australia there is no compulsory inspection of land machinery.

If the introduction of new machinery is to be taken as a criterion of advancement, then New Zealand has had a most prosperous year. In fact, during the last three years the increase has been far above the average. New plant means, also, circulation of money, employment of labour, besides

the development of the colony. Mining and dairying account for most of the increase.

Gold-dredge building has been especially brisk in the Otago District, and at the present time over £100,000 is being laid out on this important industry. There is hardly a river or alluvial flat in the whole of Otago without its gold-dredge; and the return in some cases has been phenomenal. An outlay of £6,000 to £8,000 will provide a first-class up-to-date dredge. Most of them are now fitted with compound condensing engines and ladders for getting rid of the tailings.

During the year I visited several of the gold-mining centres, to have a look at the up-to-date methods of manipulation of the best-equipped mines in Reefton, Paeroa, Waihi, and the Thames. What struck me most was the absence of labour after the quartz is won. The machinery in nearly all cases is so designed that it acts automatically, one process following another until all the gold Where water-power is obtainable it is used as the initial prime mover. All the old methods of treatment for gold-saving appear to be dying out, chemical and automatic mechanical treatments being now universally adopted.

The new pumping machinery, with its battery of Lancashire boilers, at the Thames-Hauraki Gold-mine, appears to be a first-class article, and I trust will come up to all expectations. It is

the largest appliance of its class in the colony.

Sir,—

The iron trade during the year has been good, and suitable men scarce, which is a very healthy state of things.

During the year 3,339 boilers with machinery attached were inspected, and certificates issued accordingly; also, 196 water-power machinery and 134 hydraulic and other lifts. In connection with these certificates, it would save the department and the steam-users a great amount of heartburning were the owners more prompt at taking up their certificates. There is an abated sum or reduction made if they are lifted within a month, and of an amount which should be a sufficient inducement for prompt lifting of certificates; but in some cases it is not. In the future immediate steps will be taken to enforce the law in this direction. During the year 291 new boilers of 4,132 horse-power were added to our books, and of this number 130 were made in the colony and 161 imported.

Two hundred and thirty-nine engine-drivers' certificates have been issued, and thirty-four

candidates failed to pass during the year.

Twenty accidents have been reported to me, six proving fatal, and fourteen not fatal. A full

account of these appear later in this report.

From the 1st of April, 1898, we have been under the Marine instead of the Public Works

Department, which has tended to lessen the clerical part of my duties.

I have visited during the year all the offices of the various Inspectors of Machinery, and, as far as possible, kept myself in touch with ironfounders and shipowners throughout the colony. Our work has made such rapid strides that our present staff cannot overtake it; and, as the law states that no boiler can be worked without a certificate, and none can be issued until a thorough examination is made, it is imperative that an additional Inspector should be appointed without delay.

Appended are the tables of work in detail, numbered from 1 to 13: (1.) Number and class

of boilers inspected, fees payable on these; the machinery inspected, and the fees payable thereon; and the classes and numbers of engine-drivers' certificates issued, and fees payable therefor. (2.) Different classes of work for which the boilers and machinery are used, showing the motive-power also used. (3.) Return of defects found on inspection of boilers. (4.) Return of notices given to repair boilers. (5.) Return of notices given to fence dangerous parts of machinery. (6.) Return of the accidents which were not fatal. (7.) Return of the accidents which proved fatal. (8), (9), (10), (11), (12), and (I3). Names of all candidates to whom certificates of competency and service as engine-drivers have been granted during the year.

The Secretary, Marine Department, Wellington.

I have, &c., ROBERT DUNCAN, Chief Inspector of Machinery.

No. 1.

RETURN showing the Number of Land Boilers and Machinery inspected, and for which CERTIFICATES are ISSUED, for the Financial Year ended 31st March, 1899.

Stationary: 2285. Portable: 1,054.

Machinery, including hydraulic lifts: 330.

Total number: 3,669.

RETURN showing FEES PAYABLE for the Inspection of Boilers and Machinery, and for the ISSUE of Engine-drivers' Certificates, during the Financial Year ended 31st March, 1899.

Fees payable on boilers: £3,591 10s. Fees payable on machinery: £52 10s.

Engine-drivers' fees: £94 17s. Total amount: £3,738 17s.

Twenty-one Government boilers and eight lifts (Government) inspected, not charged for, £33 10s.

RETURN showing the Number of Service and Competency Certificates issued to Winding-, Traction-, and Locomotive-engine Drivers during the Financial Year ended 31st March, 1899, and the Fees payable therefor.

Steam-winding: Service certificates issued, 9; fees payable, £1 2s. 6d. Competency certificates issued, 65; fees payable, £32 10s. Total fees, £33 12s. 6d.

Hydraulic winding: Service certificates issued, 1; fees payable, 2s. 6d. Competency certifi-

cates issued, 3; fees payable, £1 10s. Total fees, £1 12s. 6d.

Traction and locomotive: Service certificates issued, 31; fees payable, £3 17s. 6d. petency certificates issued, 130; fees payable, £65. Total fees, £68 17s. 6d.

Total number: Service certificates issued, 41; fees payable, £5 2s. 6d. Com certificates issued, 198; fees payable, £9. Total fees, £104 2s. 6d.

Total steam-winding certificates, 74; hydraulic-winding, 4; traction and locomotive, 161.

Total certificates issued, 239.

No. 2.—Return of Machinery inspected during the Financial Year ended 31st March, 1899.

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Description of Machinery.	Steam.	Steam and Water.	Water.	Description of Machinery.	Steam.	Steam and Water.			
battoirs	3			Hauling, and hauling logs	. 87	1	.		
gricultural implements	14		••	Hoisting (including hydraulic plan		+			
r-compressing	6		3	for cranes, winches, and pile-dri			1		
nmonia works	1		••		. 78		.		
nmunition-factory	1		• •	1 =	$\cdot \mid \frac{1}{0}$	••	'		
phalt-work	1		••	II	. 8		١.		
saying	1		••		8		1		
con-curing	7		i		ا ا	1	i '		
keries rrel-stave making	5	••		- *	4.9	1 ::			
rrel-stave making	i	••	••		15	::			
sket-making	i	::			.				
ths	3	1		m in		1	11		
cycle-works	4	1		Lifts for goods (steam and elec-					
scuit-factories	9		• •	tric)	. 4		١.		
cking-works	1		• •				١.		
acksmiths' tools	8				. 39		١.		
ock- and pump-works	1		••		. 46		1		
at-building	2				. 8				
iler-making	4		• • •		. 2		'		
iling-down	82	••	••		. 10				
ne-mills	15		•;		. 4	• • •	'		
ot-factories	3		1	1 · · · · · · · · · · · · · · · · · ·	·		ļ		
x-making eweries	61	••	••		3				
eweries ick- and tile-works and brick- and	OI.		••	1 6	. 4		1.		
pipe-works	41			0.1	. 16	;;			
ush-factories	2	1		0.1	. 1		1		
ble tramways	2			0 1 1131	. 1				
binetmaking and woodworking	40		12	Organ-blowing '			:		
ndle-works (see Oil, soap, &c.)	١	1	••		. 1	••	1		
ment-mixing	3				. 7	••			
ment- and lime-making	10		• •		. 1				
aff cutting	197		5		. 1	• • •			
emical-works	7	••	• •			••			
icory-mill	1	••	• • •	ll ==	9 23	••	1.		
ler-factory ach-factories	$\frac{1}{12}$	••	•••	llans Y	. 23	::	-		
ach-factories ffee- and spice-works	$\frac{12}{7}$		•••	- ·	. 78	::			
oking, warming, heating, and	1		• • •	magazine 1	. 1	1			
steaming	28			1 2 4 1 1	. 30	1			
operages	11		.,		. 1				
ppersmiths (including brass-					. 32				
vorks)	8			1	. 8	• • •			
nfectioneries	11		1		4	•••	1		
rdial-factories (including aerated-					. 4	•••			
vater works and mineral spring)	38		3		38	•••			
eameries	123		3 1	Causage making	90	• • •	:		
tlery irv factories	209	••	16	I C	390				
ntist	209		10		. 9		'		
structor	i				. 3				
mond drill	ī	::		~, * ,* ,	. 27				
cks and slips	8		••		. 4				
edging (gold)	95				. 3		ļ		
edging (harbour)	15			1 ~	. 28	•••			
ng-making	1		••		. 2	•••			
e-works	3	•••			$\begin{array}{c c} \cdot & 2 \\ 1 & 1 \end{array}$				
ectric-light works	10		2	1 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		::			
gine-works n-working	44		•••	1 mg * •	18				
n-working Ilmongeries	11	::		701 11 (111)	128	1 ::			
e-engines	19			\ \ \ \ \ \ \ \	. 198	1	}		
ewood-cutting	55		ii	m 1 / T 1	. 1				
h-preserving	10								
x mills	56		1	Tool making	. 1				
ck-mills	4				. 6				
ur-mills	5 3	2	28	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. 2				
ındries	29		••		. 2	1	ļ		
it-preserving	1		••		$\frac{1}{7}$		į .		
lvanised-iron works	1 1		• •		$\begin{array}{c c} \cdot & 7 \\ \cdot & 14 \end{array}$	٠٠.			
s-works	15	••	••		1 0.	::			
ie-works inderies	2		i		. 84	::	Ì. '		
	66		15		. 21				
irdressing		::	15	1 • · · · ·	. 14				
					\	•-	<u>:</u>		
rbour reclamation	1	1]				1 2	38		

H.—15.

No. 3.—Return of Defects found on Inspection of Boilers during the Financial Year ended 31st March, 1899.

8

Four hundred and sixty-six defects were found out, one hundred and eighteen of which were dangerous. One hundred and fifty-eight defective fittings were found on inspection of boilers, seventy-nine of which were dangerous.

No. 4.— RETURN of NOTICES given to REPAIR BOILERS during the Financial Year ended 31st March, 1899.

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

No. 5.—Return of Notices given to fence Dangerous Parts of Machinery, &c., during the Financial Year ended 31st March, 1899.

One hundred and five notices to fence dangerous parts of machinery were given, and included fly-wheels, gearing, spindles, emery-wheels, hydraulic lifts, driving-belts, ends of shafts, scutchers, pulleys, pinion-wheels, &c.

No. 6.—Return of Accidents (not fatal) in connection with Machinery during the Financial Year ended 31st March, 1899.

Name and Address of Owner.	Description of Machinery.	Name and Age of Person injured.	Nature of Accident, and Date.	Cause of Accident, and Remarks.
W. Cable and Co., Wellington	Circular-saw	W. Bird; aged	Finger cut; 1st April, 1898	Getting his hand too close to saw.
W. Cable and Co., Wellington	Punching, &c., ma- chine		Loss of finger- top; 7th May, 1898	Climbing past machine, and put finger in gearing.
P. Stewart, Seaview, Wakanui	Chaff-cutter, double rollers	J. Christopherson; aged 26	Loss of arm; 10th May, 1898	Having a self-made glove on, which caught in the rollers, and was drawn in. Machine could not be further protected.
Parker, Lamb, and Co., Auckland	Sawmill, goose-saw	H. Wilson; aged 19	Right hand cut off; 20th May, 1898	Wilson screwed the saw (which had just been sharpened) on with an old tomahawk. Saw was not screwed tight home by the nut on spindle, and came off, flew up to the ceiling, and falling, came in contact with his hand and cut it right off.
W. Wright, biscuit- factory, Dunedin	Biscuit-brake	H. Edmond; aged 17	Flesh-wound on right hand; 20th June, 1898	Wiping rolls with a sack while in motion, although previously warned not to do so.
Lyttelton Times Company, Lyt- telton	Linotype	E. F. Oakes; aged 16	Flesh-wound on fingers; 23rd July, 1898	Pinched by cogs through cleaning part of machine while in motion, directly contrary to instructions.
W. Cable and Co., Wellington	Drilling-machine	W. D. Campbell; aged 17	Fingers crushed; 12th August, 1898	By not looking what he was doing he put his hand on gearing instead of on handle.
W. Cable and Co., Wellington	Drilling-machine	N. Hastings; aged 20	Thumb crushed; 13th August, 1898	Ditto.
H. J. Clark, Flax- ton	Sawmill	A. Sambrook; aged 22	Two finger-tops cut off; 17th Aug., 1898	Through his own fault, getting his hand too close to saw. Will be back at work in a week.
P. and D. Duncan (Ltd.), Christ- church	Polishing-wheel	W. Langley; aged 23	Cut lip; 19th	This man was employed at a buff for polishing, and was standing on the wrong side of wheel in motion; part of one of the wheels carried away, and struck him on the face. If he had been on the right side of the wheel it would have missed him.
Lyttelton Times Company, Lyt- telton	Lithographic print- ing-machine	F. E. P. East; aged 27	Crushed thumb; 20th October, 1898	Inadvertence on the part of the ma- chinist resting his hand on machine- carriage. Flesh-wound; nail removed.
Bailey and Co., Rata	Portable engine	F. King; aged	Scalded leg; 31st Oct., 1898	
M. Tiny, Peel Forest	Portable engine and firewood-bench, with movable top	J. Penny; aged 30	Loss of three fingers; 17th Dec., 1898	Pushing the wood too quickly in, and while talking to others, allowed his hand to come in contact with the saw.
W. Cable and Co., Wellington	Drilling-machine	W. McLeay; aged 16	Broken arm above wrist	Shifting belt on cone while in motion.

No. 7.—Return of Accidents which proved fatal in connection with Machinery during the Financial Year ended 31st March, 1899.

9

Name and Address of Owner. Drainage Board, Christchurch	Description of Machinery.	Name and Age of Person injured.	Nature of Accident, and Date.	Cause of Accident, and Remarks.
		<u> </u>		
	Pumping sewage	David Hood; aged 65	Rib broken, lung pierced; 19th Sept., 1898	Foot slipped when oiling air-pump; fel over discharge-pipe; flange of pip broke a rib, end of which pierced lef lung. The floor and pipe were greasy and, as the machinery in motion wahigh up, there was no chance of hifalling on to that.
Joseph King, Pohui	team sawmill	Walter King; aged 16	Caught by belt, and dragged across pulley; 13th Oct., 1898	Going too near belt after removing i from fly-wheel, and while the belt was still in motion, was caught in it an wound round the shaft. The boy hat to be taken to the Napier Hospita (a distance of twenty-six miles), wher he died. He should have stopped the machinery before tampering with the belt.
Consolidated Gold- fields (Limited), Reefton	Vinding	John Mason	Struck by cage while working at bottom of shaft; 14th Feb., 1899	Failure of brake on winding-engine tact through oil getting on same from bearing alongside. This bearing habeen running hot, and an excess of oil had been used to cool it down, and som of it had found its way on to brake pulley, which spoiled its efficiency.
facturing Com- pany, Milton	Vool-squeezer	Walter Hislop; aged 44	Ribs crushed in- to heart, and feet cut off; 2nd March, 1899	Although warned never to interfere with belts, deceased caught hold of belt which had commenced to lap round shaft double, to free it, and was puller round the shaft. There was a fast and loose pulley on intermediate shafting for the purpose of stopping the gear if anything went wrong in this branch of the work, and in interfering with the belt while the machiner was in motion he was going agains his instructions.
T. Westwood and Fi	'laxmill	Fred. Walker; aged 24	11th March, 1899	Through deceased trying to replace to belt while machinery was in motion.
Davy Brothers, Se Taupiri	awmill	George J. Worthington; aged 44	Body severely crushed; 31st Jan., 1899	The deceased was sharpening tools a the grindstone in the dinner-hour An unusual noise was heard in th mill. Another employé, on going in

found deceased entangled in the grindstone-belt. He was severely crushed, and died in a few minutes from the effects of the injuries. A verdict of accidental death was returned at the inquest. At the inspection of the boiler in December, 1898, a written notice was given to the owners to protect the parts considered dangerous, but this did not include the grindstone-belt, which was not considered dangerous, being one of the simplest and slowest in speed. With the very slightest care the accident should not have happened.

No. 8.—Return of Traction- and Locomotive-engine Drivers to whom Certificates of Service have been granted from 1st April, 1898, to 31st March, 1899.

No. and Name of Person.		Date of Issue. 1898.	No. and Name of Person.	Date of Issue. 1898.
472. Robert Troughear . 473. Alexander Leith .		April 26	488. Peter Smith	Nov. 8
474. William Bradshaw .		, 26	490. James Robson	8
476. George McDonald .	• ••	" 26 " 26	491. George Edward Webby 492. Edward Durston	, 8 , 8
477. Thomas Shaw . 478. Thomas Fairburn .		, 26	493. Walter Cooper Smith 494. Cecil George Kern	, 8
479. Archibald McDonald.		"26 May 21	495. Charles McPherson	″8 1899.
481. Joseph Edward Hills 482. Patrick Walsh	••	" 21	496. Stewart Richmond 497. Francis Charles Hill	Mar. 7
483. Alfred Leipst .		Nov. 8	498. Martin Kennedy	· · · · · · · · · · · · · · · · · · ·
484. Donald Gillanders . 485. Frederick West Balde	 y	, 8	499. Robert Edmund Judson 500. James Judson	, 7
486. William Aston 487. Thomas Perks		, 8	501. Robert Thomas Button 502. George Foster	7

10

No. 9.—Return of Traction- and Locomotive-engine Drivers to whom Certificates of Competency have been granted from 1st April, 1898, to 31st March, 1899.

No. and Name of Person.	20011		ate of	Teena	No.	and Name of Person.	2000	Date of Issue.
		1)	189	98.				1898.
192. John William Norris	,••	• •	April			John Rapson	• •	Nov. 8
193. Thomas John Crane	• •	• •	"	26 26		Frank Leonard East William John Diamond	• •	, 8 , 8
195. Richard John Davies	• •	• •	"	26		John Turner	• •	" .8
196. Carl Christian Neilson		• •	"	26		Thomas Nelson Henry	• •	" 8
197. James Allan	• • • • • • • • • • • • • • • • • • • •		"	26		Archibald Brown	•••	" š
198. Alexander Collie	•••	• • •	"	26		Allan Smith McIntosh		" 8
199. Peter Traill			,,	26		John Middleton		" 8
200. John McKenzie			"	26	266.	Harry Page, jun		" 8
201. John Palton			"	26		Leven Frederick Walker		- " 8
202. Robert Sizemore White	• •		"	26		Vincent West Adern	• •	" 8
203. Percy Edmund Bonney	• •	• •	"	26		James Tarry	• •	, 8
204. Thomas Hewetson	• •	• •	"	26		Benjamin Shardlow	• • •	, 8
205. William McPherson 206. Charles Hayman	• •	• •	"	26 26		Richard Northey Saunders Charles Wilson	• •	, 8
206. Charles Hayman 207. Arthur Edward Body	• •	• •	"	26		Ol suits Ossest	• •	"8 "8
208. James Douglas	• •	• •	"	26		Robert Legg	• •	
209. William Davison	•••		"	26		John Stewart		, 8
210. James William Smith			"	26		Thomas Rhodes		″ 8
211. Hugh Beath McVicar			"	26		Percy George · · ·		,, 8
212. Robert Smith			,,	26		William Paul		<i>"</i> , 8
213. James Henry Stewart			"	26	279.	Robert Fleck		" 8
214. Robert McDonald			"	26		Peter Smellie		" 8
215. Allan Stewart Clark		• •	"	26		Frederick Keys Hazlett		" 8
216. James Cooper Watson	• •		"	26		Alexander Sinclair Gillanders	• •	,, 8
217. Russell Weekes	• •	• •	"	26		William Oldfield, sen	• •	" 8
218. Robert Duthie	• •	• •	"	26	284.	William Oldfield, jun	• •	8
219. Joseph Franklin	••	• •	"	26 26	280.	Robert Flanagan	• •	Nov. 14
220. Arthur Ruff 221. Charles Frederick West		• •	"	26		Frank Heron	•,•	" 14 " 14
222. Robert James Reid	• •	• •	"	26		TR 1 TO 1 O 11 201	• • •	, 14 , 14
223. David Murdie Anderson	<i>:</i> :	• • •	<i>M</i> ay	21		William McNally	• •	, 14 , 14
224. Herbert George Grant	••	• • • • • • • • • • • • • • • • • • • •	<i>1</i>	21		Samuel Pizzey		" 14
225. Robert William Newson			,,	21		Albert James Rich		" 14
226. Henry Tunnicliff			"	21		William James Russell		" 14
227. George Henry Derby			"	21	293.	Henry Joseph Rees		" 14
228. James Hodgson Keith			Nov.	8		Donald Donaldson Campbell		, 14
229. Charles James Powick	• •		*	8		James Lisle		" 14
230. Arthur Stewart	• •	• •	."	8		Walter Aldridge Mann	• •	, 14
231. Walter Louis Grundy	• •	• • •	"	8	297.	John Donald Dawson	• •	" 14
232. Percy John Galloway 233. Walter Fryer	• •		."	8	909	Thomas Brown		1899. Mar. 7
233. Walter Fryer 234. Reuben Carne	• •	• •	"	8		Th. 1 3371111	• • •	
235. William Philpott		• •	"	8		David Stewart	• •	17
236. Richard William Babbage		• • •	"	8		Robert Arthur Stewart	• • •	″ †
237. Thomas Summerton		• • •	"	8		James Burnett Reid		″ †
238. Alexander Edgar McGeorge			~	8		John McIntosh		" 7
239. George Patchett			,,	8	304.			" 7
240. Frederick Charles Bunyard			"	8	305.	John Finlay James Copeland		7
241. Robert Brookland	• •	• •	*	8		Robert Henry Belcher		., 7
242. John Burgess	• •		"	8		Thomas Hamilton		" 7
243. Walter Steele			"	8		Jonathan Alfred Bell	• •	" <u>7</u> .
244. William Kellahan	• •	• •	"	8		James Borrie	• •	,, 7
245. Joseph Haxlett	• •	• •	"	8 8		Joseph Preddy	• •	, 7
246. William Cunningham 247. Thomas Edmund Whiteside	• •	• •	. "	8		Andrew Geddes William Bowman	• •	7
248. George Newman	• •	• •	"	8		Campual Vnov	::	7 7
249. Frank James Shute	••	• • •	"	8		Frederick William Watkins		″ 7
250. Thomas Sim, jun	••	••	"	8		John Willis	• • •	~ ż
251. George Frederick Walker		• • • • • • • • • • • • • • • • • • • •	"	8		John Alexander Balloch	• • •	<i>"</i> 7
252. Frederick Evans			,,	8		Joseph Oliver	• •	" · 7
253. Duncan McGregor			"	8	318.	Thomas Morcom		~ 7
254. George Henry Sharp			,,	8	319.	John Henry Stickle		" 7
255. William Gover Dudding			"	8		Thomas Hawkins		"
256. Dalton William Gambull	• •	• •		8	321.	Jesse Charles Hawkins		, 7
257. Alfred John Mason	••	• •	"	8				

No. 10.—Return of Steam-winding-engine Drivers to whom Certificates of Service have been granted from 1st April, 1898, to 31st March, 1899.

No. and Name of Person.	Date of Issue. 1898.	No. and Name of Person.		Date of Issue. 1898.
29. Samuel Stevens	 April 26	35. Daniel John Nicholls		Nov. 8
30. John William Shanley	 " 26	36. Alexander Davidson		8
32. Joseph Brokenshire	 May 21	37. Joseph Dunn		Dec. 3
33. Colin Campbell Ballantyne	 Nov. 8	• •		1899.
34. James Verran	 "8	38. Edward Gray	• •	Mar. 7

No. 11.—RETURN of STEAM-WINDING-ENGINE DRIVERS to whom CERTIFICATES OF COMPETENCY have been Granted from 1st April, 1898, to 31st March, 1899.

No. and Name of Person.	18	98.	No. a	and Name of Person.		D	ate of I 1898	
91. Alfred John Durham	Apr	1 26	124.	Lewis Griffin			Nov.	8
92. William James Duthie	"	26	125.	Edward Bell			"	8
93. Hector William King	"	26	126.	Alfred Harry Tollard	• •		. ,,	8
94. Walter Henry Charles Langdon	"		127.	Gerald Langan	• •		. ,,	-8
95. Thomas Francis O'Sullivan	"	26	128.	Henry Hunter			,,	8
96. John Oscar Nilsson	"	26	129.	William George Ashby			,,	8
97. Thomas Mulholland	"	26	130.	Robert Campbell			,,	8
98. Frank Buddle	•• "	26	131.	Henry Nelson			,,	8
99. William Mylroi	"	26	132.	Henry John Moffitt			,,	8
100. George Henry Sutcliffe	"			Thomas Wilkinson			"	8
101. John Whitehouse	"						,,	8
102. Harry Graham Lever	"	26	135.	William Henderson			,,	8
103. John Edward Chamberlain	"	26	136.	John Dawley Wood			"	8
104. James Craig	"			Archibald Cox			"	8
105. John Copeland	"			Allan Smith McIntosh			"	8
106. Cornelius Wesley Gore	"			Alexander Sinclair Gillander	:B		"	8
107. William Kidd	"	26	140.	George Henderson			,,	14
108. Benjamin Williams	"		141.	James Christmas			,,	14
109. Ralph St. John Hindmarsh	"			James John Jack			,,	14
110. Herbert Thomas Balfour	"			William Bainbridge			,,	14
111. Michael Moore	"			Andrew Hamilton Waddell			"´	14
112. James Newton	"			James Lisle	• •		,,	14
113. Robert Smith	, "			Peter Allan			,, :	14
114. Horace Tomkies	"			James Edward Jefcoate				14
115. Thomas Hallinan	"			Herbert Henry Evans	• •			14
116. Thomas Thomas	May			William Hughes	• •	• • "	Dec.	3
117. William Robert Young	"			Hugh McQuillan			"	3
118. William Morgan	"		154.	Joseph Morgan			"	3
119. George Arthur Meier	"			Frederick Heslin			"	3
120. Thomas Donnelly	"		156.	Arthur Grettan Tomkies			,,	3
121. William David Lindsay McLean	"	21					1899	
122. James Dodd	Nov			George James Black	• •		Mar.	7
123. Joseph Ernest Kaye	.: "	8	158.	John Henry Shore			"	7
•								

No. 12. — Return of Hydraulic-winding engine Drivers to whom Certificates of Service have been granted from 1st April, 1898, to 31st March, 1899.

No. and Name of Person. Date of Issue. 31. Edwin Bray ... 26th April, 1898.

No. 13. — Return of Hydraulic-winding-engine Drivers to whom Certificates of Com-PETENCY have been GRANTED from 1st April, 1898, to 31st March, 1899.

No. and Name of Person. Date of Issue. 149. Thomas Moyle 3rd December, 1898. 151. Thomas Richardson Watson ... 153. Thomas Lamberton

The Principal Examiner of Engineers to the Secretary of the Marine Department.

Office of the Principal Examiner of Engineers, Queen's Chambers,

Sir,-Wellington, 4th April, 1899.

I beg leave to submit my annual report for the year ended 31st March, 1899.

Nothing has occurred during the past year to mar the efficient and smooth working of our system of examination, with the exception of three candidates whose time qualification was not according to law, and in consequence of which their certificates were not issued. Their time had been passed by the Customs, and had also been overlooked by the Examiner, and in due course the papers were sent to me, when the mistake was discovered.

A point that candidates for second-class engineers examination seem to have overlooked generally is that they must have served for one year foreign, or eighteen months coasting, in a capacity of not less than third or fourth engineer, and that during the whole of their service they must have been in possession of a third-class certificate (or exemption), as stated in paragraph 31, clause (a), of Regulations. This is of great importance, as time served at sea prior to obtaining a

third-class certificate does not qualify for second engineers examination.

On the 1st January this year a change of application procedure came into force, whereby candidates for examination apply direct and forward all fees to me. This saves the candidate's time, and does not divide the responsibility of seeing that they are properly qualified to sit for examination.

The Customs have now nothing to do either with the filling-in of the applicant's form, or checking the applicant's servitude, as this is all done at the office of the Principal Engineer-Surveyor. The change has given satisfaction generally to engineers, and appears to be a step in the right direction, saving complications.

Every year the number of applicants increases, and the engineering profession seems to be much in favour with the promising young fellows in the colony.

I have, &c.,

ROBERT DUNCAN. Principal Examiner of Engineers.

To the Secretary, Marine Department, Wellington.

The Principal Engineer-Surveyor of Steamers to the Secretary of the Marine DEPARTMENT.

Principal Engineer-Surveyor's Office, Queen's Chambers,

Wellington, 4th April, 1899. Sir,-

I have the honour to submit my annual report for the financial year ended 31st March, A larger number of surveys have been held this year than in any preceding year, and a large 1899. increase to the shipping in New Zealand waters has to be recorded, which is a tangible evidence of the progress of the colony.

The latest steamer additions to the intercolonial service are replete with up-to-date appliances and every comfort for passengers. The s.s. "Manapouri" has been supplied with new engines and

boilers, and has been fitted out specially for the South Sea Island trade.

The steam-trawling industry has gone ahead, several additions being made to the existing fleet, and at Napier especially good results have been obtained. Cold storage being always available at that port is of great assistance when dealing with a perishable commodity like fish.

Wooden-ship building, which was almost a dead art, seems to have revived, in Auckland district one shipbuilder having no less than three steamers under construction at the present time.

The usual mishaps have occurred to steamers during the year, such as collapsed flues and com-

bustion-chamber crowns, principally from oil deposits on the surfaces.

The "Mapourika," a new vessel fitted with all the latest appliances, went ashore on the North Spit at the Greymouth bar, and remained there for nearly six months. Had not the vessel

been built of mild-steel plating, no doubt she would have left her bones there.

Several accidents have occurred through cargo-lifting gear carrying away and through open hooks unshipping, but in future no open hooks will be allowed for overhead, which should lessen the number of such accidents. The Engineer-Surveyors at the different ports have been notified to

bring this regulation into force when making their annual survey of steamers after the 30th June.

The auxiliary-powered sailing-vessels appear to be doing fairly good work on the coast, and several new ones have been added through the year. The question of carrying certificated engineers on these vessels has now been settled, I trust, satisfactorily to all persons concerned. I am sure that it will be for the benefit of the owner to carry engineers who can keep the machinery in much better order, both for economical working, speed results, and upkeep, than when in the hands of the unskilled driver. The very fact of properly qualified men being in charge of the engine-room of these vessels will impart more confidence to passengers by them, and to shippers generally, who have to send produce to catch a market, where time in everything.

The amount of survey work has increased so much during the last two or three years not only owing to the increase of shipping and the scattered nature of the work, but to a number of vessels requiring a large amount of repairs through age and natural decay. At the ports of Auckland, Wellington, and Dunedin this work takes up all the time of one Surveyor, as the work requires the closest scrutiny to insure public safety; and, taking the last few years' record from our returns, I do not know of any single instance of disaster traceable to the negligence on the part of the

Numerous special harbour and daylight deep-water excursions have been run by steamers

during the year without any mishap.

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

Number.	Trade in which engaged.	Aggregate Registered Tonnage.	Registered Nominal Horse-power.	Fees payable.		
25 79 151	Foreign Home trade River and extended river	25,974 14,920 3,749	4,715 4,403 2,490‡	£ s. d. 310 10 0 616 0 0 465 10 0		
255		44,643	11,6081	1,392 0 0		

Appended is a table giving return of steamers to which certificates of survey were issued in New Zealand during the year ended 31st March, 1899, including the names of steamers, tons register, horse-power, nature of machinery and propeller, also trade in which employed.

I have, &c.,

ROBERT DUNCAN,

Principal Engineer-Surveyor.

To the Secretary of the Marine Department, Wellington.

RETURN of STEAMERS to which CERTIFICATES of SURVEY were issued in New Zealand during the Year ended 31st March, 1899.

Name of V	essel.		Tons Register.	Nominal Horse-power of Steam engines and Brake Horse-power of Oil-engines.	Nature of Engines.	Nature of Propelley.	Class of Certificate.	Remarks.
Ahuriri Airini	••		31	17	Compound	Screw	Extended river.	Now we sha
Akaroa		::	43	28	Compound	,,	River Extended river.	New yacht.
Albany			8	8	Non-condensing	,	River	Launch.
Alert	• •			16	Oil-engines		,	New launch.
Alexandra Alice	••		73 3	30 4	Non-condensing	Paddle	"	
Antrim			36	30	,,	Paddle	,,	
Aotea	••	••	89	15	Oil-engines	Screw	Home trade.	
Awarua (Blen) Awarua (Bluff			100	3 32	Non-condensing	Paddle	River Home trade	New launch. Tug.
Beatrice	,		8	10	Non-condensing	Screw	River.	Tug.
Beautiful Star	:		146	30	Compound	,,	Home trade.	
Bee	• •	•••	12	$\frac{2}{12}$	Oil engines	,,	River	New launch.
Bella Ben Lomond	• •		33	15	Non-condensing Compound	,,	Extended river. River.	
Beryl -				5	Oil-engines	,,	,, ., .,	Launch.
Birkenhead	••		55	16	Non-condensing	Paddle	, , , , , , , , , , , , , , , , , , ,	
Blanche Britannia	• •	::	18 108	9 40	,,	Screw	Extended river.	
Brunner	••,		333	95	Triple expansion	Screw	Home trade.	,
Canterbury		••		24	Non-condensing	Twin-screw	Extended river	Launch.
Charles Edwar Chelmsford	ra .	•••	$\frac{123}{70}$	48 24	Compound	Screw	Home trade.	
Clansman	• •		336	90		screw	"	
Clara			• •	$2\frac{1}{2}$	Condensing	,,	River	Launch.
Clematis	••	•••	5	8	,	Sternwheel	7	,
Comet Corinna			820	$\frac{2\frac{1}{2}}{141}$	Compound	Screw	Extended river Foreign trade.	Launch.
Coromandel			67	25	"	"	Extended river.	
Daphne	• •	• • •	• •	1	Non-condensing	~	River	New yacht.
Delta Despatch (Blu	ff)		24	24 20	Compound	Sternwheel	Extended limit	Fishing-vessel.
Dingadee	••		393	80	Compound	Twin-screw	Home trade.	T. ISHING. VESSEI.
Dispatch	• •		::	6	Non-condensing	Screw	River.	
Dolphin Doto	••		16 20	8 16	Oil-engines Compound	,, ···	Extended river	First survey. First N.Z. survey fishing-vessel.
Douglas			55	13	,	,	Home trade.	naming-vesser.
Duchess	• •		62	81	,,	,	River	First N.Z. surve
Durham Eagle	• •		$\begin{array}{c} 53 \\ 138 \end{array}$	24 70	,, ,,	Paddle	"	
Echo				3	Non-condensing	Screw	<i>"</i>	Launch.
Edina	• •	••	5	6		_ ″		*
Effort Eliza	• •	• •	13	12	Compound Non-condensing	Paddle Screw	" .	Launch.
Elsie		::	 15	8	w	"	,	Launch.
Endon			• •	5	Condensing	<i>"</i>	Extended river	Fishing-vessel.
Erin Ethel J.	• •	•••	20	$\begin{vmatrix} 4\\16 \end{vmatrix}$	Non-condensing	"	River.	
Express			36	25	Compound	,,	Extended river	First N.Z. survey fishing-vessel.
Fairy	• •		32	15	Non-condensing	,,		
Falcon Fanny	• •	••	 55	$\frac{5\frac{1}{2}}{30}$	Compound	,	Home trade.	Launch.
Fingal	• •		22	9	Compound	,,	TTOTHE GUNGE.	
Flora	• •	•••	838	180	,,	,	Foreign trade.	
Florence Flower of Ken	t.		• •	3½ 3½	Non-condensing	,	River	New launch. Launch.
Gannet			 15	$6^{\frac{3\pi}{2}}$	Condensing	,,	Home trade	Yacht.
Gairloch	• •		211	85	Compound	Twin-screw	,	
Gertie Glenelg	• •	••	100 156	59 75	Condensing	ga=-"	,	First N.Z. surve
Goldfinch	• •		190	12	Compound Non-condensing	Screw	River.	
Haupiri	••	••	475	88	Compound	,,	Home trade	Formerly "Rich mond."
Hawea Heathcote	••	• •	1,114 94	104 35	Triple expansion Compound	,	Foreign trade. River.	
Hebe	••			2	Oil-engines	"	201701,	New yacht.
Herald	• •	••	370	85	Compound	,	Home trade.	-
Hercules Hesketh	• •		51 393	36 80	Oil-engines	Twin-screw	"	
Hinemoa			•••	61	Non-condensing	Screw	River"	New launch.
Horeke		••	90	4 ²	<i>"</i> "	,,	Home trade.	Launch.
Huia (Welling					Compound	,,		

^{*} Surveyed twice, and in some cases three times.

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

Name of V	Vessel.		Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Romarks.
Invercargill			123 159	50 60	Compound	Screw	Home trade.	
Iona Irene	••			$2\frac{1}{2}$	Non-condensing	,,	River."	
'Ithaca		• •	.7	9	Compound	,,	Extended river	Fishing-vessel.
Jane Douglas		• •	75 496	22 90	"	,,	Home trade.	
Janet Nicoll J.D.O.	• •	• •	87	28	,, .,	,,	Extended river	Tug.
John Anderson			36	25	,,	,,	Extreme limits.	
Kahu	• •		99	40	,,	,,	Foreign trade.	Taunah
Kaituna	••	••	115	$\frac{4}{20}$,,	<i>"</i> . ••	River Home trade.	Launch.
Kanieri Kapanui	••		75	32	"	"	Extended river	First survey.
Kate	••	• • •		5	Non-condensing	,,	River.	
Katikati			27	8	Condensing	,,	Extended river.	NT laura ab
Kauri	••	• •	005	$\frac{1\frac{1}{2}}{70}$	Non-condensing	,,	River Home trade.	New launch.
Kawatiri Kawau	••		285 37	70 14	Compound	"	Extended river.	
Kawau Kennedy	• •	••	125	43	,,	Twin-screw	Home trade.	
Kia Ora			150	65	,,	· · ·	Foreign trade	Left the colony.
Kilmore y	• •	• •	700	$1\frac{1}{2}$	Non-condensing	Screw	River Foreign trade	Launch. First N.Z. surve
Kini Vininalta	• •	• •	$702 \\ 72$	130 24	Triple expansion	,,	Home trade.	I HSU IV.ZI. SHIVE
Kiripak a Kopu	• •	• • •		13	Non-condensing	Paddle	Extended river.	
Koputai		••	5	120	Compound	. ,	Home trade.	771
Kotiti	• •		40	14	N 1	Screw Three screws	Extended river River.	First survey.
Kotuku	• •	••	41 39	26 20	Non-condensing Compound	Screw	Home trade.	
Lady Barkly Lena	••	• •		5	Non-condensing	,,	Extended river.	
Lily			20	12	Compound	Twin-screw		-
Little George		• •	4	4	Non-condensing	Screw	River.	First survey.
Louie	• •	• •	9 39	7 80	Compound	Paddle	Extended river	Tug.
Lyttelton Mahinap u a		• •	239	80	compound ::	Twin-screw	Foreign trade	Left the colony.
Mana (Wellin	gton)		43	25	<i>"</i>	Screw	Home trade.	
Mana (Westpo	ort)	• • •	51	90	,,	Paddle	"	Tug.
Manaroa Manukau	••	• •	78 45	24 20	,,	Screw	Extended river.	
Manukau Manuwai		• •	75	25	Non-condensing	Sternwheel	River.	
Maori (Auckla	nd)		17	8	,,	Screw	Extended river.	
Maori (Duned	in)		. 118	60	Compound	,	Foreign trade. Home trade	First survey.
Mapourika	• •	• •	718 1,380	130 530	Triple expansion	,,	Home trade Foreign trade.	TILSU SULVEY.
Mararoa Matuku	• •	• •	3	3	Non-condensing	"	River	Launch.
May				3	,,	,,		
Medora	• •		67	20	Oil-engines	<i>"</i> ••.	Home trade.	New launch.
Midge	• •	• •	48	20	Compound	,,	River	New launen.
Minnie Casey Moa		• • •	109	33	Compound	: ,,	Home trade.	
Mokoia	• •	• • • • • • • • • • • • • • • • • • • •	•••	4	Non-condensing	,	River	Launch.
Mona		• •,	• • •	3	Oil-engines	,,	,	New launch. Fishing-vessel.
Moss Rose	• •	• • •	• • •	6 10	Condensing Non-condensing	"	,,	Launch.
Moturoa Mountaineer	• •	· ·	66	50	Compound	Paddle	,,	
Muritai	••		133	45	"···	Screw	Home trade	First N.Z. surve
Napier		••	48	30	<i>"</i>	,,	"	
Nautilus Nau	• •	• •	32	18 2	Oil-engines	"	River"	Launch.
Nell Nellie Brown	• • •	• •		3	// ···	,,	,,	New launch.
Ngaru				11	Non-condensing	,,	,,	"
Ngunguru	• •		54	17	Condensing	D- 331-	Home trade.	
Nile	• •	• •	21 15	20	Non-condensing	Paddle Screw	Extended river.	
Noko No. 121	• •	• •	394	100	Compound	Twin-screw	" ···	Dredge.
No. 222			502	120	•	,,	Home trade	,,
Oban	• • • •	• •	27	16	Oil-engines	Screw	River.	
Ohau	• •	••	$\begin{array}{c c} 411 \\ 73 \end{array}$	92 26	Compound	,,	Home trade.	
Ohinemuri Ohuru	• •	• • •	20	60	Condensing	Twin-screw	River."	
Omapere	••	• • • • • • • • • • • • • • • • • • • •	352	80	Compound	Screw	Home trade.	
Onslow			16	14	,,	Twin-screw	River.	
Opawa	• •	• •	64	18	Non-condensing	Screw	Home trade.	New launch.
Opuatia Oreti	• •	• •	138	50	Non-condensing Compound	,,	Home trade.	
Orem Orewa	• •	• • •	37	17	"	,,	Extended river	First survey.
Osprey	••	٠	138	70	,, .	Paddle	River.	
Ovalau	• •	• •	767	75 15	Quadruple expans'n		Foreign trade. Home trade.	
Paeroa	• •	• •	45	TO	Compound	"	TIONE DIAME.	1

^{*} Surveyed twice, and in some cases three times.

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

Name o	of Vessel.		Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Nature of Engines.	Nature of Propeller.	(Class of Certificate.	Remarks.
*Paiaka Pania	••	•••	10 27	9 11	Compound	Screw	Extended river Home trade.	Fishing-vessel.
Pareora.	•••		355	71	Triple expansion	,,	,,	
Parera *Patiki		• •	37	10 15	Oil-engines Non-condensing	Paddle	River	Launch.
*Pelorus	• •	• •	18	12	"	Screw	". "	
Penguin		• •	517	180	Compound	,,	Home trade.	
*Phœnix Pilot		• • •	6 11	5 13	Non-condensing Compound	"	River.	
Pinafore				3	Non-condensing	,	Extended river	Launch.
*Piraki *Planet	• •	• •	10	9 8	,,	,	River.	
*Plucky			13 29	40	Compound	"	Home trade	Tug.
Poherua			749	128	Triple expansion	,	Foreign trade.	
Presto Prince of W	ales.	••	487	3 27	Non-condensing Compound	Twin-screw	River Home trade	New launch. Meat-freezing vessel.
Pukaki			917	110	Quadruple comp'nd	Screw	Foreign trade.	VCBSCI.
Queen of th Result (Nar		••	121 18	40 10	Non-condensing	,	Home trade. Extended river	Fishing-vessel.
*Result (Tau		• •	18	4	Non-condensing	,,	Extended river	risning-vessei.
Rimu	••		144	95	Triple expansion	,,	Home trade	First survey.
Riro Riro Rita	• •	••	22	4 11	Non-condensing Compound	,	Extended river	Launch. First survey
101000	••	••	22	1	Compound	,	"	fishing-vessel.
Rosamond	• •	• •	462	90	,,	<i>"</i> . ••	Home trade.	
Rose Casey Rotoiti	••	• •	99 630	109 104	Triple expansion	Twin-screw	Extended river. Home trade	First survey.
Rotokino			1,304	135	Quadruple expans'n	Screw	Foreign trade.	
Rotomahan Rotomahan			139 901	50 450	Compound	,,	Home trade. Foreign trade.	
Rotorua	a (Duneu		576	172	,,	,,	Home trade.	
Savaii	••	••	31	8	Condensing	,,	Extended river	First survey; fishing-vessel.
Seagull Snark	••	••	12	6 10	Non-condensing	,	River.	Fishing-vessel.
Speedwell		• •		10	Oil-engines	,,		New launch.
*Stella *Sterling	• •	••	157 26	90 39	Compound	,	Home trade.	First survey.
Stormbird	• •		137	40	<i>"</i>	"	,,	Phist survey.
Sumner	• •	• •	94	35	Can d'an aim a	,,	River	Hopper-barge.
Sylph Taieri	• •	• •	$\frac{5}{1,071}$	8 155	Condensing Triple expansion	,,	Foreign trade.	Launch.
Tainui (Auc			47	20	Non-condensing	Paddle	River.	
*Takapuna (. Takapuna (.			58 370	20 165	Compound	Screw	Home trade.	
Talune `	••	• • •	1,303	255	Triple expansion	,,	Foreign trade.	
Taniwha (A Taniwha (T		••	191	40 16	Compound	Twin-screw	Home trade	First survey. Dredge.
Tarawera	ımaru)	••	1,269	250	"	Screw	Foreign trade.	Dreuge.
*Tarewai	••	••	7	12	,,	,	River.	
Taupo Taviuni	• •		408 910	92	Quadruple expans'n	"	Home trade. Foreign trade.	
Tawera	• ::		44	40	Oil-engines	,,	Extended river.	
Te Aroha Te Anau	• •	••	1 028	$\frac{14}{250}$	Non-condensing	Paddle Screw	River. Foreign trade.	1.
Te Anau Tekapu		• •	1,028 50	250		,,	Extended river.	
Terranora	••	• •	199	94	Condensing	Paddle	Home trade.	
*Theodore Thistle	••	••	35 77	25 90	Oil-engines	Twin-screw	River. Home trade	First survey.
Thomas Kir		• •	70	16	Non-condensing	Screw	Extended river.	_ IIII BULTUY.
Timaru Titiroa	•••	• •	211	78 3	Compound Non-condensing	Twin-screw	Home trade.	Launch
Tongariro	• •	• • •	62	25	Non-condensing	Paddle	River	Launch.
Torea			9	18	Compound	Screw	Extended river.	
Toroa Tuakau		• • •	132	40	Oil-engines Non-condensing	"	Home trade	First survey. Launch.
*Tui	••	• • •		$6\frac{1}{2}$, , , , , , , , , , , , , , , , , , , ,	,,	,	"
Tuna	• •	• •		14	Compound	Twin-screw	Extended river.	
Upolu Vesta			700	120	Quadruple expans'n Non-condensing	Screw	Foreign trade.	Launch.
*Victoria		• •	93	50	<i>"</i>	Paddle	"	
Victory Vivid	••	• •		13	,	Screw		Launch.
Waahi				5	"	"	<i>"</i>	New launch.
Waiapu Waihi	••	••	61	15	Oil-engines	,	Home trade.	
	• •		63	20	Compound	,, ,,	l "	l

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

Name of Vessel.		Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Remarks.
Waihora		1,269	250	Compound	Screw	Foreign trade.	1
Waikare	• •	1,901	229	Triple expansion	,,		
*Waikato		56	14	Non-condensing	Paddle	River.	
Waimarie	'	159	48	Compound	Screw	Home trade.	
Waimate		3,629	307	,,		Foreign trade	First N.Z. survey
Wainui		411	95			Home trade.	
Waiotahi		168	56		Twin-screw		
Wairere		27	80	Non-condensing	Paddle	River.	
Wairoa (Auckland)		63	24	Compound	Screw		
Wairoa (Nelson)		48	20	Condensing	,,	Home trade.	
*Wairoro			10	Non-condensing	l "	River	Condemned.
*Waitangi			5	Compound	l	River.	
Waitara (Wanganui)			12	Non-condensing		,,,	
*Waitoa		27	16	Compound			
Waiwera (Henley)			7	Non-condensing			Launch.
Waiwera (Kaipara)		<i>.</i> .	6	Compound	,,	1 ,,	
Waiwera (Lyttelton)	••		15			,	*
Wakatere`		157	140	,,	Paddle	Home trade.	
Wakatipu	••	1,258	230	Quadruple expans'n	Screw	Foreign trade.	
Wakatu		95	30	Compound	٠. س	Home trade.	
Wanaka		1,572	280	Triple expansion	,	Foreign trade	First N.Z. survey
Warkworth		25	10	Oil-engines	,	River.	
Wasp	••		1	Non-condensing	,	"	Launch.
Waverley		93	25	Compound	Twin-screw	Home trade.	
Weka (Auckland)		86	27			River.	ļ
Weka (Napier)		53	20		Screw	Home trade.	
Wellington		279	90			,	
Westland		35	64	Condensing	Paddle	,,	
Whangape			6	Non-condensing	Screw	River	Launch.
*Winona	• •	19	- 8	Compound		Extended river	Fishing-vessel.
*Yankee Doodle		6	12	Non-condensing	Paddle	River.	I .

^{*} Surveyed twice, and in some cases three times.

RETURN showing the CERTIFICATES of SERVICE issued to MASTERS, MATES, and ENGINEERS during the Year ended 31st March, 1899.

Name of P	of Person.]	Rank.		Class of Certific	Class of Certificate.		Date of Issue.			
Peter Annan	••			Master			Home trade	.,	16 May,	1898	••	2687	
William Spencer								٠	29 June,	~		2688	
George Samuel Emtage	••						, ·		15 July,			2689	
Henry James Bennett		••							18	*		2690	
John Eriksen						•	,		23 "			2691	
John Thomas Kingdon							٠, ا		23 Sept.,			2692	
Joseph Rodrigues Vieira					••				26 "		٠. ا	2693	
Peter Stranberg		• •					,		6 Oct.,	,,		2694	
Charles Neilson							,,		28 "			2695	
George Frost				٠ ـ			Foreign trade		21 Nov.,	~		2696	
John Wares					.,		Home trade		10 Jan.,	1899		2697	
Alfred Subritzky	• •	••			••	••	~	• •	15 Feb.,	*	••	2698	

^{*} Renewals.

RETURN showing the Number of MASTERS, MATES, and ENGINEERS examined during the Year ended 31st March, 1899, distinguishing the Number of Successful and Unsuccessful Candidates.

	Aı	ıckla	nd.	We	llingt	on.	L	rttelte	on.	D	unedi	in.	Oth	er Pla	aces.	,	[otals	3,
Class of Certificate.	Passed.	Failed.	Total.															
Foreign - going masters and mates	2	5	7	11	14	25	10	3	13	3		3				26	22	48
Home-trade masters and mates	11	3	14	9	3	12	1	1	2	1		1				22	7	29
River-steamer masters	9	2	11	7	٠. ا	7				3	1	4	1		1 2	20	3	23
Sea-going engineers	24	7	31	31	5	36	6	3	9	9	3	12	2		2	72	18	90
River-steamer engineers	8	3	11	4		4	1		1	. 2		2	1	1	2	16	4	20
Marine-engine drivers	10	3	13	1	•••	1		••	••	• •	••	• • •	3		3	14	3	17
Totals	64	23	87	63	22	85	18	7	25	18	4	22	7	1	8	170	57	227

RETURN showing the Total Ordinary Expenditure of the Marine Department during the Financial Year ended 31st March, 1899.

AD OFFICE:— Secretary, also Se	••	d Inspec	etor of C			£ s. d.	£ s. d.	£ s.
Secretary, also Secret Chief Clerk Clerks Cadet Nautical Adviser, &c.	••	-	tor of C		1	1		
Chief Clerk Clerks Cadet Nautical Adviser, &c.	••	-		netome	İ	.,		
Cadet Nautical Adviser, &c.				ustoms		320 0 0		
Nautical Adviser, &c.			• •			350 0 0		
		• •	• •	• •		65 0 0		
POWEG.	• • •	••	••	• •		317 4 1		1,052 4
POTTEG								- ,
		-				, .		
Manukau,— Salaries						426 0 0	-	
Contingencies	• •	• •	• •	• •		90 5 4		
Russell,—	••	••	••	••			516 5 4	
Contingencies		••	••	• •	[25 16 6	
Whangaroa,—					-		12 0 0 14	
Contingencies Hokianga,—	••	••	••	••]		2 3 4	
Salaries						284 0 0		
Contingencies	• •			`		48 7 11		
Kaipara,—					-		332 7 11	
Salaries Subsidy to steam	er for k	arhous	overlz	• •	••	490 0 0		
Removal of beac		arbour-	WOLK.	• •	::	340 0 0 250 0 0		
Contingencies	••	• • •	• • •	• • •	::	29 10 7		
Opunake,—]		1,109 10 7	
Salary	• •	••	••		•••		25 0 0	
Foxton,—	. *				-	100 0 0		
Salary Contingencies	• •	••	• • •	• • •		190 0 0 46 10 4	ļ	
Rangitikei,—	• •	••	••	•••	-		236 10 4	er Charles and
Salary				••		• • •	15 0 0	
Tauranga,—				*	-		, ,	
Contingencies Mokau,—	••	• •	• •	••	•••	••	5 6 6	
Salary				.,		22 10 0		
Removal of snag	8	• • •	• •	• • • • • • • • • • • • • • • • • • • •		55 0 3	• •	
Contingencies	••	••	••	••		1 19 6	* 1	
Mongonui,—					-		79 9 9	
Repairs to wharf	••	• •	• •	• •			150 0 0	
Whangarei,— Contingencies				11	, [-		1 7 6	
Wairau,—	••	••	••	• •	-	• •		
Salary		• •				145 0 0		**
Contingencies	••	••	• •	• •	•••	82 7 7	005 = =	
Havelock,— Contingencies					-		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Picton,—	••	. • •	• •	:•	. : •		Z 15 U	
Contingencies							0 13 6	•
Nelson,—					-			
Salaries	• •	• •	• •	• •		522 14 0		
Contingencies Motueka,—	• •	• •	• •		}	96 11 11	619 5 11	
Salary		••				10 0 0	715 U II	
Contingencies	••	••		••		9 8 6		
Waitapu,-					-		19 8 6	
Salary	• •	• •	••	· •		25 0 0		.*:
Contingencies Collingwood,—	••	••	••	• •	•••	56 12 6	81 12 6	
Salary		••		••		25 0 0	OI 12 (0	
Contingencies		••		• • •		6 7 0	-	
Karamea,—					- -		31 7 0	
Salary Stop bank	••	••	• •	• •	••	40 0 0		
Removal of snag	s	• • •	••	• • •		286 10 5 96 5 5		
Contingencies	• • •	• •	• •	• • •		3 10 9		
Little Wanganui,-		•		•	-		426 6 7	
Contingencies	• •	• •	• •	••	••	••	8 7 3	
Okarito,—					į.	20 15 0		
Salary Contingencies	•	• •		• •		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
Okuru,—	••	••	••	••	-	00 4 2	91 17 2	
Contingencies				••			11 16 7	
Waikawa,—					-			
Salary	• •	••	••	••	••	••	5 0 0	
Catlin's River,— Contingencies					. [*		3 15 0	
остинванская	••	• •	• •	••	••	••	9 19 0	
Wharf at Panmure		••					200 17 0	-
Pension of J. Hebder	le y		• •	• •	• •		50 0 0	
Buoy-chain		• •	• •	• •	••	••	211 12 11	
General contingencie	Þ	••	• •	• •	•• [191 3 2	4,682 3

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

Na	ture of Expendit	ure.			Details	3.	Totals.	Grand Totals.
And the second s					£	s. d.	£ s. d.	£ s.
Lighthouses:				1				
Salaries of keepers		• •			8,990			
Travelling-expenses	of keepers	••	• •	• • •		19 6	er e generalien in in i	
Oil		• •			1,701			
Stores and continger Lighthouse artificer			• •	•••	2,536	0.0		1.75
Pension of Mrs. Dec	le .	••	• • • • • • • • • • • • • • • • • • • •	- 7. 1	18			
Fog signal, Pencarro	w Head		•			16 5		
		••					13,727 19 2	
			,					13,727 19
Departmental travelling-	expenses	. ••	• • •			3 6		
Coastal buoys and survey	/8 C		• •	•••	65			
Putting s.s. "Tararua"	Cemetery in or	ger	• •	••	18			
Charts Inquiries into wrecks an	d complties	••	• •	••		18 7 14 9		
Survey of unseaworthy s	hins	''	• •	•••		6 0		
Sundries	inipa .,	• • •				14 10		
		• • •	- 77				709 13 6	
	**					i		709 13
Inspection of Machinery			··		0.050			
Salaries			• •	• •	3,256			
Travelling-expenses Contingencies		• •	•••		1,376			
Contingencies	••	••	• •		402	11 3	5,034 12 11	
•							0,00± 12 11	5,034 12 1
Examination of Masters	and Mates.—							
Salaries		••			176	4 2		* 0
Contingencies		• •			219	12 8	* *	
				-	·		395 16 1 0	
0747								395 16 1
Weather Forecasts,—					200	0 0		
Salary Contingencies	••	••	• • •			2 4		
Contingencies	••		• •	•••		2 1	368 2 4	
1.5								368 2
Administration of "The	Sea-fisheries A	ct, 1894,''-	<u></u>	1		1		
Protection of fish	••		•••	•		18 4		
Protection of oysters	••	••	•••	••	170	7 11	353 6 3	
]-			353 6 8	980 c
Introduction of Fish,—						. [359 6
Grant for hatchery					72.1	0 3		
Expenses of Expert	Avson to Euron	e and Ame	erica		559 1		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	of the Control
				- -			632 3 10	
								632 3 1
Fovernment Steamers,—				1				· , 7,
S.S. "Tutanekai,"—					0 0== +	أأما		
Wages, stores, p	rovisions, &c.	• •	• •	••	8,375 1	9 6		
S.S. "Hinemoa,"— Wages, stores, p	rovisions &a			* 8	7,294	0 11		
wages, stores, p	tovisions, we.	• •	• • •	••	1,234	9 11		
					15,670	9 5		
Less amount receive	d for freight, pa	assages, &c			8,677	7 2	** ****	
•		· · · · ·					6,993 2 3	
			e ek Kal					6,993 2
		*******		.			* 1 10 10 1	- nn 642
Less amount of cred	to to make)]		33,949 4
Liess amount of cred	tes to vote	••	. • •	•••	••		** * * * * * * * * * * * * * * * * * * *	475 6 1
Total	• • • • • •		:	_		1		33,478 17
10001	••	• •	• •	• •	• •	1	••	OC, TIO II

RETURN showing the Cost of Maintenance of the New Zealand Lighthouses, and the Quantity of Oil consumed at each, during the Year ended 31st March, 1899.

• • • • • • • • • • • • • • • • • • • •				Oil.	Stores	
Name of Lighthouse.		Salaries.		1	and	Totals.
			Gallons	Value.	Contingencies.	
			consumed.	, and a		
			! -		1 11	1
		£ s. d.		£ s. d.	£ s. d.	£ s. d.
Cape Maria van Diemen		320 16 8	1,008	71 8 0	132 8 5	524 13 1
Mara Hinau		394 7 1	785	55 12 1	104 15 0	554 14 2
m:: m::		288 6 8	509	$36 \cdot 1 \ 1$	58 13 8	383 1 5
Doon Dools		160 0 0	89	8 6 8*	. 125 14 9+	
Ponui Passage		160 0 0	76	5 7 8	10 18 11	176 6 7
Currien Telenid		334 2 3	1,375	$97 \cdot 7 \cdot 11$	106 7.11	537 18 1
Dan41an 3 Ta12a 3		375 0 0	744	52 14 0	187 9 0	615 3 0
Nanian Bluff		20 0 0	Gas	13 5 3	0 1 3	33 6 6
0 D-11		270 0 0	965	68 7 1	77 2 2	415 9 3
Pencarrow Head		300 0 0	937	66 7 5	131 1 21	497 8 7
Comos Taland		156 0 0	211	14 18 11	56 5 9	227 4 8
Cape Egmont		283 16 7	599	- 42 8 7	75 0 11	401 6 1
Manukau Head		269 3 4	534	37 16 6	58 10 3	365 10 1
Manukau South Head leading-lights		#	170	12 0 10	32 17 8	175 5 4
Manukau North Head leading-lights .		$120 \ 0 \ 0$	146	10 6 10	32 11 8	175 5 4
Kaipara Head		$270 \ 0 \ 0$	518	36 13 10	121 2 9	427 16 7
Brothers		448 6 10	682	48 6 2	71 0 3	567 13 3
Tory Channel leading-lights		90 0 0	. 167	11 16 7	6 19 2	108 15 9
Cape Campbell		270 0 0	519	36 15 3	69 5 7	376 0 10 *
Godley Head		267 10 0	519	36 15 3	59 13 9	363 19 0
Akaroa Head		270 0 0	577	40 17 5	44 10 7	355 8 0
Moeraki		266 18 9	529	37 9 5	83 19 1	388 7 3
Taiaroa Head		290 0 0	506	35 16 10-	33 0 2	358 17 0
Cape Saunders	1	255 12 9	650	46 0 10	65 14 10	367 8 5
Nugget Point		280 0 0	926	65 11 10	93 12 0	439 3 10
Waipapapa Point		280 17 5	573	40 11 9	51 17 8	373 6 10
Dog Island		331 5 1	785	55 12 1	82 19 7	$469 \ 16 \ 9$
Centre Island		351 12 2	864	61 4 0	110 8 8	523 4 10
Durgagun Daint		350 0 0	933	66 1 9	82 4 0	498 5 9
Ti alritilra		$12 \ 0 \ 0$	Gas	13 11 3	0 12 0	26 3 3
Cape Foulwind		288 11 6	544	38 10 8	68 17 4	395 19 6
Warneyall Cnit		338 4 6	585	41 8 9	70 2 7	449 15 10
Molagn		284 14 1	242	17 2 10	54 12 11	356 9 10
Stonhang Taland		383 2 3	1,822	129 1 2	174 19 78	687 3 0
Twomah Daga		210 0 0	123	8 14 3	33 15 6	252 9 9
The state of the s	-					
Totals		8,990 7 11	20,212	1,460 10 9	2,586 14 10	12,987 13 6
	-					
The state of the s						

^{*} Kerosene. + Includes £74 14s. 1d., cost of repairs. cost of additions to house. ‡ Includes £61 12s. 8d., cost of repairs. § Includes £38 7s. 11d.,

⁻This return does not include the cost of the periodical visits made to the lighthouses by the Government steamer with oil, stores, and provisions. The proportion of the steamer's expenses chargeable to this service is about £5,000 a year.

RETURN showing the Cost of ERECTION of the | RETURN showing the Amount of Light-dues New Zealand Coastal Lighthouses.

Name of	Light	house.		Cost of Ere	ctio	n.
				£	s.	d.
Pencarrow Head		• •		6,422		4
Nelson		• •		2,824		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		6
Manukau Head				4,975	2	4
Cape Foulwind				6,955	9	1
Brothers				6,241	0	0
Portland Island				6,554	14	5
Moeraki				4,288	13	2
Centre Island				5,785		0
Puysegur Point		••		9,958		5
Cape Maria van D	iemer	ı		7,028		8
Akaroa Head				7,150		5
Cape Saunders				6,066		3
Cape Egmont†		• •		3,353	17	11
Moko Hinou				8,186	5	0
Waipapapa Point		••		5,969	18	11
Ponui Passage;		••		••		
Kaipara Head		••	••	5,571	8	0
French Pass		• •		1,427		5
Cuvier Island		• •		7,406		11
Stephens Island				9,349	9	11
Cape Palliser		• •		6,243		1
Cost of telegraph c	able	to Tiri-Tiri	••	1,085		6
Miscellaneous and	unal	located	••	1,322	2	2
Total	••	••	••	£173,895	14	7

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

RETURN showing the FEES, &c., received under the Shipping and Seamen's Acts, the Merchant Shipping Act, the Sea-fisheries Acts, the Inspection of Machinery Acts, and for Pilotage and Port Charges &c., during the Year ended 31st March, 1899.

	Nature o	f Receipts	•		Amo	unt	
Shipping and Fees for s				949	£	s. 5	d. 2
men, and			narge or	sca-	,	-	-
Survey of s	teamers	••			1,402	10	0
Measureme	nt of sh	ips			25	0	0
Examinati engineer	on of		mates,	and	216	5	0
Light-dues					19,382	16	4
Merchant Sh		et				16	0
Pilotage and					2,664	16	6
Sundry receip			ırs Acts		203	14	0
Sea fisheries					477	7	0
Inspection of	Machir	erv Acts			3,904	17	0
Sundries	••		••	••	130	2	6
	Total	••	••	£	30,330	9	6

collected during the Year ended 31st March, 1899.

	Port.			Amount c	olle	cted
				£	s.	d.
Auckland				5,661	11	9
Onehunga				108	14	0
Whangarei				82	2	7
Whangaroa		• •		5	9	7
Russell		• •		34		2
Mongonui				2	17	1
Hokianga		• •	• •	7	14	5
Kaipara				90	17	3
Thames				94	19	5
Coromandel				23	5	8
Tauranga				22	16	5
Poverty Bay				390	13	5
Napier		• •		490	8	9
New Plymouth				154	14	9
Waitara				39	4	9
Wanganui		• •	• •	106	13	9
Patea		• •	•••	6	15	7
Wellington		.,		5,528	0	9
Wairau		• •		12	7	11
Picton		• •		242	3	0
Nelson	• •		• •	323	4	5
Westport				415	12	2
Greymouth				164	7	. 7
Hokitika				1	11	2
Lyttelton	• •	• •		1,707	19	3
Timaru	• •	••		331	10	
Oamaru				76	4	1
Dunedin	••	• •		1,517	5	8
Bluff and Inverce	argill	••	• •	1,738	12	5
Tota	ıl			£19,382	16	4

RETURN showing the Amount of Pilotage, Port Charges, &c., collected during the Year ended 31st March, 1899.

Name of Por	t.	Pilot	age.		Port Ch &c	arg	es,	Tot	al.	
		£	s.	d.	£	s.	đ.	£	s.	d.
Auckland*		366	10	9	2,972	12	4	3,339	3	1
Onehunga		7	18	5	122	17	3	130	15	8.
Hokianga		32	13	4	٠.			32	13	4
Kaipara		82	7	0	762	15	5	845	2	5
Thames*		84	4	0	١			84	4	.0
Gisborne*		90	14	3	804	15	7	895	9	10
Wairoa*		96	5	0	2	10	0		15	0
Napier*		581	1	5	2,961	14	2		15	7
New Plymou	th*	54	1	7	116	18	8		0	3
Waitara*		79	1	3		7	5		8	8
Wanganui*		456	9	9				456	9	9
Patea*		26	19	8	4	13	0		12	8
Foxton		147	7	1				147	7	1
Wellington*		172	19	10	7,702	11	8	7,875	11	6
Wairau		124	11	4				124	11	4
Nelson		815	15	5		11	3		6	8
Hokitika*					†13	8	9		8	9
Lyttelton*		3,869	3	8	3,273	11	10	7,142	15	6
Timaru*		708	15	0	2,099	11	4	2,808	6	4
Oamaru*					†1,445	17	4	1,445	17	4
Dunedin*		4,914	12	9	3,871	17	11		10	8
Invercargill*					13	3	2		3	2
Bluff*		2,791	15	2	1,211	17	0	4,003	12	2
Riverton*	• •		•		4	16	0	4	16	0
Totals	•••	15,503	6	8	28,030	10	1	43,533	16	9
* Harbou	r Boa	rd reven	ue.		† Tonns	ige:	rate	on carg	ω.	

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 31st March, 189J.

2	Name of S					Balance to Credit of Estate on 31st March, 1898.	Amount received.	Amount paid.	Balance to Credit of Estate on 31st March 1899.
Charles J. Miller Carl Deug, alias William	 Clansen	or Cla	nsman	••	••	£ s. d. 2 15 4 0 19 0	£ s. d.	£ s. d. 2 15 4 0 19 0	£ s. d.
G. Faulkner John R. Campbell Frederick Davis	••	••	••	••	•••	4 10 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4 10 0 0 6 8	7 4 9
Philip Hoare Henry Smith	••	••	••	••	•		0 8 6 0 5 2		0 8 6
Alexander D. McNab Joseph Dominy			•••	••	••	••	$\begin{smallmatrix}0&0&3\\2&12&4\end{smallmatrix}$	2 12 4	0 0 8
Edmund Gray Edward Jones	••	••	••	••	••	••	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 16 0 43 4 10 8 4 9	••
Charles James Collins William Hodge A. Nelson	••		• •	••		•••	8 4 9 83 17 8 4 19 0	83 17 8 4 19 0	
Henry West Matthew Miller	••		••	••		••	0 17 3 16 0 0	6 17 6	0 17 9 2
Robert McDougall Alfred Murfin	••		•••	•••	•••		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 10 0	9 8 4 2
Totals	••	••	••			8 4 4	183 7 5	159 13 1	31 18 8

RETURN of LICENSES as Colonial Pilot issued in pursuance of Section 31 of "The Shipping and Seamen's Act Amendment Act, 1894," during the Year ended 31st March, 1899.

No. of License.	Date of 1	issue.	Name of Licensee.		Port of Residence.		Date of H Lice	
17 18 19 20	12 Aug., 11 Nov., 7 Dec., 21 "	1898	Edward Wheeler Hugh McLellan Richard Groombridge Butt Archibald Kennedy	:: ::	Wellington Lyttelton Wellington	••	12 Aug., 11 Nov., 20 July, 21 Dec.,	1899.

RETURN of LICENSES as Adjusters of Compasses issued in pursuance of Section 4 of "The Shipping and Seamen's Act Amendment Act, 1895."

ress.	Ad		e.	Licens	Name of		sue.	Date of I	No. of License.
	Wellington.	 ١	n Schoen	Carl vo	Augustus	George Frederick A	1896	3 March,	1
	Auckland.	 			y	Thomas Capel Tilly	,	20	2
	Dunedin.	 			ň	Frederick Macbeth	,,	9 April,	3
		 			• •	Robert Strang		15 ,	4
		 	• • •		Chomson	George Urquhart T.	,,	5 May,	5
•.	Onehunga.	 • •				John Robertson*		26 Nov.,	6
	Wellington.	 				George Burton*	,,	9 Dec.,	7
	,,	 				William Bendall	,,	11 "	. 8
	Lyttelton.	 				Hugh McLellan	1897	1 Feb.,	9
	Nelson.	 			Cox	Frederic William C	,,	27 April,	10
	Auckland.	 			z	Thomas Fernandez	,,	27 May,	. 11
1 4	Lyttelton.	 		• •	•. •.	Robert Hatchwell	*	27 July,	12
	Wellington.	 		• •	••	Arthur G. Gifford		1 Sept.,	13
		 			nardson	Herbert John Rich	1898	13 Aug.,	14

RETURN showing the Number of Notices to Mariners relating to Matters within the Colony issued by the Marine Department during the Year ended 31st March, 1899.

Port or Place.		Subject of Notice.				en
Auckland Harbour		Dredging operations, Hobson Street Wharf.				
4	• •	Practice, mine-fields.				
Daggs Sound		lang to the first the company of the contract				
East Cape Island		Preliminary notices as to exhibition of light.				
French Pass		Position and description of bank (two notices).				
Greymouth		Barrytown Gold-mining Company's arc lights at Barry	town		4.5	
Kaipara Harbour		Leading-beacons re-erected and mark-buoys placed off	Torv	Shoal.		
Traipara Traipour		Further extension of Tory Shoal.	101	2,220001	4	
- 4		Extension of bank in Otamatea Channel.				
Manawatu River		Alteration in colour of leading lights.				•
Nelson Harbour	::	1				
New Plymouth Harbour	• •	Day and night signals for port.				
2.0W 11ymodum 11mmodu	• •			· ·		
Otago Harbour	•	Leading lights and beacons.			,	
Pelorus Sound	• •	Spar-buoy on Kainoke Rock.				
Port Nicholson	• •	Fog-signal at Pencarrow Head.			4.	
1 of a tricholson	• •	Mine-fields off Steeples Rock.				
Raglan Harbour	••	Discontinuance of beacons.		4 .	,	
Thames Harbour.	• •	Bell on fairway buoy, and more powerful light on Kop	n Wh	arf		* .
Waimakariri River	• •	Temporary flagstaff erected on South Spit.	u III	COLI.		
General	• •	Warning signal for use at night: flashing or sound sign	nal			
Goneral	• •	maining bighas for all all might. maining of sound sig				1 Page 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

DESCRIPTIVE RETURN of New Zealand Coastal Lighthouses.

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	1st order dioptric	Revolving	1'	White	Timber	Timber	24 Mar., 1879
Diemen	••	Fixed	• •	Red, to show over Columbia Reef.			
Moko Hinou	1st order dioptric	Flashing	10"	White	Stone.	Timber	18 June, 1883
Tiri-Tiri	2nd "	Fixed	••	White, with red are over Flat Rock	Iron	"	1 Jan., 1865
Ponui Passage	5th "	. "		White and red	Timber	,, `	29 July, 1871
Cuvier Island	1st "	Revolving	30"	White	Iron	,,,,,,	22 Sept., 1889
East Cape	2nd "	Flashing	10"	,,	"	"	Building.
	2nd "	Revolving	30"		Timber		10 Feb., 1878
Portland Island	••	Fixed	••	Red, to show over Bull Rock.			
Cape Palliser	2nd order dioptric	Revolving	*	White	Iron	Timber	
Pencarrow Head	2nd "	Fixed		,	. "	"	1 Jan., 1859
Cape Egmont	2nd "	"	••	,,		"	1 Aug., 1881
Manukau Head	3rd "		• • • • • • • • • • • • • • • • • • • •	.,	Timber	~	1 Sept., 1874
Kaipara Head	2nd "	Flashing	10"	,,	"	"	1 Dec., 1884
- (2nd "	Fixed	10"		"	"	24 Sept., 1877
Brothers	••	Fixed	••	Red, to show over Cook Rock.	,		د
Cape Campbell	2nd order dioptric	Revolving	1'	White	Timber	Timber	1 Aug., 1870
Godley Head	2nd "	Fixed		,,	Stone	Stone	1 April, 1865
Akaroa Head	2nd "	Flashing	10"		Timber	Timber	1 Jan., 1880
Moeraki	3rd "	Fixed	••	,,	"	"	22 April, 1878
Taiaroa Head	3rd "	,,	• • •	Red	Stone	Stone	2 Jan., 1865
Cape Saunders	2nd "	Revolving	. 1'	White	Timber	Timber	1 Jan., 1880
Nugget Point	1st "	Fixed	• •	,,	Stone	Stone	4 July, 1870
Waipapapa Point	2nd "	Flashing	10"	,,	Timber	Timber	1 Jan., 1884
Dog Island	1st order catadiop- tric	Revolving	30"		Stone	Stone	1 Aug., 1865
Centre Island	1st order dioptric	Fixed	••	White, with red arcs overinshore dangers	Timber	Timber	16 Sept., 1878
Puysegur Point	1st "	Flashing	10"	White	,,	,,	1 Mar., 1879
Cape Foulwind	2nd "	Revolving	30"	,,	,,	,,	1 Sept., 1876
Farewell Spit	2nd "	"	1′	White, with red are over Spit end	Iron	" .	17 June, 1870
Nelson	4th "	Fixed	••	White, with red arc to mark limit of	<i>II</i> .		4 Aug., 1862
				anchorage			re e Europe
French Pass	6th "	,,	••	Red and white, with	<i>h</i>	<i>"</i>	1 Oct., 1884
		"		white light on	1		
- E			٠.	beacon		1	
Stephens Island	1st "	Group flashing	†	White	,	,	29 Jan., 1894

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

† Two flashes in quick succession

RETURN of MASTERS, MATES, and Engineers to whom Certificates of Competency were issued during the Year ended 31st March, 1899.

Name of P	erson.				Rank.	i	Class of Certifica	ite.	Date of	Issue.	
hilip Escott				j	Second mate		Foreign trade		15 April,	1898	-
ohn Proudfoot	• •	• •			771	• •		•	26 "		
harles McLean		• •			~ -			• •	16 May,	,,,	
illiam Fretwell		• •			First mate		<i>"</i>	• •	9 June,	.,, '	
ohn McLennan McKenz							. "		5 July,	"	
erbert Louis Barton Go								• •	15 "	<i>"</i> ·.	
obert Hatchwell					Master, extra		,,		23 "	,,	
lbert Ernest Young					First mate		"		5 Aug.,	"	
mes Small Pender	4, 4,						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		13 "	" .	
lbert Thomas Norton	•. •.			• •		٠.	,,		13 Sept.,	"	
harles Thompson	•, •			•		• •	•	• •	13 "	. "	••
illiam Joseph White	•. •	• •	•	•	Second mate	• •	. "	••	22 "	.#	••
obert Hogg Warrander	-	• •		•	First mate	٠٠ ا	"	• •	4 Oct.,		
illiam John Burns	5.5. Damana	• •		•		• •	. "	• • •	27 "	~	• •
reeborn John Douglas I		• •		•	Tillian di las a Ala	••		• •	7 Nov., 1 Dec.,	"	•••
owland Christian Hamr aniel McKenzie		• •		•	C	•••	"	::	107	.11	••
ames Lent Martin	•. •.	• •		•			·	• •	00	"	[
illiam McBride	* *				T71 1 1	::	: "	• •	11 Jan.,	18̈́99	
eorge Napier Lindsay					3/		"	• •	10	1033	
lbert Edmund Harringt							"	• •	26 "	" .	
rederick Antonio Hardy		• • •					"	• •	0.1	"	\vdots
dward John Hales	• •	• •			~ 1		<i>"</i>	•••	9 Feb.	. #	
ans Brown	••				T-7. (• • •	20 "	"	
alter Andrew Tulloch	••	• •			3.6 . 31				6 March.	<i>"</i> .	
hn Anderson					Circ. 1		"		8 "	"	
seph Robert Maryon M	orlev				TO .		"	• • •	11 ″	,,	
'illiam Bark	11			.	Master		Home trade	• •	21 May,	1898	
ohn Kemp Mitchell				.	Mate	[,,		21 "	"	
rederick Irving				.	3.6		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		30 "	. ,,	
thur Jacques Blackmoi	te •			.	7 f . L .				2 June,		
ugh Andrew McLeod	.,			.	,		,,	••	17 "	"	
arry Stubbs	11		, .	.]	,	٠. ا	,,	• •	19.Aug.,	,	••
nomas Cowley	,,	••		•		• •	"	• •	19 "	, "	•••
omas Frederick Meyer		• •		•	3.5	\cdots	"	• •	25 "	"	•••
	· ·	• •		·•]]	"	• •	7 Sept.,	"	••
ayward Charles Subritz	-	• •				٠٠	· // // // // // // // // // // // //	::	23 "	"	•••
aac Samuel Fletcher	**	• •		•		• •	• · · ·	••	20 Oct.,	"	••
mes Irvine	• •	••		•		٠٠	., "	::	27 "	. "	••
hn Watt Darroch	• •	• •				•••		::	2 Nov.,	" .,	•••
ank Lawton	• •	• •		•	The state of the state of	• •	" "	::	0	W +-	••
ohn Hoffey ephen Lawson	, ,	• •		•		• •		• •	6 Dec.,	. "	•.• ,.
hn Edward Johnson	* *	••		•		•	, "	::	22 "	"	••
rnest Jurss	• •	• •					"	••	31 Jan.,	1899	
ndrew Running	• •		-		Tr	• •	"	: •	23 Feb	1000	1
ichard Collins.	• •	• •			36.4		, "	: :	6 March.	"	
hn Kennedy	• •								13 "	<i>"</i>	
'illiam Outtrim					3.6	}	, " .	•	29 "	.	
ank Glover							River trade		15 April.	1898	
illiam Edward Sinnott				.					21 May		
orman Smith				.	,			•	22 June,	"	
arles Edward Lowe				.	,,			• • •	8 July,	".	
lexander Snodgrass Pate	erson			.	,,		, , , , , , , , , , , , , , , , , , ,		26 "	,,	
Tilliam Couldrey				.	,		"		13 Aug.,	"	
nomas Scott		•							2 Sept.	"	
illiam Henry Meredith	• •						,	• •	23 "	<i>"</i>	
mes Finley	• •						,,	• •	26 "	,,	•••
eorge Schmidt		••,		-			<i>"</i>	•	30 "	"	••
hn Hoffey	••	••	•	•		• •	"	• •	8 Nov.,	, ,,	• •
illiam Frederic Meyenl		• •		•		• •	, , , , , , ,	• •	1 Dec.,	"	•••
lward James Holford B		• •		• }	" · · · ·	• • ["		17 "	"	••
ercy McElwain	• •	• •		•		• •	. "	• •	19 "	1000	••]
	••	••		•		••	"	• •		1899	•••
muel Cochrane	••	• •		•		\cdots	, " .	. • •	31 "	" ,	••
bert Cashman musl Wheetley McCell	11770	• •		•		• •	. "	. •	8 March,	" .	•••
muel Wheatley McCall lward Thorneycroft Fro		• •		•			. "	• • •	0.5	"	
juglas Grant Stevenson		• •		•	2nd class engineer	•••	Foreign trade	• •		1898	
arles Heber Martin		• •			3rd class engineer		- oronder armero	.•.•			
ederick Francis Bullen		• •			" "	· · -	. , "	• •	15 " 15 "	"	
arles Duncan		• •			" .	ľ		• •	15 "	" ;	
T. 14		• •			1st class engineer .		"		26 "	"	
hn Alexander		• • •					,	• •	30 "	".	
thur Leslie Turner					2nd class engineer	ł	<i>"</i>		10 May,		
alcolm Richmond					"	1	,,		10 "	"	
bert Coad	•				3rd class engineer		"	• • • •	11 "	"	
					<i>"</i>		<i>"</i>	•	11 "	"	
hn Dunstan					<i>"</i> .				11 "	,,	
	• •	• •	•								
ohn Dunstan Ifred Richard Pook ames McGuire	••				,,	1	" "		11 "	"]
lfred Richard Pook							n .		11 "	"	
Ifred Richard Pook ames McGuire	••			- 1	"		#	••	11 "		- 1
fred Richard Pook mes McGuire eorge Munroe	••	• •			"		" " " " "		11 "		••

RETURN of MASTERS, MATES, and Engineers to whom Certificates of Competency were issued during the Year ended 31st March, 1899—continued.

Name of Pa		ano roar	Rank.	Class of Certificate.	Date of Issue.	No.
Name of Pe	rgoil.		Naua.	Cause of Ori annound,		
Robert Henry Norrie			1st class engineer 3rd class engineer	Foreign trade	18 May, 1898	257 387
Edward Stanford Hibbard	••			,	18 ,	388 389
John De Vere Mannion	••		1st class engineer 2nd class engineer	,,	2 June, "	390
Peter Marshall Matthew Miller		•• ••	"TIN OTWOS OTISITICET	,,	6 ,,	391
Charles George Silvester			3rd class engineer	,,	8	392 393
Walter George Scott David Robertson		· · · · · · · · · · · · · · · · · · ·		<i>"</i>	8 , ,	394
		••	#· #		8 "	395
		••	2nd class engineer	,	8 " "	396 397
			3rd class engineer	,,	8 July, "	398
			,,	,,	28	399 400
		••	1st class engineer 3rd class engineer	,,	17 Aug., "	401
Henry William Robinson Thomas Wetherilt		••	2nd class engineer	, ,	19 ,	277
Henry Upton			1st class engineer		13 Sept., "	262 290
George Richard Skinner			2nd class engineer 3rd class engineer	"	13 , ,	402
John McCallum Albert Edwin Edmonds			"	"	15 " "	403
William John White			"	,	15 " "	404 405
		••	2nd class engineer	, , , , ,	15 " "	276
William Percy Hambleton James Adam Glasgow		••	,,	,,	13 Oct., "	281
William Cecil Ferdinand	Richards	on	1st class engineer	,	14 " "	97 251
Henry Salter		••	3rd class engineer	,,	14 " "	406
William Tinsley Frederick George Foster		••	,,	,,	14 " "	407
Thomas Elliot Naughton I	McKenzie	•	1st class engineer		14 " "	408 204
		•• ••	3rd class engineer		1 Nov., "	409
Arthur Brown Frank Leonard Peterson			"	,	2 " "	410
Samuel Hosking Luke	••	••	"		8 " " · · 8 Dec., " · ·	411 412
		••	,	,,	12 " " ··	413
			"	,	17 " "	414
Matthew Cable		••	*	,	8 Feb., 1899	415 416
James Lisle George Thomas Slade			**	,	8 " "	417
Thomas Alfred Cooper			<i>"</i>	. ,,	8	418
Hugh Alexander Calder		••	2nd class engineer	,,	15 " "	286 340
		•• ••	3rd class engineer	,	15 " "	419
				,,	20 " "	420 297
John Young		••	1st class engineer 3rd class engineer		20 " "	421
Harry Hambleton	• •	•• ••	", ord ciess offines	,,	23 " "	422
George Macdonald Hender	son		,,	,	28 " "	423 424
Henry Horner Sanderson	• •	••	1st class engineer	,	8 March, " 16 " "	272
Edgar Percival Turner John Hamilton McLean		•• •• [3rd class engineer	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	16 " "	425
Henry McDonald	••		Engineer	River trade	30 April, 1898	1779 1780
Charles Barwell		••	,	,,	11 May, "	1781
Charles Foster Harry Graham Lever			,,	<i>"</i>	20 July, "	*1782
Albert White	••		,	,	28 " " · · ·	1783 1784
John Lyons John Henry Hodgson			,	"	13 Sept., "	1785
James William Robertson		••	,	,	13 " "	1786
Montague Thomas Nelme	Bluck			,,	15	1787 1788
Robert Cashman John Docherty		••	,,	"	14 000.,	1789
John Paterson		· · · · · ·	,	,,	21 Nov., "	1790
Edward Crichton Reid	• • *		,	,,	8 Dec., " 8 Feb., 1899	1791 1792
Ernest Tirarau Walker Herbert Henry Evans			,	,,	8 " "	1793
		••	<i>"</i> ·· · · · · · · · · · · · · · · · · ·	,,	8 " "	1794
George Thomas Tupp		· · · · ·	,,	,,	8 8 March,	1795 1796
Alexander Beain William J. Fox			Marine-engine driver	" "	15 April, 1898	26
William Jupp			*	,	16 May, "	27
Frederick Redwood		••	, , , , , , , , , , , , , , , , , , ,	,,	13 June, "	28 29
Joseph Henry Redwood Richard John Morgan	• •		"	,,	10 Aug., "	30
Andrew McDougall			,,	, , , , ,	25	31 32
Robert John Allan			*		25 " " · · · · · · · · · · · · · · · · ·	32 33
Thomas Collins			"		13 gepu., "	34
Joseph Morgan			"	1 "	13 ,	35
Joseph Morgan Adam Nixon		• • • • • • • • • • • • • • • • • • • •	"	, , , , , , , , , , , , , , , , , , , ,		1374
Adam Nixon Thomas Willoughby Kenn	 У	•• •	"	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	16 Nov.,	36 37
Adam Nixon Thomas Willoughby Kenn William Edward Gibson	у У			, "	16 Nov., 8 Feb., 1899 8	37 38
Adam Nixon Thomas Willoughby Kenn	y 	•••	"	" " " " " " " " " " " " " " " " " " " "	16 Nov.,	37

25

		ended 31st March, 1899.
Date of	Order.	Purpose of Order.
	^	
189		Approves plans of extensions to Nos. 5 and 7 jetties, Lyttelton.
April	18 18	Revokes Order in Council licensing Witting, McKenzie, and Co. to occupy foreshore, South-west Bay,
~	-	Stewart Island
~	18	Approves of Westport Harbour Board expending further sum of £500 on fifty new coal-wagons for
		Westport-Mokihinui Railway.
•	18	Approves of Westport Harbour Board converting 167 coal-wagons from 6-ton to 8-ton type.
*	18 18	Approves plan of Allen and Carr's wharf at Grahamsfern, Kaipara.
•	25	Licenses Allen and Carr to occupy foreshore, Kaipara, as site for wharf. Makes regulation regarding Motueka Wharf.
Мау	2	Grants compassionate allowance to widow of late lightkeeper, N. Sciascia.
•	2	Fixes dues for Northern Steamship Company's wharf at Oniwa.
~	16	Makes close season for seals.
*	30	Revokes Order in Council licensing New Zealand Pine Company (Limited) to occupy foreshore at Oban, Stewart Island.
	31	Modifies license to Northern Steamship Company (Limited) to occupy site for slip and dolphins at
"	01	Manukau, and approves plans.
\mathbf{J} une	18	Vests management of Riwaka wharves in Riwaka Road Board, and prescribes dues.
July	11	Revokes Order in Council licensing A. Stenhouse to erect booms on Kaiarara and Wairohi Creeks, Port
	11	Fitzroy. Revokes Order in Council licensing Manukau Timber Company to erect booms in Manukau Harbour.
	11	Modifies authority for erection of bridge across Whangarei River.
"	- 25	Revokes Order in Council licensing W. D. Napier to occupy foreshore, Half-moon Bay, Stewart Island.
A ug.	15	Amends dues for Little Omaha and Tea Point wharves.
"	22	Approves plan of Kauri Gold Estates (Limited) wharf at Whangapoua.
"	$\frac{22}{22}$	Licenses Kauri Gold Estates (Limited) to occupy foreshore at Whangapoua, and fixed dues for wharf. Approves plans of Northern Steamship Company's wharves at Cowes Bay, Waiheke Island.
*	22	Licenses Northern Steamship Company (Limited) to occupy foreshore, Waiheke Island, and fixes dues
~		for wharf.
*	22	Approves plans of Mrs. Isabella McKay's bridge across Waipu River, and authorises its construction.
~	22	Approves plans of W. T. Erskine's wharf at Bolton Bay, Mahau Sound.
"	$\begin{array}{c} 22 \\ 22 \end{array}$	Licenses W. T. Erskine to occupy foreshore, Bolton Bay, Mahau Sound, and fixes dues for wharf. Revokes Order in Council licensing F. Mander and others to occupy foreshore, Kaipara Harbour.
"	$\frac{22}{22}$	Approves sundry works at Westport required by Railway Department from Harbour Board.
"	$\frac{22}{22}$	Approves plan of extension of goods wharf at Thames.
,,	29	Approves plan of extension of lower eastern and western training-walls, Westport.
"	29	Approves plan of Hobson County Council's wharf at Te Kopuru, Kaipara.
Sept.	$\frac{29}{19}$	Licenses Hobson County Council to occupy foreshore, Te Kopuru, as site for wharf. Adds to dues for Northern Steamship Company's wharf at Cowes Bay, Waiheke Island.
Sep.	26	Approves plans of extension of western groin, Turanganui River, Gisborne.
Oct.	10	Approves plans of Kauri Timber Company's booms at junction of Tangiwahine and Wairoa Rivers,
		Kaipara.
•	10 10	Licenses Kauri Timber Company to occupy foreshore, Kaipara, as site for booms.
*	10	Approves plan of Kauri Timber Company's wharf and booms, Manukau Harbour. Licenses Kauri Timber Company to occupy foreshore, Manukau, as site for wharf and booms:
<i>"</i>	10	Approves plan of F. D. S. Neave's wharf at Titirangi Bay.
″	10	Licenses F. D. S. Neave to occupy foreshore, Titirangi Bay, as site for wharf.
•	10	Authorises Westport Harbour Board to expend £250 in fitting fifty hopper wagons with lifting gear.
•	24	Approves plan of Spring Creek River Board's works, Wairau River. Approves plan of Northcote Wharf, Auckland.
	$\frac{24}{31}$	Approves plans of G. J. Black's wharf at Akaroa.
	31	Licenses G. J. Black to occupy foreshore, Akaroa, as site for wharf.
*	31	Vests management of Panmure Wharf in Panmure Township Road Board.
*	31	Makes regulations as to whitebait-fishing.
Nov.	$\begin{array}{c} 31 \\ 25 \end{array}$	Approves plan of Otago Dock Trust's repairing jetty. Approves plans of Quay Street Jetty, No. 4 Auckland Harbour.
Dec.	19	Approves plans of M. Davies's proposed baths at Kikowhakariri Bay, Coromandel.
	19	Licenses M. Davies's proposed baths to occupy foreshore at Kikowhakariri Bay as site for baths.
". ~ .	29	Approves plans of Wellington Harbour Board's proposed reclamation, wharves, and watercourse exten-
	99.	sion.
Jan.	13 26	Approves plans of additions to Wynyard Pier, Auckland. Approves expenditure of £542 for fencing railway, Westport-Seddonville.
Feb.	6	Approves of extension of coal-loading wharf at Westport.
"	28	Extends close season for seals.
March		Vests management of Maraetai Wharf in Maraetai Road Board; makes regulations and prescribes dues.
~	4	Prohibits exportation of rock-oysters.
. "	4	Validates election of members of Thames Harbour Board. Dismisses George Allman from Civil Service.
*	8	Makes regulations for boats carrying passengers and towed by steamers.
~	9	Notifies that James Jones's certificate of competency as master, home trade, is invalid.
*	15	Approves plans of Wirikino Bridge, and authorises erection of same.
	15	Approves plans of H. N. Gallate's oyster-storage bed, Balena Bay, Wellington.

SUMMARY of CASUALTIES to SHIPPING reported to the Marine Department during the Financial Year ended 31st March, 1899.

			-	Casu	alties or	1 or nea	Casualties on or near the Coasts of the Colony	sts of th	te Colon	y.				Casua	Casualties outside the Colony.	de the	Jolony.			I -	Total Number)er
				Steamers.		Sailin	ing-vessels.		Total w	Total within Colony	ony.	Ste	Steamers.		Sailing-vessels.	ressels.	Tota	Total outside Colony.	Colon,		or Casualties reported	orted.
Nature Nature	Nature of Casualties.		No. of	Топпаgе.	to .oV Lives lost.	No. of valeasels.	Топпаве.	No. of Lives lost.	No. of Vessels.	Топпаве.	No. of Lives lost.	No. of Vessels.	Топпаge.	No. of Lives lost.	Vessels.	io oV	Lives lost. No. of Steels.	Топпаве.	No. of Lives lost.	No. of Vessels.	Tonnage.	o.oV taol sevicI
Strandings,— Total wrecks Partial loss Slight damage No damage	::::	::::	2 H 22	1,046 48 1,407		202- ::	277 1,862		12 2	2,908 48 1,407	: ::	::::		::::		114		114	::::	112 12 2	391 2,908 48 1,407	: ::
Total strandings	andings	:	8	2,501	:	12	2,139	i	02	4,640	1				1	114		1 114	:	21	4,754	-
Founderings,— Total loss	•	:	:		:	1	6	9	<u></u>	93	9	:	:	:	:	:	:	:	:	-	92	9
Collisions,— Partial loss Slight damage No damage	:::;	:::	B 62 H	1,448 409 78	:::	ଜାନା :	521 62	:::	70 4 H	1,969 471 78	:::	:::	:::	:::	:::	• • •	:::	:::	: : :	70 4H	1,969 471 78	:::
Total co	Total collisions	:	9	1,935	:	4	583	:	10	2,518	:	:	<u> </u> :	 :	: :	:	: '	•	:	10	2,518	:
Fires,— Partial loss Slight damage	: ::	::	1.63	2,709	::	H :	67	::	0101	2,776	::	1 :	2,647				:	1 2,647	::	es 67	5,423	::
Total fires		:	9	3,578		н	67		4.	3,645	:	1 2	2,647		:			1 2,647	:	.t.	6,292	:
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	ling damage by loss of masts, aschinery	heavy seas sails, &c.,	හ	459		. 63	196	:	7.0	655	:	:	•	:	1 1,255	55	_	1 1,255	:	9	1,910	:
Total case Loss of life only	Total casualties to shipping	ing	20	8,473	::	ଷ :	3,077	<u> </u>	40 :	11,550	7 :		,647		2 1,3	698,		3 4,016	: 80	43	15,566	
Total nu	Total number of casualties reported	es reported	80	8,473		08	3,077	7	40	11,550	7	62	3,365	11	2 1,369	. 69		4 4,734		1 44	16,284	8

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March,
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1898
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tte of	Name of Vessel,	ŕ	ster. sge.	Nun	Number of	Na	Nature of	Number of	Place where	₽	Wind.		:
Casualty.	also Age and Class	Kig.	ngeR unoT	Orew.	Passen- gers.	Cargo.	Casualty.	Lives lost.	Casualty occurred.	Direc- tion.	Force.	Decision of Court of Inquiry, &c.	Name of Master
1898. April 2	Wakatipu, s.s., 22 years	Schooner 1258	1258	45	58	General	Collision; par- tial loss	:				S.S. "Wakatipu" was coming up harbour with flood-tide and strong fair wind. When near-	George Gordon
61	Laira, 28 years	Barque	492	13	:	Wool and tallow	Collision; par- tial loss	:	Victoria Wharf, Dunedin	N.E.	Fresh breeze	ing Victoria Wharf she got into shallow water, and, refusing to answer her helm, ran into the "Laira," which was moored to wharf, and sank her. Captain Smith and	Peder Hoigh.
6	Tekoa, s.s., 8 years	Schooner	2647	48	:	General	Fire on board; partial loss	:	Lat. 49° S., long. 162° 40' E. On voyage from London to Dun- edin	ż	Hard gale	his officers exonerated from blame. Vessel was found to be on fire in No. 3 hold at 3 am. Magazine was opened and 20 tons gunpowder thrown overboard, and also some cases of rockets and other explosives which	Joseph John Hamon.
15	St. Kilda, 30	Schooner	189	8	:	Coal	Stranded; par-	:	Entrance to Wanganui	W.S.W. Light	Light		James White
May 2	years Aorere, s.s., 12 years			6	:	General	tial loss Fire on board; slight damage	:	River Queen's Wharf, Welling- ton	:	•	f steward's bunk; caused by box of	William Tinney.
6	Wairoa, s.s., 14 years	Ketch	48	မ	:	Produce	Stranded; slight damage	:	Harding Point, Gook Strait	8 .	Moderate		Frank Perry Ricketts.
11	Kawatiri, s.s., 14 years	Schooner	286	18	: .	General	Shaft disabled	:	Port Hardy, D'Urville Island	W.N.W.	Strong		Berthold Apstein.
17	Hercules, 1 year	Schooner	51	ະດ	က	General	Loss of propel- ler	:	Okarito River	:		coupling bolts to stern shaft broken. Vessel was towed to Wellington by s.s. "Ohau". After crossing bar the propeller dropped off, vessel having auxiliary screw worked by oil-	Edward Alfred Stenbeck.
20	Wanderer, 37 years Aratapu, 20 years	Cutter Brigan-	23	3	: :	Coal Timber	Stranded; total loss Stranded; par-	; =	14 miles south of Marsden Point, Whangarei Whanganata Beach,	N.E.	Strong breeze Gale	engines Casualty occasioned by mainsail being blown away in flerce squall Casualty caused through cables parting and	George Frost. William Gilmer,
30	Wakatu, s.s., 9		95	14	12	general Produce and general	Loss of two pro-	: :	south-east of Coro- mandel Peninsula Off Ohau Bay, Cook Strait	S.S.W.	Gale		James Wills.

Department—continued.
Marine
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2
reported
SHIPPING
Ę,
CASUALTIES 1
nd
WRECKS and
oŧ
RETURN (

		Name of Master.	- F		rser James White.	dis- Ole Andreas	<u> </u>	8		→	1st Gray.	pro- Peter McIntyre.	bar Oscar Jarman.	was ing William Robert-			ľip, ing	she	ind Philip Mortimer	nal. tnk	irty George Frost.	y a William Cozens.
CALL - CONTROLL.		Decision of Court of Inquiry, &c.	Vessel in crossing bar touched the ground and	got out of the channel, and was stranded on North Bank	Casualty caused by parting of towing-hawser at a critical time when on the bar	Casualty caused through error in judging dis-	Maintopmast, foretopmast, toggallantmast, yards, sails, and gear carried away during	neavy gale and sea	Casualty caused through "Felicity" being anchored too near fairway without lights	The fourth engineer, Charles James Collins,	August while engines were stopped to over-	Daul nigh pressure slide-valves Casualty, caused through breakage of pro-	peller-snatt Casualty caused through the water on the bar not heigr sufficient with the sea that man	running caused by bnoy marking rock heing	out of position Vessel was slightly out of mid-channel	Vessel struck by a blind roller, three ship's	lengths to the westward of the South Tip, while entering Greymouth Harbour, causing	her to sheer, and, striking the ground, she became unmanageable	misjudged his distance, and g fluky the vessel hung in sta	Making leeway, she struck the mud-bank	Vessel's jib split, the weather being very dirty and squally. The master, desiring to get shelter, kept too close in shore considering	the weather Casualty caused by vessel being struck by a very savere will weather
To To	Wind.	Force.	<u> </u>	breeze		Fresh	Gale		:	:		Light	Fresh	Moderate	Light	;			Various		Moderate gale	Gale
	Δ	Direc- tion.	S.E	: :	≩	W.N.W.	W.N.W. Gale		:	:		S.E.	S.W	S.W.	S.E.	₩.			W. to S.W.		K.E.	.₩
	Place where	Casualty occurred.	Entrance to Patea	Kilver		Bushend Point, Fare-	Near the Solander Islands		Off Motueka Wharf	Lat. 40° 5' S., long, 35° 31' F. On vorses	from Glasgow to Wel-	Off Lyall Bay, near	Bar of Wanganui River	Luke Rock, Queen	⊈ no	.⊠ &	Greymoutn		Orakei Bay, Auckland Harbour		Okite Point, Bay Islands	Evan's Reef, Kapiti
	Number	Lives lost.	:		:	:	:	:	:	-		:	:	:	:	:			:		:	:
	Nature of	Casualty.	Stranded; par-	tial loss	Stranded; par- tial loss	Stranded; par- tial loss	Loss of masts, sails, &c.	Collision; slight	damage Collision; slight	Loss of life	, and	Loss of propel-	Stranded; par-	Stranded; no	damage Stranded; no	damage Stranded; par-	FIRI 1088		Stranded; par- tial loss		Stranded; total	Stranded; par-
	Z	Cargo.	Coal	7	general	General	Coal	Ballast	Ballast	General		General	Cos.l	Coal :	General	General			Coal		Ballast	Cosi
-	Number of	Passen- gers.	:		:	:	:	:	. :	:		C3	19	:	116	27			:		:	:
	Num	Стеч.	6	c	מ	14	တ	14	61	88		П	13	15	. 22	41			_		<u>-</u>	∞
	ter age.	sigeA Tonn	44		103	843	145	127	27	718		78	110	138	1269	718			292		12	132
	i	Kig.	Ketoh				Brigan- tine	Schooner	Ketch	Schooner		Schooner	Schooner	Schooner	Schooner	Schooner			Barquen- tine		Ketch	Schooner
	Name of Vessel,	Age and Class.	Mana, s.s., 12	years St Kilds 90	inda,	Thora (Norwe-gian), 20 years	ďΩ	¥	Es years Felicity, 13	Mapourika, s.s.,			Moa, s.s., 34	Ö	Ë	16 years Mapourika, s.s.,	, J Car.		Silvereloud, 24 years	:	Perseverance, 20 years	Whangaroa, 5
	Date of	Casualty.	1898. June 8			9. "	14	, 14	, 14	Aug. 3		. 25	78 ,	Sept. 3	30	Oct. 1			•		42	, 31

					•	29						H.–	-15.
Neil McDonald.	Thomas Bergen de Wolfe.	George Alfred Lobb.	William Cameron.	Henry George Subritzky.	Henry James Bennett.	Henry Michael Vanderspeck.	Alfred Jonas.	(Richard Hug-	William Molli-	y son. John Smyth.	Richard Wood,	William Scurrah.	Joseph Allan.
Moderate Gasualty caused by vessel being anchored in an open bay. Very bad weather coming on, and the vessel in danger of being driven on the reef or of foundering at her anchors, the cable was slipped, and the vessel beached to save life and prometry.	<u>×</u>	Probably explosion of oil in lamp-room. No other part of vessel sustained damage	Master was held to be blameless as regards the stranding. He was misled by current as shown on chart, and his orders to be called if any alteration in the weather	Fire occurred in oil-engine room, which was burnt and charred, and the oil-tank injured. No evidence to determine cause or origin of fire, or to show that casualty was caused by wrongful act or default of either of the	A heavy easterly see set into the bay where vessel was anchored, and as there was not sufficient wind to work her off shore she gradually dragged ashore, and became a	_ లొ	ner asuore Casualty caused through shifting of sand bar	Casualty caused through action of master of "Gertie," he having overtaken the "Huia" and attempted to pass in a place in which it was not prudent to do so. He was ordered	to pay the costs of inquiry, amounting to	Ď	of the crew. Vessel put into Fort Chalmers-for repairs and medical attention Vessel left Napier for Tairna in ballast on 3rd March, and has not since been heard of.	Collision caused through wrongful default of master of "Eleanor" in not keeping proper look-out and in not keeping out of the way of the "Tokerau," which was close-hauled	on the starboard tack. His certificate was suspended for two months, and he was ordered to pay £2 17s., costs of inquiry
Moderate gale	Moderate	:	Moderate breeze	:	Light	Moderate gale	Calm	Calm		Strong	:	Variable	•
E.S.E.	N.W.	•	W.N.W.	:	E.N.E.	.≅	;	:		S.W. by	:	W.S.W.	
Nugget Point, Mac- quarie Island	Bar of Waitara River	Coal-staiths, Westport	Farewell Spit, about 3 miles east of Gape Farewell	Queen Street Wharf, Auckland	Gough's Bay, near Akaroa	South-west end of Ponui Island, Hauraki Gulf	Inside bar of Mokau	The Narrows, above Landguard Bluff, Wa-	nganul_Kiver	Lat. 48° 37' S., long. 158° 43' E.	On voyage from Napier to Tairua	Near Rangitoto Chan- nel, Hauraki Gulf	
:	:	:	:	:	:	•	:	:	:	:	Supposed 6, all hands	:	:
Stranded; total loss	Stranded; par- tial loss	Fire on board; slight damage	Stranded; partial loss	Fire on board; partial loss	Stranded; total	Stranded; total loss	Stranded; par-	Collision; par- tial loss	Collision; par-	Damaged by heavy sea	foun. total	Collision; par- tial loss	Collision; slight damage
General	General	Coal	Produce	General	Firewood	Ballast	Coa	General	Produce	General	Ballast	Ballast	Coal
:	:	:	:	:	:	:	က	:	;	C 3	:	:	:
91	13	27	9	Ď	C1	67	<u>L</u>	12	12	21	ဖ	C3	ന
114	115	820	95	67	21	17	9		100	1255		62	35
Ketch	Schooner	Schooner	Brigan- tine	Schooner	Ketch	Cutter	Ketch	Schooner	Schooner	Barque	Schooner	Cutter	Ketch
H	s.s., 12	s.s., 16	, 12	years	t, 40	s, 35 <u>1</u>	s., 17	CN .	8.s., 8	7, 13		23	19
Gratitude, years	Kanieri, s.e years	Corinna, s.e years	Sir Henry, years	Medora, 3 years	Margaret, years	Four Sisters, 35 <u>½</u> years	Douglas, s.s., 17	Huia, s.s., years	Gertie, s.s	Carnmoney,	Marmion, years	Eleanor, years	Tokerau, years
10	=	, 28	. =	Ħ	16	20	9	25	25	м	(Since)	22	15
ž 5-	- Н.	, £	Jan.	•	ą	*	Feb.	•	•	Mar.	, Si	Маг.	2

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

NT. company of the section		N.E. Light and The wind failed at a critical time, and the strong John Pearson.	Casualty caused through master of "Mana- John Bollons.	listance was too short Peter McIntyre.	s and confused sea, William Ewart	ke adrift, and smash- ntaining wax-matches violent concussion
	Decision of Court of inquiry, &c.	The wind failed at a critical time, and the stron ebb lide swung vessel on to the North Spit	Casualty caused through master of "Mana-	approaching until the distance was too short	>	of No. 1 tween-deck broke adrift, and smash- ing into pile of cases containing wax-matches set them on fire by the violent concussion
Wind.	Force.	Light and calm		Calm	Moderate breeze	
F	Direc- tion.	Ä.		:	N.E.	
Place where	Casualty occurred.	North Spit, Kaipara	Between Queen's Wharf	and Wool Jetty, Wellington Harbour	About 5 miles east of Hen and Chickens	
Number of	Lives lost.	:	:	:	;	
Nature of	Casualty.	Timber Stranded; total	Collision; slight	Collision; no	Fire on board;	4
	Cargo.	Timber	Ballast	General	General	
Number of	assen- gers.	స	7	4	:	
Num	Crew		53	11	41	
ster.	ізеЯ ппоТ	201	282	78	2709	
Ė	151 161 161	Barquen- tine	Schooner	Schooner	Schooner	
Name of Vessel,	Age and Class.	1899. Mar. 21 Cuthona, 21 Barquen- years tine	Η.	≱.	Indramayo, s.s., Schooner 10 years	
Date of	Casualty.	1899. Mar. 21	, 23	. 23	. 28	

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