1926.

NEW ZEALAND.

MARINE DEPARTMENT.

ANNUAL REPORT FOR 1925-26.

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

YOUR EXCELLENCY,— Marine Department, Wellington, August, 1926.

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

I have, &c.,

G. JAS. ANDERSON,

Minister of Marine.

His Excellency Sir Charles Fergusson, Bart., LL.D., G.C.G., K.C.B., D.S.O., M.V.O., Governor-General of New Zealand.

REPORT.

The SECRETARY, MARINE DEPARTMENT, to the Hon. the MINISTER OF MARINE.

SIR,— Marine Department, Wellington, 31st July, 1926.

I have the honour to submit this my annual report on the operations of the Marine Department for the financial year ended the 31st March, 1926.

I propose, as last year, to draw particular attention to matters of greater importance which have arisen during the year, leaving the more detail and routine administration to be summarized under the various headings.

ADMINISTRATION AND STAFF.

No changes of particular importance have occurred during the year.

FINANCIAL.

The double-entry system of accounts is now completely established, and has been in full operation during the past year, and has proved of immense advantage to the Department. The immediate establishment of debtors and creditors which it enables has, for this immediate year, somewhat adversely affected the year's finance, but will advantage the succeeding and every future year. During the current year it is intended to completely sectionalize the accounts in relation to each branch of the Department's operations, in order that a more complete administrative perspective may be obtained.

The balance-sheet of departmental accounts which will be presented will completely disclose the Department's financial position. Certain standing charges, such as interest on capital, sinking fund and depreciation, are beyond our capacity to control or vary. The collection of revenue and the control of expenditure is, however, largely within the Department's capacity, and for this reason I use, as expressing the Department's effort, a statement of receipts and payments extending over a period of five years.

Comparative Statement of Receipts and Payments for the Five Years ended 31st March, 1922, 1923, 1924, 1925, and 1926.

PAYMENTS

Branch.	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.
Head Office	*	9,169	8,433	9,378	9,148
Harbours	5,194	4,216	6,279	3,911	3,862
Lighthouses	37,085	27,734	25,503	26,018	26,038
Meteorological Office	3,909	5,314	5,671	6,009	6,007
Mercantile Marine	12,632	11,901	13,422	14,262	15,413
Inspection of Machinery	27,492	25,279	24,821	24,714	26,181
Fisheries	13,784	10,456	10,792	12,539	15,351
Government Steamers	34,184	19,675	21,155	19,956	18,642
Miscellaneous Services	17,415	3,460	1,573	2,676	1,359
Totals	151,695	117,204	117,649	119,463	122,001

* It was formerly the practice to include Head Office expenditure under miscellaneous services.

RECEIPTS.

Branch.	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.
Shipping Branch—					
Light dues	41,311	39,689	76,868	80,469	78,709
Engagements, discharges, &c. ..	3,968	4,108	4,027	4,155	4,532
Survey fees..	3,354	3,202	4,666	5,027	5,750
Examination fees	586	396	370	417	431
Miscellaneous receipts	1,076	1,288	1,331	1,174	823
Harbours—					
Pilotage, port charges, &c.	648	765	769	843	871
Foreshore revenue	1,175	1,131	2,904	4,579	5,374
Fisheries—					
Sale of oysters	7,763	7,702	7,356	8,395	10,205
Sundry receipts	324	324	926	667	804
Inspection of Machinery—					
Inspection of boilers, &c.	13,102	17,300	16,568	18,417	17,289
Examination fees	602	618	635	649	568
Tramways Act—					
Examination fees	57	49	104	84	91
Ross Sea Revenue	..	..	200	200	1,721
Miscellaneous Receipts	..	..	653	307	2,278
Totals	73,696	76,572	117,377	125,383	129,446

The summarized result is that payments have decreased from £151,695 in 1921–22 to £122,001 in 1925–26, whilst receipts have increased from £73,696 in 1921–22 to £129,446 in 1925–26. Thus by reduction of payments amounting in the period to £29,694 and an increase of £55,750 in the receipts the Department has improved its position to the extent of £85,444 in five years.

Westport Harbour Account.

During the period 1921–22 to 1925–26 the following results have been obtained in so far as receipts and payments are concerned :—

Year.	Receipts. £	Payments. £
1921–22	31,412	75,642
1922–23	44,020	50,303
1923–24	44,126	44,588
1924–25	49,566	40,949
1925–26	56,920	49,876

It will thus be seen that in five years payments have been decreased from £75,642 to £49,876, and receipts have increased from £31,412 to £56,920—a net betterment of £51,274.

The net betterment on both departmental and Westport Harbour Accounts amounts to £136,718.

From a balance-sheet point of view—that is to say, taking into consideration all charges for interest on capital, sinking fund, and depreciation—the position is that on the departmental accounts we are still approximately £18,000 to the bad. We can now meet ordinary annual expenditure and depreciation charges, but cannot meet interest on capital and sinking fund.

The main avenues of loss are as follows: (*a*) Ship survey, £5,000; (*b*) inspection of machinery, £7,000; (*c*) Meteorological Branch, £6,000. As to (*a*) and (*b*), revised scales of charges are in course of preparation with a view to more nearly equalizing the expenditure; as to (*c*), it is understood that this branch will probably be transferred to the new Department proposed to be constituted to embrace a number of scientific branches.

The results obtained in connection with Westport Harbour Account are considered particularly satisfactory in view of the facts that the cost of annual overhaul of the dredge "Eileen Ward" was particularly heavy, amounting to some £3,000; that the dredge "Mawhera" was chartered from the Greymouth Harbour Board for special work from the beginning of February; and, further, that interest at 5½ per cent. on Treasury advances to the account amounting to £141,000 was charged to the account for the first time since the Department assumed control of the harbour.

The surplus of £5,630 for the year has been transferred to a Harbour Maintenance Reserve Account. It has been deemed advisable to establish such a reserve within the Harbour Account because expenditure in one year may, for many reasons, considerably exceed that of another year. Dredge-overhaul is a case in point; the necessity to charter the "Mawhera" for dredging the berthages and swinging-basin is another. Similarly, the export of coal is always liable to considerable fluctuation from causes outside our control. The mining dispute in 1923–24, which practically stopped the export of coal for seventeen weeks, is an instance of fluctuation of revenue. The creation of a Harbour Maintenance Reserve Account will assist to stabilize results and provide a fund from which harbour improvements may be effected.

A loan of £30,495 was paid off during the year. The surplus of £6,788 from sinking fund in respect of the £150,000 loan which was repaid during 1924–25 was utilized for this purpose, and the balance, £23,707, was met out of surplus funds in the Harbour Account.

I consider that the Department's attitude with regard to Westport Harbour and the district it serves should be exactly the same as that of a Harbour Board—which, in plain words, means that the Department is not entitled to use the Harbour Account as a means of profit-making. When the Department took the concern over it was in a bankrupt condition. The harbour must carry its own burdens. Although the accounts are now showing a surplus, it is necessary to enlarge the reserve before it can safely be asserted that the account is financially stable, and this for the reason that the harbour lives on coal-export. Many causes entirely outside the Department's control may at any time throw the results from surplus to deficit. Export of coal is showing marked increase at present, and if that is maintained for a period the Department will be in a position to make the port still more attractive to shipping, and to reduce the account's indebtedness to Treasury in respect of advances made in past years.

Balance-sheet.

The following statements of expenditure and revenue, which take into consideration interest, sinking fund, and depreciation charges, show the position over the period 1921–22 to 1925–26 of general departmental accounts and Westport Harbour Account:—

EXPENDITURE.

Branch.	1921–22.	1922–23.	1923–24.	1924–25.	1925–26
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Head Office	10,728 17 3	9,612 2 8	8,574 3 2	9,292 7 4	9,626 13 9
Harbours	3,585 18 2	4,826 13 2	3,739 17 5	3,921 2 11	4,295 13 3
Lighthouses	31,409 15 1	26,995 19 5	25,302 19 4	26,823 6 5	24,220 2 2
Meteorological	3,857 2 3	5,374 0 3	5,572 6 2	5,863 19 2	6,124 12 6
Mercantile Marine	16,292 11 0	15,150 17 11	16,585 15 1	17,896 11 0	24,626 5 5
Inspection of Machinery ..	28,778 10 10	27,015 0 0	25,802 1 2	26,124 16 11	20,793 2 9
Fisheries	6,068 6 0	4,545 3 2	3,743 11 8	2,890 13 10	3,179 2 6
Government Steamers ..	37,199 5 2	21,697 19 6	22,819 8 9	21,837 5 4	24,309 19 11
Miscellaneous Services ..	4,239 6 9	2,655 3 8	3,939 7 5	1,734 3 1	2,189 17 10
Grants and Subsidies ..	4,626 7 8	1,510 0 0	900 0 0	150 0 0	540 0 0
Depreciation	7,826 13 10	8,035 4 9	7,911 18 8	8,844 18 9	8,862 19 6
Interest on Capital ..	21,007 10 9	15,716 7 3	17,471 16 8	17,737 15 7	17,811 11 0
Totals—General Accounts ..	175,620 4 9	143,134 11 9	142,363 5 6	143,117 0 4	146,580 0 7
Westport Harbour Account ..	63,950 1 10	50,738 17 5	46,619 1 11	44,666 14 0	51,909 4 11
Totals	239,570 6 7	193,873 9 2	188,982 7 5	187,783 14 4	198,489 5 6

REVENUE.

Branch.	1921–22.	1922–23.	1923–24.	1924–25.	1925–26.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Shipping Branch—					
Light dues	41,311 9 6	39,688 16 8	76,867 15 6	80,467 6 2	82,875 6 3
Engagement and discharge fees, &c.	3,698 6 6	4,107 15 6	4,026 15 5	4,155 5 8	4,532 5 10
Survey fees	3,538 7 10	3,095 9 0	4,785 2 6	5,010 0 4	6,137 16 11
Examination fees ..	585 12 8	395 12 6	369 12 0	417 5 0	429 10 0
Miscellaneous	1,076 5 1	1,289 0 4	1,389 8 0	1,175 6 3	823 14 3
Harbours—					
Pilotage, port charges, &c.	647 15 6	764 14 6	768 13 1	842 18 7	870 11 8
Foreshore revenue ..	1,165 12 6	1,126 14 1	2,909 0 4	4,393 19 1	5,704 2 4
Inspection of Machinery—					
Inspection fees, &c. ..	17,382 12 11	17,126 19 0	16,125 11 2	17,256 2 10	18,005 8 10
Examination fees ..	658 16 9	667 0 0	738 18 0	732 18 0	657 5 0
Fisheries—					
Net profit from sale of oysters	2,741 4 7	2,546 9 6	2,310 19 9	2,139 10 1	2,517 3 11
Fishing-boat license fees, &c.	323 15 0	324 9 6	627 14 1	477 14 6	575 5 4
Rental of toheroa-beds ..	10 0 0	10 0 0	300 0 0	300 0 0	300 0 0
Government Steamers—					
Freight, passage-money, &c.	6,026 4 4	1,785 0 7	2,788 1 8	4,793 0 10	3,185 17 8
Ross Sea Revenue	..	..	200 0 0	200 0 0	1,720 12 6
Miscellaneous Revenue ..	22 19 11	1,872 6 10	1,850 4 4	961 9 10	950 11 3
Totals—General Accounts ..	79,189 3 1	74,800 8 0	116,057 5 10	123,322 17 2	129,285 11 9
Westport Harbour Account ..	25,836 19 3	38,700 8 1	42,285 7 4	50,378 11 0	57,539 12 11
Totals	105,026 2 4	113,500 16 1	158,342 13 2	173,701 8 2	186,825 4 8

Westport.

During the year the new harbour navigation lights were installed.

In order to deepen the water available at the berthages and to increase the depth and width of the swinging-basin, arrangements were made to charter the Greymouth Harbour Board's bucket dredge "Mawhera." The services of the vessel could not be obtained until February. Up to 31st March the dredge had removed 48,200 yards of material, at an average cost of 11·5d. per yard. Unfortunately, the dredge had to be returned to Greymouth for a period to deal with difficulties which had arisen there. It is hoped she will be able to carry on continuously to completion of the work. It is unfortunate that two of the heaviest floods known in the river for many years brought down quantities of shingle equivalent to about two months' work of removal.

A grab was hired from the New Plymouth Harbour Board to be used in conjunction with wharf-cranes for berthage dredging, but this method proved too expensive.

Despite bad weather, which adversely affects the bar and prevents dredging operations, good depths were maintained, the working-depths being as under: Over 18 ft. to 20 ft., two days; over 20 ft. to 22 ft., thirty-three days; over 22 ft. to 24 ft., 128 days; over 24 ft. to 26 ft., 157 days; over 26 ft., forty-five days.

The dredging of the swinging-basin to increased depth and width is being undertaken, to enable the larger ships now visiting the port for bunker-coal to be swung at any state of the tide. It is anticipated that when the dredging is completed ships up to 425 ft. in length will be handled safely. During the past year twenty-six ships visited the port for bunker-coal, twelve of these arriving during the months of February and March. This trade shows signs of considerably increasing. A factor which militates against it to some extent is that coal is not always available and ships are sometimes kept waiting. It is hoped that steady demand will induce the mining companies to make such provisions as will obviate these delays.

There has been much local agitation for many and various works, running in the aggregate into several hundred thousands of pounds. Acting under your direction, I spent some days at the port investigating these proposals, most of which had been proposed and some actually commenced by the Board, but eventually abandoned by it as a result of the report of a special Commission in 1913.

The only works which I could find necessary and justified were:—

(*a.*) Improvement of various harbour lights. This has been done.

(*b.*) Increasing depth of berthage at wharves. This has been done.

(*c.*) Dredging out the swinging-basin for a length of 1,500 ft. opposite the crane wharf, to enable ships of up to 425 ft. to be swung. This work is in hand, and would have been completed ere this but for the extra work involved by the two floods previously referred to.

(*d.*) Improved cranage facilities at the crane wharf, mainly used for coal loading.

There are four cranes on this wharf. One of them has been increased in height to enable it to load the larger ships at any state of the tide. Though this has resulted in considerable improvement, it is not completely satisfactory with ships having much top hamper. The cranes are the property of and are operated by the Railway Department, which is now considering the best method of effecting still further improvement in cranage facilities.

The record annual export of coal from Westport is 800,000 tons, in 1914. The average of the last three years is 516,000 tons. Last year was slightly below the previous year owing to trouble at the Millerton Mine. The Harbour Board's reports of 1916, 1917, and 1918 contained statements

similar to that in its 1919 report, which said, "The port and railway equipment is in first-class order and capable of dealing with an output (export) of 40,000 tons of coal per week." This is equivalent to 2,080,000 tons per annum. It is difficult to understand, therefore, why there should by any criticism of the capacity of the port to deal with the export which now occurs.

Harbour Legislation.

During the year five Bills were promoted and passed as follows:—

Harbours Act Amendment.—This Bill provided for—

(*a.*) The establishment of a uniform set of accounts for all Harbour Boards, in order to enable the compilation of reliable data and comparisons:

(*b.*) Placing a Harbour Board in the same position as any other local authority with regard to the hypothecation of debentures:

(*c.*) Repeal of section 218 of the Harbours Act, thereby placing a Government harbour in the same position as any other harbour authority as regards pilotage:

(*d.*) Extension of harbour authorities' powers to make by-laws in respect of discharge of oil in harbours, and regulation and control of anchorages, buildings, and equipment provided for yachts, boats, launches, and other small craft, and to fix fees for use of same:

(*e.*) Enabling a harbour authority to establish an imprest account out of which wages of casual labour and emergency payments may be made:

(*f.*) Enabling a Harbour Board to enter into an agreement with any corporate body representing growers of fruit to provide cool or refrigerated storage:

(*g.*) A declaratory provision as to leasing-powers of Harbour Boards.

Auckland Harbour Board Empowering.—The decision of the Board to construct a viaduct across Freeman's Bay had the effect of prejudicially affecting leaseholders. The Act empowers the Board to make any necessary adjustments in leases, or to give leaseholders leases of other areas, with a provision for arbitration where the adjustment cannot be amicably settled.

Napier Harbour Board Rating Regulation.—The Board by its 1921 legislation anticipated the provisions of the Harbours Act of 1923, which enables a Board to levy upon constituent local bodies within its district for any rate struck by the Board. The Napier Act, however, contained a provision that a constituent local authority need not collect the Board's rate unless it decided by special resolution to do so. Certain local authorities objected to collecting the rate, and the Board had therefore to collect its own rate in these districts. By the repeal of its special legislation the Board is now enabled to take advantage of the provisions of the general statute.

Whangarei Harbour Board Vesting and Empowering.—This Act vests some 10 acres of foreshore in the Board. It is proposed to erect a cement-works on the site.

Whangarei Harbour Board Empowering.—This Act authorizes the Board to borrow £25,000 to enable it to carry out certain harbour improvements giving deep water at the town wharves, and enabling the section of railway to Onerahi, with its lifting-span railway-bridge, to be eliminated.

Harbour-works.

Gisborne.—The works authorized are being actively prosecuted and are making good progress. It is anticipated that the new works will be available for coastal shipping in about twelve months. The provisions for overseas shipping and elimination of lighterage charges will follow as the full scheme of construction becomes available.

Napier. The Board, as a result of changed personnel, decided to reconsider its policy, and to that end called in Messrs. Cullen and Keele, who had previously reported. These gentlemen, after further investigation, concluded by recommending adoption of the breakwater harbour, thus supporting the recommendation of the Marine Engineer. The Board thereupon decided to promote legislation authorizing it to complete the breakwater harbour. Shortly thereafter county elections again changed the personnel, with the result that, despite the recommendations of the Marine Engineer and Messrs. Cullen and Keele, the Board has rescinded the previous decision to proceed with the breakwater harbour and is now promoting further legislation which, it is understood, proposes to embark on a reclamation policy, leaving the essential harbour-construction policy entirely in abeyance and affording a new lease of life to those apparently dominating interests which are concerned only in subverting the proper functions of a Harbour Board.

New Plymouth.—Works authorized under the loan authority granted by the 1924 Act are being vigorously proceeded with.

Timaru.—The proposals put forward by the Board in December, 1923, which involved an expenditure of some £400,000, not having been approved by the Commission set up in terms of the Board's Act of 1876, the matter could proceed no further. The Board has now asked for another commission to investigate a modified plan, and the Commission is now in course of being set up.

Lyttelton and Otago.—The Lyttelton and Otago Harbour Boards are each contemplating an expenditure of £300,000 to £350,000.

Opunake.—Certain works are being carried out in this harbour by the Harbour Board, under existing statutory authority. Owing to various causes, principally the difficulty of obtaining suitable stone, the estimated cost of the work is likely to be exceeded, and the Board has applied for authority to raise an additional amount equal to 10 per cent. of its loan authority (£50,000). While the Department is of the opinion that the work should never have been authorized in the first place, it is considered hardly advisable, at the present stage of the work, to stop it altogether, and it has therefore been agreed to allow the promotion of the necessary legislation to enable the Board to raise the

additional sum (£5,000) and complete the work in modified form. Practically £50,000 has been spent or committed. The timber to build the wharf has been paid for and delivered. It is a case of allowing another £5,000 in the hope that shipping may be induced to use the port and provide revenues and thus reduce to the extent of such revenues the rate charge upon the district.

Karamea.—A substantial addition to the existing wharf has been built in order to cope with the timber trade, and plans, &c., have been prepared for a comprehensive lay-out of skidways to serve the milling industry. The shed accommodation in connection with the wharf is also being extended to facilitate the storage and sorting of cargo. Surveys have been carried out in order to determine the best route for a tramway to the stone outcrop on the Oparara River. The existing retaining-wall has demonstrated its utility, but has deteriorated and in places collapsed, and it is now proposed to provide an annual sum which will ensure its replacement.

Little Wanganui.—Plans have been prepared and a contract let for a new wharf at this port. The work is in hand and practically completed.

Waikokopu Harbour.—The new wharf is completed and the amount of shipping using it is steadily increasing. During the year the hull of the s.s. "Talune" was purchased and towed to Waikokopu, where it was filled with stone and sunk in position to form a breakwater. The hulk is now being connected with the shore by a stone breakwater, and already the benefit has been very apparent, vessels being able to lie at the wharf and load in practically all weathers. The wharf shed has been extended owing to the increasing demand for space for storage and handling purposes, and an electric lighting plant has been installed to facilitate night work.

Great Barrier Island, Tryphena Harbour.—Provision was made last year for a sum of money to provide a wharf in this harbour. Unfortunately a difference of opinion exists between the local residents as to the most suitable site, their opinion being determined by localized interest. In order to determine this point, a Commissioner was appointed and visited the island, took very full evidence, and submitted definite recommendations, to which it is proposed to give effect.

General.—A large number of applications have been received from local bodies and private individuals for the approval of works involving marine interests. Each of these has been carefully investigated and, where desirable, approved.

The question as to what harbours should or should not be constructed is, or should be, one of vital interest in a young country in course of development, and demands the closest consideration. In this connection an extract from an article entitled "The Requirements of Modern Ports," by Sir George Buchanan, K.C.I.E., which appeared in the *Dock and Harbour Authority* of April, 1926, may be of general interest. It is as follows:—

> "*Port Finance.*—Lastly, turning to the financial requirements, I may say that in my experience the mere carrying-out of engineering-works is child's play to the difficulty in arranging finance.
>
> "To justify large expenditure on the development of a port there must be a sound and permanent economic basis for its existence, and every proposition should be looked upon from the following points of view:—
>
> "(*a.*) Is the port necessary in the interest of present or prospective trade?
>
> "(*b.*) Is the proposition a sound one, financially?
>
> "(*c.*) Can the engineering difficulties, if any, be overcome at a moderate cost?
>
> And to answer these questions there is required, in the first instance, a careful examination and report on the prospective trade of the port, the area of country to be tapped, the possibilities of increasing that area, and giving better transport facilities to the port, also the prospective revenue and maximum capital expenditure permissible as a start. Armed with this information the engineer can, and must, cut his coat according to his cloth, and say what can be done for the money, since a grandiose scheme prepared without this information is a mere waste of time.
>
> "Assuming that the port is established and in operation, the fundamental principles of port finance are that every article or ton of goods which either directly or indirectly uses the port should contribute to the port's maintenance, and that every penny earned by the port should be spent on the port, and if there is a substantial surplus it should be expended on either a reduction of capital debt or a lowering of port dues and charges. The principle that everything using the port should pay was enunciated by the Royal Commission on the Port of London some twenty-five years ago, and is now generally accepted."

This declaration of essential considerations by a so widely recognized authority is a sufficient justification of the harbour-construction policy outlined in the Department's 1923–24 report.

Lighthouses.

Cape Foulwind.—The conversion of this light to acetone automatic is just about completed.

Kahurangi.—The conversion of this light to automatic has not yet been completed, but it is the next for attention.

Dog Island.—The installation of a new light with second-order dioptric lens and incandescent burner has been completed. This replaces a sixty-year-old, inefficient, and dangerous light.

Pencarrow Head; Godley Head.—Fog-signals of the diaphone type have been ordered, and are due to arrive shortly. These signals will vastly improve the navigation aids in entering Wellington and Lyttelton Harbours.

Matakaoa.—The installation of an automatic light has been completed.

A number of other minor works and improvements have been carried out.

Contemplated Lighthouse Works.

Kaikoura.—Having regard to the heavy passenger traffic nightly running between Lyttelton and Wellington, it is considered desirable that there should be a light somewhere half-way between Cape Campbell and Godley Head, so as to afford ships an intermediate opportunity to fix their position.

Kahu Rocks.—Shipmasters feel the need of a light between Cape Palliser and Castlepoint, on the east coast, to enable them to fix their position. This applies particularly to smaller ships which keep closer inshore, and is the more necessary because of the existence of much foul ground. The establishment of a light will enable vessels to fix their position.

Cow Island.—The Wigham light provided at Cow Island, near the entrance to Coromandel Harbour, has proved a failure: a small automatic acetone light has been ordered to take its place.

North Cape.—If funds are available it is proposed to establish an automatic light at North Cape to indicate an important turning-point.

Manukau South Head; Egmont; Moeraki.—If funds are available it is proposed to convert these three lights to automatic.

It is proposed to follow a policy of converting watched lights to automatic in certain places, for three considered reasons: Firstly, the reliability of automatic lights has now been so firmly established that there need be no apprehension as to their faithfully serving their purpose; secondly, what with the increased number of lights to be tendered and the calls upon the time of the lighthouse-tender for work other than the lighthouse service, it is becoming increasingly difficult to visit the various watched lights with a sufficient frequency; thirdly, the interest, sinking fund, depreciation, staffing, and operating costs of automatic lights are very materially less than in the case of watched lights. The reduction in all costs will result in a saving which will enable still further development of navigational aids without increasing the cost to the Dominion.

The conversion to automatic of the light at Kaipara (South Head) and Egmont will obviate the necessity for serving the east coast of the North Island except at Cape Maria and Hokianga Harbour. It will be possible to make arrangements locally for such service and attention as the two lights mentioned may require.

The conversion of the Cape Foulwind (Westport) light will largely obviate the necessity for service on the west coast of the South Island. A policy of conversion of certain lights on the east coast to automatic (the necessary service being arranged locally), and the working from Bluff of certain lights in Foveaux Strait which must remain watched lights (which can also be arranged from various centres), will practically obviate the necessity for the service of the "Tutanekai" on the east and south coasts of the South Island.

Adjustment and Survey of Ships' Compasses.

The compasses of ships in the foreign-going and in the home trade have been adjusted in accordance with the Compass Regulations by adjusters who are licensed by this Department for that purpose, and in most cases the adjustments have been very well performed. However, in the case of some of the older ships, or ships which have received much structural alteration since they have been built, some difficulty in obtaining a fine adjustment has been experienced by the adjusters; but such difficulties are not insurmountable, and a careful attention to existing conditions has in all cases enabled those compasses to be dealt with satisfactorily. The adjustments are investigated by this Department's Compass Inspectors at the various ports, and the result of this investigation shows that they are alive to the importance of this branch of their duty. The compasses of smaller ships plying within restricted limits, although not required to be adjusted, are required to be efficient for their purpose. These compasses also are inspected, and in some cases it has been found they required adjustment before they could be passed as efficient for their purpose.

During the year it has not been found necessary to detain any ship owing to her compasses being inefficient.

The gyroscopic compass, although met with occasionally in oversea ships, has not yet made its appearance on any of our coastal ships, and it would appear the time is far distant when it will oust the magnetic compass from the important position which the latter continues to hold.

Marine Casualties.

A normal number of marine casualties occurred during the year, the greater number being of minor importance involving slight damage to ships; whilst a few, beyond the slight delay to the ships concerned, involved no damage, and in a few cases, caused by stranding in harbours, &c., involved no risk of life or property. Preliminary inquiries into the causes of casualties have been held by the Superintendents of Mercantile Marine at the various ports when considered desirable, and in ten cases formal investigations before a Magistrate were found necessary.

In two cases of stranding of small vessels each vessel was run on shore in an endeavour to avoid loss of life. A total of twenty collisions occurred, some being those of ships colliding with a wharf or a similar structure, and a few being collisions between two vessels; all of these cases occurred within restricted limits. The collisions between vessels were mainly confined to vessels of the smaller class, and a few cases resulted in one of the vessels being sunk.

The most serious casualties of the year, involving total loss, were the "Cyrena," at Wanganui; the "Karu," at Cape Maria Van Diemen; and the "Manaia," at Slipper Island. Each of these cases was investigated before a Magistrate, who had the assistance of two nautical assessors, and in each case the Court exonerated the master and officers of the ship from blame.

The Department considered it necessary to reopen two cases for rehearing before a Judge with assessors. In both cases the decision of the lower Court was reversed.

It is gratifying to note that only two lives were lost arising out of marine casualties, and, as it happened, even these would not have been lost had the crew stuck to the ship instead of taking to the lifeboat. It is not suggested that the master of the vessel committed an error of judgment in the circumstances prevailing when he ordered the crew into the boats to effect a landing.

Notices to Mariners.

During the year eighty-one notices to mariners were issued and circulated throughout the Dominion for the benefit of shipping. These notices mainly relate to changes in the various descriptions of aids to navigation at our harbours and on our coasts, to changes in other parts of the world frequented by our ships, and to information of derelicts, wreckage, &c., shoals, rocks, or any information which is thought to be of value to shipping.

Some navigational information of a more urgent nature requires to be more promptly circulated among shipping than would be the case if such were dealt with by the usual method of issuing a notice to mariners, and in such cases an urgent navigational warning is broadcasted by wireless. This has been done on occasions when such was deemed necessary.

The issue of notices to mariners is an almost international practice, and by reciprocation provides most countries with worldwide information concerning dangers and navigational aids to shipping. This Dominion suitably reciprocates, and achieves beneficial results.

Radio Direction-finding for Navigational Purposes.

Information from older countries shows the earlier application of wireless navigational direction-finding—that of placing an expensive direction-giving instrument on shore—has not developed extensively, but in its place a less expensive system of placing radio beacons on shore has found more favour. This latter system would appear to have come to stay, although it may vary in form by some additional appurtenance of a non-radio character of such a nature as to provide a combination of sound-waves and radio-waves having simultaneous origin, the combination of these two waves providing at once both direction and distance, thereby enabling a precise position to be obtained; whereas a single radio beacon in its present form can provide direction only, which alone is of great value in foggy weather, as its practical range is enormously greater than that of other known fog-signals. The value to navigation of radio beacons is now so widely acknowledged, and in the more frequented oceans of the world so many ships are equipped with the necessary complementary instrument—that is, a radio direction-finder—that this system has become very efficient and is much in use.

With the desire to keep abreast of the times in wireless development as affecting aids to navigation, and in particular for the purpose of providing an efficient fog-signal to be of use to ships equipped with a radio direction-finder when in the vicinity of Three Kings Islands, the question of providing an efficient navigational aid so as to assist ships to navigate past Three Kings Islands in foggy weather has concerned this Department in the past, and until the development of the radio fog-beacon had reached its present state of efficiency there did not exist any system of fog-signal entirely suitable for use in this locality. As the result of this Department's tests with experimental radio beacons, at Three Kings Islands, at Cape Maria van Diemen, and in Auckland Harbour, it was decided to install a radio fog-beacon at Cape Maria van Diemen, and arrangements were made for this to be carried out in 1925. However, some difficulty was encountered in procuring an automatic signal-interrupter of a suitably robust type. Eventually this difficulty was overcome by obtaining from the Canadian Government Lighthouses Department an automatic interrupter of approved type which has been in use by that Department for some time at its radio fog-beacons.

The complete equipment is now in course of erection at Cape Maria van Diemen. On completion of the installation some tests for accuracy and radius will require to be made, and when these have been carried out this radio fog-beacon will commence to function regularly, and may then be made use of for navigation purposes by ships which have on board the necessary complementary instrument for obtaining direction.

There are not yet many of our ships fitted with a radio direction-finder, although several visiting ships are so equipped; and it is hoped that when this radio beacon has been established those ships which are fitted will make use of it, and that other ships will become fitted. The radio beacon will be operated by lighthouse-keepers who are qualified for that purpose.

This installation will make the third wireless installation at lighthouses under the control of this Department. However, in each other case (Puysegur Point and Stephen Island) the wireless has been installed for communication purposes only, and has taken the place of the more expensively maintained and less efficient telephone. But it will be possible for those installations to be adapted so as to function as radio beacons also if later such is found desirable.

It is proposed to ask for an appropriation to enable radio direction-finding stations to be established at Wellington and Lyttelton.

Examination of Masters and Mates.

During the year the examinations for certificate of competency as master or mate in the mercantile marine have been carried out at the ports of Auckland, Lyttelton, and Wellington quarterly, in such a manner that an examination is held monthly at either of these ports alternating in scheduled rotation. 52 per cent. of the examinations were performed at Wellington, 28½ per cent. at Auckland, and 19½ per cent. at Lyttelton.

During the year 133 examinations of candidates were held, an increase of twenty-eight above the number of examinations held during the previous year. Of the total, eighty-one examinations were for certificates for foreign-going ships, fifty-one for certificates in the home or coastal trade and restricted limits, and one for the voluntary examination in compass-deviation.

The number of failures in examination was 66 per cent. of the total number of examinations held, as against 54 per cent. during last year. 93 per cent. of the failures were incurred in the subject of navigation and 7 per cent. in seamanship, the latter, which embraces the Collision Regulations, being confined to the lower grade of home-trade certificates.

Of the candidates who passed, three elected to sit for the higher speed signalling examination, and all were successful. This examination is quite voluntary, and it is gratifying to see candidates endeavouring to become as highly qualified as is possible in this branch of the work.

Of the total number of candidates for examination, nineteen passed at first attempt, as against twenty-six last year; one candidate attended the examination six times, and two five times, before achieving success.

There were no applications from candidates to be examined for the higher certificate as extra master, or for a license as colonial pilot.

The slowly decreasing number of younger men who, owing to lack or absence of service in square-rigged ships, are able to sit for "ordinary" (square-rigged) certificates continues to be apparent. The total number of younger men who sat for their first foreign-going certificates (second mate) was fifteen, of whom five only were qualified by service in square-rigged sailing-ships to sit for the "ordinary" (square-rigged) certificate, the remainder (ten) being qualified to sit for certificates for steamships only. Notwithstanding this shortage among the younger men who have not the square-rigged service, there were many of the older men who, by virtue of their earlier service in square-rigged sailing-ships, were thereby enabled to obtain their final certificate as master "ordinary," so that shortage of "ordinary" (square-rigged) certificate holders, although pronounced, is not yet extremely so. The purely local nature of our results does not precisely define the position in respect of our younger men, as a number of them in the course of their voyages obtain their certificates in other parts of the Empire, and we to some extent lose trace of them.

Owing to now proved efficient application of radio for navigational purposes and for marine communications in cases of distress and disaster, and for the purpose of extending the application of wireless to small ships, it has been found desirable that some knowledge of this subject should be possessed by masters and mates in the mercantile marine; and in respect of candidates for their first home-trade certificate of competency it is now compulsory that they shall pass a prescribed elementary examination in wireless before they are allowed to sit for their examination. However, wireless has not yet been made a compulsory subject for foreign-going certificates as these must conform to Board of Trade Regulations, but in the meantime provision has been made that existing home-trade and foreign-going certificate holders may, after passing the prescribed examination in wireless, have that fact endorsed on their certificates.

On the 1st January, 1926, the Imperial Board of Trade introduced alterations to the syllabus of examination for the several grades of certificates of competency. This involved recasting the examination-papers. This has been done, and similar alterations were made in the examinations simultaneously with those made by the Board of Trade. The Board also now requires every candidate for a foreign-going and for a home-trade certificate of competency to produce a certificate of efficiency as a lifeboatman; and a similar requirement by this Department is now under consideration.

Examination in Form and Colour Vision.

Apart from candidates for certificates of competency in the mercantile marine, forty-two candidates submitted themselves to undergo the sight-test examination, which embraces both form and colour vision. These examinations are provided for the purpose of enabling all persons serving or intending to serve in the mercantile marine, or in fishing-vessels, to ascertain whether their vision is such as to qualify them for service in that profession. Of the total, two candidates failed to pass the required standard of vision.

These examinations are conducted at Auckland, Lyttelton, Dunedin, and Wellington as occasion requires, and of the total examinations 52 per cent. were held at Wellington, 36 per cent. at Auckland, 7 per cent. at Lyttelton, and 5 per cent. at Dunedin.

Examination of Lightkeepers in Signalling.

Lightkeepers who are employed in this Department's lighthouse service are required to submit themselves periodically for examination in signalling duties. This examination involves a knowledge of signalling duties as performed at lighthouses and signal stations, and embraces tests of signalling in Morse code by lamp-flashing and flag-waving, and in the hand-flag semaphore system of signalling. The examination compares favourably with the examination in signalling passed by all holders of certificates of competency in the mercantile marine. The lightkeepers' examinations were held as occasion required, and in the majority of cases the lightkeepers passed the examination with credit. During the year eight lightkeepers were successful in passing this examination.

Nautical Almanac and Tide-tables.

The annual publication of the "New Zealand Nautical Almanac and Tide-tables" was carried out as in previous years, and this book was issued early in December, this being the twenty-fourth edition issued, the first edition being issued in 1903.

This publication contains the very necessary astronomical ephemeris used by navigators, given for every two hours throughout the year; also, daily tidal information concerning the main ports, tidal streams, &c. Owing to the development of New Plymouth and of its more frequent use by oversea ships, also that its locality is a good one on which to base tidal data for some smaller ports,

arrangements have now been made for the daily tidal predictions for that port to be introduced into the 1928 and subsequent editions. A portion of the book is used for conveying much other useful and necessary information to shipping, and the book is much used among those upon whom the responsibility of navigating ships rests. It also contains sunrise and sunset times for the main centres.

Wireless Telegraphy on Ships.

Resulting from this Department's legislation of 1924, comprehensive power was provided for the purpose of regulating wireless-telegraph installations to be placed on ships. Regulations, primarily on the lines of those issued by the Imperial Board of Trade but secondarily extending requirements, were drawn up and issued on the 25th June, 1925, and came into force on the 1st January, 1926.

The main features which distinguish our regulations from those of other countries are that we require wireless to be fitted on any seagoing ship of which the number of persons carried exceed twenty-five, thus providing that wireless shall be carried on ships of smaller class than is required elsewhere; also in providing for the operation of wireless on such small ships, and on home-trade ships in general, by deck officers, who are required to pass a special examination for that purpose. The result of this has been that since the regulations were issued a total number of 114 certificated deck officers passed a prescribed examination in wireless and became certificated as wireless signallers for this purpose.

The regulations, in their application to foreign-going ships, are substantially the same as those of the Imperial Board of Trade.

As far as can be observed, the regulations are working in a satisfactory manner.

The only occasion which has arisen, since the regulations came into operation, of testing the efficiency of their provisions in the case of a marine casualty was in connection with the wreck of the s.s. "Manaia" on Slipper Rock. The vessel was equipped with wireless and was able to establish communication with the s.s. "Ngapuhi," which immediately came to her aid and took off passengers and crew. This happening reveals an advantage of our regulations over the Imperial Regulations. Under the latter the ship would have had a separate operator who, in this zone, would have been off duty from 9.30 p.m. to 7.30 a.m., whereas under our regulations a listening watch is performed every four hours.

Whaling in Ross Dependency.

The floating factory "Sir James Clark Ross," together with her five whale-catchers, made her third expedition to the waters of Ross Dependency, leaving New Zealand on the 29th October, 1925, and returning on the 28th February, 1926. The record of this season's operations shows that 531 whales were captured, yielding 1,508,100 gallons of whale-oil, as against 1,286,000 obtained during the previous season.

The expedition, although it started from New Zealand about three weeks earlier than on the previous year, encountered bad ice-conditions, which seriously retarded its progress and caused much unforeseen coal-consumption, this latter necessitating the expedition's return a little earlier than was expected. The bad ice-conditions caused extensive damage to the five whale-catchers, and it is expected the cost of reconditioning these vessels will approximate £16,000. The reconditioning is being carried out at Port Chalmers, so that the vessels will be in readiness for next year's operations.

The licensees, in terms of the agreement entered into with the Imperial Government prior to control of Ross Sea Dependency being vested in the Dominion, are entitled to operate two floating factories; and it was intended to introduce the second floating factory during the past season. However, this was found impracticable, but the licensees have now obtained a ship of 12,093 tons gross, which they have renamed "C. A. Larsen," in memory of their late manager, who died in Ross Sea in 1924. This ship is being fitted in readiness for next season's operations, and she, together with her whale-catchers, is expected to arrive here about mid-October next.

Last season's operations produced a revenue to this Department of £2,212 10s., which, added to the annual license fee of £200, makes a total of £2,412 10s. for the season's operations.

From observations taken, and from records available to this Department, it does not appear that the number of whales in Ross Sea is appreciably less than when whaling operations commenced there three years ago.

There is nothing to show that any person other than the servants of the licensees have visited Ross Sea for whaling purposes since the creation of Ross Dependency; but it has been suggested that some whaling enterprise intends to pursue whaling without interference by this Government by carrying out their work outside of the territorial waters of Ross Dependency. The attention of the Imperial authorities has been drawn to this.

Survey of Ships; Inspection of Machinery and Boilers.

The ever-increasing volume of work, especially in respect of land machinery-inspections, has been very marked within this period, and has called for the utmost effort on the part of the staff, the numerical strength of which had been for a considerable period unequal to the task set, to such extent that it had been found difficult in some districts and impossible in others to grant annual leave to officers. The appointment, however, of three additional such officers who joined the service during December and January has brought considerable relief.

Survey of Ships.

There is a reduction of four in the total number of survey certificates issued for vessels during the year as compared with the previous year. The numbers of certificates of survey issued during the year are as follows: Seagoing steamships and auxiliary-powered vessels, 201; steamships and auxiliary-powered vessels plying within restricted limits, 572; sailing-vessels, 21; making a total

of 794. 301 vessels were also surveyed for seaworthiness and efficiency under section 226 of the Act: this number is an increase of 146 over the previous year's total. Department's certificates were issued for the first time to fifty-four vessels, of which eight are seagoing steamers and motor-vessels, and four sailing-ships.

One of the vessels surveyed for the first time is the s.s. "Toroa." She is owned by the Devonport Steam Ferry Company, and was built in Auckland. She is of composite construction, and of the following dimensions: Length, 130 ft. 9 in.; breadth, 31 ft. 5 in.; depth, 9 ft. 9 in.; gross tonnage, 309; register tonnage, 197. Her certificate permits her to carry 1,221 passengers when plying within the Auckland river limits. Plans and specifications of a vehicular steamer for the same owners were approved during the year. This vessel will be of similar dimensions and construction to the new passenger-vessel.

An interesting vessel surveyed during the year is the stern-wheel steamer "Rawhiti." She is engaged carrying cargo and passengers on the Waikato River. The vessel and her machinery were built in Glasgow, and then taken down and shipped in sections to the Waikato, where they were re-erected. She has a length of 190 ft.; breadth, 35 ft.; depth, 5 ft. 6in.; draught, 2 ft. 9 in. The tonnage is 410 gross and 299 register. The vessel is propelled by a set of twin-cylinder horizontal non-condensing engines, with cylinders 18 in. diameter by 60 in. stroke, driving a stern paddle-wheel 17 ft. in diameter. Steam is supplied from two boilers of the marine locomotive type working at a pressure of 160 lb. per square inch. The boilers are 13 ft. long and 5 ft. 9 in. diameter at the barrels.

The "Arahina," a new tug and pilot vessel owned by the Wellington Harbour Board, was built and surveyed in Auckland during the year. She is built of wood, on the diagonal principle, and is of the following dimensions: Length, 62 ft. 7 in.; breadth, 14 ft. 8 in.; depth, 5 ft. 1 in. She is propelled by a set of four-cylinder semi-Diesel engines of 100 b.h.p.

During the year very extensive alterations and repairs were carried out to the s.s. "Marama." The vessel was converted from coal-burning to oil-burning. Several oil-fuel tanks were built into the hull above the double bottom, and most of the double-bottom tanks were made suitable for the carrying of oil fuel. The passenger accommodation was rearranged, and altogether the vessel has had a very thorough overhaul. Before final approval of the plans of the alterations, investigation was made as to the effect the alterations would have on the stability of the vessel. The matter was found to be of such importance as to justify a request for the preparation of new stability data. This the owners readily agreed to, and they further carried out in a very thorough manner the Department's suggestion that the new stability data should be more amplified than usual, and that it should be simplified as much as possible so that the master of the vessel could predetermine the margin of stability his vessel would have under various conditions of loading, ballasting, and weather. A good case can be made out to support a regulation that the properties of stability of all vessels should be recorded on board for the information of the ship's officers. Shipbuilders prepare stability data for certain types of vessels, and the owner can obtain this information if he requires it. To be of much service, however, to the navigating officers the form in which it is at present generally supplied should be simplified and made more handy.

A number of sailing-vessels in the Auckland district have been fitted with oil-engines as an auxiliary means of propulsion.

It was found necessary during the year to issue circulars dealing with the construction and design of air-receivers for motor-ships and of small crude-oil-fuel tanks. With this information before them engineers can now quote firm prices for such work. This was impossible previously when they had no guide to the Department's requirements.

Owing to the increasing number of steam and motor vessels now carrying oil in tanks, the time has probably arrived when regulations should be framed to protect Surveyors and workmen when they are engaged in the inspection of and repairs to tanks. In New Zealand our experience in connection with repairs to oil-tanks has been very limited. Unless the risks attached to such work, and the precautions necessary to minimize these risks, are made known accidents cannot be avoided. Twelve lives were lost at Cardiff in 1919 by a serious explosion on a ship, and at Millwall in 1920 seven lives were lost on a barge undergoing repairs. Both these vessels carried oil. As a result of these accidents an engineer on the Home Office staff was instructed to make inquiries into the risks attached to the carrying-out of repairs on oil-carrying and oil-fuel ships. A report has been issued summarizing the results of his inquiry, and specifying the minimum precautions which are considered necessary to ensure the safe conduct of repair work on oil-carrying and oil-fuel ships, the term "oil" including petroleum spirit, petrol, or similar materials.

A circular was issued dealing with the fireproof lining of the engine-room of motor-vessels constructed of wood. The previous instructions were prepared when motor-engines were mostly of petrol type. The semi-Diesel engine using crude oil, and (for launches) engines adapted to use kerosene, are coming into favour. The risks of fire are not so great when crude oil or kerosene is used as is the case with petrol. The previous instructions as to lining of engine-rooms were therefore modified to permit of both the steel and insulating linings being less extensive for the engine-room of vessels propelled by crude-oil and kerosene engines.

Two wooden scows were fitted out during the year to carry petrol below decks. One of these vessels is flat-bottomed. Very careful attention was therefore given to the design and workmanship of the bulkhead. The bulkhead was constructed of steel plating suitably stiffened with steel angle-bars. The plating was secured all round the edges to heavy wood margin planks bedded on to the ship's frames, sides, and decks. The margins were thoroughly caulked, and all seams in way of the margins were stop-watered. The bulkhead was first hose-tested and afterwards tested for airtightness by burning sulphur for eight hours in the hold with the hold sealed up. The test was very satisfactory. Altogether the bulkhead has been tested with sulphur fumes four times in less than three

months, and in each case it was found to be perfectly tight. Considering that previous to the making of the last test the vessel had encountered unusually heavy weather and had loaded two cargoes whilst lying on the hard, the bulkhead must be considered satisfactory. The other scow which was fitted with a similar bulkhead is a round-bottomed vessel.

Examination of Marine Engineers.

During the year 187 (222) candidates passed their examinations and 119 (111) failed. Of those who passed 91 (100) were engineers of seagoing ships, 10 (10) were engineers of steamers plying within restricted limits, 33 (32) were engineers of seagoing motor-vessels, and 53 (80) were engineers of such boats plying within restricted limits. The figures in parentheses are those of last year.

Examination of Land-engine Drivers and Electric-tram Drivers.

These examinations were held at the various offices of the Inspectors of Machinery throughout the Dominion at the regular intervals provided for in the regulations—namely, in the months of May, August, November, and February. In addition a few special examinations were granted, but the holding of special examinations is not encouraged, as it is considered that the regular examinations are of sufficient frequency, and, except in very exceptional circumstances, candidates are expected to arrange that they may attend the scheduled examinations.

The full list of places where the examinations were held is shown in an appended return, as also is the number of candidates examined at each place. The classes of certificates for which examinations were held were—First-class engine-driver, second-class engine-driver, steam-winding-engine driver, locomotive-engine driver, traction-engine driver, locomotive and traction engine driver, and electric-tram driver. The total number of candidates examined was 608; of this number 428 passed and 180 failed in their examination.

Recognition of Certificates from Abroad.

Under section 49 of the Inspection of Machinery Act, 1908, certificates of the appropriate grade were granted, without examination, to holders of certificates from abroad, as follows: Denmark, 1; Queensland, 1; South Africa, 2; Western Australia, 1.

Inspection of Machinery.

The number of inspections of machinery carried out during the year total 34,634, as compared with 27,853 during the year 1924–25, an increase of 6,781.

The number of fatal accidents reported to the Department is five. One of these does not come within the scope of the Inspection of Machinery Act: it occurred through a tractor striking a tree and overturning. Of the other four, one was due to an apprentice attempting to put a belt on a pulley overhead, to accomplish which he mounted a ladder whilst the transmission machinery was running at its normal speed. He became entangled in the belting and received terrible injuries. In another case the operator in charge of a machine was stepping over a belt when the overcoat he was wearing was caught by the belt. He was thrown to the ground and killed. The machine had not been inspected by a Department's Inspector, and the belting had not been protected. The machine was erected under skilled supervision, however, and the necessity for guarding the belting was not apparent. It is to be noted the operator was considered to be a careful and competent workman. In another instance the man killed had been oiling the machinery. The circumstances leading up to the accident are not very clear. The man probably did not hear the whistle, and was caught in some way by the machinery when it was started up. In the fourth case, the man in charge of the machinery responsible for the accident was caught by the coat in bevel gears which were unguarded. The machinery had not been inspected by the Department.

One hundred non-fatal accidents were reported to the Department during the year, and of these ten cannot be regarded as caused by machinery, and the Department is therefore in no way responsible for them.

The number of non-fatal accidents reported during 1924–25 was 105, and thirty-three accidents were caused by woodworking machinery: and of this number twenty-four can be attributed to circular saws and planing-machines. In most cases the reports show that the operator himself was to blame for the accident. Six were due to neglect to use a push-stick, four to inattention, five to removing timber from a bench by the hand when the machine was running, two to neglect to adjust a guard, two to neglect to replace a guard, two to using a machine for a purpose for which it was not intended, one to using a machine before its erection had been completed, one to the unlawful use of a square-head buzz planer, and one due to a boy frolicking in the vicinity of a machine. Many woodworkers fail to realize the special risk they run of being injured by a saw or planer when passing the last few inches of timber through the machine. Pushers are often looked upon as an unnecessary hindrance; but, owing to the feeling of security they must give, the last few inches of wood can be put through the machine more quickly with their aid than without it. There are several designs for pushers, and to those unacquainted with these the Department's Inspectors will be only too pleased to offer suggestions as to the best design for a particular purpose. The Inspectors have particulars of a number of designs which have found favour with woodworkers in Great Britain.

After woodworking machinery, transmission machinery is responsible for the next highest number of accidents, which is six. In four of these cases the persons injured were adjusting belts on overhead shafts without first having taken the precaution to slow down or stop the machinery.

The necessity for the inspection of even small machines is exemplified by the report of an accident by a small oil-engine. The man looking after this engine happened to be standing in front of it when it broke down and he was struck by a piece of flying metal. He received a fractured skull

and injury to the left eye. The accident was attributed to the bolts in the connecting-rod bottom end having fractured, and thereby the piston and rod were forced against the cylinder-cover and shattered it.

This type of accident occurs frequently with oil-engines and also gas-engines. In the case of an engine of considerable size the damage is costly to repair—in fact, the engine is often not worth the expenditure necessary to put it into working-order again. To avoid breakages of connecting-rod bolts, frequent inspection is necessary to see that the bolts have not worked slack, and the bottom and brasses require to be adjusted when worn. With a knock in the bearings the bolts are liable to be overstressed. Bolts of small engines are easily damaged in tightening them up. Too long a spanner should not be used in tightening up $\frac{3}{8}$ in. and $\frac{1}{2}$ in. diameter bolts. These bolts are sometimes annealed with a view to prolonging their life. It has to be remembered, however, that these bolts are often made of special steel, the annealing of which is likely to result in more harm than good unless information is available as to the correct heat-treatment for the steel. Defects in the bolts due to fatigue cannot be removed by annealing, and the only remedy is to renew the bolts.

Lifts.

Many new lifts have been inspected during the year. Rules for the design and construction of lifts have been drafted. A number of the new lifts installed each year are fitted with safety devices of questionable efficiency. Lift-manufacturers, for their own credit, generally bring to the notice of their clients the most modern and approved safety devices, but these are seldom appreciated at their real value when extra cost is involved in supplying them: they are too often looked upon as mere efficiency fads. It is true that occasionally features are introduced into lifts which may be looked upon as refinements not absolutely necessary to safe working. An independent opinion, therefore, such as would be obtained from the rules of this Department would be much appreciated by lift-owners and architects. One of the most debatable questions relates to what safeguards are reasonably necessary for the gates of lift-wells and cages, and whether the gates of goods-lifts should be as safe as those of a passenger-lift. Experience has shown that devices for locking passenger-lift gates, which at one time were considered to be sufficient, are no longer so, as the small boy and others bent on mischief have discovered how they can tamper with them. The only claim to safety that many gates of cargo-lift wells have is that they are fitted with locks intended to fasten on the operator's side of the well only. When a lift can be worked whether the gates are open or shut there is room for doubt as to whether such gates are a proper protection to a lift-well.

Boilers.

The number of new boilers inspected during the year is 342, as against 363 last year. The total number of boilers inspected for the year is 7,895 as compared with 7,944 last year. No accidents to boilers have been reported during the year. Extensive repairs to boilers have been carried out in many instances, and in this connection the autogenous welding processes have been found effective. Quite a number of engineering-shops now have their own welding plants. The Department finds it necessary to restrict the use of autogenous welding to the class of repair which is not entirely dependent on the strength of the weld.

A number of plans of boilers have been submitted for approval before the boilers have been made. Manufacturers have found this a great convenience, and have shown their appreciation of it; although, when the plans are submitted, there are generally prospects that boilers made to the plans will require certificates from the Department. Often, however, in the case of manufacturers abroad, the boilers do not come to New Zealand, and the Department receives no reward for the work entailed in approving the plans.

Circulars issued during the year relate to certificates of test for boiler-material and hydraulic-test certificates of imported boilers, dished ends of Lancashire and Cornish boilers, guards for breast or drag bench-saws, and monel metal. Monel metal is an alloy of nickel and copper. It is being used in the construction of steam-cooking utensils, for which purpose it has considerable value on account of its resistance to several kinds of corroding influences, and its quality of retaining a finish similar to that of pure nickel.

A recent report of an explosion from a steam-jacketed pan made of aluminium draws attention to the risks attendant on the use of this material when subjected to steam pressure. Aluminium is of a soft nature, and is liable to fail suddenly under stress. Preliminary indications of distortion or buckling should be regarded seriously.

Government Shipping Offices.

In the Government shipping offices the administration of the Shipping and Seamen Act has been efficiently carried out. Appended is a statement showing the number of seamen engaged and discharged at the various ports during the year, and the fees received for such transactions. The total number engaged and discharged was 19,285 and 19,348 respectively, as against 17,929 and 17,941 respectively during the previous financial year. The transactions at the four main ports were as follows (the figures in parentheses being those of the previous year):—

Port.	Engagements.	Discharges.	Fees.	
			£ s. d.	£ s. d.
Auckland	6,523 (5,742)	6,608 (5,917)	1,210 17 0	(1,056 8 0)
Wellington	7,205 (6,509)	7,239 (6,291)	1,294 5 0	(1,163 8 0)
Lyttelton	1,556 (1,765)	1,416 (1,746)	271 3 0	(319 18 0)
Dunedin	1,688 (1,541)	1,744 (1,620)	322 12 0	(292 2 0)

Inspection of Seamen.

This service has been maintained. A record of men applying for work is kept for the purpose of filling vacancies as they occur.

Sick and Injured Seamen.

The total amount paid by shipowners to sick and injured seamen, under the provisions of the Shipping and Seamen Amendment Act, 1911, was £21,853 14s. 9d., as against £17,237 6s. 2d. in the previous year, an increase of £4,616 8s. 7d.

Registration of Shipping.

On the 31st December last there were on the register of vessels in the Dominion 117 sailing-vessels, of 19,452 tons register; 281 steamers, of 100,765 tons register; and 181 motor-vessels, of 3,476 tons register; as compared with 123 sailing-vessels, of 19,392 tons register; 276 steamers, of 91,750 tons register; and 165 motor-vessels, of 3,228 tons register, at the end of the previous year. The number of seamen and boys employed on board was 3,990, as compared with 3,859 at the end of 1924.

Shingle and Sand Beaches and Foreshores.

The Department's assets in its beaches and foreshores around the coast have been very carefully guarded, with the result that the sum of £5,374 4s. 11d. has been collected during the year in rents and royalties, as compared with £4,578 11s. 11d. during the previous year.

S.S. "Hinemoa."

This vessel, after being extensively overhauled and altered under this Department's supervision, was handed over to the Department of External Affairs for service in the island trade.

S.S. "Tutanekai."

The lighthouse tender continued to perform her regular function, with the exception that for the periods 24th November, 1925, to 24th December, 1925, and 26th April, 1926, to 8th June, 1926, she was engaged in conveying His Excellency the Governor-General round the South Island and to the Cook and other islands.

In order to maintain the lighthouse tendering the services of the "Hinemoa" were secured for the period 18th January to 18th February.

Meteorological Branch.

This branch has carried out its usual function. It is understood it is to be transferred to a new Department to be created to encompass various scientific branches.

Fisheries.

It has hitherto been the practice to incorporate a long and detailed report by the Chief Inspector of Fisheries. This report is not yet available, but it is doubtful if much of the matter it has usually contained serves any really valuable future purpose, in that it is based on reports and information from outside people who have no responsibility and may often unconsciously mislead.

It is proposed to institute as soon as possible a system of simple returns which will provide data of greater reliability and value as to the quantities of fish caught and their species. The information supplied will be regarded as strictly confidential to the Department, and will in course of time enable the collation of reliable data, and from this and investigation in various localities valuable results may be expected to accrue. There is reason to believe, from the opinions expressed by fishermen who have been consulted, that the fishermen, in the assurance that their returns will be regarded as confidential, will readily assist.

In the past the activities of the Department have been primarily concerned with the routine administration of the Fisheries Regulations under the Fisheries Act of 1908 and its amendments, the aim of which is to secure the safe and proper operation of the fishing industry in its various phases, to the present advantage of the general public without jeopardizing the fishery possibilities for future generations. The measures taken under this head are necessarily regulative and restrictive.

In addition the Department has been actively engaged for some years in developmental work. Under its protection the rock-oyster beds of the north have been saved from the imminent danger of absolute depletion to which they had been brought by the unregulated and almost unrestricted exploitation of former times. Since 1908 steps have been taken to increase the supplies by the creation of artificial beds and the replanting of depleted beds. There are now encouraging indications that the construction of "oyster-walls" on suitable foreshores, which has been carried on at relatively small expense, will prove a most profitable investment in the near future. This work is still going on, and it is the ambition of the Department not merely to restore the natural beds to something like their old-time productivity, but also to multiply the normal natural yield by growing oysters where formerly there were none.

The most important developmental activity, the success of which has aroused world-wide interest, has been the acclimatization of the quinnat and Atlantic salmon species in New Zealand waters. The Department may take a legitimate pride in this achievement, which has been carried through with a very limited staff, and with material facilities which are very exiguous in comparison with those at the disposal of the Fisheries Departments of older countries.

The Dominion occupies a position which is unique among the civilized nations of the world in its almost total lack of organized official or unofficial information about its fishery resources. It is clear that measures for the proper administration of the fisheries, and for the development and

improvement of the industry, are equally crippled and limited by the lack of scientific knowledge of the natural resources in question. It must be added that such scientific knowledge is not obtainable at a glance, but can only be acquired as the result of organized investigation over a considerable period of time.

The necessity for such knowledge is demonstrated when cases of controversy arise between conflicting fishery interests, and the Department is in the invidious position of being compelled to take as evidence the conflicting opinions of either side to the dispute. Though they may be perfectly honest, such opinions are inevitably biased, and in any case cannot carry the weight which obtains with facts gathered in a scientific manner by disinterested parties.

The sort of information that is needed as the groundwork for rational fishery exploitation and administration may be classed under two heads. In the first place, adequate statistics relative to the fisheries are urgently needed. The present system of obtaining estimates of the total quantity and value of fish landed at each fishing-port for a whole-year period is of slight utility, assuming that the approximate accuracy of the figures provided may be taken for granted, which, in view of the circumstances of their collection, is by no means the case. The omissions and imperfections in the figures which up to now have represented the fishery statistics of New Zealand are quite inevitable so long as there is no adequate provision made for their collection and collation. It is not suggested that the time is ripe for the institution of a system on anything like the scale of the fishery statistics of Britain or Canada, where the fishing industries have reached a high stage of development and are of special national importance. We should begin by concentrating on the most important fishing-ports and limiting the details to the comparatively few species of fish which are of outstanding commercial importance.

Fishery statistics afford not only an index to the progress of the fishing industry in its various branches, with its seasonal and local variations, but they also throw light on the natural phenomena of the occurrence of the fishes themselves, especially as to their varying abundance from year to year and from place to place.

The principal object of scientific administration is to regulate exploitation so that it does not cut too deeply into the reserve that must be maintained to ensure adequate stocks for the future. Even in this young and thinly populated country there have already arisen cases where serious depletion of certain fish stocks has been alleged to have been brought about; and others will doubtless arise in the future. The assistance of statistical data in enabling one to detect the trend of any decline in the yield of a fishery is too obvious to need any further exposition.

While statistics relating to the yield of the fisheries are the most obvious and most easily attainable form of information, they do not provide all that is necessary for our guidance in dealing with fishery problems. We require the further light of a knowledge of the broad facts of the life-history of the fishes—how, when, and where they spawn, their age and size at maturity, their rate of growth, and the nature of their migrations. Without such knowledge administration is blindfolded, and any project of substantial economic development can only be guesswork. It should therefore be the policy of the Department to do all that is possible to gather scientific understanding of the fish-life in our seas and fresh waters. This calls for scientific staff and equipment. To make provision for the amount of work to be done might very well involve the establishment of a trained staff, with laboratory facilities and the means of collecting material for study on too ambitious a scale to contemplate at the present time. That the necessity for making provision for scientific fishery research is recognized by the Department is shown by its interest in the Portobello Marine Biological Station. The existent facilities of this station are very limited, but more substantial support has been afforded which it is hoped will render possible considerable increase in its output of useful work.

It is highly desirable also that the developmental work with regard to oyster-culture and salmon acclimatization should be accompanied by experiments and observations on scientific lines. In connection with oyster-culture, for instance, there is a need for investigations into the conditions which make for the most successful spatting and fattening. It is certain that such knowledge would enable more efficient and productive methods of culture to be developed.

With regard to the acclimatized salmon species, we require to know how their growth in the streams, on the one hand, and in the great lakes or the sea, on the other hand, compares with that of the same species in their native habitat. The study of scales affords a ready means of throwing light on this question, and, correlated with information as to their food-supplies, would enable us to understand the conditions of their life and growth, to gauge the possibilities for the ultimate well-being of the stock, and to regulate their exploitation in an intelligent way.

Such tasks are admittedly quite beyond the power of this Department to carry out as at present staffed and equipped. It is perhaps sufficient at present that the desirability of such work should be recognized, and a commencement made upon the more fundamental problems. Already, with trifling equipment and very little expense, important biological facts regarding the snapper, the rock-oyster, and the toheroa have been elucidated, but much remains to be done before a comprehensive knowledge of the more important points in the natural history of these species can be obtained.

However devoted and efficient may be the services of its temporary and permanent officers responsible for the enforcement of fishery regulations for the conduct of the rock-oyster business in the north and the salmon-culture operations in the south, a Department whose functions are limited to these activities cannot be regarded as fulfilling the part of a national fisheries administration. The three main lines along which development should proceed in order that the Department may be placed in a position to regulate and foster the Dominion fisheries on a sound and enlightened basis, and to be of assistance to the general technical improvement of the industry, may be summarized as follows: (1) The collection of fishery statistics; (2) the acquisition of scientific information about the more important edible fishes, crustaceans, and molluscs; (3) the establishment of a bureau of technical

information (to be acquired from books, journals, and reports relating to the fisheries of other countries) which may be of service for the guidance of those interested in the development of the fishery industry of New Zealand.

Mr. Hefford, who arrived in New Zealand in May, 1925, has been engaged in acquiring a knowledge of local conditions and fisheries, and has made special investigation into snapper fisheries in the Hauraki Gulf, rock-oyster fisheries, toheroa fisheries, and has directed investigations into Foveaux Strait oyster fisheries. These latter have been carried out from time to time by Mr. W. M. Young. From what has already been stated it will be realized that in most cases investigations must extend over a considerable period of time before any positive conclusions can be drawn.

Salmon Fisheries.

During the past year Dr. C. H. Gilbert, Special Assistant to the United States Bureau of Fisheries, and Mr. J. P. Babcock, Chairman of the International Fisheries Commission, visited New Zealand in private capacity, but were good enough to give special attention to our salmon fisheries, and during their visit to the salmon waters were accompanied by Mr. L. F. Ayson.

The following extract from a brief report furnished by Dr. Gilbert is of utmost importance :—

"The initial stages of your experiment have met with unqualified success. Self-perpetuating colonies have been established, and are flourishing and increasing in numbers. Their future would seem to depend on success in administration. If handled cautiously and conservatively, without undue haste to 'realize on the investment,' there should be a steady increase, and the final establishment of runs of distinct commercial importance.

"But such a consummation can easily be delayed, if not wholly prevented, by premature attempts to establish a salmon fishery and to place these fish on the market. Their rate of natural increase in their new home has not been determined. They are living in a new environment, subject to the attacks of a wholly new set of enemies. If these are more efficient than their old enemies in America—and there is good reason to fear this may be the case—fewer will escape in each generation to form the spawning reserve, and the natural increase will be correspondingly diminished. For this reason, among others, it will demand constant watchfulness and utmost caution not to endanger the success of an experiment so advantageously begun.

"Our own experiences in Alaska have brought home to us the constant dangers of overfishing. Such serious encroachments have been made thus on our salmon supplies that we have been compelled to close all rivers to fishing of any description, and compel our fishermen to reap their harvest in the open sea and on coasts away from the mouths of rivers. With such experiences behind us it is perhaps inevitable that we should regard with some degree of apprehension the opening of your rivers to the netting of salmon at a time when you are endeavouring to build up your runs to their maximum efficiency. Certainly the results should be most carefully inspected, and the extent of the fishing held to very modest dimensions. I venture to suggest the importance of obtaining reliable statistics each year of the captures in each stream by the different methods. There should also be an inspection annually of all the spawning-beds, to determine as accurately as possible the size of the spawning colonies. If these facts are placed permanently on record year by year, it will result in building up a body of knowledge of the utmost value to the future administration of the fisheries."

The reference to "the attacks of a wholly new set of enemies" draws experienced attention to the remarkable percentage of quinnat salmon caught in the rivers which are deeply gashed by some sea-enemy. The warning from such authorities cannot be ignored, and it is obvious that, instead of extending the present commercial operations, we will, in the meantime, have to restrict them. To this end it is proposed to strictly limit the amount of netting for sale permitted in rivers.

In the June issue of the *Canadian Fisherman* Mr. Babcock is reported as saying, "The future of the Pacific salmon fishery of New Zealand would seem to depend on administration. If handled conservatively the self-perpetuating runs of the quinnat should steadily increase, and result in final establishment of runs of great commercial importance. Their rate of increase has not yet been determined in so short a time. If I were asked to make the salmon-fishing regulations of New Zealand—and I have not been—the catching of quinnat would be prohibited for a considerable period, as time will have to demonstrate the maximum of production their great rivers are capable of. With adequate measures of protection, runs of great commercial importance may be developed."

Atlantic Salmon.

The collection of salmon-eggs this season has been the most successful since the establishment of Atlantic salmon in these waters. This is partly due to the increasing annual run of fish, and to the very favourable weather conditions prevailing throughout the spawning season. With the exception of two floods of a few days' duration, the nets continued catching from the date of commencement, 13th April, to the 21st August, the date when the men ceased operations. Our experience in collecting eggs shows that these fish, so far, are not conforming to a definite spawning-season period, as they do in their native habitats in the Northern Hemisphere. While the main runs of ripe fish come into the rivers in May, June, and July, yet we find individuals spawning from the beginning of April to well on in September—a period of over five months. This season we caught quite a number of salmon which were making their second return to the river for spawning.

The Waiau River was inspected from the outlet of Lake Te Anau to Horseshoe Bend, a distance, by river, of eight miles, and salmon spawning-beds were found over the whole distance. This is an important discovery, as, from the size of the beds, they were undoubtedly made by large sea-run fish.

The total number of salmon caught during the spawning season was 527—283 females and 244 males. The number of eggs collected was 936,500, and the average yield per female fish was 3,500.

As the Department is concentrating on stocking the Wanganui River, fully half a million of the eggs collected were sent to the Government hatchery on the upper Wanganui, where the eggs hatched out successfully, and the fry were liberated in several tributaries of the main river. The balance of the eggs collected at Te Anau were hatched out and liberated in tributaries of the Waiau and Clutha Rivers.

These salmon have taken so well to the Waiau and its tributaries that care must be taken to maintain and increase the supply in its waters, and for this purpose it might be wise for a few years to restrict the number caught by anglers, and also the quantity of eggs collected for stocking other rivers.

The number of salmon caught by anglers this season was about seven hundred, being quite double the number taken the previous year.

Quinnat Salmon.

The run of these fish last season (1925) was similar to the previous one, both with regard to the number and condition of the fish which came up, but the run for these two seasons was considerably less than for 1922–23.

The work of collecting eggs was continued on similar lines to previous years, with the exception that, on account of not being able to get sufficient skilled assistance, the Dobson River was not worked, operations being confined to the Hakataramea and Ahuriri Rivers.

On account of unsettled weather causing a succession of floods, the work of netting spawning fish was an unusually difficult one, particularly in the Ahuriri, where in the time of a fresh there is a heavy body of water to contend with; and this season, on several occasions, the men, in order to hold their traps, worked in shifts, waist-deep in the water, night and day, and they deserve every praise for the way they held on under such trying conditions.

The total number of eggs collected was 672,000, of which 388,000 were got from the Ahuriri and 284,000 from the Hakataramea. The eggs when "eyed" out were distributed as follows: 500,000 were sent to the Government hatchery at Maori Creek for stocking the Wairau River, 150,000 were supplied to the Tasmanian Government, and the balance were hatched at Hakataramea.

Owing to the smaller number of salmon taken in the traps this season the quantity of fish cured for sale at Hakataramea only amounted to 292 lb. There was a keen demand for the product, and owing to the limited supply available numerous applications had to be refused.

Foveaux Strait Oyster-beds.

The quantity of oysters landed at Bluff from these beds for the season under review was 26,039 sacks; wholesale value, £17,576. This shows an increase of 2,243 sacks in quantity and £2,703 in value on the previous year's catch. This year 23,870 sacks were disposed of in the Dominion, and 1,987 sacks and 89 cases of opened and frozen oysters were exported to Australia. Scientific investigations in connection with the occurrence and condition of the oysters are now being made by Mr. Maxwell W. Young, of the Portobello Station, under the supervision of Mr. Hefford. This is important work, as the scientific control of the working of these valuable beds is necessary for their permanent conservation. The investigations up to the present have been made in the open oyster season, and by going out in one of the oyster-dredging vessels. These vessels naturally work only the beds which give the best returns. To carry out the investigations to a successful conclusion it is necessary that some work should be done in the close season, when most of the oysters are spawning, and at the same time to test areas which are not worked by the commercial dredgers.

Toheroa Beds.

The beds on the North Kaipara beach are well stocked with toheroa of all ages, and the lessees of Nos. 1 and 2 areas have had a successful season at their cannery—the pack for the season consisting of 980 cases.

The lessees of the beds on the Ninety-mile Beach also report a successful season. Toheroas were plentiful and in splendid condition, and the quantity canned shows a large increase on the previous season's operations.

An inspection was made of the Rangatira Beach (South Kaipara), and it was found that toheroas exist along a stretch of about twenty-seven miles, but the beds are scattered and not nearly so well stocked as those on the North Kaipara and Ninety-mile Beach.

Rock-oysters.

During the past season the Department took 8,297 sacks of oysters, which yielded a return of £10,205.

Portobello Marine Fisheries Investigation Station.

During the past year the position and usefulness of the Portobello Fish-hatchery has been under the joint consideration of the Department and the Board which immediately controls it. The position was that although in the past few years the Department has been almost entirely financing the station, it has had no voice in the expenditure or policy of the work.

By mutual agreement Mr. Hefford has joined the Board. The Department has increased its financial assistance to enable the station to function to more definite purpose. At the commencement of each year a programme of work will be laid down which may encompass any particular investigation that the Department may require to be undertaken. The Department has taken Mr. M. Young, the station biologist, on to its staff, and he is now available for any work either at the station or elsewhere.

Attached hereto is the annual report of the Chairman of the Board (Hon. G. M. Thomson, M.L.C.).

PROSECUTIONS.

During the year prosecutions for offences under and breaches of the various Acts administered by the Department were taken as follows: Fisheries Act, 47; Harbours Act, 10; Inspection of Machinery Act, 49; Shipping and Seamen Act, 58.

G. C. GODFREY,
Secretary.

MARINE FISHERIES INVESTIGATION STATION.

SIR,— Portobello, 5th May, 1926.

I have the honour, on behalf of the Board of the Portobello Station, to forward the following report of the work carried on during the year ending 31st March, 1926.

As stated in last year's report, the introduction of foreign fishes and crustacea into these waters has ceased for the time being, and only one female lobster remains in the pond. The circular issued by the Marine Department in 1922, offering a bonus of £5 per pair for live European edible crabs (*Cancer pagurus*) or live lobsters (*Homarus vulgaris*) has not been taken advantage of. It is advisable, however, to keep the offer open, as it is always possible that some enthusiast may be met with, especially in the engineering staff of outward-bound steamers from Britain, who may feel inclined to endeavour to bring out some of these crustaceans. All the earliest shipments of lobsters were made in this manner, and several were successful.

Investigations into the occurrence and distribution of sprats and pilchards along the coast have not made satisfactory progress; the fish have not been in any numbers to observe.

In his report to the Board on the work of the station, Mr. W. Adams, the curator, states that, as in past years, the stomachs of all fishes caught, whether by the trawl, seine net, or line, were examined and their contents noted. He adds: "The sprats and pilchards were not seen in numbers on the surface, though a sharp lookout was always kept. During June these small fish were no doubt plentiful on the bottom off Cape Saunders, as all large fish caught were found to contain large quantities of sprats. The nets were put out, but the fish were invariably too deep, as none were caught in the meshes close to the lead-line. Of the larger fish caught in the same locality during July, none contained sprats or pilchards, the stomach-contents being large quantities of whalefeed (*Munida subrugosa*). During October sprats were reported to be in large shoals north of Moeraki. At the latter part of the same month one of the local fishermen reported that small numbers were seen on the surface at Sandfly—that is a little to the south of Cape Saunders. These fish have also been reported as abundant pretty well all the year round at the Nuggets, but of course the resources of the station do not permit of our making investigations so far from the station, as the insurance on our launch limits us to ten miles from Otago Heads. The only method would be, if satisfactory evidence were forthcoming of the occurrence of these fish, for Mr. Young to proceed to the Nuggets overland and arrange to go out in local boats. The reports usually received are too vague to be accepted as good evidence: they can only be taken as indications of the general occurrence of these small fish. The record of the last three years shows how very erratic is the occurrence of these clupeids on the coast. At times in past seasons they have been recorded as present in enormous numbers, but for the past three seasons they have been chiefly conspicuous by their absence. This is similar to what is found to be the condition in Australian waters, and shows that fishing for pilchards and sprats in these southern seas would appear to be only an occasional and very erratic occupation, except, perhaps, in one or two localities. This question requires further examination, for a good sardine industry would be a valuable addition to the fishery resources of the Dominion. In this connection it may be noted that a paper "On the Occurrence of Clupeids in New Zealand Seas," prepared by Mr. Maxwell Young, the Biologist, and the Chairman, was read at the Science Congress held by the New Zealand Institute in Dunedin in January, and this will probably be printed in the forthcoming volume of the Institute Transactions.

Referring to the general conditions of the past season, Mr. Adams states that "the work carried out with dredge, trawl, and hand-lines on the offshore fishing-grounds has not been satisfactory, owing to the unsettled weather which prevailed throughout the greater part of the year. During April and May fine weather was experienced and we were able to go out regularly. Towards the latter part of June stormy weather set in, and throughout the remaining months of the year unfavourable conditions continued to prevail. There has been an exceptional scarcity of flat fish on the local grounds. All the trawlers that were able to make the journey have been going as far south as the Nuggets, where large hauls of soles have, for the past seven years, been caught. During the past year only two small trawlers have regularly worked the local grounds, and their catches have been the poorest on record. Throughout the winter months the spells of fine weather were too short to allow the grounds which the fish were on to become clear of weed. During October flat fish were more plentiful than at any other time of the year. Fair numbers were taken in the shallow water of Blueskin Bay, but in the deeper water some three miles north-east and east of Otago Heads the grounds were found to be almost bare of fish. On these grounds a greater variety of fish is usually caught than on the grounds well off shore."

Since his appointment as Scientific Adviser to the Fisheries Branch of the Marine Department it has seemed desirable to the members of this Board that Mr. E. A. Hefford should be appointed a member, in order that the station might be brought more directly into touch with the Department, and that its work should be definitely guided by his scientific advice. After discussions between the Chairman, Mr. Hefford, and Mr. G. C. Godfrey, Secretary to the Department, this course was laid

before you and was agreed to by yourself. Accordingly in November the Board was reconstituted as follows, His Excellency the Governor-General in Council appointing the Hon. Geo. M. Thomson, Professor W. B. Benham, Messrs. C. W. S. Chamberlain, A. E. Hefford, and G. W. Howes as members. The first meeting of the newly constituted Board was held on the 7th January, when, *inter alia*, the following resolutions were agreed to :—

"(1.) That the name of the station be altered from 'The Marine Fish-hatchery' to 'The Marine Fisheries Investigation Station.'

"(2.) That as Mr. Maxwell Young, Biologist at the station, is a Government employee, the Minister be asked to bring the fact under the notice of the Public Service Commissioner in order that he may be recognized as a member of the Civil Service."

The alteration of the name emphasizes the fact of the widened scope of the work of the station, and its national character. Instead of being a local or provincial affair, it is now recognized as a New Zealand concern. It is doing biological fishery-work of national importance, and is inaugurating research on hydrographic problems, dealing with the New Zealand seas generally.

The meeting also approved of a scheme of hydrographic work suggested by Mr. Hefford. This includes temperature and salinity observations of the sea off Otago Heads, to be taken as frequently as weather conditions permit. These at first would be surface observations only, but later on mid-winter and bottom layers would be similarly tested by special apparatus (*e.g.*, Nansen-Patterson water-bottles, &c.). To begin with, stations five and ten miles from the Heads would be observed, to be extended later to fifteen and twenty miles. By enlisting the co-operation of fishermen and coasting-steamers, these observations will be extended both north and south, and thus a considerable amount of observational material will be obtained. Such observations would probably indicate any seasonal changes in the drift, which may possibly correlate with such variable phenomena as the irregular distribution of the sprats and pilchards off the coast.

In last year's report it was stated that the United States National Museum had kindly undertaken to work out the tow-net material forwarded from this station. Accordingly during the year Mr. Young has forwarded to the Museum 178 tubes of such collections, consisting chiefly of surface-swimming Copepoda. He has made somewhat extensive collections of dredged and netted material during the year, much of which has been distributed to other workers. This includes tube-forming and other Polychætes, *Boltenia*, &c., to Professor Benham; *Zostera* to Professor Holloway, and prepared fish-jaws to the late Dr. Raynor Bell; Mollusca to Mr. Finlay; *Goniocidaris* to the British Museum; Tunicates and Crustacea to Professor Chilton, of Canterbury University College; a new species of Holothurian to Dr. Mortensen, of Copenhagen; prepared heads of elephant-fish (*Callorhynchus*) to Mr. Kesteven, of Billahdelah, New South Wales; and eggs of the same species for Professor Edgeworth, of Bristol University. He has continued his researches on Tunicates, and on the growth of native fishes, including smelts (*Retropinna*), of which a number were taken in January.

Towards the end of the present season, in response to a request from the Marine Department, the Board detached Mr. Young for work in conjunction with Mr. Hefford, on the oyster-beds of Foveaux Strait, and he made his preliminary visit to the Bluff in March. In order to facilitate his work and to give him the requisite authority in case of any difficulty arising in the course of investigation, he was duly appointed an Inspector of Fisheries.

Mr. S. Broadley, assistant curator of the station (and Inspector of Fisheries for the Otago District), has made two visits of inspection to the outlying fishing-ports, both north and south. He has also inspected the Dunedin Fish-market at regular intervals. In response to a request from the Department he is to be liberated next month for salmon-netting at the mouth of the Clutha River.

In addition to the paper already referred to on "The Occurrence of Clupeids in New Zealand," Mr. Young has contributed the following papers throughout the year: "On Malignant Tumours of European Turbot" (*Journal of the Marine Biological Association of Britain*); "Range and Nomenclature of *Physiculus rhacinus*," and "Fishing Industry of Otago" (both in *N.Z. Journal of Science and Technology*); "Marine Fauna of the Chatham Islands" (in the press); "Marine Biological Notes, embracing the Growth of Crayfish, Commensalism of Tunicates and Mollusca, Food of Starfishes, &c." (in the press). He has also ready for publication the following: "On *Cristaculeus dyscritus*, a new Genus and Species of Stomateid Fishes"; "On the Occurrence of *Mora mediterranea*"; "On the Occurrence of *Centrolophus maoricus*."

The library continues to increase by the addition of recent papers and publications of scientific societies, and the very full card-indexing renders it most valuable for reference.

The whole of the buildings and plant are kept in very good order by the staff, while the renewal of piping and pumping apparatus required is now provided for.

Yours, &c.,
GEO. M. THOMSON,
Chairman.

Hon. G. J. Anderson, Minister of Marine, Wellington.

TABLES.

STATEMENT OF REVENUE FOR THE YEAR ENDED 31ST MARCH, 1926, IN COMPARISON WITH THE PREVIOUS YEAR.

Item.	1924–25.	1925–26.
	£ s. d.	£ s. d.
Shipping Branch—		
Light dues	80,467 6 2	82,875 6 3
Engagement and discharge of seamen, &c.	3,420 14 0	3,664 15 3
Survey of ships	5,010 0 4	6,137 16 11
Examination fees	417 5 0	429 10 0
Miscellaneous receipts	1,175 6 3	823 14 3
Harbours—		
Pilotage, port charges, &c.	842 18 7	870 11 8
Foreshore revenue	4,393 19 1	5,704 2 4
Inspection of machinery—		
Inspection fees	17,256 2 10	18,001 19 4
Examination fees	732 18 0	657 5 0
Miscellaneous receipts	..	3 9 6
Fisheries—		
Net profit from sale of oysters	2,139 10 1	2,517 3 11
Fishing-boat license fees, &c.	365 4 9	505 2 6
Rental of toheroa areas	300 0 0	300 0 0
Sale of trout-ova, &c.	112 9 9	70 2 10
Government steamers—		
Fares, freights, &c.	4,793 0 10	3,185 17 8
Ross Sea Dependency—		
Royalties on whale-oil	200 0 0	1,720 12 6
Miscellaneous revenue—		
Sale of charts, books, and forms	1,263 2 6	1,447 1 4
Sale of "New Zealand Nautical Almanac"	129 13 3	146 16 4
Rents of buildings and reserves	235 9 8	207 17 8
Miscellaneous receipts	67 16 1	16 6 6
Totals, general accounts	123,322 17 2	129,285 11 9
Westport Harbour Account	50,378 11 0	57,539 12 11
Totals	£173,701 8 2	£186,825 4 8

N.B.—The figures quoted for 1925–26 are subject to audit.

SUMMARY OF EXPENDITURE FOR THE YEAR ENDED 31ST MARCH, 1926, IN COMPARISON WITH THE PREVIOUS YEAR.

Branch.	1924–25.	1925–26.
	£ s. d.	£ s. d.
Head Office	9,292 7 4	9,626 13 9
Harbours	3,921 2 11	4,295 13 3
Lighthouses	26,823 6 5	24,220 2 2
Meteorological	5,863 19 2	6,124 12 6
Mercantile marine	17,896 11 0	24,626 5 5
Inspection of machinery	26,124 16 11	20,793 2 9
Fisheries	2,890 13 10	3,179 2 6
Government steamers	21,837 5 4	24,309 19 11
Miscellaneous services	1,734 3 1	2,189 17 10
Grants and subsidies	150 0 0	540 0 0
Depreciation	8,844 18 9	8,862 19 6
Interest on capital	17,737 15 7	17,811 11 0
Totals, general accounts	143,117 0 4	146,580 0 7
Westport Harbour Account	44,666 14 0	51,909 4 11
Totals	£187,783 14 4	198,489 5 6

N.B.—The figures quoted for 1925–26 are subject to audit.

TABLE SHOWING THE NUMBER OF SEAMEN ENGAGED AND DISCHARGED IN NEW ZEALAND, AND THE FEES RECEIVED, FOR THE YEAR ENDED 31ST MARCH, 1926.

Port.	Engagements and Discharges, Foreign and Intercolonial Trade.				Engagements and Discharges, Home Trade.				Total Engagements.		Total Discharges.		Grand Totals.	
	Engagements.		Discharges.		Engagements.		Discharges.							
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
Auckland	3,556	346 1 0	3,607	348 10 0	2,967	259 13 0	3,001	256 13 0	6,523	605 14 0	6,608	605 3 0	13,131	1,210 17 0
Dunedin and Port Chalmers ..	1,109	106 15 0	1,255	119 17 0	579	51 15 0	489	44 5 0	1,688	158 10 0	1,744	164 2 0	3,432	322 12 0
Gisborne	8	0 16 0	8	0 18 0	97	7 4 0	128	8 6 0	105	8 0 0	136	9 4 0	241	17 4 0
Greymouth	59	5 4 0	60	5 4 0	32	2 10 0	38	3 2 0	91	7 14 0	98	8 6 0	189	16 0 0
Hokianga	8	0 16 0	2	0 4 0	2	0 4 0	..	..	10	1 0 0	2	0 4 0	12	1 4 0
Hokitika	..	..	..	..	..	..	8	0 4 0	..	..	8	0 4 0	8	0 4 0
Invercargill	115	11 10 0	104	9 18 0	43	3 12 0	40	3 6 0	158	15 2 0	144	13 4 0	302	28 6 0
Kaipara	..	..	..	..	7	0 6 0	..	..	7	0 6 0	..	..	7	0 6 0
Lyttelton	895	86 4 0	723	71 16 0	661	55 12 0	693	57 11 0	1,556	141 16 0	1,416	129 7 0	2,972	271 3 0
Napier	36	2 16 0	53	4 10 0	372	27 7 0	410	28 18 0	408	30 3 0	463	33 8 0	871	63 11 0
Nelson	8	0 16 0	8	0 16 0	761	60 0 0	739	57 12 0	769	60 16 0	747	58 8 0	1,516	119 4 0
New Plymouth	20	2 0 0	19	1 8 0	33	2 6 0	58	4 2 0	53	4 6 0	77	5 10 0	130	9 16 0
Oamaru	3	0 4 0	6	0 10 0	1	0 2 0	1	0 2 0	4	0 6 0	7	0 12 0	11	0 18 0
Onehunga	..	..	..	..	420	32 19 0	408	31 16 0	420	32 19 0	408	31 16 0	828	64 15 0
Patea	..	..	..	..	25	1 2 0	23	1 0 0	25	1 2 0	23	1 0 0	48	2 2 0
Picton	1	0 2 0	..	..	14	1 8 0	8	0 16 0	15	1 10 0	8	0 16 0	23	2 6 0
Tauranga	..	..	2	0 4 6	..	..	..	..	..	..	2	0 4 6	2	0 4 6
Thames	13	1 13 0	9	1 5 0	..	..	..	..	13	1 13 0	9	1 5 0	22	2 18 0
Timaru	25	2 10 0	10	1 0 0	40	2 9 0	37	3 3 0	65	4 19 0	47	4 3 0	112	9 2 0
Wairau	..	..	..	..	25	1 2 0	11	0 6 0	25	1 2 0	11	0 6 0	36	1 8 0
Wanganui	27	2 12 0	25	2 8 3	80	5 18 0	86	6 19 3	107	8 10 0	111	9 7 6	218	17 17 6
Wellington	4,488	417 1 0	4,445	411 18 0	2,717	230 10 0	2,794	234 16 0	7,205	647 11 0	7,239	646 14 0	14,444	1,294 5 0
Westport	16	1 10 0	13	1 4 0	20	2 0 0	24	2 2 0	36	3 10 0	37	3 6 0	73	6 16 0
Whangarei	2	0 4 0	3	0 6 0	..	..	..	..	2	0 4 0	3	0 6 0	5	0 10 0
Totals	10,389	988 14 0	10,352	981 16 9	8,896	747 19 0	8,996	744 19 3	19,285	1,736 13 0	19,348	1,726 16 0	38,733	3,463 9 0

TABLE SHOWING TOTAL COST OF MAINTENANCE (EXCLUDING INTEREST ON CAPITAL AND DEPRECIATION) OF NEW ZEALAND COASTAL LIGHTHOUSES FOR THE YEAR ENDED 31ST MARCH, 1926.

Name of Lighthouse.	Salaries and Wages.	Oil consumed.		Stores and Maintenance.	Totals.
		Gallons.	Value.		
	£ s. d.		£ s. d.	£ s. d.	£ s. d.
Akaroa Head	487 15 5	692	49 0 4	98 16 8	635 12 5
Brothers	818 16 7	766	54 5 2	208 6 8	1,081 8 5
Cape Brett	730 4 3	720	51 0 0	142 2 4	923 6 7
Cape Campbell	527 9 5	682	48 6 2	200 4 9	776 0 4
Cape Egmont	467 1 8	659	46 13 7	120 6 3	634 1 6
Cape Foulwind	470 16 9	736	52 2 8	63 6 2	586 5 7
Cape Maria	776 10 2	813	57 11 9	241 18 6	1,076 0 5
Cape Palliser	526 11 6	595	42 2 11	101 11 8	670 6 1
Cape Saunders	475 8 4	627	44 8 3	44 14 5	564 11 0
Castlepoint	514 18 9	632	44 15 4	164 12 8	724 6 9
Centre Island	631 7 8	663	46 19 3	130 18 3	809 5 2
Cuvier Island	769 10 6	823	58 5 11	219 1 1	1,046 17 6
Dog Island	764 11 9	631	62 3 11	140 6 6	967 2 2
East Cape	522 2 1	758	53 13 10	163 17 3	739 13 2
Farewell Spit	780 19 2	762	54 19 6	154 14 11	990 13 7
French Pass	283 1 8	206	19 3 10	44 18 5	347 3 11
Godley Head	506 2 10	744	52 14 0	305 10 4	864 7 2
Jack's Point	271 6 8	310	21 19 2	109 9 2	402 15 0
Kahurangi Point	577 12 8	600	42 10 0	267 12 0	887 14 8
Kaipara Heads	816 19 11	952	67 8 8	293 12 1	1,178 0 8
Manukau Heads	489 2 0	640	45 6 8	156 16 5	691 5 1
Moeraki	477 1 8	622	44 1 2	63 11 0	584 13 10
Moko Hinou	746 16 7	725	51 7 1	303 14 9	1,101 18 5
Nugget Point	655 3 3	717	50 15 9	87 12 5	793 11 5
Pencarrow Head	593 18 9	761	53 18 1	293 11 7	941 8 5
Portland Island	717 17 7	819	58 0 3	216 3 9	992 1 7
Puysegur Point	719 8 9	756	53 11 0	179 4 2	952 3 11
Stephens Island	773 7 0	774	54 16 6	249 5 3	1,077 8 9
Tiritiri*	85 11 9	..	..	26 18 3	112 10 0
Tory Channel	100 0 0	184	22 4 8	7 6 7	129 11 3
Waipapapa Point	497 8 4	735	52 1 3	63 8 8	612 18 3
Automatic lights	..	..	..	443 5 0	443 5 0
Totals	17,575 3 5	..	1,456 6 8	5,306 17 11	24,338 8 0

*Converted to automatic on 7th May, 1925.

RETURN OF ESTATES OF DECEASED SEAMEN RECEIVED AND ADMINISTERED IN PURSUANCE OF THE PROVISIONS OF THE SHIPPING AND SEAMEN ACT, 1908, DURING THE YEAR ENDED 31ST MARCH, 1926.

Name of Seaman.	Balance to Credit of the Estate on 31st March, 1925.	Amount received.	Amount paid.	Balance to Credit of the Estate on 31st March, 1926.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Anderson, E.	5 5 2	..	5 5 2	..
Andrews, C.	..	5 19 6	5 19 6	..
Beere, J.	..	14 8 4	14 8 4	..
Calland, J.	3 15 3	25 11 3	29 6 6	..
Carney, J.	..	33 16 11	33 16 11	..
Corbett, W.	..	9 5 10	..	9 5 10
Croucher, B. G.	..	8 11 3	8 11 3	..
Hamilton, W. T. W.	..	9 3 7	..	9 3 7
Hollam, A.	..	8 17 0	..	8 17 0
Kerfontain, P. M.	4 12 10	..	4 12 10	..
King, C.	..	8 5 2	..	8 5 2
Knox, R.	..	21 0 0	21 0 0	..
Laird, J.	22 0 11	92 2 4	114 3 3	..
Larsen, A.	7 16 0	..	7 16 0	..
Larseni, C.	21 16 7	..	21 16 7	..
Lewis, A.	..	20 14 3	..	20 14 3
Linddahl, J.	5 2 5	..	5 2 5	..
Linton, A.	..	14 3 2	14 3 2	..
Marrack, R.	..	5 1 8	5 1 8	..
Mitchell, G.	..	3 15 2	3 15 2	..
Mitchelson, F.	4 14 11	..	4 14 11	..
Pratt, T.	..	9 17 1	..	9 17 1
Ravenswood, R.	..	5 4 6	..	5 4 6
Roiall, E. M.	..	23 19 1	23 19 1	..
Roiall, M.	11 4 2	..	11 4 2	..
Saunders, F.	..	6 10 3	..	6 10 3
Skeddon, J. T.	..	28 10 11	28 10 11	..
Skilton, W. J.	..	16 6 1	16 6 1	..
Staw, C.	7 1 4	..	7 1 4	..
Victor, C.	17 8 4	..	17 8 4	..
Totals	110 17 11	371 3 4	404 3 7	77 17 8

TABLE SHOWING THE NUMBER OF STEAM TRAWLERS, OIL-ENGINE TRAWLERS, AND OTHER VESSELS EMPLOYED IN LINE AND SET-NET FISHING, WITH THE NUMBER OF FISHERMEN EMPLOYED AND APPROXIMATELY THE TOTAL NUMBER OF PERSONS ENGAGED IN THE FISHING INDUSTRY, AT EACH PORT, FOR THE YEAR ENDED 31ST MARCH, 1926.

(Compiled from the returns given in the District Inspectors' reports.)

Name of Port.	Steam Trawlers.	Oil-engine Vessels.	Danish-seining Vessels.	Line and Set-net Fishing Vessels.	Number of Persons employed.		
					Fishermen.	Others.	Total.
Hokianga	..	..	..	15	22	..	22
Russell	..	..	..	56	174	40	214
Kaipara	..	..	..	34	50	10	60
Whangarei	..	..	..	15	18	8	26
Auckland (including Thames, Coromandel, and Manukau)	5	..	23	270	530	350	880
Tauranga	..	..	..	36	30	6	36
Gisborne	1	..	..	10	32	6	38
Napier	30	..	..	85	167	20	187
New Plymouth	1	..	..	19	45	25	70
Wanganui	..	..	..	10	4	..	4
Foxton	..	..	..	23	49	5	54
Wellington	1	..	..	105	180	115	295
Picton	1	..	..	42	78	..	78
Blenheim	..	13	..	..	20	2	22
Nelson	..	3	..	78	125	8	133
Westport	1	..	..	16	24	6	30
Greymouth	..	..	..	12	6	2	8
Hokitika	..	..	..	2	1	6	7
Kaikoura	..	..	..	18	20	2	22
Kaiapoi	..	..	..	16	16	..	16
Akaroa	..	..	..	15	24	..	24
Lyttelton	1	3	..	92	140	..	140
Southbridge (Lake Ellesmere)	..	..	..	20	40	..	40
Timaru	..	24	..	..	25	8	33
Oamaru	..	..	..	9	15	..	15
Moeraki	..	..	..	27	30	..	30
Otago District	5	9	..	93	186	126	312
Invercargill	..	..	..	34	40	15	55
Bluff	..	..	..	51	124	20	144
Stewart Island	..	..	..	35	91	11	102
Chatham Islands	..	..	..	..	..	..	..
Totals	46	52	23	1,238	2,306	791	3,097

TABLE SHOWING NUMBER AND SPECIES OF WHALES TAKEN ON NEW ZEALAND COAST, AND VALUE OF PRODUCTS.

Whaling-station.	Number of Whales taken.	Species.	Yield of Oil.	Quantity of Bonedust or Fertilizer.	Total Value.
			Tons.	Tons.	£
Whangamumu	48	Humpback	250	40	6,400
Marlborough Sounds (Mr. J. A. Perano's factory)	26	Humpback	112	..	2,240
Marlborough Sounds (Mr. E. C. Perano's factory)	22	Humpback	120	..	2,000
Totals	96	..	482	40	10,640

TABLE SHOWING THE VARIOUS KINDS OF FISH CAUGHT AND APPROXIMATELY THE TOTAL QUANTITIES AND VALUE OF FISH LANDED AT THE DIFFERENT FISHING-PORTS FOR THE YEAR ENDED 31ST MARCH, 1926.

(Compiled from the figures given in the District Inspectors' reports for the year.)

Name of Port.	Principal Kinds of Fish caught.	Quantity.	Total Value. £ s. d.
Hokianga ..	Snapper, mullet, kahawai, flounder	No returns supplied	[redacted]
Russell	Crayfish, mullet, hapuku, snapper, flounder, kahawai, kingfish, maumau	15,800 cwt.	9,600 0 0
Whangarei ..	Snapper, mullet, flounder, hapuku	2,348 cwt.	4,749 1 8
Kaipara ..	Snapper, flounder, mullet, kahawai, trevally, gurnard ..	4,300 cwt.	9,300 0 0
	Toheroa	980 cases	1,715 0 0
Auckland District	Snapper, tarakihi, trevally, flounder, sole, gurnard, hapuku, john-dory, kingfish, moki, rock-cod, kahawai, butterfish, crayfish, barracouta, mullet, garfish, mussels	159,588 cwt.	147,429 0 0
	Crayfish	2,220 cases	3,050 0 0
	Mussels	1,600 sacks	500 0 0
Tauranga ..	Snapper, hapuku, trevally, kahawai, rock-cod, garfish, moki, flounder, crayfish	3,000 cwt.	5,599 0 0
Gisborne ..	Tarakihi, gurnard, snapper, flounder, soles, kahawai, hapuku, crayfish	2,514 cwt.	3,752 0 0
Napier	Tarakihi, snapper, moki, kahawai, gurnard, trevally, hapuku, southern kingfish, barracouta, john-dory, flounder, sole, brill	24,224 cwt.	32,580 13 0
	Crayfish	780 sacks	1,462 10 0
	Whitebait	3,200 lb.	400 0 0
	Shell-fish (pipis, cockles, mussels)	310 sacks	193 15 0
New Plymouth ..	Snapper, hapuku, kingfish, tarakihi, kahawai, cod, crayfish, gurnard	1,200 cwt.	1,680 0 0
Wanganui ..	Blue-cod, hapuku, flounder, snapper	293 cwt.	463 14 8
Foxton	Flounder, snapper, hapuku, kahawai, whitebait	500 cwt.	1,600 0 0
Wellington ..	Tarakihi, gurnard, flounder, sole, snapper, ling, warehou, hapuku, moki, butterfish, blue cod, southern kingfish	70,662 cwt.	109,307 0 0
Picton	Hapuku, moki, butterfish, garfish, crayfish, blue cod ..	6,200 cwt.	9,300 0 0
Blenheim ..	Red cod, sole, flounder, ling, snapper, moki, hapuku gurnard, tarakihi, mackerel, butterfish, crayfish	2,000 cwt.	3,750 0 0
Nelson	Snapper, flounder, gurnard, bream, hapuku, cod, crayfish, barracouta	1,400 cwt.	1,517 8 0
Westport ..	Red cod, crayfish, flounder, groper, gurnard, hapuku, kahawai, ling, moki, snapper, sole, turbot, whitebait	820 cwt.	3,309 10 0
Greymouth ..	Flounder, sole, cod, groper, snapper, whitebait, herring ..	30 cwt.	168 0 0
	Whitebait	24,000 lb.	3,000 0 0
Hokitika ..	Groper, snapper, flounder, herring, kahawai	50 cwt.	100 0 0
	Whitebait	94,595 lb.	8,904 7 6
Kaikoura ..	Groper, ling, trumpeter, southern kingfish, butterfish, terekihi, moki, crayfish	2,319 cwt.	4,200 0 0
Kaiapoi ..	Whitebait, kahawai, flounder	234 cwt.	980 0 0
Akaroa	Groper, ling, conger eel, flounder, sole, brill, blue and red cod, crayfish, barracouta, kingfish, kahawai, moki, butterfish, &c.	1,200 cwt.	1,900 0 0
Lyttelton ..	Groper, barracouta, red cod, ling, flounder, sole, gurnard, brill	12,000 cwt.	18,000 0 0
Southbridge (Lake Ellesmere)	Flounder, herring	500 cwt.	2,000 0 0
Timaru	Flounder, sole, brill, groper, ling, red cod, gurnard, kingfish, barracouta	4,400 cwt.	6,600 0 0
Oamaru.. ..	Groper, red cod, blue cod, moki, barracouta, ling	2,174 cwt.	2,966 0 0
Moeraki.. ..	Groper, red cod, blue cod, moki, crayfish, barracouta, ling ..	3,065 cwt.	5,038 0 0
Otago District ..	Groper, ling, red cod, barracouta, kingfish, blue cod, moki, trumpeter, terakihi, trevally, mullet, garfish, kahawai, gurnard, kelpfish, sole, flounder, brill, skate	43,540 cwt.	45,717 0 0
Invercargill ..	Blue and red cod, groper, moki, flounder, kingfish, mullet, ling, sole, crayfish, barracouta, whitebait	1,750 cwt.	4,300 0 0
Bluff	Groper, blue cod, flounder	9,686 cwt.	..
	Oysters	1,562,321 dozen	20,893 0 0
Stewart Island ..	Blue cod, groper, trumpeter, moki	7,639 cwt.	13,480 0 0
Chatham Islands	Blue cod, hapuku, trumpeter	4,775 cwt.	12,825 0 0
	Totals	388,211 cwt.	502,329 19 10

TABLE SHOWING THE NUMBER OF SACKS AND VALUE OF THE OYSTERS DISPOSED OF IN THE DOMINION AND EXPORTED FOR THE YEAR ENDED 31ST DECEMBER, 1925.

Locality.	Disposed of in Dominion.	Exported.		Total Number.		Total Value (Wholesale). £ s. d.
Dredge-oysters.	Sacks.	Sacks.	Cases.	Sacks.	Cases.	
Foveaux Strait	23,870	1,987	89	25,857	89	17,576 0 0
Rock-oysters.						
Bay of Islands	3,418	..	..	..	..	..
Whangarei	324	..	..	..	..	..
Kaipara	237	..	..	..	..	..
Hauraki Gulf	3,131	..	..	8,281	..	10,205 12 0
Coromandel	575	..	..	..	..	..
Great Barrier	596	..	..	..	..	..
Totals	32,151	1,987	89	34,138	89	27,781 12 0

TABLE SHOWING THE TOTAL QUANTITY AND VALUE OF FISH IMPORTED INTO AND EXPORTED FROM NEW ZEALAND DURING THE YEAR ENDED 31ST DECEMBER, 1925.

Fish imported.

Description of Fish.	Quantity.	Value.	Description of Fish.	Quantity.	Value.
		£			£
Anchovies, salted (in bulk) ..	6 cwt.	23	Fish, preserved in tins ..	4,358,719 lb.	180,390
Oysters, fresh	..	..	Fish, frozen, smoked, dried, pickled, and salted ..	1,445 cwt.	41,882

Fish exported.

Description of Fish.	New Zealand Produce.		Not New Zealand Produce.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Anchovies, salted (in bulk)	..	..	..	..
Oysters, fresh	149,821 doz.	1,474	..	..
Fish, preserved in tins	118,459 lb.	16,999	81,950 lb.	3,235
Fish, frozen, smoked, dried, pickled, and salted ..	14,874 cwt.	38,424	18 cwt.	65

RETURN SHOWING AMOUNTS RECEIVED PRIOR TO 1ST APRIL, 1925, STANDING TO CREDIT OF ESTATES OF DECEASED SEAMEN, AND FOR WHICH CLAIMS HAVE NOT BEEN PROVED.

	£	s.	d.
Alexander, S., late trimmer, s.s. "Moeraki"	0	9	2
Carroll, D., late A.B., s.s. "Joan Craig" ..	4	14	0
Cliffe, F., late A.B., s.s. "Storm" ..	5	10	6
Cossar, B., late cook, s.s. "Kanna" ..	3	8	5
Darling, J., late deckhand, s.s. "Aotea" ..	1	8	8
Engdahl, A., late A. B., barquentine "Lyman D. Foster"	13	16	10
Fowler, C., late A.B., s.s. "Kokiri" ..	5	18	4
Hogg, W., late cook, barquentine "Lyman D. Foster"	19	18	7
Lundgren, V., late A.B., barquentine "Lyman D. Foster"	13	16	10
Manchin, J., late fireman, s.s. "Maori" ..	26	12	9
Millett, D., late A.B., barquentine "Lyman D. Foster"	17	17	2
Morley, J., late fireman, s.s. "Waimarino" ..	1	11	10
McIntyre, A., late A.B., barquentine "Lyman D. Foster"	11	8	7
Nelson, R., late fireman, s.s. "Ripple" ..	1	1	7
Peterson, F., late A.B., s.s. "Tiroa" ..	32	1	7
Riley, J., late fireman, s.s. "Poherua" ..	8	9	0
Wold, H., late A.B., barquentine "Lyman D. Foster"	10	5	4
	£178	9	2

SUMMARY OF EXAMINATIONS FOR CERTIFICATES OF COMPETENCY AS MASTER, MATE, OR ENGINEER

Class of Certificate.	Auckland.			Wellington.			Lyttelton.			Dunedin.			Other Places.			Totals.		
	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign-going masters and mates	1	10	11	16	31	47	9	14	23	..	..	..	..	..	..	26	55	81
Voluntary examination in compass deviation	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Home-trade masters and mates	4	8	12	5	13	18	1	..	1	..	..	..	..	..	..	10	21	31
Masters of river steamers ..	4	7	11	2	1	3	..	2	2	..	..	..	..	..	..	6	10	16
Master, 25-ton cargo-vessel	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	2	2	4
Seagoing engineers (steam) ..	25	26	51	8	16	24	17	19	36	16	16	32	25	19	44	91	96	187
River-steamer engineers ..	3	2	5	1	..	1	..	..	..	..	..	..	6	2	8	10	4	14
Seagoing engineers (oil) ..	19	5	24	..	..	..	2	1	3	..	..	..	12	4	16	33	10	43
River engineers (oil) ..	15	2	17	2	..	2	1	..	1	1	..	1	34	7	41	53	9	62
Totals ..	73	62	135	35	61	96	30	36	66	17	16	33	77	32	109	232	207	439

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE ISSUED IN NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1926. (RIVER-LIMIT VESSELS NOT INCLUDED.)

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.			
							Able Seamen.	Firemen.	Trimmers	Greasers.
Akaroa	24	28	99	Compound ..	Screw ..	Home trade ..	1	1	..	..
Alexander ..	185	72	334	Compound ..	Twin screw	Home trade ..	4	3	..	..
Alma	21	45	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Altair	30	48	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Alwin G. ..	4	20	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Apanui	135	28	222	Triple expansion	Screw ..	Home trade ..	4	2	..	..
*Arahura ..	771	145	1,697	Triple expansion	Twin screw	Home trade ..	7	6	3	3
Arapawa ..	128	47	275	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Awahou	151	74	280	Compound ..	Twin screw	Home trade ..	4	3	..	..
Awarua (Fish V) ..	87	50	163	Compound ..	Twin screw	Foreign trade	..	..	..	..
Baroona ..	54	24	149	Compound ..	Screw ..	Home trade ..	2	2	..	..
Breeze	286	84	355	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Calm	523	550	680	Triple expansion	Screw ..	Home trade ..	5	3	..	..
Canopus ..	835	250	1,056	Triple expansion	Screw ..	Home trade ..	6	3	2	3
Clansman ..	338	99	578	Compound ..	Screw ..	Home trade ..	5	3	..	..
Claymore ..	119	54	420	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Corinna	791	141	802	Compound ..	Screw ..	Home trade ..	6	3	2	3
Coronation ..	59	100	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
Countess ..	57	28	180	Compound ..	Screw ..	Home trade ..	2	2	..	..
Cygnet	70	43	200	Compound ..	Screw ..	Home trade ..	2	2	..	..
Daphne	100	55	197	Compound ..	Screw ..	Home trade ..	4	2	..	..
Dominion ..	5	30	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Dredge 350 ..	488	117	738	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Dunedin ..	125	500	1,097	Triple expansion	Twin screw	Home trade ..	4	3	2	3
Echo	100	103	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
†Elsie	24	30	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Excelsior ..	6	46	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Fairburn ..	60	90	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Fanny	55	30	159	Compound ..	Screw ..	Home trade ..	2	2	..	..
Flora	818	180	840	Compound ..	Screw ..	Foreign trade	6	3	2	3
Futurist ..	90	385	463	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Gael	55	20	86	Compound ..	Screw ..	Home trade ..	2	1	..	..
Gale	287	450	316	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Glenelg	156	75	286	Compound ..	Screw ..	Home trade ..	4	3	..	..
Haere	59	60	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Hananui II ..	44	58	279	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Hawera ..	92	31	193	Compound ..	Screw ..	Home trade ..	2	2	..	..
Herekino ..	185	76	441	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Hikurangi ..	163	64	266	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Hinemoa ..	282	150	527	Compound ..	Screw ..	Foreign trade	5	3	..	..
Holmdale ..	295	99	500	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Huanui	56	60	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
Huia	166	160	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
Inaha	116	300	..	Motor ..	Twin screw	Home trade ..	4	..	..	..
Invercargill ..	123	41	228	Compound ..	Screw ..	Home trade ..	4	2	..	..
Isabella de Fraine	76	90	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
James C. ..	14	100	60	Compound ..	Screw ..	Home trade ..	1	1	..	..
*James Cosgrove ..	114	61	480	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Jane Gifford ..	6	20	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
*John	134	90	192	Compound ..	Screw ..	Home trade ..	4	2	..	..
John Anderson ..	34	25	80	Compound ..	Screw ..	Home trade ..	2	1	..	..
Kahika	528	103	642	Triple expansion	Screw ..	Foreign trade	5	3	..	..
*Kaiaia	24	30	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Kaiapoi ..	1,246	201	1,009	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Kaikorai ..	1,860	430	1,662	Triple expansion	Screw ..	Foreign trade	8	6	3	3
*Kaimai	784	126	684	Triple expansion	Screw ..	Home trade ..	6	3	..	..
*Kaimanawa ..	1,247	213	1,269	Triple expansion	Screw ..	Foreign trade	7	6	3	3
†Kairanga ..	1,726	148	1,046	Triple expansion	Screw ..	Foreign trade	8	3	2	3
*Kaitangata ..	1,195	200	899	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Kaitoa	141	65	298	Compound ..	Twin screw	Home trade ..	4	3	..	..
Kaitoke	1,862	434	1,574	Triple expansion	Screw ..	Foreign trade	8	6	3	3
*Kaituna ..	1,208	200	993	Triple expansion	Twin screw	Foreign trade	7	3	2	3
Kaiwarra ..	1,847	2,000	1,759	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Kakapo ..	949	150	710	Triple expansion	Screw ..	Foreign trade	6	3	..	..
Kamo	725	159	747	Triple expansion	Screw ..	Foreign trade	6	3	..	..
Kamona ..	903	117	722	Triple expansion	Screw ..	Foreign trade	6	3	..	..
Kapiti	114	35	217	Compound ..	Screw ..	Home trade ..	4	2	..	..
Kapua	6	31	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Kapuni	97	30	182	Compound ..	Screw ..	Home trade ..	2	2	..	..
*Karori	1,194	147	873	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Katie S.	6	12	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	
Katoa	1,382	335	1,617	Triple expansion	Screw ..	Home trade ..	7	6	3	3
*Kauri	1,830	304	1,224	Triple expansion	Screw ..	Foreign trade	8	3	2	3

* Surveyed twice. † Surveyed three times.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.			
							Able Seamen.	Firemen.	Trimmers.	Greasers.
Kawatiri ..	1,856	429	1,554	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Kawau	53	20	93	Compound ..	Twin screw	Home trade ..	2	1	..	..
Kekeno	19	50	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Kennedy ..	131	38	156	Compound ..	Twin screw	Home trade ..	4	2	..	..
Kiritona ..	75	150	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
*Kittawa ..	708	120	729	Triple expansion	Screw ..	Foreign trade	6	3	..	..
Koau	77	170	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Kohi	20	90	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Kokiri	713	135	800	Triple expansion	Screw ..	Foreign trade	6	3	2	3
Komata.. ..	1,294	260	1,214	Triple expansion	Screw ..	Home trade ..	8	3	2	3
Koromiko ..	1,541	313	1,368	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Korua	186	63	322	Compound ..	Screw ..	Home trade ..	4	3	..	..
*Kotare	83	20	118	Compound ..	Screw ..	Home trade ..	2	2	..	..
Koutunui ..	98	26	153	Compound ..	Twin screw	Home trade ..	2	2	..	..
Kurow	1,540	333	1,438	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Lady Eva ..	3	120	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Lyttelton ..	24	108	263	Compound ..	Paddle ..	Home trade ..	1	3	..	..
Maggie	6	8	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Maheno	3,318	600	6,188	Turbine ..	Twin screw	Foreign trade	12	18	9	3
Mahurangi ..	95	80	243	Compound ..	Screw ..	Home trade ..	2	2	..	..
Mako	247	65	455	Triple expansion	Screw ..	Home trade ..	5	3	..	..
Malanta ..	186	70	247	Compound ..	Screw ..	Foreign trade	4	2	..	..
Manaia	630	104	968	Triple expansion	Twin screw	Home trade ..	7	3	2	3
*Manuka.. ..	2,813	357	3,182	Triple expansion	Twin screw	Foreign trade	11	9	6	3
Maori	1,567	5,600	5,859	Turbine ..	Triple screw	Home trade ..	9	15	9	3
Marama ..	3,992	1,500	4,805	Triple expansion	Screw ..	Home trade ..	13	12	6	3
Mararoa ..	1,329	530	3,231	Triple expansion	Screw ..	Home trade ..	8	9	6	3
Matangi ..	635	233	986	Triple expansion	Twin screw	Home trade ..	7	3	2	3
Miro	29	60	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Moeraki.. ..	2,735	357	3,574	Triple expansion	Twin screw	Foreign trade	11	9	6	3
Motu	109	160	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
Muriel	22	18	134	Compound ..	Screw ..	Home trade ..	1	2	..	..
Murihiku ..	369	70	520	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Navua	1,773	220	1,949	Triple expansion	Twin screw	Home trade ..	9	6	3	3
Ngahau	21	80	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Ngaio	725	130	965	Triple expansion	Screw ..	Home trade ..	7	3	2	3
Ngakuta ..	944	248	1,119	Triple expansion	Screw ..	Foreign trade	6	3	2	3
Ngapuhi ..	311	160	928	Triple expansion	Twin screw	Home trade ..	5	3	2	3
Ngatiawa ..	220	55	409	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Nikau	98	55	305	Compound ..	Twin screw	Home trade ..	2	3	..	..
Nora Niven ..	66	40	187	Triple expansion	Screw ..	Home trade ..	2	2	..	..
Nor' West ..	6	15	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Oban	21	20	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Ohinemuri ..	52	30	124	Compound ..	Screw ..	Home trade ..	2	2	..	..
Opawa	54	110	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
Opihi	638	116	601	Triple expansion	Screw ..	Home trade ..	6	3	..	..
Opua	288	80	337	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Orepuki.. ..	224	78	344	Compound ..	Screw ..	Home trade ..	4	3	..	..
Oreti	72	30	182	Compound ..	Screw ..	Home trade ..	2	2	..	..
Orewa (F.V.) ..	37	17		Compound ..	Screw ..	Home trade ..	..	..	..	..
Otima i.. ..	111	160	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
*Pakura	304	115	534	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Parero	251	85	408	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Paroto	48	120	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Pearl Kasper ..	16	52	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Pegasus.. ..	10	30	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Plucky	29	40	260	Compound ..	Screw ..	Home trade ..	1	3	..	..
Pono	30	52	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Progress ..	181	28	192	Compound ..	Screw ..	Home trade ..	4	2	..	..
Putiki	168	60	325	Compound ..	Screw ..	Home trade ..	4	3	..	..
Rarawa.. ..	460	140	1,207	Triple expansion	Twin screw	Home trade ..	6	3	2	3
Regulus.. ..	232	150	511	Compound ..	Twin screw	Home trade ..	4	3	..	..
Rimu	169	95	528	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Ronaki	129	270	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
Ruru	62	50	166	Compound ..	Screw ..	Home trade ..	2	2	..	..
Scot	16	16	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Serfib	82	58	340	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Southern Cross ..	403	117	445	Triple expansion	Twin screw	Foreign trade	6	3	..	..
Storm	371	94	523	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Te Aroha ..	56	125	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Te Awhina ..	87	99	557	Triple expansion	Twin screw	Home trade ..	2	3	..	..
Tees	247	78	364	Triple expansion	Screw ..	Foreign trade	5	3	..	..
*Terawhiti ..	102	99	609	Triple expansion	Screw ..	Home trade ..	4	3	..	..
The Portland ..	39	60	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Theresa Ward ..	9	95	482	Triple expansion	Screw ..	Home trade ..	1	3	..	..

* Surveyed twice.

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

Name of Vessel.	Tons Register.	Nominal Horse-power of Steam-engines and Brake Horse-power of Oil-engines.	Indicated Horse-power of Steam-engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Minimum Number of following Classes of Crew Law requires to be carried.			
							Able Seamen.	Firemen.	Trimmers.	Greasers.
Thomas Currell ..	84	75	430	Triple expansion	Screw ..	Home trade	2	3	..	..
Tiroa	94	31	187	Compound ..	Screw ..	Home trade ..	2	2	..	..
*Titoki	247	86	556	Triple expansion	Twin screw	Home trade ..	4	3	..	..
†Tofua	2,634	355	2,797	Triple expansion	Twin screw	Home trade ..	11	9	3	3
Torea	28	60	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Tuahine.. ..	4	14	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Tuatea	58	28	149	Compound ..	Screw ..	Home trade ..	2	2	..	..
Tuhoe	98	120	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Wahine	1,798	720	7,938	Turbine ..	Triple screw	Home trade ..	9	18	12	3
Waihora ..	2,993	410	1,791	Triple expansion	Screw ..	Foreign trade	10	6	3	3
Waikonini ..	6	60	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
*Waikouaiti ..	2,379	327	1,915	Triple expansion	Screw ..	Foreign trade	9	9	3	3
Waimea.. ..	207	100	439	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Wainui	411	99	714	Compound ..	Screw ..	Home trade ..	6	3	..	..
Waiotahi ..	168	56	340	Compound ..	Twin screw	Home trade ..	4	3	..	..
Waipori.. ..	1,221	180	1,026	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Waipu	76	50	190	Compound ..	Twin screw	Home trade ..	2	2	..	..
Wairau	56	20	107	Compound ..	Screw ..	Home trade ..	2	2	..	..
Wairoa	48	16	70	Compound ..	Screw ..	Home trade ..	2	1	..	..
Waitomo ..	2,719	372	1,525	Triple expansion	Screw ..	Foreign trade	10	6	3	3
Waterlily ..	23	20	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Waverley ..	93	25	119	Compound ..	Twin screw	Home trade ..	2	2	..	..
Westland ..	8	86	400	Compound ..	Paddle ..	Home trade ..	1	3	..	..
Whakariri ..	449	120	642	Compound ..	Twin screw	Home trade ..	5	3	..	..
Whangape ..	1,901	280	1,165	Triple expansion	Screw ..	Foreign trade	8	3	2	3
Will Watch ..	48	45	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
*Wingatui ..	1,344	1,300	1,085	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Wootton ..	90	33	137	Compound ..	Screw ..	Home trade ..	2	2	..	..
Zita	68	170	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..

* Surveyed twice. † Surveyed three times.

RETURN OF SAILING-VESSELS SURVEYED DURING THE YEAR ENDED 31ST MARCH, 1926, WITH PARTICULARS OF TONNAGE, ETC.

(River-limit Vessels not included.)

Name of Vessel.	Tons Register.	Class of Certificate.	Minimum Number of Seamen required by Law to be carried.		
			Able Seamen.	Ordinary Seamen.	Apprentices or Boys.
Alert	98	Home trade	2	1	..
Combine	24	Home trade	1	..	..
Deveron	26	Home trade	1	..	..
Elsie Mary	99	Home trade	2	1	..
Endeavour	54	Foreign trade ..	2	..	..
Ethel Wells	19	Home trade	1	..	..
Herald	73	Home trade	2	1	..
Hero	25	Home trade	1	..	..
Holmwood	696	Foreign trade ..	8	1	1
Huon Belle	25	Home trade	1	..	..
Kitty Fraser	25	Home trade	1	..	..
Moa	99	Home trade	2	1	..
Ngaru	66	Home trade	2	1	..
Owhiti	9	Home trade	1	..	..
Piri	195	Foreign trade ..	4	..	1
Rangi	86	Home trade	2	1	..
Rira	100	Foreign trade ..	4	..	1
Saucy Kate	25	Home trade	1	..	..
Seagull	25	Home trade	1	..	..
Talisman	70	Home trade	2	1	..
Ysabel	148	Foreign trade ..	4	..	1

Return of Wrecks and Casualties to Shipping reported to the Marine Department from the 1st April, 1925, to the 31st March, 1926.

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1925.													
Feb. 17	Aroha, o.e.v., 10 years	..	6	2	18	Nil	Collision ..	Nil	Bay of Islands ..	..	Calm	The Court held that the "Knoxie" was guilty of breach of articles 21 to 24 of regulations preventing collisions at sea, in that, being the overtaking vessel, she should have kept out of the way of the overtaken launch "Aroha," but she went across bow of the "Aroha," with which she was brought into collision. The Court ordered that the master of the "Knoxie" pay £30 towards the costs of the inquiry	Otto R. Newmann.
	Knoxie, o.e.v., 15 years	..	5	2	2	Nil							A. E. Fuller.
Mar. 2	Opawa, motor, 29 years	Ketch ..	54	9	..	General, 40 tons	Engine trouble; £250	Nil	Cook Strait ..	S.W.	9	On passage from Wellington to Blenheim the engine broke down, necessitating vessel being towed to anchorage by the "Echo"	W. McKinnon.
April 3	Glenelg, s.s., 47 years	F. and A.	156	12	..	..	Collision; £75 damage	..	Auckland	Calm	..	Whilst the "Glenelg" was backing out from the wharf she fouled the "Huanui," damaging the latter's mizzen boom but doing no damage to herself	W. J. Paine.
	Huanui, sail, 15 years	Ketch ..	99	3	..	Coal, 32 tons ..							T. C. Thomsen.
„ 3	Kaimai, s.s., 1 year	Schooner	784	25	..	Ballast ..	Bent piston-rod ..	..	Between Wellington and Greymouth	S.S W.	8	The high-pressure piston-rod became bent, but was replaced by a spare one, thus enabling the vessel to proceed on her voyage	A. E. Chrisp.
„ 6	Rimu, sail, 30 years	Ketch ..	21	3	..	Shell sand, 80 tons	Stranded; £15 damage	..	Auckland	S.	Strong	While riding an anchor in Kirita Bay the anchor-chain parted, causing the vessel to go ashore on the beach	J. McKinnon.
„ 15	Waverley, s.s., 42 years	Steamer	93	10	..	Frozen meat, 50 tons	Struck submerged object; £200 damage	..	Patea	W.	Breeze	Owing to insufficient water when leaving Patea, vessel bumped heavily, lost steerage way, and slewed round, striking a submerged object, starting a leak in the forepeak	W. T. Brigden.
„ 23	Suffolk, s.s., 23 years	Schooner	4,529	104	..	General, 1,700 tons	Grounded, slight damage	..	Otago Harbour ..	Calm	..	Owing to a fog coming down suddenly, shutting out all aids to navigation, the vessel sheered and grounded on port side of channel, which she floated off next day, when it was found that the tips of two propeller-blades were bent slightly	C. Matthews.
„ 28	Alma, aux., 23 years	Schooner	21	5	..	Timber, 47,000 ft.	Stranding; £70 damage	..	Opotiki	Calm	..	After crossing the bar inwards at top of high water vessel stranded in a lagoon, from which she was hove back into the river by the anchors, when it was found that the shoe and one rudder-gudgeon were broken off	E. McGerney.
May 1	Peregrine, s.s., 13 years	Steamer	162	4	100	..	Struck ferry tee; £10 damage	..	Auckland	West	Light ..	The engineer failed to reverse engines for about thirty seconds after orders were given, resulting in vessel striking the ferry tee	M. Scott.
„ 7	Hebburn, s.s., new	Schooner	2,487	31	..	General, 4,000 tons	Fire	..	Lat. 26° 52′ S., long. 131° 45′ W.	E.	5	Smoke was seen issuing from the bunker, and on investigation coal was found to be smouldering alongside the boiler-casing, but was extinguished without damage to ship or cargo	C. G. Neale.
„ 11	Huanui, sail, 15 years	Ketch ..	99	5	..	Benzine, 2,000 cases	Collision; £60 damage	..	Auckland	..	..	When the "Kahu" was berthing she collided with the "Huanui" (which was berthed), breaking the latter's cathead, and damaging bulwark, two stanchions, and covering-board	T. C. Thomsen.
	Kahu, s.s., 41 years	Ketch ..	82	9	..	Fish-brackets, 230							D. Middlemiss.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1925. May 22	Isabella de Faine, o.e.v., 23 years	Schooner	23	7	..	General ..	Tiller badly fractured	..	Off North Cape	N.N.E.	8 to 10	During heavy weather the tiller-band round rudder-head fractured, bringing ship up to the wind and losing mainsail, jib, and few pieces of sheathing forward, necessitating putting into Russell, where repairs were effected, and vessel proceeded on voyage.	James D. Bell.
„ 22	Awahou, s.s., 12 years	Schooner	151	17	1	General, 40 tons	Damaged bulwark; £20 damage	..	Near White Island ..	N.N.E.	Gale ..	Whilst the ship was hove-to a sea broke aboard, bending the starboard bulwark forward inboard	W. S. Clark.
„ 24	Cyrena, s.s., 12 years	Steamer	1,214	47	..	Benzine ..	Stranded ..	..	Wanganui	S.E.	3	The Court held that the ship was in all respects seaworthy and well equipped; that the casualty was not due to any default or incompetence of the master or Harbourmaster; that after the casualty all proper precautions and measures were taken for the ship's safety; and that the casualty was due to a bank in which there was probably a log of wood on which she founded and bumped	Donald R. Paterson.
„ 25	Wainui, s.s., 39 years	Schooner	411	33	18	General, 71 tons	Grounded; no damage	..	Napier	N.E.	Fresh breeze	When leaving Inner Harbour, vessel grounded on a bank near the Iron Pot, but came off in fifty minutes without sustaining damage as far as could be seen, and proceeded on voyage to Auckland via way ports	S. A. Chatfield.
„ 26	Admiral, s.s., 41 years	Cutter ..	29	4	..	Timber, 30 tons	Leaking	..	Pelorus Sound ..	Calm	..	Going at reduced speed intending to use Guard's Pass, but finding it too dark, the vessel's course was altered to pass north of Forsyth Island, but miscalculating distance from island, grazed outer end of reef, starting forefoot and butts in planking and causing leaking	MervynKennedy.
„ 29	Storm, s.s., 5 years	..	371	17	..	General, 400 tons	Grounded, no damage	..	Wanganui River ..	Calm	..	When proceeding slowly up river one hour and a half after high water, vessel, when abreast No. 8 Mitchell's Reach, touched and stuck fast, but floated off on next tide, sustaining no damage	Robin V. Manson.
„ 30	Twilight, o.e.v., 25 years	Ketch ..	5	3	..	Fish	No damage ..	..	Stewart Island ..	S.E.	1	The "Twilight," when leaving the wharf at Half-moon Bay to go to her moorings at Bragg's Bay, ran into the "Dolly" and sank her	Robert Bragg.
	Dolly, o.e.v., 30 years	Ketch ..	5	2	..	Mutton-birds ..	Collision, £60 damage						P. L. Corstensen.
„ 31	Ngakuta, s.s., 12 years	F. and A.	934	26	..	Coal and general, 1,500 tons	Damaged: stop valve		Lat. 26° 53′ S., long. 172° 40′ E.	E.	Light ..	It was discovered that the spindle was fractured at the pin-hole, and was repaired, for which purpose engines were stopped for nine hours, after which vessel proceeded on her voyage	Alfred Reed.

June 5	Orini, o.e.v., 7 years	Schooner	19	6	..	Benzine and kerosene, 85 tons	Fire; total loss ..	..	Cook Strait.. ..	E.	Light ..	The Court held that there was no evidence to show the cause of the fire; that the captain and crew did everything possible to extinguish it, and were justified in leaving the vessel. The Court was further of opinion that the galley should have been placed at a greater distance from the engine-room, and that vessels of this description were unsuitable for carrying inflammable cargo.	G. Roff.
„ 14	Mararoa, s.s., 40 years	Schooner	1,328	65	125	General, 46 tons	Leaking	..	Between Wellington and Lyttelton	S.	Gale ..	On passage to Lyttelton leak developed in stokehold bilge, which on examination proved that a rivet had carried away, but the leak was stopped by a wooden plug being inserted	T. B. Sewell.
„ 14	John, s.s., 26 years	Schooner	134	14	..	..	Stranding ..	..	Pukerua Bay ..	S.	Heavy gale	The Court found that the vessel struck an uncharted rock or submerged object, but in view of the heavy weather at the time the master was justified in seeking shelter, and that the casualty was not due to any negligent act or default on part of master or other officers or crew	J. Hawick.
„ 17	Ruawai, s.s., 9 years	Cutter ..	177	14	34	General, 50 tons	Collision with wharf; £100 damage to wharf	..	Kaipara Harbour ..	Calm	..	When approaching the Raupo Wharf during thick fog the master mistook distance from wharf light and collided with wharf, damaging same to the extent of £100, but vessel sustained no damage	C. Faulkiner.
„ 23	Holmwood, sail, 25 years	Schooner	696	15	..	Coal, 997 tons ..	Stranding ..	..	New Plymouth ..	N.N.E.	2	The master went rather far in and vessel refused to answer her helm, resulting in her grounding, although both anchors were let go. She refloated afterwards without damage	C. V. Stanich.
„ 24	Flora, s.s., 43 years	Schooner	818	35	..	General, 700 tons	Dowel-pin in after high-pressure crank slack	..	Lat. 26° 24′ S., long. 175° 35′ E.	N.	40 miles	A heavy knocking was heard which, on investigation, was found to be due to dowel-pin having worked out of after crank web; but being temporarily repaired, vessel proceeded to Auckland	G. A. Grey.
„29–30	Wanaka, s.s., 38 years	F. and A.	1,505	36	..	General, 2,100 tons	Leaking	..	Cook Strait.. ..	S. to S.S.W.	9	Owing to heavy seas vessel laboured, causing several rivets to start in frames of lower hold, resulting in vessel's leaking and damaging a quantity of cargo	John MacLean.
July 7	Wainui, s.s., 39 years	Schooner	411	32	51	General, 350 tons	Collision ..	..	Rangitoto Channel ..	Calm	..	On a rehearing before a Supreme Court Judge and two Assessors it was held that the collision was due to an error of judgment on the part of each of the masters—that of the "Wainui" in failing to keep the "Iris Eileen" on his starboard bow and in altering his course so as to cross her bows; and of the "Iris Eileen" in his ignorance of the regulations for preventing collisions at sea and his inability to cope with an emergency. The Court ordered the Master of the "Wainui" to pay £26 5s. towards the costs of the Crown	S. A. Chatfield.
„ 7	Iris Eileen, (F.B.), s.s., 3 years	Cutter ..	6	2	..	Fish							A. L. O'Brien.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1925. July 16	Daphne, s.s., 3 years	Steamer	100	14	8	General, 10 tons	Broken top-washer-high-pressure valve	..	Great Barrier Island..	S.	Breeze	Owing to the top-washer of the high-pressure valve breaking the rings got damaged, necessitating temporary repairs being affected, after which vessel proceeded to Auckland	E. H. S. Goertz.
,, 16	Herald, sail, 28 years	Schooner	73	4	..	Fencing-posts, 1,300	Stranded.. ..	..	Matapouri Bay ..	E.N.E.	9	Owing to wind freshening vessel dragged her anchor and went ashore on beach carrying away her deadwood and rudder-post, but she was subsequently towed to Whangarei, where temporary repairs were effected, enabling her to proceed to Auckland	Edward Sellars.
,, 17	Muritai, s.s., 3 years	Steamer	199	8	..	..	Stranded.. ..	..	Wellington Harbour ..	S.E.	Light ..	The port tail-shaft, which was clamped, slipped out of the tube, causing a big inflow of water, necessitating her being beached, where she was plugged and pumped out	Charles C. Bullock.
,, 19	Ionic, s.s., 23 years	Schooner	7,623	175	1	Frozen produce, &c.	Collision ..	..	Lyttelton Harbour ..	Calm	..	When the "Lyttelton" was running alongside the "Ionic" to take tow-line the tug got rather close, resulting in the wash from the "Ionic" drawing her in and striking, damaging the starboard quarter of the "Ionic"	Alex. E. Jackson.
,, 19	Lyttelton (Tug), s.s., 18 years	..	1	8	..	..							Andrew Brodie.
,, 20	Te Pioneer, s.s., 15 years	Cutter ..	25	1	..	..	Fire	..	Dargaville	Calm	..	A fire broke out on the starboard side of the engine-room near the boilers from forepart of boiler to after part of cabin, but the cause of the fire could not be ascertained	John F. Anderson.
,, 22	Fairburn, aux., 14 years	Ketch ..	60	5	..	..	Stranded, £200 damage	..	Off Whale Island ..	N.N.E.	Gale ..	After leaving Whakatane, master anchored under lea of Whale Island for shelter, but owing to bad holding-ground the anchors dragged and he decided to put to sea, which he found could not be done, as vessel being light, and engines racing owing to big seas, vessel was driven on the beach	A. J. Teixeira.
,, 28	Ruapehu, s.s., 24 years	F. and A.	5,798	112	..	Frozen, about 2,200 tons	Stranded.. ..	..	Wanganui	N.W.	1–2	When picking up anchorage the vessel, owing to haze dimming front shore lights, grounded on silt-bank, but came off in about an hour without sustaining apparent damage	A. W. McKellar.
,, 23	Mahi, aux., 22 years	Ketch ..	6	2	..	..	Stranded, £200 damage	..	Bay of Plenty ..	N.W.	Gale ..	During north-west gale the vessel would not lie at anchor owing to one anchor having been lost and to the other failing to hold although assisted by engine, thus compelling master to beach the vessel to prevent her being wrecked on a rocky shore	M. W. T. Lane.
Aug. 3	Matangi, s.s., 17 years	F. and A.	635	38	58	General, about 250 tons	Damaged steering-gear; £5 damage	..	Hauraki Gulf ..	S.S.W.	Fresh ..	The lever control-valve of the engine of the steering-gear was found to be broken, and as there were no spare parts on board the vessel was put back to Auckland for repairs	E. Dorling.

Aug.	5	Albatross, s.s., 21 years	..	111	4	500	..	Collision ..	..	Auckland Harbour ..	Calm	Dense Fog	The lower Court held the master of the "Albatross" solely responsible and ordered him to pay the costs of the inquiry, but on a rehearing before a Supreme Court Judge and two Assessors the decision of the lower Court was reversed and the master of the "Scot" found to be blameworthy because he had failed to comply with several regulations, although the Court was doubtful if these omissions had been a factor in causing the casualty. In view of the loss sustained by the owners through the injury done to the "Scott" the Court made no order as to costs	Thos. A. Lynch.
"	5	Scott, o.e.v., 18 years	Ketch ..	16	2	..	Sand							John E. Carey.
"	12	Ngahau, aux., 5 years	Schooner	21	5	..	Shingle, 105 tons	Stranded ..	..	Near Whananaki ..	N.E.	Storm ..	When loading shingle the vessel was washed up on beach and filled with water owing to wind coming in strong, to there being a high sea, and to its being impossible to get the vessel's head on to sea	H. E. Carey.
"	12	Black Cat, s.s., 20 years	Schooner	9	3	..	Nil; damage £2	Collision ..	..	Otago Harbour ..	S.W.	3	The "Black Cat" was outward bound when she was struck a little abaft the beam by the "Kohinoor," which was inward bound but not showing regulation lights, resulting in latter vessel's bow being stove in and causing her to sink instantly	M. J. Hargrave.
"	12	Kohinoor, motor (age not known)	Schooner	5	2	..	Nil; £1,000 damage							Wm. Y. Currie.
"	21	Wingatui, s.s., 11 years	Schooner	1,344	34	..	General, 800 tons	L.P. piston-rod broken	..	6 miles off Moeraki Light	N.W.	2–3	A violent knocking was heard in low-pressure cylinder with rupture of cover and escape of steam, when it was found that the piston-rod was broken at the top of taper	F. L. G. Jounay.
"	21	Awahou, s.s., 13 years	F. and A.	151	17	..	General, 100 tons	Four propeller-blades stripped	..	Gisborne	Nil	..	When the vessel was turning round to proceed to sea, the propeller struck the wharf, stripping off four of the blades	A. McLachlan.
Sept.	1	Mollie, aux., 14 years	Yawl ..	4	2	..	Fishing ..	Collision ..	..	Timaru	..	..	The "Mollie" was leaving the harbour before daylight without having the regulation lights, and the "Heather" was entering the harbour with port and starboard lights lit but no masthead light, when the "Heather" struck the "Mollie" on the port side, causing her to sink. The master of the "Heather" stated that he did not see the "Mollie" until too late to prevent the collision	Thos. L. Smith.
"	1	Heather, aux., 1 year	Ketch ..	4	2	..	Fish ..							John Clauson.
"	3	Joan Craig, s.s., 22 years	Schooner	698	22	..	Coal and timber, 750 tons	Stranded ..	..	Wanganui River ..	..	..	The vessel took the ground abreast of Spoil Wharf, but sustained no damage, and was refloated after about 100 tons of coal were lightered	K. McArthur.
"	5	Will Watch, aux., 30 years	Ketch ..	46	5	..	Coal, 60 tons ..	Collision ..	..	Kaiti Wharf ..	W.	Stiff ..	Gisborne Harbour Board's Hopper Barge No. 2 was approaching the wharf on flood tide when, before way could be taken off, she collided with the "Will Watch," breaking her mizzen boom and damaging her after sail	R. E. Roff.
"	5	Bulli, s.s., 20 years	Cutter ..	29	2	..	..	Collision ..	..	Auckland	W.N.W.	Gale	The "Bulli" was being towed to wharf, and the "Glenelg," which was manœuvring to get away from the wharf, where shipping was very congested, collided with the "Bulli"	Fredk. M. Olsen.
"	5	Glenelg, s.s., 47 years	F. and A.	156	12	..	Coal, 150 tons ..							W. J. Paine.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1925. Sept. 9	Kosmo, s.s., 12 years	Schooner	3,194	72	..	General, 5,224 tons	Fire	..	Lat. 35·05° S., long. 161·04° W.	W. by N.	11	Fire broke out in No. 4 shelter-deck, involving wooden bulkhead between said deck and bunker, and several cases of cargo; but the outbreak was extinguished by ship's hose, and evidently had its origin in heated coal setting alight the bulkhead	G. Shinney.
,, 9	Kent, s.s., 7 years	Schooner	5,444	51	..	General, 5,000 tons	Fire	..	Auckland Harbour ..	S.W.	5	At 5 a.m. fire broke out in No. 2 'tween decks port side; but, as it was impossible to reach fire through the hold. holes were cut in the ship's side, and the fire was extinguished at 3 a.m. next day	M. M. Downton.
,, 15	Loyalty, s.s., 48 years	..	24	..	..	..	Foundered ..	..	Bluff	Calm	..	The Bluff Harbour Board's diver was conducting blasting operations with gelatine in the vicinity of the "Loyalty," and the explosion evidently blew a hole in her bottom, causing her to sink in three minutes. She had been out of commission some time	..
,, 15	Awahou, s.s., 15 years	Schooner	151	17	..	Sheep, 763 ..	Collision, damage £25	..	Gisborne	W.	Light ..	Owing to the tide catching the "Awahou," too little room at bend of river, and to presence of mud, she sheered when leaving the harbour and bumped one of the Harbour Board's mud-barges, damaging 10 ft. of belting	G. A. Nairn.
,, 22	Putiki, s.s., 21 years	Schooner	168	17	..	50 tons maize ..	Collision ..	..	Gisborne	W.	Strong	When the "Putiki was leaving her berth she bumped into the "Tiroa," damaging the rail and bulwarks of the latter on the port quarter	H. E. Smith.
,, 22	Tiroa, s s., 9 years	Schooner	93	10	..	30 tons general..							L. D. Clark.
,, 23	Cobar, s.s., 22 years	Schooner	69	5	40	..	Stranded; no damage	..	Wellington	W.	6	When approaching Rona Bay wharf the heaving-line missed the wharf and the engines were put full astern, but she touched forward, and her stern was blown round by a heavy squall, and she grounded	Edward Cartner.
,, 23	Will Watch, aux., 30 years	Schooner	48	..	..	General ..	Anchor and sails carried away	..	Off Tokomaru Bay ..	N.	Gale ..	Whilst at anchor the port anchor carried away, and also the main and the mizzen sail, after which the vessel was taken in tow by the "Mako," but when the starboard anchor was being heaved up it slipped from the windlass and was lost	G. M. Smart.
,, 26	Tui, s.s., — years	Cutter ..	3	2	..	..	Stranded; £10 damage	..	Hauraki Gulf ..	S.W.	Gale ..	In attempting to tow barque "Daphne" to safe anchorage at Tiri Tiri, the arm of the tiller slipped, causing loss of control of tug, which drifted ashore	K. W. Larsen.
,, 27	Gale, s.s., 6 years	Schooner	287	17	..	General, 500 tons	Stranded; no damage	..	Wanganui River ..	W.	Strong	When proceeding up the river vessel grounded in the channel abreast of No. 5 pile at Mitchell's Reach, where, after being lightened, she floated off apparently undamaged	Chas. E. Goodyear.

Sept. 29	Port Hacking, s.s., 25 years	Steamer	4,025	60	..	General, 2,058 tons	Fire; £40 damage	..	35·6° S. lat., 170·25° W. long.	E.	..	Smoke was seen coming out of starboard bunker, hence coal was used from there, and hose played when required; subsequently discovered that insulation overhead and pipe-casing smouldering, and coal heated, necessitating woodwork being thrown overboard	A. C. Hoad.
Oct. 5	Wanderer, o.e.v., 22 years	Barge	23	4	..	Gravel, 100 tons	Broken shaft ..	..	Wellington	N.	..	When swinging in the Hutt River and going astern with engines the tail-shaft of port engine broke, but vessel returned to town wharf on starboard engine, when new shaft was fitted	F. Eastergaard.
„ 8	Maori, s.s., 18 years	F. and A.	1,567	83	171	General, 100 tons	Damaged stem ..	..	Off New Zealand Coast	E.N.E.	4	On voyage between Lyttelton and Wellington a sharp bump forward was felt, apparently caused by striking some submerged object, which damaged 10 ft. of vessel's stem	B. B. Irwin.
„ 9	Excelsior, aux., 32 years	Schooner	6	4	..	Sand, 76 yards	Struck submerged rock	..	Auckland Harbour ..	S.W.	Moderate	The vessel missed stays, and, owing to the engine not being in use and to master misjudging distance from shore, she struck a submerged rock about 100 yards off south side of Rangitoto Island	H. Clark.
„ 10	Calm, s.s., 16 years	Schooner	523	19	..	General, 50 tons	Stranded.. ..	..	Wanganui River ..	W.	Moderate	When proceeding down the river the heel of vessel touched bottom near Spoil Wharf, the force of wind turning her to starboard, but doing no damage to ship or cargo	Gerald Sharpe.
„ 10	Storm, s.s., 5 years	..	371	17	..	General, 500 tons	Stranded.. ..	..	Wanganui River ..	W.	Fresh ..	When going up the river the vessel was caught on the port quarter by the sea and wind, causing her to shear towards North Mole, which she struck slightly without damaging herself or cargo, and from which she came off under her own power	Robin V. Manson.
„ 13	Claymore, s.s., 23 years	Schooner	159	17	21	General, 20 tons	Fractured crank-shaft	..	Inside Tiri Tiri ..	N.W.	Light ..	On the way to Auckland the crank-shaft fractured, therefore the vessel was put under easy steam until she reached port	Albert Johnson.
„ 14	Inaha, motor, 2 years	F. and A	116	11	..	..	Damaged stern ..	..	Patea	N.W.	Breeze	When crossing the bar inwards the ship took a sheer towards the western breakwater, which she struck, thereby sustaining considerable damage	A. P. Gibson.
„ 15	Turakina, s.s., 2 years	Schooner	5,373	36	..	General, &c., 3,000 tons	Fire	..	Wellington	..	..	Smoke was observed issuing from No. 5 ventilators, but the fire was subdued with the assistance of the fire brigade, when it was found that deck-plating was buckled and some copra was burnt	T. S. Hamilton.
„ 24	Mako, s.s., 11 years	Schooner	247	21	12	General, 50 tons	Collision with wharf	..	Napier	S.W.	Light ..	After straightening up in fairway vessel was caught by flood tide on starboard bow, causing her to sheer to port, and, although starboard anchor was let go, the vessel swung round and her stem came in contact with the end of wharf	S. Jones.
Nov. 19	Lyttelton, p.s., 48 years	F. and A.	24	9	1	..	Collision ..	..	Hauraki Gulf ..	S.S.W.	Light	The Court found that the master of the "Lyttelton" had not kept a sufficient look-out, and ordered him to pay £25, the costs of the inquiry. The Court further ordered that all certificates be returned.	N. A. Olson.
„ 19	Talisman, scow, 28 years	Scow ..	70	4	..	Sand, 100 tons...							H. Andersen.
„ 19	Kennedy, s.s., 60 years	Schooner	131	12	..	General, 200 tons	Cracked furnace ..	..	Cook Strait.. ..	N.N.W.	Gale ..	Vessel had to put into Wellington on account of bad weather, when the engineer discovered that there was a crack in the furnace, which was repaired same day	A. M. Stewart.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1925. Nov. 23	Ihumata, s.s., 14 years	Schooner	653	23	..	Coal, &c., 1,140 tons	Struck submerged object	..	Lat. 353·3° S., long. 159·22° E.	N.E.	Light breeze	On voyage from Newcastle to Wanganui the vessel twice hit a submerged object, which stopped the engines and stripped about 12 in. of one propeller-blade and slightly chipped another, but did not retard the speed of the vessel	C. W. Ostenfeld.
„ 27	Waiotahi, s.s., 34 years	Schooner	168	19	1	Case cargo, 50 tons; cattle, 5 head	Starboard low-pressure piston cylinder carried away	..	Hauraki Gulf ..	S.W.	4	Whilst on a voyage to Auckland from Whangarei the piston of starboard low-pressure cylinder carried away, and, before the engine could be stopped, smashed the top and side of the cylinder	John Wilson.
„ 30	Progress, s.s., [illegible]— years	Schooner	181	12	..	Produce, 250 tons	Stranded	..	Kaipara River ..	N.W.	Light ..	After passing Te Kopuru Wharf the vessel ran over apparently soft shingle, causing her to heel over slightly to starboard, but apparently doing no damage	H. L. Hay.
Dec. 4	Kairanga, s.s., 4 years	Schooner	1,726	28	..	Coal and timber, 3,420 tons	Stranded	..	Port Stephen, Australia	N.	1-2	When leaving port the vessel grounded on a 15 ft. patch inside Takaba Head, but refloated after five hours, and proceeded to Dunedin, where she was surveyed and found to have sustained no damage	David Harkness.
„ 5	Pakura, s.s., 4 years	Schooner	304	17	..	Wool, 300 tons ..	Broken piston-rod ..	..	Akitio, New Zealand ..	W.	Moderate gale	When heaving in starboard anchor the port piston-rod of windless broke, knocking out the end of the cylinder	C. W. Coldicutt.
„ 8	Gabriella, s.s., 5 years	Schooner	946	24	..	Coal, &c., 2,000 tons	Grounded ..	..	Wanganui	W.S.W.	4	Whilst entering the river and steering as directed by semaphore from Castlecliff Pilot-station, the vessel took the ground about 200 ft. inside the moles, and was refloated next day, but after proceeding 1,000 ft. again grounded, but on neither occasion sustained damage	R. Matheson.
„ 12	Kestrel, ferry s.s., 20 years	..	159	4	20	..	Collision ..	..	Auckland Harbour ..	..	Calm	The Court found that the master of the "Kestrel" fell asleep while in charge, his condition being due to home troubles resulting in his being overtired; that the collision was due to fault of said master in not informing his owners that he was unfit for duty, and thus risking lives of passengers; that he be ordered to pay £5 towards costs, and that his certificate be suspended for three months; and the Court further held that during night trips the mate should be required to keep a lookout	J. C. Douglas.
„ 12	Wanganui, hulk ..	..	..	..	..	..							..
„ 13	Fairburn, aux., 19 years	Ketch ..	60	6	..	Timber and general, 90 tons	Fire	..	Off Cape Runaway ..	W.	Fresh breeze	Smoke was seen coming from under deck cargo, consisting of timber, a spark from engine probably igniting old benzine-tank stowed on top of timber; but the fire was extinguished by a few buckets of water	W. H. Sawyers
„ 14	Kaitangata, s.s., 18 years	F. and A.	1,195	30	..	Coal, 2,466 tons	Struck submerged object; £140 damage	..	Greymouth	N.	..	Vessel's engines were going full speed to hold ship to wharf during heavy flood in Grey River, and it is surmised that vessel's propeller was struck by a snag or log coming down in the flood	A. Reed.

Dec. 21	Mahi, aux., 20 years	Ketch ..	6	2	..	Timber, 15 tons	Struck submerged rock	..	Whakatane ..	..	..	..	When passing through entrance vessel struck submerged rock in main channel and returned to port, when it was found that she was holed in two places and sheathing more or less damaged	M. W. S. Lane.
„ 19	Apanui, s.s. 20 years	Schooner	134	16	10	General, 100 tons	Damaged propeller	..	Awanui River ..	..	E.	L.	The vessel struck a protruding root of a tree when going round a bend, resulting in propeller-blade being bent, which was replaced and vessel resumed voyage.	E. H. S. Geortz.
„ 22	Waipori, s.s., 25 years	Schooner	1,221	32	..	Coal, 2,500 tons	Grounded ..	..	Westport	..	..	Calm ..	When safely moored the ship took the ground, where she remained until the tide made four hours later, when she was shifted to berth astern, and it was found she was undamaged	H. M. Hurley.
„ 24	Koutunui, s.s., 15 years	Schooner	98	11	..	Wool, 60 tons	Stranded	..	Table Cape ..	..	..	Smooth	On voyage from Gisborne to Napier ship got somewhat off her course, due apparently to hazy condition of atmosphere and possibly a set towards land resulting in her touching the reef and slightly damaging rolling-chocks and false keel	J. Beaton.
„ 30	Manuka, s.s., 22 years	Schooner	2,813	107	97	General, 300 tons	Fire; about £300 damage	..	Dunedin	..	..	Light ..	Fire was discovered in after end starboard-side lower hold, which had damaged temporary wooden thwartship bulkhead, several battens, and buckled steel-deck beam	Henry S. Whyborn.
„ 30	Ruru, s.s., 20 years	Schooner	62	10	..	Ballast ..	Collision ..	..	Table Cape ..	..	S.E.	1	The vessels were meeting when the "Ruru" blew one blast as an indication that she wanted to communicate by Morse signal, but the "Huanui," thinking that, according to "Collision Regulations," "Ruru" was going to starboard, altered her course accordingly, resulting in vessels touching lightly but doing no damage to either	A. Haroldson.
	Huanui, o.e.v., 15 years	Ketch ..	60	7	..	Wool, 50 tons ..								C. Thomsen.
„ 29	Wairau, s.s., 26 years	Schooner	56	10	..	General, 40 tons	Stranded; £12 damage	..	Wairau	..	N.E.	Light ..	When crossing the bar outwards the vessel stuck in channel, but on cargo being discharged she floated off and proceeded to Wellington, where it was found that no damage had been done	E. Jackson.
1926. Jan. 1	Rarawa, s.s., 22 years	Schooner	460	42	120	General, 15 tons	Collision ..	..	Onehunga ..	..	S.W.	Strong	The "Zita" was berthed and the "Rarawa" was berthing when she fouled the bowsprit of the "Zita," snapping it off and carrying away part of the rail of the "Rarawa"	W. Bark.
	Zita, aux., 47 years	Schooner	68	6	..	Manure, 40 tons								J. Francis.
„ 1	Kakapo, s.s., 24 years	Schooner	949	27	..	Coal and timber	Touched bar; £68 damage	..	Greymouth ..	..	W.	Light ..	When leaving port touched on bar, stripping nuts off spring buffer of steering-gear, necessitating hand gear being connected, by which vessel was steered to Auckland	Wm. A. Grey.
„ 3	Gale, s.s., 6 years	Schooner	287	17	..	General, 400 tons	Struck breakwater	..	Wanganui	..	W.	Fresh breeze	When entering the river the vessel refused to answer helm and sheered towards and struck the northern breakwater with her bow, but backed off without sustaining damage	Robt. Rodger.
„ 9	Coronation, aux., 23 years	Ketch ..	59	6	..	Timber ..	Damaged propeller-blades; £20	..	Auckland	..	..	Calm ..	When entering the harbour the four propeller-blades were stripped without any warning, which cannot be accounted for except that the propeller was of cast iron	A. Berridge.
„ 19	Gael, s.s., 21 years	F. and A.	55	7	18	General, 2 tons	Broken rudder ..	..	Waiwera, Auckland ..	..	N.E.	Fresh ..	When attempting to leave the wharf the rudder refused to act owing to its being broken in that the blade was sprung away from the stock	R. McKinnon.
„ 28	Ihumata, s.s., 15 years	Schooner	653	23	..	Timber, 275 tons	Grounded; no damage	..	Wanganui River ..	..	N.W.	2	Owing to the lower beacon light being obscured by a vessel at Castlecliff, the Master of "Ihumata" was compelled to steer as near as he could judge along channel, but took the ground on starboard edge of channel, but floated off at following flood tide without sustaining any damage	C. Ostenfeld.

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

Date of Casualty.	Vessel's Name, Age, and Class.	Rig.	Register Tonnage.	Number of		Nature of		Number of Lives lost.	Place where Casualty occurred.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1926.													
Jan. 29	Canadian Challenger s.s., 4½ years	..	5,331	34	..	General, 2,098 tons	Leaking	..	Lat. 28·4° N., long. 70·10° W.	..	Gale ..	From date to 5th February vessel encountered heavy gales and high seas, in which she strained heavily, causing leakage of fuel oil from various tanks	W. B. Armit.
,, 31	Ngahau, aux., 5 years	Schooner	21	6	..	In ballast ..	Injured engine ..	..	Off Cape Stevens	S.E.	Variable	When bound to Croixelles from Wellington the after head on port engine developed a crack, and vessel was headed towards Nelson for repairs	G. H. King.
Feb. 1	Tuatea, s.s., 21 years	Cutter ..	58	5	29	..	Struck breakwater	..	Gisborne	W.	Light ..	The Master mistook a bright bicycle-light on the breakwater for white light on end of groyne, and, before he discovered his error and vessel had gone astern sufficiently, the stern struck the breakwater a glancing blow damaging former and tearing away sheath to the value of £50	John H. Hawkes.
,, 1	Mana, s.s., 40 years	Schooner	76	10	..	Frozen mutton	Collision ..	..	Wanganui Roadstead	W.	Moderate	The "Mana" was lightering the "Port Hunter" when, owing to the heavy swell, the mainmast of the "Mana" caught on the fish-plate on the starboard bow of the "Port Hunter," breaking the bolt on the mast and damaging the mast and rigging to the value of £1 10s.	D. Bonner.
	Port Hunter, s.s., 3 years	Schooner	5,296	..	..	..							..
,, 4	City of Norwich, s.s., 13 years	Schooner	4,346	66	..	General, 4,920 tons	Fire; slight damage	..	Lat. 34° S., long. 152° 30′ W.	N.E.	5	Smoke was observed issuing from No. 6 hold ventilator, starboard side aft, and hatch was opened and two leads of hose and quantities of sand played on fire until extinguished	Lidstone Adams
,, 10	Cygnet, s.s., 41 years	Schooner	70	10	..	General and coal, 22 tons	Condensor-door cracked	..	Kaikoura	W.	Light ..	It was discovered that the condensor-door was cracked, which was caused by the main discharge-pipe being blocked with ashes and other matter floating in harbour	W. Williamson.
,, 16	Marama, s.s., 19 years	Schooner	3,992	129	107	General, 1,400 tons	Engine trouble ..	..	Prince's Wharf, Auckland	S.W.	2	After vessel was berthed, the Chief Engineer reported that rocking-shaft bearings on port engine had carried away, caused probably by pump getting sudden rush of water.	H. W. W. Bold
,, 17	Kaimanawa, s.s., 17 years	Steamer	2,416	27	..	..	Plate dented ..	..	Auckland	S.	4	Whilst moving slowly alongside wharf one of the spring piles caught under sheer-strake plate, starting some rivets and slightly denting plate below	D. McDonald.
,, 26	Kurnalpi, s.s., 20 years	Schooner	298	17	..	General, 80 tons	Struck submerged object	..	Bay of Islands ..	Var.	2	When just clear of Red Head the vessel scraped a submerged object, which appeared to give with the ship and did not diminish her headway; no damage was done, as soundings in bilges and tanks showed them to be quite dry	George Atwood.
,, 28	Karu, aux., 25 years	Schooner	197	12	..	Timber, 184,000 ft.	Stranded; total loss £5,000	2	Twilight Bay, Cape Maria Van Dieman	S.S.W.	9	The Court found that the casualty was caused by the vessel striking some object on the bar as she came from Whangape Harbour; that the vessel was seaworthy and well found; and that Frank Saunders and Roy Ravenswood lost their lives by drowning when endeavouring to get ashore from the wreck. The Court ordered that the Master's certificate be returned, and made no order as to costs	J. W. R. Richmond.

Mar. 4	Mako, s.s., 12 years	Schooner	247	21	4	General, 40 tons	Leaking	..	Cape Runaway ..	Var.	Light ..	It was discovered that ship was leaking, when a search revealed that amidships in cross-bunker there was a hole, which was plugged with softwood plug, stopping the leak, and enabling vessel to proceed to Auckland	S. Jones.
„ 12	Huia, aux., 31 years	Topsail Schooner	166	12	..	Bricks and explosives, 180 tons	Injury to machinery	..	Lat. 39·50° S., long. 152·35° E.	N.	2	On voyage from Melbourne to Westport the No. 1 crank web broke right across immediately under crank-pin on after side, but no damage was done to any other part of the engine	H. E. Lane.
„ 15	Waitemata, s.s., 7 years	Schooner	3,555	48	..	General, 8,000 tons	Struck wharf ..	..	Napier	N.E.	2	Whilst berthing at Breakwater Wharf the vessel had too much way on, and her stern struck fender piling and stripped off about 50 ft., but did no damage to herself	S. Hewitt.
„ 17	Port Hardy, s.s., 3 years	Schooner	5,431	85	6	General, 6,700 tons	Leaking	..	Lat. 46·30° N., long. 25° W.	N.W.	Gale ..	On sounding No. 1 bilge it was found that port side was making water, therefore bilge was pumped dry, and by continuous watch it was found that water was making an average of 8 in. per hour through a leak caused by heavy straining of the ship	Wm. S. Mason.
„ 18	Tu Atu, o.e.v., 22 years	Cutter ..	28	3	1	General, 50 tons	Fire	..	Wairoa River ..	O.	Smooth	A fire discovered in the hold, caused apparently through a number of sacks of lime becoming heated through dampness; the fire was extinguished, but not before it had slightly damaged the ship and did considerable damage to the cargo	R. W. Martin.
„ 20	Lake Takapuna, s.s., 1 year	..	188	4	150	..	Collision; £80 damage	..	Auckland ..	S.W.	Light	The "Hauraki," assisted by the tug "Te Awhina," was being berthed at Prince's Wharf when the wash from their propellers caught the incoming "Makora," causing her to drift broadside on to the "Lake Takapuna," carrying away the "Makora's" bulwarks amidships	Geo. A. Simmons.
	Makora, s.s., 5 years	..	194	4	30	..							J. H. Selley.
„ 24	Alexander, s.s., 23 years	Schooner	185	16	..	General, 50 tons; and sheep, 54	Stranded.. ..	..	Entrance Pelorus Sound	N.W.	Gale ..	On voyage from Lyttelton to Nelson the lights at entrance to Pelorus Sound were obscured owing to fierce, heavy rain-squalls, which shut out the land also, consequently ship's speed was reduced, when the light suddenly appeared close on starboard side; though engines and helm were used to avoid getting nearer, the ship grazed something, which, however, was found to have done no damage to the ship	John Maylen.
31	Waikawa, s.s., 7 years	2-mast Schooner	3,525	48	..	Coal, 7,700 tons	Propeller-blade broken	..	Tasman Sea; lat. 33·49° S., long. 168·3° E.	S.W.	Squally, moderate gale	It was discovered that the engines were racing, consequently it was anticipated that something was wrong with propeller, and speed was reduced until arrival at Auckland, where an examination revealed that about 3 ft. of one blade had been broken off	E. Harris.
1	Cygnet, s.s., 40 years	F. and A.	70	10	1	General, 20 tons	Stranded.. ..	..	Ben More, Kaikoura..	N.N.E.	..	The Court found that the casualty was not caused or contributed to by the wrongful act of any of the officers or men; that the Master committed an error of judgment in changing his course, in not accurately estimating the leeway being made, and by keeping closer inshore to avoid heavy weather, thus preventing his fixing the distance from land; but that the Master acted in a seamanlike manner in bringing his vessel to port. The Court ordered that his certificate be returned, but that he pay half the costs of the inquiry	W. Williamson.

Summary of Casualties to Shipping reported to the Marine Department during the Year ended 31st March, 1926.

Nature of Casualty.	Casualties on or near the Coasts of the Dominion.									Casualties outside the Dominion									Total Number of Casualties reported.		
	Steamers.			Sailing-vessels.			Total within Dominion.			Steamers.			Sailing-vessels.			Total outside Dominion.					
	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.	No. of Vessels.	Tonnage.	No. of Lives lost.
Strandings—																					
Total wrecks	3	1,435	2	..	..	..	3	1,435	2	..	..	..	..	..	..	..	..	..	3	1,435	2
Slight damage	25	12,525	..	1	73	..	26	12,598	..	..	..	..	..	..	..	..	..	..	26	12,598	..
No damage	17	15,824	..	1	696	..	18	16,520	..	2	2,379	..	..	..	..	2	2,379	..	20	18,899	..
Total strandings	45	29,784	2	2	769	..	47	30,553	2	2	2,379	..	..	..	..	2	2,379	..	49	32,932	2
Collisions—																					
Total loss	1	4	..	..	..	..	1	4	..	..	..	..	..	..	..	..	..	..	1	4	..
Slight damage	24	15,121	..	3	268	..	27	15,389	..	..	..	..	..	..	..	..	..	..	27	15,389	..
No damage	8	554	..	..	..	..	8	554	..	..	..	..	..	..	..	..	..	..	8	554	..
Total collisions	33	15,679	..	3	268	..	36	15,947	..	..	..	..	..	..	..	..	..	..	36	15,947	..
Fires—																					
Total loss	1	19	..	..	..	..	1	19	..	..	..	..	..	..	..	..	..	..	1	19	..
Slight damage	6	13,743	..	..	..	..	6	13,743	..	3	11,565	..	..	..	..	3	11,565	..	9	25,308	..
No damage	..	..	..	..	..	..	..	..	..	1	2,487	..	..	..	..	1	2,487	..	1	2,487	..
Total fires	7	13,762	..	..	..	..	7	13,762	..	4	14,052	..	..	..	..	4	14,052	..	11	27,814	..
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	22	11,230	..	..	..	..	22	11,230	..	6	16,205	..	..	..	..	6	16,205	..	28	27,435	..
Total number of casualties reported	107	70,455	2	5	1,037	..	112	71,492	2	12	32,636	..	..	..	..	12	32,636	..	124	104,128	2

Return of the Number of Land Boilers and Machinery inspected during the Financial Year ended 31st March, 1926.

Boilers.

Class.	Not exceeding 5 Horse-power.	Exceeding 5 but not exceeding 10 Horse-power.	Exceeding 10 Horse-power.	Total.
Stationary	3,222	689	2,293	6,204
Portable	216	1,025	450	1,691
Totals	3,438	1,714	2,743	7,895

Machinery.

Class.	Number.	Class.	Number.
Hydraulic lifts	119	Oil-engines	15,162
Electric „	1,042	Gas-engines	849
Gas „	6	Electric-motors	15,739
Oil „	1	Miscellaneous	21
Steam „	25		
Gas, hydraulic, and electric-motor hoists ..	1,219	Total	34,634
Water-engines, peltons, turbines, and water-wheels	451		

Return of New Boilers inspected for the Year ended 31st March, 1926.

District.	Made in Dominion.		Imported.		Total.	
	Number.	Horse-power.	Number.	Horse-power.	Number.	Horse-power.
Auckland	43	604	63	498	106	1,102
Auckland North	1	12	..	..	1	12
Auckland South	4	28	12	77	16	105
Canterbury North	68	396	14	115	82	511
Canterbury South	1	5	5	38	6	43
Gisborne	..	..	7	76	7	76
Hawke's Bay	10	77	7	47	17	124
Nelson	..	..	4	19	4	19
Otago	16	128	11	74	27	202
Southland	2	129	12	61	14	190
Taranaki	..	..	2	8	2	8
Taranaki North	2	10	6	29	8	39
Wellington	15	218	19	217	34	435
Wellington North	..	..	..	..	..	..
Westland	7	106	11	454	18	560
Totals	169	1,713	173	1,713	342	3,426

Return of the Number of Certificates issued to Land Engine-drivers and Electric-tram Drivers during the Year ended 31st March, 1926.

Class.	Number.	Class.	Number.
Service—		Competency—*continued.*	
First-class engine-driver	3	Steam-winding-engine driver	4
Second-class engine-driver	1	Locomotive- and traction-engine driver ..	68
Locomotive and traction-engine driver ..	1	Locomotive-engine driver	9
		Traction-engine driver	55
Competency—		Electric-tram driver	87
First-class engine-driver	27		
Second-class engine-driver	215	Total	470

RETURN OF LAND-ENGINE DRIVERS' AND ELECTRIC-TRAM DRIVERS' EXAMINATIONS HELD THROUGHOUT NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1926, SHOWING THE NUMBER OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES.

Place.	First Class.		Second Class.		Steam Winding.		Locomotive and Traction.		Locomotive.		Traction.		Electric-tram Driver.		Total.		Grand Total.
	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	
Auckland	3	1	35	13	1	1	10	4	..	..	4	1	16	..	69	20	89
Blenheim	..	..	1	..	..	..	..	..	..	..	1	..	..	..	2	..	2
Christchurch	1	1	7	2	..	..	6	4	..	..	11	5	30	..	55	12	67
Dunedin	..	1	8	8	..	..	3	..	..	..	2	..	10	..	23	9	32
Gisborne	..	..	5	2	..	..	4	..	..	..	..	..	..	..	9	2	11
Greymouth	2	4	22	8	1	..	..	..	6	2	1	..	..	..	32	14	46
Hamilton	4	2	17	6	..	..	5	1	2	1	1	..	..	..	29	10	39
Invercargill	3	6	14	14	..	..	2	2	1	..	5	2	2	..	27	24	51
Kohukohu	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3	..	3
Napier	3	1	8	1	..	..	3	..	..	..	1	..	..	..	15	2	17
Nelson	1	1	7	2	..	..	1	..	..	..	3	1	..	..	12	4	16
New Plymouth	..	1	18	20	..	..	4	..	..	..	..	..	1	..	23	21	44
Pahiatua	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Palmerston North	2	3	19	20	..	..	2	1	..	..	1	2	..	..	24	26	50
Queenstown	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	2
Rawene	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Russell	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Timaru	..	..	3	..	..	..	1	..	..	..	18	7	..	..	22	7	29
Wanganui	2	..	10	3	..	..	..	..	..	..	1	..	..	..	13	3	16
Wellington	1	2	8	10	..	..	..	3	..	..	5	1	28	4	42	20	62
Whangarei	..	..	14	5	..	..	10	..	..	..	..	..	..	..	24	5	29
Totals	22	23	203	115	2	1	51	15	9	3	54	19	87	4	428	180	608

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