1925.

NEW ZEALAND.

MARINE DEPARTMENT.

ANNUAL REPORT FOR 1924–25.

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

YOUR EXCELLENCY,— Marine Department, Wellington, August, 1925.

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

I have, &c.,

G. JAS. ANDERSON,

Minister of Marine.

His Excellency General 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. MINISTER OF MARINE.

SIR,— Marine Department, Wellington, 18th August, 1925.

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, 1925.

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

FINANCIAL.

General Departmental Accounts.

To a very considerable extent the Department is limited in its ability to earn revenue to the State for the various services which it performs to the fees prescribed by statute or otherwise.

As these fees have not been increased during the year, though in some cases the fees do not by any means represent value for professional services rendered, the only means by which the Department's financial position could be improved lay in the careful husbanding of expenditures and the institution of methods designed to assure that the Department received all that it was entitled to claim.

In order to ensure this result the accountancy methods were varied during the year with the object of enabling the complete introduction of the double-entry system on the 1st April, 1925.

The partial adoption of this system during the past year has shown most satisfactory results, which will be improved upon during the current year, when the system is in full operation.

The financial results of the Department's work in the effort to square accounts have been most satisfactory, as the following table will reveal. For purposes of comparison I use a statement of receipts and payments over the years 1921–22 to 1924–25. This is a complete revelation so far as it goes; but, of course, it does not include interest, sinking fund, and depreciation charges. The reason for eliminating these charges is twofold. At the institution of a balance-sheet the assessment of capital values was somewhat haphazard, and subsequent investigation has shown them to be excessive. Accordingly they have been adjusted to a proper assessment. To base a comparison on a statement which included over-assessed capitalization and its consequential interest, sinking fund, and depreciation charges with a statement based on a readjusted capitalization would, of course, have the effect of giving the Department greater credit than it could justly claim. Furthermore, the charges on past capital expenditure, once that capital is properly assessed, is something the Department cannot control.

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

Payments.

—	1921–22.	1922–23.	1923–24.	1924–25.
	£	£	£	£
Head Office	*	9,169	8,433	9,378
Harbours	5,194	4,216	6,279	3,911
Lighthouses	37,085	27,734	25,503	26,018
Meteorological Office	3,909	5,314	5,671	6,009
Mercantile marine	12,632	11,901	13,422	14,262
Inspector of machinery	27,492	25,279	24,821	24,714
Fisheries	13,784	10,456	10,792	12,539
Government steamers	34,184	19,675	21,155	19,956
Miscellaneous services	17,415	3,460	1,573	2,676
Totals	151,695	117,204	117,649	119,463

Receipts.

—	1921–22.	1922–23.	1923–24.	1924–25.
	£	£	£	£
Shipping and Seamen Act—				
Engagements, discharges, &c.	3,968	4,108	4,027	4,155
Survey fees	3,354	3,202	4,666	5,027
Measurement of ships	25	17	22	22
Examination fees	586	396	370	417
Light dues	41,311	39,689	76,868	80,469
Fines, forfeitures, and sundry receipts	1,051	1,271	1,309	1,152
Harbours Act—				
Pilotage, port charges, &c.	648	765	769	843
Foreshore rents, &c.	1,175	1,131	2,904	4,579
Fisheries Act—				
Sale of oysters	7,763	7,702	7,356	8,395
Sundry receipts	324	324	926	667
Inspection of Machinery Act—				
Inspection of boilers, &c.	13,102	17,300	16,568	18,417
Examination fees	602	618	635	649
Tramways Act—				
Examination fees	57	49	104	84
Totals	73,696	76,572	116,524	124,876

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

The summarized result is that payments have decreased from £151,695 in 1921–22 to £119,463 in 1924–25, whilst receipts have increased from £73,696 in 1921–22 to £124,876 in 1924–25. Thus by reduction of payments amounting in the period to £32,232 and an increase of £51,180 in the receipts the Department has improved its position to the extent of £83,412 in four years.

Westport Harbour Accounts.

In 1920–21 the Westport Harbour Board having become so unfinancial and in the position of having to be supported by Treasury advances from the Consolidated Fund, the whole of the Board's affairs were taken over by the Marine Department.

An adjustment of responsibilities and functions was made as between the Marine Department and the Railway Department, with corresponding adjustment of liability for capital expenditure and its charges.

The financial position of the Harbour Account made it essential to review every avenue of expenditure and every source of revenue to deal drastically with the former and exploit the latter.

The full loss in the last year of the Board's operations having regard to interest, sinking fund, and depreciation charges amounted to approximately £50,000.

The obligation was placed upon the Department to endeavour to square the account.

During the period 1921–22 to 1924–25 the following results have been obtained in so far as payments and receipts are concerned :—

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

It will thus be seen that in four years the payments have been decreased from £75,642 to £40,949, and the receipts increased from £31,412 to £49,566, a net betterment of £52,847.

No. 1 Loan of £150,000 matured on the 1st March, 1925. The sinking fund investments held by the Public Debt Sinking Fund Commissioners on account of this loan were more than sufficient to effect repayment. The Marine Department's proportion of the loan (having regard to Marine Department to Railway Department adjustment of capital liabilities) amounted to £88,235, the liquidation of which left the Department with a reserve of a corresponding amount on Westport Harbour Account. As the accumulated debit balance on Revenue Account was £32,475, a similar amount was transferred from Reserve Account in order to clear the Revenue Account.

Taking all charges into consideration, except as is hereinafter qualified, the net profit for the year, on Westport Harbour, amounted to £5,821.

This result, however, is somewhat misleading. It arises, firstly, from a heavy hand on expenditure, and, secondly, from our legal inability, as interpreted by the Audit Department, to pay interest charges which are morally due on temporary loans or advances from Consolidated Fund to Westport Harbour Account. These advances amount to £141,126 17s. 2d. and stand in the same position as bank overdraft to any Harbour Board. It is quite clear that the Harbour Account should pay interest as any Harbour Board would be required to pay. This amount, however, is reducible by £60,000, representing our surplus cash and temporary investments, of which we are not at present legally able to clear the account.

The non-payment by Westport Harbour Account of interest on the net advance of £81,126 17s. 2d. from the Consolidated Fund means in plain words that the general public is contributing some £4,462 to maintain Westport Harbour, and there is no logical reason why it should.

Had interest charges on these advances been debited in the past year's accounts the position would have been that instead of showing a net profit of £5,821 the result would have been a net profit of £1,359.

In considering Westport Harbour finance it must be borne in mind that while operating, maintenance, dredging, and capital charges go on every day, revenues in the shape of coal royalties and charges on shipping are dependent to a very great extent not only on the winning but on the export of coal. Westport coal can be won and exported only to the extent that there is demand for it, and, even if the demand exists, only as coal is available for export. During the 1923–24 year industrial difficulties on the Buller Coalfield practically stopped the export of coal and consequential revenues to the Harbour Account over a period of seventeen weeks. During the past financial year there has, fortunately, been no such interruption.

Furthermore, we must not lose sight of the fact that the demand for steam-coal for ships is being noticeably affected by the increasing use of oil fuel, while the industrial and domestic consumption of coal is also affected by the increasing use of electricity.

I mention these matters to show that, although the account shows a profit for the past financial year, the result has been achieved under conditions of (*a*) minimum expenditure consistent with maintaining efficient port service ; (*b*) a year's work during which there has been comparatively little interruption in coal export ; and (*c*) freedom from interest charges on accumulated Treasury advances from Consolidated Fund.

The effort of the past year has been to find bed-rock requirements under most favourable conditions. Having ascertained that, we must anticipate a heavier liability in the shape of interest charges on Treasury advances and the repayment thereof, increased expenditure on dredging and dredge overhaul and maintenance, and the possibility, which is always with us, of interruption in the production of coal for export.

With a view to increasing coal-export, approval has been obtained to additional expenditure on (*a*) deepening by dredging the berthages at the Coal Wharf ; (*b*) dredging out the swinging-basin to a greater depth and width to enable larger ships, coming for bunker coal, to be safely handled ; (*c*) raising at least one of the coal-cranes to enable these ships to be loaded at any state of the tide.

It is also proposed to revise the port charges generally, placing them much on the same basis as Greymouth, with the general intent that ships shall pay exactly according to the use they make of the port.

During the year representations were made to you in Westport by deputation urging the prosecution of works contemplated by the late Board, and in the partial carrying-out of which over £75,000 was expended without any beneficial result. I spent some days in Westport investigating the necessity and financial practicability of these works, but could find no more justification for their prosecution than could the Commission which most exhaustively investigated the whole matter in 1913, and whose report caused the Board itself to suspend the work.

Balance-sheet.

Whilst discussion of the payments and receipts position over a period of years correctly represents the effort of the Department to pay its way it is misleading as to the net financial result, and may lead to the suggestion that the Department is overcharging for services rendered. Subject, therefore, to what I have already said as to readjustment of capital assessment, it is necessary, in order that the position may be completely understood, to submit a statement which takes into consideration interest, sinking fund, and depreciation charges.

The following statements of expenditure and revenue, which include these charges, shows the position over the years 1921–22 to 1924–25, both in regard to general departmental accounts and Westport Harbour Account :—

Expenditure.

——	1921–22.	1922–23.	1923–24.	1924–25.
	£ 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
Harbours	3,585 18 2	4,826 13 2	3,739 17 5	3,921 2 11
Lighthouses	31,409 15 1	26,995 19 5	25,302 19 4	26,823 6 5
Meteorological	3,857 2 3	5,374 0 3	5,572 6 2	5,863 19 2
Mercantile marine	16,292 11 0	15,150 17 11	16,585 15 1	17,896 11 0
Inspection of machinery	28,778 10 10	27,015 0 0	25,802 1 2	26,124 16 11
Fisheries	6,068 6 0	4,545 3 2	3,743 11 8	2,890 13 10
Government steamers	37,199 5 2	21,697 19 6	22,819 8 9	21,837 5 4
Miscellaneous services	4,239 6 9	2,655 3 8	3,939 7 5	1,734 3 1
Grants and subsidies	4,626 7 8	1,510 0 0	900 0 0	150 0 0
Depreciation	7,826 13 10	8,035 4 9	7,911 18 8	8,844 18 9
Interest on capital	21,007 10 9	15,716 7 3	17,471 16 8	17,737 15 7
Totals—General Accounts	175,620 4 9	143,134 11 9	142,363 5 6	143,117 0 4
Westport Harbour Account	59,959 7 1	51,795 19 3	47,213 7 10	43,602 5 11
Totals	235,579 11 10	194,930 11 0	189,576 13 4	186,719 6 3

Revenue.

——	1921–22.	1922–23.	1923–24.	1924–25.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Shipping and Seamen Act—				
Light dues	41,311 9 6	39,688 16 8	76,867 15 6	80,467 6 2
Engagement and discharge fees, &c.	3,698 6 6	4,107 15 6	4,026 15 5	4,155 5 8
Survey fees	3,538 7 10	3,095 9 0	4,785 2 6	5,010 0 4
Examination fees	585 12 8	395 12 6	369 12 0	417 5 0
Miscellaneous	1,076 5 1	1,289 0 4	1,389 8 0	1,175 6 3
Harbours Act—				
Pilotage, port charges, &c.	647 15 6	764 14 6	768 13 1	842 18 7
Foreshore revenue	1,165 12 6	1,126 14 1	2,909 0 4	4,393 19 1
Inspection of Machinery Act—				
Inspection fees, &c.	17,382 12 11	17,126 19 0	16,125 11 2	17,256 2 10
Examination fees	601 16 9	618 0 0	634 18 0	648 18 0
Fisheries Act—				
Net profit from sale of oysters	2,741 4 7	2,546 9 6	2,310 19 9	2,139 10 1
Fishing-boat license fees, &c.	323 15 0	324 9 6	627 14 1	365 4 9
Rental of toheroa-beds	10 0 0	10 0 0	300 0 0	300 0 0
Tramways Act—				
Examination fees	57 0 0	49 0 0	104 0 0	84 0 0
Government steamers—				
Freight, passage-money, &c.	6,026 4 4	1,785 0 7	2,788 1 8	4,793 0 10
Miscellaneous revenue	22 19 11	1,872 6 10	2,050 4 4	1,273 19 7
Totals—General Accounts	79,189 3 1	74,800 8 0	116,057 5 10	123,322 17 2
Westport Harbour Account	26,340 16 5	38,196 10 11	42,285 7 4	50,378 11 0
Totals	105,529 19 6	112,996 18 11	158,342 13 2	173,701 8 2

HARBOUR-WORKS.

During the last session four Harbour Board Bills were promoted :—

New Plymouth.—This Bill proposed to give the Board authority to increase the loan indebtedness of the Board and district by £300,000, the main object being to increase harbour facilities and improve conditions for overseas ships. As no particulars whatever had been furnished to the Department as to the works proposed or as to their necessity, the Bill was tentatively opposed before the Local Bills Committee in order to reveal full particulars. The promoters demonstrated to the Committee that the Board's operations in the past had been financially successful in that no rate had been struck since 1908; that considerable saving would result to the district from increased direct import and export; that greatly increased import and export could be confidently anticipated by reason of completion within reasonable time of the Stratford–Main Trunk line; that the Board would be justified, should it be necessary, in increasing charges on shipping by reason of improved facilities and elimination of delays; that the Board was reasonably justified in supposing that when all charges for the additional loan became payable, there would still be no necessity to have recourse to special rating on the harbour district.

Waimakariri River Harbour (Kaiapoi).—The original constitution of this harbour district embraced the districts of the following local authorities: The boroughs of Kaiapoi and Rangiora, and the counties of Rangiora, Eyre, Oxford, Waipara, Amuri, Cheviot, Ashley, and Kowhai.

As the place for shipment and discharge of cargo is the Town of Kaiapoi, which is connected with the general railway system, it is difficult to understand how so wide a district came to be constituted. Owing to the condition of the river-mouth the port had practically been closed for some years. From this and the fact that the port was of no use to the greater part of the district an agitation arose to abolish the district, and at the previous election eight out of ten members were returned with that object in view. This position resulted in the promotion of legislation designed to exclude the districts of all the constituent local authorities except the Borough of Kaiapoi. This proposal was given every support, and, incidentally, the loan authority of the Board was cut down from £90,000 to £15,000.

Mangonui Harbour District and Awanui Harbour District.—These Bills proposed to constitute two separate Harbour Board districts, each of small area and adjoining one another, both within the Mongonui County.

The Mangonui Bill proposed to constitute a special local body to deal with Mangonui Wharf alone.

The Awanui Harbour Bill was likewise designed to constitute still another local authority, ostensibly to deal with a wharf to be constructed outside the mouth of the Awanui River to take the place of the wharf within the Awanui River, which at that time was silting up. The total estimated cost was about £11,000, £8,000 of which would be required for road access, a work outside a Harbour Board's but within a county's function.

As the Mongonui County Council had already been vested with the powers of a Harbour Board in respect of Mangonui Wharf, it appeared to the Department that there was no justification for the creation of these two Harbour Boards, the administration expenses of which would absorb any revenues which might be derived from harbour charges and leave nothing for the maintenance of the wharves; but that, on the contrary, the proper course was to extend the county's powers under the Harbours Act to Awanui Harbour.

Neither Bill was passed.

During the past two years the Department, in pursuance of the policy enunciated in last year's report, has become involved with the Gisborne and the Napier Harbour Boards in respect of their harbour-development policies.

In both cases statutory loan authority for the works proposed had been obtained and loan proposals sanctioned by the ratepayers.

Gisborne.—A scheme of outer harbour-works, in conformity with the local Act and also in conformity with the general issue submitted to the ratepayers, had been approved for prosecution in terms of the Harbours Act. The Department became aware, however, that the Board contemplated the carrying-out of a minor or inner-harbour scheme which, in the opinion of its professional adviser, was doomed to failure, and which, in any case, was not in accordance with statutory authority, vote of the ratepayers, or plans approved under the Harbours Act. The matter was taken up with the Board with definite result, and prosecution of an approved outer-harbour scheme is now in hand.

Napier.—In this case statutory loan authority had been obtained for the prosecution of a scheme of works in what is known as the Inner Harbour. Ratepayers' sanction had also been obtained.

Expenditure already incurred on certain works made it clear that the scheme could not be completed for the balance of loan-money available. Even if the completed scheme of work would successfully achieve the results alleged by its supporters—an extremely doubtful question—it was clear that the prosecution of an incomplete scheme, such as could be carried on within the means available, was simply courting disaster. Local interest in the problem became so intense as to justify departmental intervention. The Marine Engineer made an exhaustive investigation, resulting in the compilation of an invaluable report which discussed the economic and engineering practicability of the Inner Harbour and Breakwater Harbour alternative schemes, and found convincingly in favour of the latter.

The position of the Harbour Board in the matter is extremely complicated and difficult, not only by reason of its statutory limitations to raise loans and prosecute works, but because of the conflict of local opinion. Before determining its further course of action the Board eventually decided to obtain further advice from the Consulting Engineers who previously reported on the alternative schemes, and in fairness to whom, it must be stated, no data whatever was available as to borings when they previously investigated. The present position is that the Board is now awaiting the report of its Consulting Engineers. Meantime the Department has the position well in hand, since no plans of future work which might be undertaken in connection with the Inner Harbour scheme have been approved and the Board cannot proceed without such approval.

Timaru Harbour.—This case is in a somewhat different category. The Board proposed to expend something like £400,000 in harbour-works designed to overcome certain difficulties. By the terms of its Constitution Act, dating away back to 1878, the Board is not permitted to enter into any contract for harbour-construction works until the plans therefor have been approved by a special Commission of expert and scientific men.

The Timaru Harbour Constitution Act is the only local Act which contains such a provision—an expression of the wisdom of the men who, in 1878, promoted the Act, and a recognition of the problem of creation of artificial harbours. It is doubtless to their precaution that Timaru Harbour owes its success.

The Board submitted two alternative plans for consideration.

The resolution actually passed by the Board asked not only that these plans should be submitted to the Commission, but, in effect, that if the Commission could not see its way to approve either of the plans it should be asked to suggest any other means by which the desired result might be achieved. Unfortunately, the resolution of the Board as transmitted to the Department, and on which the Commission was drawn, failed to include the latter provision.

The Commission, after local investigation and the hearing of evidence, was not convinced that the difficulties which the Board desired to overcome were as real as the Board appeared to believe; but, even if they were, the Commission considered that the results desired could be achieved at less expense, and recommended further engineering investigation, and therefore refrained from approving either of the plans submitted.

The Department is aware that the Commission came to a conclusion as to how the results desired by the Board could be achieved at less expense; but the Commission also became aware, during its investigation, of the disparity between the resolution of the Board and its order of reference based on the Board's submission to the Department.

The Commission therefore felt itself constrained to act strictly in accord with its order of reference. Intermediary effort by the Department has failed to forward the matter.

Shipping and Seamen Act.

Survey of Ships.—The normal requirement of law in regard to survey of ships is that every ship (with unimportant exceptions) under our jurisdiction is required to be presented for annual survey within thirty days prior to the expiry of her current survey certificate.

In 1916, owing to commandeer of ships for transport and other war purposes, the tonnage available for our own purposes became so restricted that application was made to extend the survey over a period of six months, and thus enable ships to avoid laying up for survey. This practice, though doubtless justified by the exigencies of the times, meant that a ship ordinarily due for survey in December might commence her survey in July, and extend it in half a dozen different ports and under a dozen different Surveyors over a period of six months. She would acquire her certificate for the ensuing twelve months at the end of December, which would mean that at the expiry of that certificate the survey of, at any rate, some parts of the ship would be eighteen months old. During the year this practice was cancelled and shipowners required to conform to pre-war practice.

In this country the general public seems to take an intense personal interest in the survey of ships. The Department makes no objection to this so long as those who may criticize have sufficient qualifications to justify expression of an opinion.

New Zealand requirements in the way of ship survey are more far-reaching than any other country in the world. They are simply that every ship, except a pleasure yacht or launch, or a fishing-boat under 10 tons, must be surveyed annually.

The British Board of Trade, whose practice we follow in most shipping matters, and the Commonwealth of Australia do not require any cargo-ship, no matter how large, to be surveyed at all; even a passenger-ship carrying up to twelve passengers is not required to be surveyed. Furthermore, even with ships under survey, conditions are in many respects much easier, such, for instance, as requiring twin unit vessels to open up engines for survey only every alternate year. Most of the ships not required in Great Britain or Australia to be surveyed by Government Surveyors are, of course, surveyed by Insurance Corporation Surveyors, such as Lloyds, but this survey is effected only every fourth year, and is not recognized by New Zealand law.

As to the manner in which ship survey work has been carried out in past years there may, in isolated cases, have been some individual slackness. Those individuals have been revealed and dealt with drastically. The public may rest assured that to-day the ships under our jurisdiction are annually subjected to rigid survey by men who are competent and perform their duty who understand that they must do clean straight work without fear or favour, and who know well that they will be supported in their action.

Wireless Telegraph Installation on Ships.

The legislation on this matter existing prior to last session of Parliament was weak, in that its power to require the installation of wireless equipment related only to equipment for the transmission of wireless messages, and was entirely silent as to equipment for the receipt of messages.

By the legislation of 1924 comprehensive power was given, and, Royal assent being given to the Act, draft regulations were prepared accordingly. In accordance with an undertaking given by you these were submitted to interested parties. The Shipowners' Federation considered the Department's proposals altogether too drastic; the Seamen's Union considered they were reasonable; the Merchant Service Guild thought they did not go far enough; while the Marine Engineers' Institute was satisfied with them.

In order to deal with the detail objections of the Shipowners' Federation you appointed a Committee consisting of Captain G. S. Hooper (Nautical Adviser), Mr. E. A. Shrimpton (Chief Telegraph Engineer), and myself to hear their objections. We accordingly held an inquiry in Auckland and in Wellington. The draft regulations, in so far as class of installation and requirements in the way of operators, were drawn very much on the lines of Board of Trade requirements, which in turn conform to International Wireless Convention requirements. These requirements are at least ten years old in their conception, and pay no regard to the extraordinary developments in wireless telegraphy which have since been achieved.

The first objection in Auckland was that the draft regulations covered a number of ships which voyaged in allegedly sheltered waters, never out of sight of land and but short distances from port to port, and that in such cases the requirement to carry wireless was absurd and unreasonable. The second objection was to the cost of the normal and emergency installations required by the regulations, and to the cost in wages, accommodation, and keep of a special operator, who would have practically nothing to do, and would perform no other duty than that of wireless operator. The third objection was that in the case of some of the ships in question it was impracticable to install wireless because there was no space for accommodation of operator or wireless cabin, that masts were too short and too close together to give a satisfactory aerial, and that in some cases the ships had only one mast, and that even if wireless could be installed the installation was unnecessary and would be ineffective.

Subsequently we investigated a modern installation of a type which under older definition would be described as an emergency installation. Although the time of inspection was noon, and the ship on which it was installed badly shrouded by wharf-shed structures, no difficulty whatever was experienced in communicating with radio stations at Wellington and Awarua. This set had been operated for some time by one of the ship's officers.

After full consideration we unanimously concluded that efficient wireless communication could be installed on "home trade" ships (that is, ships engaged solely in coastal trade) if the installation definitions were altered to provide in their case for "Home Trade Major" and "Home Trade Minor" installations, the former having not less than 200-watt capacity and the latter not less than 100-watt capacity. The question as to whether a home-trade ship should carry a "Major" or a "Minor" installation would depend on the class of ship and the voyages she engaged in.

We also concluded that, so far as operation was concerned, the position would be adequately met by permitting the home-trade ship installations to be worked by deck officers specially examined and certificated for that purpose.

This possible amelioration of conditions, which does not in any way abate the efficiency of installations from a life-saving point of view, was put to the Wellington Conference and accepted by them.

With regard to intercolonial and foreign-going ships, however, it was necessary to conform to Wireless Convention requirements.

In the final revision of the regulations the requirement to carry wireless was in no way abated; all that was done in the way of variation was that the conditions were made easier and more practicable, thus enabling wireless installation to be carried much further than would otherwise have been the case.

The provision enabling the apparatus on home-trade ships to be worked by qualified deck officers marks an entirely new departure in wireless-on-ships legislation.

Our regulations as finally passed are in advance of either Great Britain or the Commonwealth of Australia to the extent shown by the following comparison:—

Great Britain and Commonwealth of Australia.	*New Zealand.*
(*a.*) Any ship over 1,600 tons gross register.	(*a.*) Any ship over 1,600 tons gross register.
(*b.*) Any ship carrying more than twelve passengers.	(*b.*) Any ship carrying more than twelve passengers.
	(*c.*) Any ship the number of whose crew, plus the number of passengers the ship is authorized to carry, exceeds twenty-five persons.

After a very careful study of the loss of life arising from marine casualties on our coast during a period of ten years, and having regard to the possible saving of life which might, under most favourable review, have been effected by wireless, it did not seem reasonable to drive the installation of wireless any further for the time being. Doubtless further developments in wireless communication in the future will make practicable the further extension of its use on ships.

Lighthouses.

During the year Tiritiri and Anglem Point lights have been converted to automatic.

Authority has been obtained and the necessary apparatus ordered for the conversion of Piako River leading-lights, Cape Foulwind, and Kahurangi lights to automatic.

The old-fashioned sixteen-burner light at Dog Island will shortly be replaced by an up-to-date second-order dioptric light.

A new automatic light is now being installed at Matakaoa Point (Hicks Bay).

New lenses are being placed in the East Cape light, which has also been connected with the telephone system.

Bad weather on the coast frequently causes the lighthouse tender to be delayed for days in replacing gas-cylinders in automatic lights. To overcome this delay a large additional number of cylinders have been ordered which will enable the gas-capacity of a number of the automatic stations to be duplicated. Thus if bad weather precludes a station being served without undue delay it can be left until next trip without fear that the gas-supply will run out.

As some of the automatic lights have been in use for a number of years it has become necessary to order a number of spare parts for burner and flasher apparatus. By this means worn parts can be replaced by spare parts and repairs and overhaul effected in Wellington.

Wireless Installation at Lighthouses.—Puysegur Point and Stephen Island.—The telephone connection to Puysegur Point, the most isolated station in New Zealand, became impossible of

maintenance. Similarly, the cable connection between Stephen Island has been giving a great deal of trouble and can be maintained only by frequent repair or replacement.

A wireless set has now been installed at Puysegur Point, and this will enable constant and reliable communication with Radio-Awanui.

The set for Stephen Island is practically ready and will be installed in September next.

General.—A close study of lighthouse costs, including interest, sinking fund, depreciation, maintenance, salaries, transportation of keepers and their families, stores, &c., has revealed that a very considerable saving can be effected by conversion of a number of stations from watched to automatic lights. A general policy of conversion will therefore be followed as parliamentary appropriation will permit. The requirements and circumstances of every station will, of course, be subjected to close investigation before conversion is decided upon. It is not intended that in every case where conversion is effected that the converted light will remain entirely unwatched. Though experience in this and other countries justifies a firm belief in the reliability of these automatic lights, the Department feels that in public interest it should have some form of watch in the case of the more important and inaccessible lights, and will arrange accordingly.

During last year the Department took £80,000 from shipowners for light dues. An assessment of all legitimate charges arising in connection with lighthouse service and maintenance, including interest, sinking fund, and depreciation, reveals that the revenues derived very nearly approximate the charges.

It should not, I think, be the Department's policy to turn the lighthouse service into an agency for profit-making for the State. The policy should require that shipping should pay dues to fully and efficiently maintain a service which is of incalculable value to it. The savings which may be effected by conversion should be capitalized to enable better service and more lights and other aids to navigation to be provided.

Fog-signals.—Pencarrow and Godley Heads.

These two fog-signals are of primative design and of somewhat uncertain value.

Provision is being made on this year's appropriations, in the sum of £4,000, to enable the provision of modern and effective fog-signals. The ferry service between Wellington and Lyttelton, to say nothing of the general shipping of the ports, demands nothing less.

Fisheries Branch.

Mr. L. F. Ayson, who for so many years has been connected with the Department as Chief Inspector of Fisheries, has passed the normal retiring-age. There appeared to be no one available in New Zealand to take up his position and so applications were invited in Great Britain. An expert Committee, appointed by the High Commissioner, selected Mr. A. E. Hefford, M.Sc., who arrived in New Zealand on the 15th May. Mr. Hefford has a wide experience in all classes of fisheries work, both scientific investigation, practical fishing, commercial handling, and market organization.

Mr. Hefford is meantime engaged in acquiring general local knowledge of our sea-fisheries as a prelude to more complete investigation.

In the past, the supply of sea-fishes being so plentiful, the Department's operations have been more generally confined to acclimatization of fresh-water fishes and the upbuilding of the rock-oyster fisheries.

If the condition of our fisheries were to be judged by the availability to the public, not only at fishing-ports but at other centres, of good-quality fish within the means of everybody, one might be justified in supposing that our fisheries were becoming depleted. The facts do not justify such a supposition. Are the supply conditions, so far as the buying public knows them, due to supply-control methods, to antiquated methods of catching, or to inefficient methods of handling, condition-keeping, and distribution? The limited investigation made within my knowledge certainly reveals instances of definite limitation of catches, and limitation of days on which catches may be made. The investigation is at present insufficient, however, to justify conclusions. It will be Mr. Hefford's function to investigate all these questions in their logical order.

The suggestion has been made that greater assistance should be given to the fishing industry. It is presumed that this means that financial assistance should be widely granted under the Fishing Industry Promotion Act. To advance money to individual fishermen to enable them to buy launches, nets, &c., is to invest public funds on a very uncertain security indeed, as past experience has shown.

If the State were to advance funds it should do so only in the assurance that greater quantities of fish would be available to the public at cheaper prices.

Is there, in the first place, any real necessity for increasing the number of fishermen when it is known that in some cases, at any rate, catches are even now limited and regulated?

Furthermore, is there any guarantee, if Government assistance be granted, that prices will be reduced and quantity and quality improved?

It seems to me that financial assistance which would result in benefit to the industry without corresponding advantage to the public is hardly justified.

The commercial taking of salmon which was permitted under special license last season in the Clutha, Waitaki, Rakaia, and Waimakariri Rivers showed very disappointing results, and no effort whatever was made by fishermen to take the fish at sea.

Ross Sea Whaling Expedition.

The "Sir James Clark Ross" made her second expedition to the Ross Sea, leaving New Zealand on the 21st November, 1924, and returning on the 10th March, 1925.

The expedition had a much more successful season than on the previous year, the catch of whales yielding 32,165 barrels of oil equal to 1,286,000 gallons.

During the off season the five whale-catchers have been anchored in Patterson Inlet, Stewart Island, except during the time occupied in overhaul work at Port Chalmers.

The company is endeavouring to organize a second expedition consisting of one floating station and five catchers, but it is yet uncertain whether it will be ready in time for next season's work.

Meteorological Branch.

The sub-committee of the Science Committee of the New Zealand Institute has completed its investigation and has furnished its report. The Committee's recommendations are along the lines of reorganization of the branch in order to extend its value to the community. It is hoped that these recommendations will be put into effect shortly.

Staff.

I have to express my appreciation of the work of the Heads of various branches of the Department and of departmental officers generally. All have joined in a common effort to better general organization and individual performance of duty and so to enhance the Department's reputation for good service. To achieve this, however, nearly every responsible officer has had to go short of his annual leave: this partly by reason of extra work which inevitably arises out of progressive reorganization and partly by reason of the extraordinary amount of sickness which has occurred amongst the staff during the year.

In past years the Marine Department has been in the unfortunate position of having been a "chopping block" between interests which conflict at every possible opportunity. Its responibilities, its many and various functions, and its difficulties have not been fully realized.

It is very well to produce marked improvement in financial results. The more essential necessity, to my mind, is to construct and reconstruct so that inefficient officers, if they still exist, may be eliminated, and so to the end that those who remain or may be added, may do their work with thorough efficiency consciously building, as they work, respect for themselves and the Department and creating a departmental structure in which all its servants may take pride.

It is due that special recognition should be given to our lighthouse service and to the Master and personnel of the lighthouse tender, the s.s. "Tutanekai." The service is one over which there can be little or no supervision. The best we can do is to carefully select the men, imbue them with a sense of their responsibility and entrust them to perform their duty faithfully at any cost. In no respect have they failed in their trust during the year.

Prosecutions.

During the year prosecutions for offences under and breaches of the various Acts administered by the Department were taken as follows: Fisheries Act, 77; Harbours Act, 2; Inspection of Machinery Act, 29; Shipping and Seamen Act, 26.

Adjustment and Survey of the Compasses of Ships.

The compasses of ships to which the Compass Regulations apply have been surveyed by the Department's Compass Inspectors at the various ports as occasion demanded, and the results show that the compasses of vessels are maintained in a good state of efficiency.

The compasses of other ships in this Dominion which are not required by the Compass Regulations to have their compasses adjusted for survey purposes but which are required to carry an efficient compass in their equipment have in some cases been called upon by the Compass Inspectors to have their compasses adjusted owing to their being found inefficient.

Close attention has been given to the compasses of the smaller class of ships which are employed within restricted limits, as it has been found that in some cases the compasses of those ships are on occasions purposely removed as a precaution against them being pilfered or otherwise interfered with, and such removal impairs their efficiency. As a result of this it may be found necessary to insist that the compasses of such ships shall always be kept in their proper positions.

The adjusters of compasses, who are licensed as such by this Department and who are employed by masters and owners of ships when necessary, have carried out the adjustment of ships' compasses in a satisfactory manner; and in some cases the masters of vessels, when in possession of a foreign-going master's certificate, have swung their own ships, and in a few cases they have adjusted their own compasses, as is allowed by the Compass Regulations.

In some ships the work of the licensed adjusters of compasses is rendered difficult owing to insufficient consideration having been given to the necessity for providing for a suitable place in which to install a standard compass when a ship is built, and at times it is found that its nearness to masses of iron, often asymmetrical, is such as to render it difficult of adjustment without impairing its directive force.

Similarly, this applies to ships which undergo much structural alteration and to ships which have become trading-ships by conversion, and in both of these latter cases it would appear to be necessary that designs of such structural alterations or conversions should be submitted for investigation for the purpose of ensuring that a suitable place for the standard compass is provided.

The compasses of some ships of unusual construction, such as dredgers, ships which have been converted from one purpose for another, or ships which have undergone much structural alteration, require special investigation of their conditions in respect of the manner in which their compasses

are affected; and in such cases the Compass Inspectors must be satisfied with the efficiency of the compasses before a Compass Certificate is issued.

It has not been found necessary to delay any vessel owing to her compass being found inefficient, but in isolated cases it has been found advisable to restrict a ship's sphere of operations unless a further adjustment is performed.

Some overseas vessels visiting this Dominion are fitted with a gyroscopic compass, and it would appear to be used by them with both advantage and satisfaction.

The gyroscopic compass has not yet been adopted in any of our local trading-ships, and the magnetic compass appears to maintain its supremacy for general use in these waters, its redeeming feature being that once properly installed and carefully guarded against interference it performs its directive functions without application of artificial energy or power, such as is required by the gyroscopic compass for the purpose of maintaining the necessarily constant speed of its rotor.

It is satisfactory to see that the Department's Inspectors of Compasses at the various ports have shown that they are keenly alive to the necessity of the compasses of ships, on which so very much depends whilst they are at sea, being maintained in an efficient condition.

Marine Casualties.

During the year a number of marine casualties to ships have occurred, the majority of which were surrounded by circumstances peculiar to each individual occurrence; most of the casualties being slight and of a miscellaneous description. Several were grounding casualties causing little, if any, damage, and could be attributed to shallow harbours in which vessels are required to navigate with little depth of water. Collisions have been few and mainly confined to vessels of small tonnage plying within restricted limits. Casualties have, where necessary, been investigated by holding preliminary inquiries, and, where circumstances appeared to justify such, magisterial inquiries have taken place.

In all, ninety preliminary inquiries were held, and in ten cases it was found desirable to hold magisterial inquiries. Generally speaking, the results of the inquiries show the evidence tendered to have been fairly weighed.

Ships totally lost within the Dominion during the year were: The schooner "Warlord," 98 tons, which was blown ashore at Hawke's Bay; s.s. 'Ngahere," 556 tons, at Greymouth when leaving that port; s.s. "Wakatu," 95 tons, stranded at Clarence River entrance in bad weather; s.s. "Rama," 244 tons, struck a rock at Chatham Islands; s.s. "Konini," 833 tons, a new vessel, stranded in Foveaux Strait, in weather of low visibility; and s.s. "Ripple," 174 tons, which foundered off Cape Palliser. Of the foregoing, except in the case of the "Ripple," no lives were lost, the crew of the "Ngahere" being removed from that vessel to the shore by aid of the rocket apparatus which is maintained by the Greymouth Harbour Board. A return of wrecks and casualties to shipping during the year is appended.

Notices to Mariners.

Navigation warnings, pertaining to rocks, shoals, or other obstructions to navigation, changes in lights, buoys, beacons, signals, &c., or any alteration in respect of "aids" to navigation, changes in harbours, and anything affecting the navigation of our own and visiting ships, also information of importance to ships in respect of other localities and information which has been published by the Imperial Board of Trade, has been published from time to time, as has been found necessary.

Radio Direction-finding for Navigational Purposes.

The progress of radio direction-finding in the older countries has been closely watched, and the question as to advantages which one system may have over another is becoming more pronounced. The first system to be extensively adopted, by which a wireless-equipped vessel became dependent on a shore station for its bearing or line of position, could be used for that purpose only; whereas the system subsequently adopted, by which a vessel with its own radio direction-finding equipment could obtain its own bearing or line of position, could be used with advantage in other ways; particularly it becomes the most valuable "aid" for the purpose of avoiding collision in foggy weather and for locating a wireless-equipped vessel in distress. The radio direction-finder is now found on many vessels; other vessels are being fitted with it, and its future extensive use appears to be assured. From a navigation point of view when obtaining a radio bearing by a shore radio station in foggy weather, it is desirable that the shore radio station should be at or near a salient point on the coastline, and this is made possible by the installation of a radio beacon at or near an existing lighthouse. As indicated in last year's report it has been decided to establish a radio-direction-finding plant at Cape Maria van Diemen. Instructions were given for the assembly of the requisite equipment and this has been procured, but the automatic interrupter, an essential part of the apparatus, is not yet available. It was intended to make this in New Zealand, but the skilled officer of the Post and Telegraph Department, who was to carry out the work, unfortunately died and the part will now have to be imported.

While the departmental officers have proved the efficiency of radio direction-finding for ships to their own complete satisfaction, and while their experience coincides with that of older countries which have developed this navigational aid, its value is restricted for the time being by two factors: the conservatism of shipmasters and others who have had no actual experience of its reliability and value and the reluctance of shipowners to depend upon a navigation aid which many of their shipmasters view with doubt. It is not unnatural therefore that shipowners are reluctant to incur the cost of installing the necessary equipment.

The Department's position in the matter is that it believes in the value and reliability of radio-direction-finding and that it is prepared to fully respond to any indication on the part of shipowners that if radio-direction-finding beacons are provided they, in turn, will equip their ships with the complementary apparatus.

Examination of Masters and Mates, etc.

The examinations for certificates of competency as master or mate in the mercantile marine have been performed monthly during the year, alternating quarterly at the ports of Lyttelton, Wellington, and Auckland in accordance with the Department's regulations. The number of candidates for examination shows an increase, the total number being one hundred and five for all grades of certificates, of which sixty-six sat for certificates for foreign-going vessels and thirty-nine for certificates for vessels in the home trade and restricted limits. The amount of failures for the year is 54 per cent., a slight increase in comparison with former years; the increase in failures probably resulting from the "time" alteration made by the Board of Trade in the manner in which navigation problems were set in 1925, and in which respect this Dominion copies the Board of Trade very closely so as to maintain uniformity in the examinations, thus ensuring recognition of New-Zealand-issued certificates in Great Britain and in other portions of our Great Empire. The "time" alteration marked a distinct departure in nautical astronomy, the science by which ships are taken across the oceans of the world, and, although the "time" alteration involved in principal nothing more than commencing the astronomical day at midnight instead of at midday as has been the custom of astronomers and navigators throughout the past, it necessitated resetting the whole of the astronomical problems used in the examinations of masters and mates, a work requiring much time and care. Probably a small percentage of the failures may be attributed to the larger number of marks now allotted to trigonometrical problems, as prior to 1925 those problems were less difficult and were entitled to marks incommensurate with their importance.

One candidate sat twice (unsuccessfully) for the higher examination as extra master.

Five candidates sat for the voluntary examination in compass-deviation, two being successful. A "pass" in this examination qualifies a person to apply for this Department's license as an adjuster of ship's compasses. One candidate passed an examination as Pilot for the Port of Wanganui; but there were no applicants for examination for a license as Coastal Pilot, or for the voluntary examination in speed signalling.

Of the total number of candidates who sat for examination it is pleasing to see that twenty-six passed at first attempt. The inability of some candidates to successfully contest an examination appears to be shown in the case of one candidate for a lower-grade certificate who was unsuccessful at his seventh sitting.

The decrease in sailing-vessels is shown by the increasing numbers of candidates who sat for certificates for steamships only, and of the total number of foreign-going certificates issued during the year only seven entitled their holders to serve on square-rigged sailing-vessels. By this it will be seen that it now becomes increasingly difficult to obtain experience on square-rigged vessels, so that few candidates are able to sit for "ordinary" (square-rigged) certificates.

Of the total number of candidates, seven passed for a certificate as master of a river steamer. The holder of this certificate is entitled to act as master of a steamer of any size plying within restricted limits at any port within this Dominion. Before he can sit for a certificate he is required to have served at least one year at sea or on board of a vessel plying within restricted limits, and the examination at present does not call for any navigational knowledge other than is embraced by the Collision Regulations. The brief sea service required and the very meagre nature of the examination does not appear sufficient to qualify a person for such an all-embracing certificate entitling him to take charge of any steamer in any of the many ports in this Dominion; and the question as to whether future conditions for this certificate should not require more adequate sea service and some knowledge of navigation, also as to this certificate being localized for use in the limits for which a candidate is examined, demands consideration.

In 1926 a further improvement in the examinations for foreign-going certificates is to be made by the Board of Trade, and in which this Dominion will require to comply; the main feature being that certain problems may be solved by optional processes, and greater knowledge will be required of some subjects of which hitherto an elementary knowledge only was expected. The higher examination for extra master is to include a general mathematical paper embracing mensuration. Also, in 1926, in Great Britain, the examination for home trade or coastal certificates are to be considerably improved, and candidates for those certificates will then be required to find the deviation of the compass in a more satisfactory manner than exists at present. They will also be required to find the longitude by astronomical observations, such as is performed by their compeers in overseas vessels. In this respect it is desirable that this Dominion adopt these improvements in respect of its coastal navigators, as the coasts of this Dominion are more exposed and are not nearly as plentifully provided with artificial aids to navigation as are the coasts of the United Kingdom.

On and after the 1st January, 1926, the Board of Trade will require every candidate for a foreign-going certificate of competency, and similarly for home-trade certificates issued in the United Kingdom, to produce a certificate of efficiency as lifeboatman.

This alteration is for the purpose of ensuring that individual officers who will be in possession of certificates of competency issued subsequent to the 1st January, 1926, shall be efficient in the use of the modern life-saving equipment on ships. The Board of Trade has agreed to accept similar certificates of efficiency as lifeboatman issued in this Dominion, and in this Dominion arrangements for candidates to be examined and the necessary certificate to be issued will require to be made. In the United Kingdom these examinations are carried out by officers appointed by the Board of Trade.

An innovation is regard to the description of certificates of competency to be issued has been brought about by the Board of Trade, and that body has departed from the linen-sheet description of certificate, and has now brought into use a certificate in book form, having advantages both in handiness, durability, and in cleanliness; and arrangements are now being made for the issue of an identical bookform certificate in this Dominion. The linen certificate had its disadvantages: it was unhandy, and frequently after years of use became very dirty and almost unintelligible in respect of its contents.

Examination in Form and Colour Vision.

Candidates for examination in form and colour-vision are persons who are serving or who intend to serve in the mercantile marine or in fishing-vessels and who desire to ascertain whether their vision is such as to qualify them for service, and some of the former are sent for examination by their employers at periodical intervals. Sixty-one candidates were examined in form and colour-vision tests, of which number one candidate was referred to the Principal Examiner for further examination. Subsequently he was granted a special examination by the Department, and the result of the special examination showed him to possess a typical red-green colour blindness, thereby rendering him unfit to sit for a certificate as master or mate.

Examination of Lightkeepers in Signalling.

The light-keepers employed at the lighthouses and signalling-stations under control of this Department are required to undergo periodical tests of efficiency in signalling, and examinations for such purposes are conducted as opportunity occurs. Since inauguration of these examinations three years ago it is pleasing to see that in most cases the results show the lightkeepers to have passed the examination with credit. It is equally pleasing to see that one of the senior lightkeepers, who had been in the Department's service for thirty-five years, voluntarily submitted himself for and was successful in passing this examination.

"Nautical Almanac and Tide-tables."

This annual publication, in which is provided the necessary astronomical data relating to the sun and other celestial bodies as required for the use of navigators, todal predictions, tidal streams, and other information of use to seamen, was issued at its usual time, mid-December, 1924. An important change, for the purpose of achieving uniformity with the "Admiralty Nautical Almanac," was made in respect of the commencement of the astronomical day at Greenwich (London), which from January, 1925, and onwards is to be reckoned from midnight, and not from midday as formerly. Daily tidal predictions for the ports of Auckland, Wellington, Lyttelton, Dunedin, Bluff, and Westport are given at present, and it is intended to include tidal predictions for the Port of New Plymouth as soon as this can be arranged for. Tidal-stream predictions for French Pass and Tory Channel also are provided. Late navigational information concerning the ports and the coasts of this Dominion is included, and is found to be of much use to our own and to visiting mariners. Navigational warnings from local and other sources, and sunrise and sunset times for Auckland, Wellington, Christchurch, Dunedin, Invercargill, Westport, Nelson, and New Plymouth, may be obtained from the book.

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 17,929 and 17,941 respectively, as against 17,989 and 17,817 respectively during the previous financial year. The transactions at the four main ports were as follows (the figures in parenthesis being those of the previous year):—

Port.	Engagements.	Discharges.	Fees.
			£ s. d. £ s. d.
Auckland	5,742 (6,214)	5,917 (6,228)	1,056 8 0 (1,135 2 0)
Wellington	6,509 (6,099)	6,291 (6,265)	1,163 8 0 (1,114 3 0)
Lyttelton	1,765 (1,854)	1,746 (1,663)	319 18 0 (326 9 0)
Dunedin	1,541 (1,549)	1,620 (1,549)	292 2 0 (287 6 0)

Inspection of Seamen.

This service has been maintained. A record of men applying for word 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 section 6 of the Shipping and Seamen Amendment Act, 1911, was £17,237 6s. 2d., as against £16,854 8s. 10d. in the previous year.

Registration of Shipping.

On the 31st December last there were on the register of vessels in the Dominion 123 sailing-vessels of 19,392 tons register, 276 steamers of 91,750 tons register, and 165 motor-vessels of 3,228 tons register, as compared with 127 sailing-vessels of 19,812 tons register, 266 steamers of 77,557 tons register, and 162 motor-vessels of 3,293 tons register at the end of the previous year. The number of seamen and boys employed on board was 3,859, as compared with 3,623 at the end of 1923.

Examinations of Masters and Mates.

This year shows an increase in the total number of candidates for certificates for seagoing vessels, the total number being 93, as against 71 of last year. The failures this year numbered 56, and successes 37, which is a slightly decreased percentage of the passes of the previous year. Of the total, 66 were candidates for foreign-going certificates, and 27 were candidates for certificates for home-trade vessels, and of these 37 passed; whilst 12 were desirous of obtaining certificates for vessels which trade within restricted limits, of which 7 passed. The percentage of passes in all grades was 46. Voluntary examination in compass deviation, 2 passes, 3 failures.

Examinations of Marine Engineers.

During the year 222 candidates passed their examinations and 111 failed. Of those who passed, 100 were engineers of seagoing ships, 10 were engineers of steamers plying within restricted limits, 32 were engineers of seagoing motor-propelled ships, and 80 were engineers of such boats plying within restricted limits.

Examinations of Land Engineers, 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, during the months of February, May, August, and November. 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, as compared with the number of candidates offering, and candidates are now expected to arrange that they may attend the scheduled examinations.

The full list of places where examinations were carried out 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: Extra first-class engineer, first-class engine-driver, second-class engine-driver, steam-winding-engine driver, electric-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 649; of this number 474 passed and 175 failed in their examinations.

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: United Kingdom, 1; Canada, 1; South Africa, 1; Queensland, 2; New South Wales, 1; Victoria, 1; Western Australia, 1; Tasmania, 2.

Lighthouses, Harbours, and Government Steamer.

Lighthouses.—The duties connected with the maintenance of the various coastal lighthouses have been satisfactorily carried out during the year, the lighthouses being tendered by the s.s. "Tutanekai." The inspection of lighthouses has been continued during the year, and good results have manifested themselves.

The sum of £80,467 6s. 2d. has been received as light dues on shipping during the year, as compared with £76,867 15s. 6d. in the previous year.

Harbours.—The work of overhaul and maintenance of navigation aids in harbours under the control of the Department has been satisfactorily carried out by the various Harbourmasters and by the master of the s.s. "Tutanekai." The latter has also attended to the coastal buoys and beacons under the control of the Department during the vessel's periodical trips.

The sum of £842 18s. 7d. has been collected as pilotage and port charges in respect of harbours under the control of the Department, as compared with £768 13s. 1d. during the previous year.

Shingle and Sand Beaches and Foreshores.

The Department's assets in these beaches and foreshores around the coast have been very carefully guarded, with the result that a sum of £4,393 19s. 1d. has been collected during the year in respect of rents and royalties, as compared with £2,909 0s. 4d. during the previous year.

Survey of Ships.

Certificates have been granted to 250 steamers, 520 oil-engine vessels, and 28 sailing-vessels, as compared with 267, 540, and 30 respectively during the previous year. Attached are returns of seagoing vessels, included in the above, to which certificates were issued.

It is to be noted that there has been a reduction of 39 in the number of certificates issued for all vessels, and that of this deficiency 27 are home trade and 12 foreign-going, while for seaworthiness 155 certificates have been issued this year, as against 123 for the year 1923–24.

Under the heading of inspection of machinery the year has been more successful in point of the number of inspections made. During the twelve months 363 new boilers were inspected, as compared to 275 during 1923–24, while the total boiler inspections for the year was 7,944, as against 7,780 for the previous period, an increase of 164.

In respect of machinery the total number inspected during the twelve months was 27,853, as compared to 25,111 for the year 1923–24, this being an increase of 2,742, which is distinctly satisfactory.

Survey of Ships.—During the year certificates were issued as follows: Seagoing vessels, 176; vessels plying within restricted limits, 594; sailing-vessels, 28: making a total of 798. There were also 155 vessels surveyed for seaworthiness and efficiency under section 226 of the Act. In addition, a number of vessels passed through interim surveys during the currency of their certificates. Forty-seven vessels, of which 7 are seagoing steamers and motor-vessels and 4 are sailing-vessels, were surveyed for the first time during the year. One of these vessels is the "Lake Takapuna," which was built in Auckland for the Takapuna Tramway and Ferry Company (Limited). She is a composite vessel, 132 ft. length by 32 ft. beam by 9·9 ft. depth. She is propelled by a set of triple-expansion engines supplied with steam from a boiler of the ordinary multitubular marine type. She is certificated to carry 1,265 passengers in river limits and 706 in extended river limits.

Another vessel which has just been built in Auckland is the auxiliary ketch "Miro." She is built of wood and is diagonally planked. Her dimensions are—Length, 64 ft.; beam, 20·5 ft.; depth, 5·9 ft. She is a staunch vessel, and has been built to carry explosives. She is propelled by a set of semi-Diesel oil-engines of 60 b.h.p.

Two scows have also been built in Auckland. One of these vessels is 66 ft. in length by 18·8 ft. breadth by 4·1 ft. depth, and is propelled by a set of two-cylinder semi-Diesel oil-engines of 20. b.h.p. The other is a sailing-vessel, 73 ft. in length by 22 ft. in breadth by 3·8 ft. in depth.

The scow is a type of vessel which is very suitable for trading in the waters around Auckland. The majority of these vessels have flat bottoms, square bilges, and centre-board keels, and load their cargoes whilst lying on beaches. Few of them have any hold, as they are specially built for the carriage of deck cargoes and in accordance with the Department's deck-cargo regulations. As the spaces below deck are not adapted for cargo and therefore have no freight-earning value, it has been the practice to bulkhead off large portions of these spaces and to claim them as water-ballast tanks. To enable a decision to be made as to whether this claim is a legitimate one, a full investigation was made during the year as to the adaptability of the spaces for such ballast, and as to the necessity for water-ballast tanks in the scow type of vessel to ensure sufficient stability, trim, and weatherly qualities under various conditions of loading. Inclining experiments were carried out on two vessels, one being a sailing-scow and the other an auxiliary scow.

Mention may here be made of two vessels built abroad and surveyed here for the first time. One of these is the motor cargo-vessel "Inaha," and the other is the cargo-steamer "Kairanga," which burns oil as fuel.

The "Inaha" is a twin-screw vessel of 250·7 tons gross and 115 tons register, and is built of steel. She is porpelled by two-cycle semi-Diesel oil-engines of 300 b.h.p. The "Kairanga" has a tonnage of 2,830 gross and 1,726 register. She is propelled by a set of triple-expansion surface condensing-engines supplied with steam from two multitubular marine-type boilers each of 2,050 square feet of heating-surface.

Of the surveys for seaworthiness a large number of the defects found were due to collisions and grounding. One overseas steamer was found to have seven furnaces in three boilers badly distorted.

The use of oil as fuel is increasing. The number of motor-vessels and of steamships burning oil fuel is becoming greater each year. Several steamers originally built to burn coal have been converted to burn oil. The arrival in New Zealand of the motor-vessel "Aorangi" was an event of marked interest in shipping circles, and the facilities kindly offered by the owners for a complete inspection of the vessel provided the opportunity for study by engineers of the great progress that has been made in the design of the internal-combustion engine. The engine-room of the vessel was particularly interesting for the reason that it has the largest engine to date of the two-cycle single-acting type of any passenger-vessel afloat. The "Aorangi" is an example of the confidence that is now placed in the internal-combustion engine. It is interesting to note that, based on Lloyds returns for the year 1923–24, nearly 19 per cent. of the tonnage built during that year was motor tonnage, and of the total tonnage recorded in Lloyds Register about 3 per cent. is motor tonnage. It has been stated that in Germany, Sweden, and Denmark, motor-vessels represent 78 per cent. of the total tonnage under construction.

It is not only the increase in popularity of the motor-vessel that accounts for the increased consumption of oil. Oil is being largely used in steamships as fuel instead of coal. It is estimated from Lloyds report for the year 1923–24 that nearly 28 per cent. of the total tonnage built that year is propelled by steam-engines either using, or fitted to use, oil fuel.

Unless the price of oil becomes unprofitably high in relation to that of coal we may expect the numbers of motor-vessels and oil-burning steamers to increase. There is doubt in some quarters as to whether the supply of petroleum will be equal to the demand. It has been predicted by an English university professor of science that there will be a petrol famine in five years, but another eminent authority is of the opinion that there is no occasion to worry about future supplies. It is generally agreed, however, that oil should not be extravagantly used. The doubt about future supplies appears to be due to the difficulty or impossibility of gauging the capacity of the oilfields. The consumption of petroleum in New Zealand for the year 1923 has been estimated by Mr. Homer S. Fox, the United States petroleum expert, to be 20·3 gallons per head of population. The corresponding figure for Australia is 9·2, and for the world 23·8.

The oil-burning steamer is in a better position than the motor-vessel to meet a scarcity of oil or an unprofitable rise in its price, as a change from oil-burning to coal-burning can be made at short notice and small expense.

In view of the increase in the use of oil fuel the Marine Department of the Imperial Board of Trade have issued a further circular on the precautions to be observed in the use of oil fuel. Attention

is directed to the necessity for taking special precautions to reduce the risk of fire to a minimum. It is pointed out that even in the best-equipped vessel the danger is always present unless there is constant vigilance and strict attention to cleanliness. The conditions which are highly dangerous, and which it is most important to avoid, are such as will permit of the possibility of fire spreading over an area such as spaces underneath the boilers (bilges and ballast-tank tops), a condition not unknown to the Surveyors and one which constitutes an act of neglect by the responsible engine-room officer deserving of severe censure. No evidence of oil should be permitted to exist in such places. The chief engineer might usefully require the condition and contents of the engine- and boiler-room bilges and tank-tops to be logged at the end of each watch. The great importance of cleanliness might be further impressed on the engineering staff by posting in the engine and boiler rooms a notice to the following effect: "Cleanliness is essential to safety, and small fires which may occur can be prevented from being disastrous by keeping fittings tight and bilges scrupulously clean." Copies of this circular have been forwarded to all Engineer Surveyors and to chief engineers of oil-burning steamers.

Whilst the great importance of cleanliness in the use of boiler fuel and other crude oil as used in the Diesel and semi-Diesel engines cannot be overstressed, there is even a greater necessity for care in the use of petrol and other light motor-oils as used in most of the launches. Petrol is a most dangerous oil. Petrol-vapour is heavier than air, and therefore finds its way into the bottom of the boat and into parts where its presence might not be suspected. Petrol liquid will creep along metal surfaces, and no riveted joint can be guaranteed to prevent it leaking through. Many who are accustomed to use it ashore are inclined to use it afloat in the same more or less careless manner. They forget that in the open air the spilt benzine is rapidly dispersed, but that on a launch it saturates the woodwork and that its vapour is confined in any compartment in which it may be spilt. Many people display a contempt for danger born of ignorance or indifference when handling petrol. Many accidents are due merely to gross carelessness, and in such cases those responsible deserve severe punishment.

Petrol is a highly dangerous explosive, and its vapour is very easily ignited. Some of the precautions that should be observed in the handling of petrol should be obvious to any one. In some cases of fire where the presence of petrol has been suspected as the cause it has been difficult to understand just how the fire started. It is known, for instance, that a man standing on the rubber covering of the running-board of a motor-vehicle, filling the tank under the seat with petrol from a can which he was holding in the air, has generated sufficient electricity by the friction of the petrol passing out of the mouth of the can to cause a spark and resultant fire.

The filling-pipes of oil-tanks on board ship should be carried above the deck so that the oil-vapour displaced from the tank when it is being filled may have free escape into the open air. It has come to the knowledge of the Department that in some cases the deck filling-pipes have been removed so that the tank could be filled from below deck. This is a highly dangerous practice, and one vessel last year was burnt to the waters edge due to the filling of the tank from the engine-room. Surveyors have been instructed to see that fuel-tanks are fitted close to the deck so that, from lack of headroom, it will be impossible to fill the tank from below deck.

Advice has been received from the Board of Trade respecting new rules relating to the life-saving appliances to be carried on ships. The regulations of this Department are now being revised to bring them into conformity with the latest Board of Trade regulations. The principal points in which the new Board of Trade rules differ from those of the Department at present in force are as follows: The present rules require on all foreign-going passenger-steamers lifeboats sufficient to accommodate all persons on board. In the Board of Trade rules great importance is attached to the principle that all boats must be readily available in case of emergency. In a few of the existing foreign-going passenger-ships where it is not possible to carry boats for all in such a manner that they shall be readily available the deficiency is allowed to be made up by buoyant apparatus. The capacity of the lifeboats is subject to a definite minimum.

To provide for the rescue of those who may not have been able to obtain a place in a lifeboat or who may have been thrown into the sea, all foreign passenger-steamers are required to carry, in addition to their ordinary equipment, light buoyant apparatus sufficient for 25 per cent. of those on board.

The carriage of a motor boat or boats is made compulsory on vessels carrying more than fifteen lifeboats, and these motor-boats must be fitted with wireless apparatus and searchlights. If the vessel does not carry a motor-boat and has more than ten lifeboats, one of these is required to be fitted with wireless. In the case of foreign-going passenger-vessels launched after the 1st March, 1913, and in the case of home-trade passenger-vessels launched after the 1st January, 1926, other than those where the height of the boat-deck above the water-line at the vessel's lightest seagoing draught does not exceed 15 ft., the structural strength of the boats, and the strength of the davits, falls, blocks, and all other gear required for lowering the boats, are required to be sufficient to permit of the boats being safely lowered into the water with the full complement of persons and equipment on board, the ship being assumed to have a list of 15 degrees.

On all foreign-going passenger-steamships in which the boat-deck is more than 30 ft. above the water-line provision has to be made for the illumination from the ship of the lifeboats when alongside and in process of or immediately after being launched. In order that boats shall have a satisfactory form and ample stability and sufficient freeboard and strength, a table of scantlings and a minimum specification have been embodied in the instructions relating to life-saving appliances. Buoyant apparatus is required to be reversible, to be of such size and strength, and of a weight not exceeding 400 lb., so that it can be handled without mechanical appliances, and, if necessary, be thrown from the vessel's deck on which it is stowed. It is further required to have sufficient stability in any position in which it is capable of floating. Life-jackets are in future to be reversible, suitable both for adults and children.

During the year instructions to Surveyors of Ships have also been issued relating to the sizes of shafts for steam-engines and internal-combustion engines, repairs to boilers, chain cables for auxiliary scows, and surface ventilation of coal cargoes. All holds, bunkers, and other compartments of vessels in which coal is carried must be provided with an effective system of surface ventilation to ensure the free escape of the explosive gases given off by the coal. As spontaneous combustion is promoted by the introduction of air into a mass of coal, ventilation into a mass is prohibited, and the Department cannot accept any arrangement of ventilators which would deliver air into the body of the coal stowed in any compartment.

Inspection of Machinery.

The number of inspections carried out during the year total 27,853, as compared with 25,111 during the year 1923–24.

There were reported to the Department during the year 19 fatal and 105 non-fatal accidents. Seven of the fatal accidents were not due to machinery causes in respect of which the Department had any responsibility whatever. In each case of accident an Inspector of Machinery has made a detailed report, and the circumstances of every accident have been closely investigated. The majority of accidents have not been due directly to machinery causes, but to careless indifference which creates a false feeling of security. A foreman of works was killed in a shaft-tunnel, a place he had prohibited his workmen from entering. Another man was killed whilst riding on a goods-lift, although there was a notice in large letters posted up prohibiting any one from riding on the lift.

The prevention of such accidents is beyond the control of the Department. Greater sense of appreciation by workmen of the danger associated with the machinery they attend to would materially assist in a reduction of the number of accidents; in fact, this is probably the most helpful means by which an appreciable reduction can be brought about. From the various reports received during the year it appears that many workmen have not the instinct to perceive an open danger as such, and therefore act as if in perfect safety, with the almost inevitable result. Machinery-owners should as far as possible choose men for machinists who are naturally careful. They should be well trained and thoroughly informed of the dangers of working machines they may be in charge of. Not until a machinist has been trained to do the correct thing habitually should he be considered satisfactory.

Guards and other mechanical safety equipment will not prevent all accidents. They can prevent a proportion of them only. The majority can be considerably reduced by the careful attention of the worker to what he is about.

Of the fatal accidents, one was due to the oiling of overhead shafting when in motion, two to adjusting belts by hand while the machinery was in motion, one to entering a shaft-tunnel whilst wearing a loose apron, one to riding on a lift authorized to carry goods only. One unfortunate woman was killed by a 3 h.p. milking-machine. Her clothing became entangled in the belting or fly-wheel. This engine had been installed and in use without the knowledge of the Department and was therefore unprotected.

All of the above accidents were avoidable if reasonable care had been exercised.

Of the non-fatal accidents, 33 were caused by wood-working machines. Of this number, circular saws were resonpsible for 17 accidents and buzz-planers for 7. Of the 17 circular-saw accidents, 9 were due to the worker's hand slipping on to the saw in front whilst the wood was being pushed through, 3 persons were injured through slipping on the ground or floor, thereby coming in contact while working about saws, one was badly cut through attempting to bring a saw to rest quickly by pressing his hand on the side of it, one was injured through cleaning under the bench whilst the saw was revolving, another being injured by a piece of timber flying off the saw, and in the remaining two cases the actual causes of the accidents are not clear. Here, again, at least 80 per cent. of the accidents were due to carelessness and foolhardy action. It is satisfactory to note that there was only one accident due to a piece of timber flying back off the saw. The special preventative for this class of accident is a fin at the back of the saw. Many workers prefer the tensioning-fin—that is, one held at each end—in lieu of the usual type, which is bolted firmly in position at the lower end only. The Department has recently approved several designs of tensioning-fins which are now being installed. In the case referred to one of these improved fin guards has been fitted, and it is expected there will be few such accidents in future. There is difficulty in protecting workers against accidents caused by the hands of the benchman slipping on to the saw in front when feeding, because the height of saw exposed above the bench cannot be less than the thickness of the timber cut. When handling small timber a push-stick in common use should be used invariably to push the timber through the last few inches. A number of the accidents were due to neglect to use this precaution.

The buzz-planers responsible for the accidents herein referred to were all fitted with circular cutter-blocks. The injuries were not severe, except in one case where four fingers were so badly lacerated that they had to be amputated. In this case the man was attempting to plane a small piece of jarrah by applying hand-pressure immediately over the knife-block, the timber being swept away by the action of the knives the hand fell on the revolving knives with some force and so was badly injured. This is the cause of the greater number of such accidents, and when it happens to one not practised in operating this machine it is the lack of knowledge of its action, while if an expert is caught it is usually the result of foolhardiness.

This is the most severe accident caused by a buzz-planer fitted with a circular cutter-block which has been reported to the Department, and its extent is difficult to understand. These machines even with the latest equipment are very dangerous. The gap in the bed of a circular-head machine is not usually so large as that required for a square cutter-block, and being practically filled up by the circle there is little likelihood of more than the flesh at the tips of the fingers being removed,

However, that a very severe injury can be inflicted by the circular head is evident, though, as already stated, difficult to understand. The fitting of a circular head to buzz-planers is often considered the only safety-device necessary, but it should be widely understood that the fitting of a cover above the gap and over the knives—that is, a bridge-guard—is an additional safeguard and is essential. Machines which do not have the bridge-guard will not be passed in the future.

Instructions were issued during the year relating to guards for drag or breast bench-saws used in sawmills. A supply of safety pamphlet No. 8 issued by the Home Office, which relates to "Fencing and other Safety Precautions for Wood-working Machinery," was obtained and issued to all Inspectors of Machinery. The pamphlet is practically up to date and deals with all machines commonly in use. It is well illustrated, and it is hoped that the instructions contained in it when given effect to will assist in reducing the number of accidents with wood-working machinery.

Boilers.—The number of boilers inspected during the year was 7,944, as compared with 7,780 last year. Many dangerous defects were discovered and repairs effected during the year, and to the careful annual inspection made may be attributed the fact that no serious accident has taken place during the period under review.

The number of new boilers inspected during the year is 363, as against 275 last year.

Circulars relating to boiler-construction have been issued recently as follows: Rules for Boiler-furnaces; Rules for Hydraulic Test of Boilers; Instructions respecting thinning of copper dished ends.

Lighthouses.

Three Kings Islands.—Since writing my last report a further series of direction-finding tests were carried out in Auckland Harbour in the presence of members of the Shipmasters' Guild and representatives of the Harbour Board and other interested bodies. The tests fully demonstrated the efficiency of the apparatus, and convinced all parties that it was a much more efficient aid to navigation than any auditory fog-signal.

Arrangements are being made to procure the necessary equipment for establishing a direction-finding station at Cape Maria van Dieman. This installation will then be operated by the personnel employed at the lighthouse, and will, it is considered, give better aid to navigation than a light and fog-signal on the Three Kings Islands themselves.

Cape Brett.—A new landing-crane has been erected at this station to replace the one which was destroyed by the phenomenal storm experienced here some time ago. This crane is exposed at times to very violent wave action, and a special design had to be adopted to overcome the difficulties inherent to this place.

Tiritiri.—This light has been converted from a watched oil-burning light to an automatic flashing one. It was originally an important making light for vessels approaching the coast, but owing to the diversion of trade through the Panama Canal and the provision of other powerful lights its importance is not so great as formerly. For this reason arrangements were made, when converting, to reduce the range of the light somewhat. The apparatus as converted is highly efficient and is giving full satisfaction.

Piako River Leading-lights.—It is now proposed to replace the existing oil-burning lights with a single automatic flashing light, and details are being prepared to that end.

East Cape.—The new lenses required to replace the damaged ones in the old light have been received and placed in position. Improvements to the existing access road and landing have been also carried out. A special telephone-line has been erected, and a toll-station established here to serve the requirements of the light-station and to enable the necessary meteorological information to be supplied.

Matakaoa Point.—The apparatus for this new light has been received and landed at the site. Suitable arrangements have been made for the land and access road, and the work of erection is to be put in hand immediately. This light will serve a twofold purpose. Owing to the shifting of the East Coast Lighthouse from the island to the mainland, there is a small dark sector to the northward. The new light at Matakaoa Point will be of great assistance to shipmasters coming from the north for turning the Matakaoa Point before they come actually within the range of East Cape light. Secondly, it will act as a port light in connection with the Port of Hicks Bay, where a new wharf is now being constructed by the Hicks Bay Harbour Board.

Cape Palliser.—A new water-supply has been provided for this station. The original provision consisted of rain-water tanks only. Considerable storage is required here, and as the existing tanks required renewal it was decided to provide a concrete reservoir fed by pumping from a near-by spring and providing a gravity supply to the various cottages and utilities.

Cape Foulwind.—Orders have been placed for the supply of the necessary apparatus for the conversion of this light from a watched oil-burning light to an automatic flashing gas light. Portion of the apparatus has been already received, and the remainder, consisting of the lens and lantern, is expected very shortly. Immediately the whole outfit is received the construction of the tower will be put in hand. This lighthouse will be the first one in this country to be equipped with the Dalen incandescent acetylene burner with automatic mantle-exchanger. The operation of this light will be wholly automatic, including the changing of the incandescent mantles in case of breakage, and it will be the most powerful unattended light so far installed on the New Zealand coast. The annual saving as a result of its use will amount to several hundreds of pounds per annum.

Puysegur Point.—Additions have been carried out to the buildings at this station, and the installation of a radio transmitting and receiving set has been completed.

Dog Island.—An examination of the optical and illuminating apparatus of this lighthouse has been made, and it has been decided to dismantle the existing light system and replace it with a standard

second-order dioptric lens and incandescent oil-burner. This plant is now in stock, and the alterations will be put in hand shortly. The present apparatus, the only one of its kind in New Zealand, has been in continuous use since 1868.

Chatham Islands.—A fifth-order dioptric lens fitted with two incandescent electric lamps has been, with the permission of the Post and Telegraph Department, erected on the wireless mast at Waitangi. This light, which is lit from the batteries of the wireless station, has proved to be of great assistance to shipmasters trading to this port.

Anglem Point.—A small automatic acetylene-burning light has been erected at this point to replace the oil-burning light which has been established here for some time. This light is used principally by fishermen, but the difficulty and expense of getting any one to give it regular attention resulted in the alteration.

Kahurangi Point.—This lighthouse, which is isolated and a difficult one to tender, is now being converted to automatic operation. It is not proposed to leave the light wholly unattended, one keeper being retained in place of the three now required. It is anticipated that the alteration will show a considerable economy.

During the year the question of automatic control for a number of other lights has been investigated, and after careful consideration it has been decided to increase the gas-storage capacity at some of the more inaccessible automatic installations with a view to reducing the number of times per year that these lights must be tendered.

The s.s. "Tutanekai," which is the sole tender for all lighthouses, is at present hard-pushed to keep up to schedule, and with the increased number of lights it will be a considerable advantage if the interval between tendering can be increased.

Harbour-works.

Gisborne.—Plans in detail in connection with this harbour have been the subject of very considerable discussion between myself and the Board's Engineer, and the whole question of Inner versus Outer Harbour has been threshed out between the Marine Department and the Board, as a result of which the Board quite recently decided by a very large majority to proceed with the works of an Outer Harbour in accordance with plans prepared by their Engineer some years ago, and which plans have been approved.

Napier.—The Marine Engineer reported fully on the question of harbour facilities at Napier, as the result of which report the Board ceased operations in connection with the Inner Harbour, and has made arrangements to obtain a further comprehensive report from the Engineers who reported on harbour questions at this port in 1913. To enable the Engineers to report more definitely, borings are being taken, both in the area which will be enclosed if the Outer Harbour is completed, and also in the channel leading to the Inner Harbour, and throughout the area of the Inner Harbour which would require to be dredged if that harbour were adopted.

Westport.—The most important work at this port is the maintenance of an adequate depth on the bar, and (except when weather conditions were unsuitable) the "Eileen Ward" has been constantly at work to this end. During the year she dredged and conveyed to sea 589,410 tons. A satisfactory depth has been maintained throughout to adequately serve all shipping wishing to use the port.

Last year repairs were carried out to the breakwater, additional stone being tipped at the ends. This work was well done and has given very satisfactory service, consequently no further maintenance has been necessary during the year.

Waikokopu.—During the year the new wharf has been practically completed. This wharf, including piled approaches, is 376 ft. long, and, together with the formation of stone-protected earth access bank, has been erected by the Public Works Department.

The traffic over this wharf, which is considerable and increasing, has been handled by the Public Works Department, but arrangements are being made to hand the control over to the Wairoa Harbour Board under agreement with the Minister of Public Works.

General.

A large number of applications were 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. Among these various applications were the following:—

Wharves.—Wharf and tram-line, Maori Beach, Port William, Stewart Island; Tolaga Bay; Port Ahuriri, Napier; Rattray Street Wharf, Dunedin; Whananaki, Whangarei; Sandy Bay; Bayswater, Auckland Harbour; Big Omaha; Te Kopuru; Rona Bay and Queen's Wharf, Wellington; King's Wharf, Auckland; Whangaroa, Chatham Islands; The Mount, Tauranga; Whangaparaoa; Tokatoka; Rawene, Hokianga; Maraetai; Paritu Bay, Coromandel; Tiritiri, Auckland Harbour; Island Bay, Wellington; Devonport, Auckland; Opotiki; Foxton.

Wharf-sheds.—Tokatoka; Rawene, Hokianga.

Boatsheds and Landings.—Matawhi Bay, Russell; Paremata Boating Club.

Foreshore Licenses.—Paremata; Mangawhare, Wairoa River; Murray's Bay, Hauraki Gulf; Rawene, Hokianga River; Half-moon Bay, Stewart Island; Opononi, Hokianga; Purakanui; Mercury Island cattle-race; Rawene, Hokianga; Wade River; Hauraki Gulf; Tangawahine; Bragg's Bay, Stewart Island; Pahi River, Kawhia; Kohimarama, Hauraki Gulf; Golden Bay; Whangaroa Harbour; Mapuna, Kaipara Harbour; Waiaro, Coromandel; Te Kopuru; Papuke River, Whangaroa.

Harbour-works.—Gisborne; Wanganui; Thames; Napier; Whangarei; Nelson; Tauranga; Opunake; Bluff.

Electric-power Cables crossing Navigable Rivers.—Thames Valley Power Board, Piako River; Wanganui Power Board, Wanganui River.

Boat-slips.—Port Jackson; Wade River; Bragg's Bay, Stewart Island; Mill Bay, Mangonui Harbour; Rocky Bay, Waiheka; Bravo Island, Stewart Island.

Timber-booms.—Dargaville; Tangawahine Creek, Kaipara.

Bridges over Navigable Waters.—Turanganui, Gisborne; Oputuru Creek, Raglan; Wairoa River, Dargaville; Avon River, New Brighton.

Reclamations.—Evans Bay, Wellington.

Fisheries.

During the year the Chief Inspector of Fisheries visited the following fishing-grounds and oyster-beds: Hokianga, Whangape, Bay of Islands, Whangaruru, Whangamumu, Whangarei, Kaipara, Manukau, Hauraki Gulf, Coromandel, Great Barrier, Thames, Tauranga, Cook Strait, Marlborough Sounds, Picton, Blenheim, Lyttelton, Kaiapoi, Lake Ellesmere, Timaru, Oamaru, Moeraki, Port Chalmers, Molyneux Bay, and Invercargill.

In connection with oyster-cultivation work, special inspections were made of the oyster-beds at Bay of Islands, Whangarei, Great Barrier, Hauraki Gulf, Kawau Island, Mahurangi, and Coromandel coast.

Visits were also made to the Government Atlantic-salmon Hatchery at Te Anau Lake, and Waitea Creek Hatchery on the Wanganui River, and also to the Quinnat-salmon Hatchery at Hakataramea, Maori Creek, and Pembroke. An inspection was made of the Haast River on the West Coast, crossing over the Haast Pass to its headwaters and following it down to its junction with the Landsborough.

The annual reports received from the Collectors of Customs and Inspectors of Fisheries show that, taking the year right through, fish have been plentiful on the usual fishing-grounds, and good catches have been made by fishermen.

The catching-power at Auckland has been largely increased by the number of launches which have given up set-net and line fishing and gone in for the more up-to-date method of Danish seining. The number of Danish-seining vessels this year numbers 22, as against 3 the previous year. The large steam trawlers which tried seining last year in the Hauraki Gulf found that the cost of working such vessels at this method of fishing was too great, and they have all gone back to trawling, and with the exception of one small trawler all the vessels now using the Danish seine are motor-power launches. A good deal has been said about the destruction of immature fish by Danish seiners, but experience has proved that even with a 3½ in. mesh in the wings and cod end of the net very few small snapper or tarakihi are taken, and with a 4 in. mesh there are practically none; so it would seem that the depletion of the fish-supply in areas where this method of fishing is employed can be guarded against by fixing a mesh of net which will allow all fish below a certain size to pass through. In fine weather good hauls have been made by the seiners throughout the year—as an instance, two launches working off the Coromandel coast: for three hauls one had 3 tons of fish, and the other for two hauls fully 2 tons, all the fish being well over the regulation size.

Extensive new works for Sanfords Limited were finished and opened in February last. This is the largest and most complete plant for handling fish in the Southern Hemisphere. The most up-to-date facilities for cleaning, packing, and curing fish are provided, with a complete plant for the extraction of fish-oil and the manufacture of fish-fertilizer and fish-meal, and also a large ice-making plant.

Foveaux Strait Oyster-beds.—In his report the local Inspector at Bluff says: "The oysters this season are plentiful and in good condition. The total quantity taken from the beds was 23,796 sacks; of these, 522 sacks and 360 cases of opened and frozen oysters were exported to Melbourne, and the balance, 23,274 sacks, were disposed of in the Dominion. The total wholesale value of the season's catch was £14,873."

Rock-oysters.—The beds picked last season in the Hauraki Gulf were part of Ponui, Waiheke, Pakihi, Brown's, Rangitoto, Matu Tapu, and Rakino Islands, also part of Mahurangi and the south coast. The beds on Coromandel coast and Great Barrier Island, and the Kaipara beds, were also picked. The only oysters picked at Bay of Islands was 161 sacks for local sale. The reason for not picking for the Auckland market was because the principal beds had a very heavy crop of oyster-spat, and the mature oysters could not be picked without destroying large quantities of these small oysters, and also because the Bay of Islands men were employed picking at Kaipara and Hauraki Gulf throughout the season. The beds all over the Bay of Islands are in very good condition and will yield over 3,000 sacks for market this season. All the oyster-cultivation walls are now heavily covered with oysters: from those built in 1921–22 the Inspector says quite 200 sacks of first-class oysters will be taken for market this season. With the splendid fixing of young oysters on the walls built it is safe to say that within four years the Department will get back all the money spent on cultivation work, and have miles of permanent beds in localities where neither rock nor oysters ever existed.

The Whangarei beds are in splendid condition, and it is expected that over 400 sacks can be taken for market this season.

The Kaipara beds yielded 2,011 sacks for market last season. These beds are very extensive, and with proper protection and careful picking can be greatly improved. This season there is a good fixing of young oysters.

The Hauraki Gulf and Great Barrier beds are improving year by year. They were lightly picked last season from both localities; 4,346 sacks were taken. The beds were left in good heart, and it is expected that they will yield quite the same quantity this season.

Since the appointment of an Inspector for the Coromandel coast the beds are showing steady and satisfactory improvement; 323 sacks were picked last season, and the Inspector expects to take well over 400 this season.

There is a good fixing of young oysters on the rock walls built in Putiki and Brown's Bays, Waiheke Island, and in Te Kumu Bay and other places on the Coromandel coast there is a good showing of young oysters this season.

Toheroa-beds.—North Kaipara beach beds: Nos. 1 and 2 leased areas are well stocked, and although these areas have been worked without a rest for the last five years they are reported by the Inspector to be in good condition.

From Glink's Gap reserve to some distance north of Mahutu Gap there has been a heavy spawning during the last two years, and the beds are fast recovering from the depleted condition they were in some years ago.

The lessees of the beds on the Ninety-mile Beach between Ahipara and Scott's Point have now got their canning-factory in full working-order, and they report a successful season, and toheroas plentiful all over their sections of the beach.

Atlantic Salmon.—These fish continue to show a satisfactory increase in the Waiau River and its tributaries. The number caught by anglers in Te Anau Lake and its tributaries shows a considerable increase on the previous season's catch. The number taken in the lower reaches of the Waiau did not, however, come up to the number caught in 1924.

The salmon-angling is proving a great attraction to visitors to Te Anau, and sportsmen from all over the Dominion have visited the district for the salmon-fishing and have been well satisfied with the sport they got.

On account of unfavourable weather and floods during the spawning season the quantity of eggs collected did not come up to the previous season's total. In his report on the season's work the Assistant Inspector, who was in charge, says: "Collecting operations in the Upokororo River were continued until the 18th September, when the nets were again washed out. This was the seventh occasion on which the nets were swept away or had to be removed because of floods. The results for the season's work are not as good as anticipated, but, as pointed out in my previous report, continuous floods caused an immense amount of hard, cold work for a minimum result. Another season, however, conditions may be the reverse, when we can look forward to obtaining probably a million eggs with less hardship and less cost."

The number of eggs collected was 454,000, and the total fish handled was 129, of which 76 were females and 53 males. It will be noticed that the largest proportion of the fish were females. The same condition existed last season, and is a very unusual thing with spawning salmon or trout, the reverse usually being the case. The eggs collected were all sent to the Department's hatchery on the Wanganui River. They hatched out exceptionally well, and the young fry, which were fine vigorous young fish, were liberated in tributaries of the river.

Quinnat Salmon.—Last spawning season the weather and river conditions were most unfavourable for the collection of eggs. The Assistant Inspector in his report says:—

"The collection camps were again established on the Dobson and Ahuriri Rivers, and the Hakataramea was also worked by the staff at the Hakataramea Hatchery. The men for the Dobson went into camp on the 4th April, and the gang for the Ahuriri on the 10th.

"I regret to report that at both these stations which in other seasons have been so successful were this year a comparative failure. The season was a continued succession of nor'-west rains, which caused those rivers to flood heavily and kept them too high to work, causing a large amount of extra work, considerable hardship, and loss of material.

"On the 10th May I went to the Dobson to inspect the work, and finding the rivers still high and salmon not as plentiful as in other seasons, and there being little prospect of getting a payable quantity of eggs, I decided to abandon the work there for this season.

"At the Ahuriri salmon were more plentiful, but not in as large numbers as in previous seasons, and a great deal of time was lost by floods. The nor'-west rains do not affect the Hakataramea River to the same extent—in fact, they were rather beneficial than otherwise, and we had the best season experienced for some years.

"The following is the total of eggs collected: Dobson, 40,000; Ahuriri, 293,000; Hakataramea, 431,000: total, 764,000.

"These eggs were distributed as follows: Wairau (Marlborough), 600,000; Hokitika, 150,000; and the balance were hatched out at Hakataramea and the young fish liberated in that river."

Curing and smoking of salmon was attempted for the first time at the Hakataramea Station this season, but owing to the adverse conditions already mentioned in this report the quantity of fish handled was limited.

This season the Department decided to allow netting for salmon in the Waimakariri, Rakaia, Rangitata, and Waitaki Rivers, and also allow anglers holding trout-fishing licenses to sell their catch of salmon, and the following licenses were issued: For the Waimakariri, five netting licenses and three anglers' selling licenses; for the Rangitata, one netting license and two anglers' selling licenses; for the Rakaia, six anglers' selling licenses.

In the Waimakariri River 190 salmon were taken and sold by the netters, and 11 by the three anglers who held selling licenses, making a total of 201, and the weight 552 lb.

No returns are yet to hand from the other rivers.

An effort was made by the Department to catch salmon for market from the tideway of the Clutha River. Two experienced men were employed and worked both branches of the river from the 12th March to the 16th April, but were practically unsuccessful in getting salmon.

This river is a very difficult one to net, for even when in normal condition it carries a very heavy body of water, and at ebb tide the current is so strong that it is difficult to hold set-nets; besides, branches of trees, logs, and debris from flax-mills block the nets. It is also very difficult to find a clear bottom for a hauling-net, as in most places it is full of snags.

During the first two weeks the men were on the estuary the river was considerably above normal, and the current was too heavy to hold set-nets, and it took some time before any clear bottom could be found for hauling nets.

Although the run of quinnat salmon this season has been rather poor, yet there is no doubt but they came up the Clutha River in considerable numbers, although the men were not catching them, as a run of salmon were seen in the Clutha at Lowburn Ferry about the end of March, and the day after the men packed up their nets and left the mouth of the river a large school of fish were seen making their way up the Matau Branch.

It is evident that very few salmon were running while the Department's men were on the river, and the river conditions were generally unfavourable at that time. There is no question but that the Clutha Estuary is rather difficult to work with nets because of the strong currents experienced, rough bottom in many places, and the quantity of debris which comes down. However, from the experience gained this season, the officer in charge is of opinion that netting when the river conditions are favourable is quite possible, and he says in his report: "I certainly consider that in a very short time quinnat salmon will be taken in large quantities in this river."

The run of salmon this season was certainly considerably below the number which has come up during the last previous four or five years, and on that account the quantity taken by netters and also by anglers has been very much below the average of previous years.

In normal seasons there is no doubt the catching of salmon in the different rivers on the east coast will be a good business proposition.

The following is a summary of the information supplied by Collectors of Customs and Inspectors of Fisheries in their reports for the year:—

Bay of Islands (including Whangaroa and Mongonui).—The Inspector reports that the supply of fish for the past year has been exceptionally good, and for several months exceeded the demand. Mullet, snapper, and flounders were taken in large quantities. Sporting fish were very plentiful this season, and a great many overseas anglers have had splendid sport, and were unanimous that it is the best fishing they have yet experienced. The Bay of Islands oyster-beds are in splendid condition this season, and it is expected to take over 3,000 sacks from them this year. Last season oysters were only picked from these beds for the local market. The reason for this was that the pickers from Bay of Islands were employed for the whole of the season picking the Kaipara beds. There has been a very good fixing of spat on all the natural beds, and a wonderful fixing on all the rock walls built during the last two years. All the cultivated beds in the Bay of Islands are now heavily stocked with oysters, and over 200 sacks of first-class oysters will be taken from some of the rock walls built in 1920 and 1921. The Whangaroa beds, which were replanted by the Department, are being depleted by the constant poaching which goes on there. Unless these beds have stricter protection it is felt they will soon be completely destroyed. The Whangarei beds are in very good condition indeed, and it is expected to take between 400 and 500 sacks of first-class oysters from them this year.

Whangarei.—Snapper, mullet, and other market fish have been plentiful throughout the greater part of the year on the local fishing-grounds, and good catches were made, particularly on the fishing-grounds outside the harbour.

Kaipara.—The usual market fish have been caught in fairly large quantities during the year in the Kaipara Harbour and its estuaries. Flounder is the fish mostly sought after, as there is a keen demand for them in the Auckland market. Mullet has been very plentiful, but as there is very little demand for this fish for the Auckland market they were only taken by fishermen in small quantities. Snapper has also been plentiful, but on account of the very large quantities of these fish brought in to Auckland by trawlers and Danish-seining boats there has been very little demand for these fish from the Kaipara grounds.

Toheroas are very plentiful on the west-coast beds from north of Kaipara Heads to Mahuta Gap.

The Kaipara oyster-beds are in good condition, and a large quantity was picked for the Auckland market last season.

Auckland.—The Inspector for the district states that the quantity of fish caught in the Auckland District, including Thames, Coromandel, and Manukau, was approximately 134,552 cwt., valued at £126,151. This shows a substantial increase on the previous year's operations, the wholesale value of fish, oysters, and mussels amounting to £132,228.

Snapper and other round fish have been fairly plentiful, although the average size of snapper has been rather small. Flounders have been particularly plentiful, especially on the Thames flats.

The oyster-beds in the gulf were lightly picked last season, yielding 3,726 sacks. The beds were all left in good heart, and will easily give an equal quantity this coming season. The beds at Great Barrier yielded 620 sacks, and are showing a substantial improvement every year The bed on the Coromandel coast are showing a substantial improvement each year; 323 sacks of oysters were taken from them last season, and from the condition the beds are in it is estimated that they will give from 400 to 500 sacks this coming season.

The rock-wall oyster-cultivation work at Putiki and Brown's Bay have now got a splendid fixing of young oysters on them. At Te Kumu Bay and generally along the islands on the Coromandel shore the fixing of young oysters this year has been very satisfactory.

Tauranga.—The catches by fishermen on the local ground has been quite equal to the previous year. Considering the extensive fishing-grounds in the Bay of Plenty, it is to be regretted that there is so little interest taken in the development of the fishing industry from this port. As a matter of fact, the quantity of fish brought in from the local grounds is not nearly sufficient to supply the demand in Tauranga and district, and large supplies are brought from Auckland every week.

Deep-sea sport fishing has become very popular here, and is attracting a large number of visitors and foreign tourists as well as sportsmen from all parts of the Dominion.

Gisborne.—Fishermen report fair catches during the year, although flat fish in the bay have not been so plentiful as previously.

Hawke's Bay.—The local Inspector reports that the past year has been a fair average one for fishing. The weather conditions have not been of the most favourable nature owing to the prevalence of easterly and southerly winds, and the absence of westerly winds, which have a strong tendency to bring the fish into the waters of Hawke's Bay. From September to March of the present year fish have been fairly plentiful. All catches have been disposed of without difficulty, and no fish had to be stored in freezing-chambers. The fish caught have been in first-class condition, and the wholesale price obtained has shown an increase.

New Plymouth.—Extensive fishing-grounds exist off the Taranaki coast, but on account of the want of sheltered harbours there are very few vessels employed in the industry, and considerable quantities of fish have to be imported from Auckland to supply the local market.

Wanganui.—There has been no progress in the deep-sea fishing industry in this district during the past year, and most of the fish required to supply the local market is brought from Hawke's Bay and even as far afield as Auckland and Thames.

Foxton.—Fishermen report flounders as being fairly plentiful in the estuary, and snapper, hapuku, and kahawai as being plentiful on the outside fishing-grounds. The whitebait season has been an average one.

Wellington.—The one steam trawler working from this port reports good catches throughout the year. Tarakihi, moki, hake, gurnard, and snapper have been plentiful on the trawling-grounds worked by this vessel. On the fishing-grounds off Kapiti and Mana Islands the line and net fishermen have had a good season. On the Cook Strait and east-coast fishing-grounds a good deal of time has been lost by fishermen on account of easterly weather. On some of the old grounds groper have been somewhat scarce, but taken as a whole fish have been fairly plentiful, and the men have had a good season.

Picton.—The quantity of fish taken during the year equals that of the two previous seasons. Groper were taken in large quantities on the new grounds discovered last year. The flounder-fishermen in the Sounds report flounders as being plentiful during the year.

Blenheim.—The Collector's report states that fishermen have had a very good year, flat fish in particular being plentiful, and very good prices obtained for their catch.

Nelson.—There has been no development in the fishing industry during the year. Fish have been fairly plentiful on all the local fishing-grounds, but the quantity of fish taken shows a decrease during the year.

Westport.—The season just ended has not proved as successful as previous years, not on account of any scarcity of fish, but mainly owing to a decreased local demand, which is very limited.

Greymouth.—As stated in previous reports, the bar harbour is a great hindrance here to the fishing industry, as it is only occasionally that it is safe for the fishing-vessels to venture out. Fishermen state that the usual market fish have been plentiful on the outside grounds, and good catches were made when the weather conditions allowed them to go out. Last season was a fairly good one for whitebait, and the men made good wages while the season lasted.

Hokitika.—As will be seen by the returns, the catching of whitebait is practically the only fishing done at this port. The local Inspector reports that last season was a poor one for these fish, partly on account of the prevalence of floods in the rivers.

Kaikoura.—Fishermen report a fairly successful season, and the usual market fish were plentiful in the local fishing-grounds. The men, however, lost a considerable amount of time on account of the heavy easterly weather which prevailed during part of the year.

Lyttelton.—The local Inspector says in his report that the fishing industry at this port has not been so good as last year. On this account a few of the fishing-boats have gone to other fishing-grounds. The decrease in the fish caught was mostly in flat fish and groper, which have not been so plentiful as last year. There has been a good demand for fish throughout the year, and on several occasions there was a scarcity in the Christchurch market. Taking it all round, the fishing industry at this port is in a satisfactory condition.

Kaiapoi.—In his report the Inspector states that there is very little to comment on the year's fishing, as the season has been an ordinary one. The run of whitebait was equal to the previous year, and good wages were made by fishermen while it lasted. Licenses to net quinnat salmon in the estuary of the Waimakariri River have been issued this year by the Marine Department. Up to the end of March the run of these fish has not been a large one. There is a great demand in Christchurch and other places for this fish, and it is being sold by the catchers at from 1s. to 1s. 6d. a pound wholesale.

Rangiora.—The Inspector states that the whitebait-fishing at the mouth of the Ashley River and on Saltwater Creek has been very poor during the past season, and a number of the men who used to fish did not trouble this season, but obtained other employment. The quantity of flounder taken in the tideway of the Ashley was similar to previous years.

Southbridge.—Flounders were fairly plentiful in Lake Ellesmere during the year, and the quantity and value of fish taken was about equal to the previous year. In order to improve the fisheries the Inspector recommends that the mesh for set-nets should be increased in size to 5 in.

Akaroa.—Fish have been plentiful off Banks Peninsula, and fishermen have had a good season.

Timaru.—The past season has again been a poor one for flat fish, and on this account the launch-men have been doing mostly line fishing. This method has been more profitable for them, as trawling for flat fish consumes much more benzine. Some of the latest boats are fitted with a type of engine that runs on crude oil, and this is proving less expensive than benzine. Good catches of groper have been made by the hook-and-line men, and on the whole fishermen have earned good wages during the year.

Oamaru.—The Collector in his report states that the local fisheries experienced an uneventful year, last winter showing extremely poor returns, which, however, improved with the advent of summer. As usual, groper proved the mainstay of the local fleet, but as this fish is only found in quantities about twenty miles off shore the fishermen require fine weather and a liberal expenditure on petrol to secure good catches.

Moeraki.—The conditions on the fishing-grounds here are similar to those off the coast of Oamaru. On the whole the fishermen have had a good season, although the catches through the winter months were rather poor, yet during the summer season both groper and blue cod were plentiful.

Otago District.—The Inspector states that throughout the year fair catches of the usual market fish were taken on the outside grounds by the hook-and-line men. Taking the year on the whole the supply of line fish has not exceeded the demand. On several occasions groper and kingfish brought high prices, kingfish selling as high as 5s. each, and groper bringing £2 per case of about seven or eight fish. Large quantities of red cod and barracouta frequented the Otago waters. On account of no demand very few of these fish were brought in.

The trawling fleet have made poor catches for practically the whole of the year. One of the largest of these fishing-vessels has been laid up, as the owner states that he has been losing money for a considerable time. The hauling seine-net and set-net fishermen have taken good hauls of flounder and trevally throughout the year, and have averaged good wages. The Puketeraki fishermen have experienced a good season with crayfish.

Invercargill.—The fishing-grounds have been well supplied, and good catches have been made by the fishermen. There was a good run of whitebait in all the estuaries, and larger quantities than usual were marketed.

Bluff.—The usual market fish were plentiful on the Foveaux Strait and coastal fishing-grounds, and when good weather prevailed good catches were made. The Inspector reports that oysters are plentiful and in good condition on the different beds in the strait. Altogether the fishermen and oyster-dredgers have made good wages throughout the year.

Stewart Island.—The Inspector states in his report that the fishing industry has been very good during the past year. Blue cod as usual is the principal fish sought after, and good catches have been made during the season for these fish. Trumpeter and groper are plentiful on all the grounds around Stewart Island, but there is very little demand for these fish, as the fish-dealers at Bluff will only take very small quantities.

Chatham Islands.—The year under review has been up to or rather better than the avarege so far as the industry is concerned, both as regards employment and the quantity of fish taken. Fish of excellent quality are abundant. In November the industry experienced a severe set-back on account of the wreck of the fish-carrying steamer "Rama," which struck a rock when leaving Kaingaroa Harbour, and had to be beached, and ultimately became a total wreck. It was several months before another vessel was put on to carry the fish to Wellington.

Returns.

The following returns are appended hereto:—

(1.) The various kinds of fish caught, and approximately the total quantities and value of fish landed at the different ports, for the year ended 31st March, 1925.

(2.) The total quantity of oysters taken from the different beds, the quantity disposed of in the Dominion, the quantity exported, and total value.

(3.) The total quantity and value of fish imported into and exported from New Zealand during the year ended 31st December, 1924.

(4.) The number of steam trawlers, oil-engine trawlers, and other vessels employed in net and line 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, 1925.

(5.) The number and kinds of whales taken at each whaling-station, and the quantity and value of oil, bonedust, or fertilizer produced.

MARINE FISH-HATCHERY AND BIOLOGICAL STATION, PORTOBELLO.

Sir,— Dunedin, 2nd June, 1925.

On behalf of the Board of the Portobello Marine Fish-hatchery and Biological Station, I beg to forward herewith the report of the work carried out during the year ended 31st March, 1925.

Turbot (Rhombus maximus).—The experiment started in 1913 for the introduction of this fine food fish has been temporarily ended as far as this station is concerned. At the date of our last annual report eleven fish were still kept in the tanks, although it was apparent that there was no hope of their spawning. It is quite evident that flat fish require a considerable pressure of water to enable them to discharge their ova. No direct experiments have been made to ascertain what depth and pressure of water is required, but during the spawning-time (July and August) of the native flat fishes (flounders, sole, and brill) these latter were seldom taken by the trawl in less than about 20 fathoms. Absolutely ripe fish brought into the hatchery-ponds immediately held up their ova, and apparently only parted with them with difficulty, and in several cases retained them in the body.

It was therefore quite apparent that it was no use to keep the few remaining turbot in the hatchery-tanks, and as they were beginning to die it was considered advisable to liberate them. Accordingly on the 14th October last the remaining fish—now reduced to nine—were liberated by Mr. Adams near the same locality as the two preceding lots—viz., off Pellet's Point, to the south of the Nuggets. The Board is indebted to Mr. A. J. Allen (agent) and the proprietors of the s.s. "Oreti" for the assistance given on this as on previous occasions of the liberation of these fish. As stated in last report of the Board, there is great probability of these fish appearing in New Zealand waters, even though none have so far been met with.

Lobsters (Homarus vulgaris).—Only two females have been left of the original stock, and these hatched out small batches of eggs (estimated at about five thousand altogether) during January. As no males are left no further supply of fertilized eggs can be expected.

Therefore the attempts to introduce European turbot, lobsters, and crabs (*Cancer pagurus*) are now concluded for the time being. It is to be hoped that when conditions are more favourable the Government will renew its efforts to naturalize these species in New Zealand waters. The turbot is finer than any of the local flat fishes, fine as these are, and commands a high price in the markets of Europe. The lobster is considered by most connoisseurs to be finer than the native crayfish (*Palinurus lalandii*), though opinions differ on this matter. It does, however, command a high price both in Europe and America, and would be a desirable addition to the food-supply of this country. The edible crab has no rival in the New Zealand seas, as none of the local indigenous species are large enough to have a commercial value.

The launch "Karoro" has been employed outside Otago Heads every week during the season when weather conditions permitted, and the staff have experimentally worked the available ground with line fishing and trawling from Puketeraki to Sandfly Bay, four miles south of Cape Saunders. The launch can only work her 70 ft. trawl to a little over 20 fathoms; her 7½ horse-power oil-engine will not haul in deeper water. But dredging with a small dredge has been carried out to the 70-fathom line with interesting results.

The attempts to locate the shoals of Clupeids (pilchards and sprats) have not been very successful so far. Mr. Adams reports that at Waikawa sprats were reported to be in vast shoals off the coast throughout the greater part of the summer months. They have also been reported at times as plentiful at the Nuggets and at Moeraki, but they have not been met with in any quantity off Otago Heads. That they have not been much in evidence there is best shown by the fact that from the numerous fish taken and whose stomach contents have been noted sprats were very rarely taken. At various times a few have been taken in the small-mesh net at the cod end of the trawl. Small shoals have been seen among the rocks off Cape Saunders, driven there by the barracouta, but too near the cliffs to be secured by surface trawling or hand-nets. The sprat-nets ordered from Britain arrived too late to be reported in the year's work. Mr. Adams is very confident that, "providing there are no barracouta near the surface, there should be no difficulty in catching large numbers of sprats or pilchards."

"The weather during the winter months was very unsettled, and flat fish were more scarce than for some years past. These fish during the spawning season were only being caught in small numbers on the grounds four miles north-east and east of Otago Heads. The grounds closer inshore were foul with loose weed throughout the greater part of the winter, and were in consequence almost bare of flounders and soles. Towards the latter part of July flat fish commenced to work closer inshore. Early in August, however, heavy weather again drove them into the deeper water, and from then on they were hard to locate, being constantly on the move. The first ripe soles were caught on the 25th July, all being males. It was not until the 11th August that any ripe females were caught. A week later the majority of soles taken in the trawl were spent, a small number only retained a few eggs. All were in poor condition. Brill were exceptionally scarce, none being caught during the spawning season. . . .

"Although the weather conditions during the winter were somewhat stormy, it was not until the 12th June that it became necessary to start the heater in order to keep up the temperature of the supply water for the observation-tanks. The water in the outside ponds did not drop below 4° C., and the tank supply was on no occasion below 6·5° C.

"The duties of Inspector of Fisheries for the Otago District have taken up a good deal of Mr. Broadley's time in collecting fishing-license fees, and visiting the local fish-market. The outlying fishing-ports, both north and south, were twice inspected by him. During the latter part of February and throughout the whole of March Mr. Broadley has been engaged on behalf of the Department in salmon-fishing at the mouth of the Clutha River."

Mr. Maxwell W. Young, Biologist of the station, has had a busy year. The second lot of fish for the College of Natural Science, Philadelphia, has been prepared, consisting of 103 specimens, and this has been sent off. The total number forwarded has therefore been 147 specimens.

A considerable amount of material of zoological interest has been sent to Professor Benham. This includes fishes, tunicates (especially a good stock of prepared specimens of *Boltenia pachydermata*, for use of biological students in Otago University), polychaetes, Crustacea, and Mollusca. Sea-water from outside the Heads has been supplied to Professor Benson for his important researches (in conjunction with Professor Hercus) into the relations of iodine and goitre.

Dr. Raynor Bell, Professor of Dental Surgery, has been supplied with the fixed and preserved jaws of several species of fish, in connection with his researches into the development of teeth.

The Crustacea from the dredgings and trawls have mostly been sent to Professor Chilton, of Canterbury College; the Brachiopoda to Dr. J. Allan Thomson, of the Dominion Museum, Wellington; and the Mollusca to Mr. H. J. Finlay. In addition, red cod and whale-feed were supplied to Professor J. Malcolm, Professor of Physiology in the University of Otago, who has been working up the relative food-values of various species of food fishes. Mr. Scarfe, of Wellington, has been supplied with marine algæ.

Mr. Young has classified and described most of the zoological material collected during the expedition to the Chatham Islands, which was undertaken by the Otago Institute last year. The results will be duly published in a special volume descriptive of the work and collections of the expedition. He has also devoted special attention to the structure and classification of the New Zealand tunicates, an important but hitherto quite neglected group of organisms. He has also contributed a set of seven short papers to the *New Zealand Journal of Science and Technology.*

For several years past surface collections of tow-net material have been made at the hatchery every week, but it has not hitherto been possible to have these examined and worked out. The accumulation of tubes became so great that further collecting was stopped last year. As no zoologist could be found in New Zealand, Australia, or Britain who would undertake the examination of this material, the Chairman of the Board communicated with the United States National Museum, Washington, and received a ready and cordial response. The Museum is prepared to work up all the Copepoda and Ostracoda of these collections, and already a considerable assortment of tubes has been posted to Washington. The importance of the study of these marine organisms lies in the fact that they constitute the most important part of the food of various larval fishes, especially of the Clupeids (pilchards, sprats, &c.).

The stomach contents of all fishes caught were examined and the results noted.

The station is now providing a considerable amount of prepared zoological material for use in the University, which meets all cost of collection and preservation.

Cross-indexing of a large number of periodicals and journals has been carried out throughout the year, thus enormously increasing the value of the library to all scientific workers. A large number of valuable books and papers have been added to the library during the year. One gift of thirty volumes, being a complete set of the publications of the Puget Sound Biological Station, came from Dr. T. C. Frye, of the University of Washington, Seattle. A full set, twenty-four volumes, of the publications of the Liverpool Biological Station was also added. The New Zealand Board of Science and Art has placed the hatchery on its free list, and presented it with a complete set of the *Journal of Science and Technology.*

The whole of the buildings, property, and plant of the station have been kept in excellent repair under constant and careful supervision of Messrs. Adams and Broadley. The iron piping of the hatchery building, and the windmill-pump which supplies the major part of the water used in the hatchery-tanks are both pretty well worn out. The Board would suggest, however, that no important work or alterations be carried out until the station has been thoroughly inspected by Mr. Hefford. The Board desires to congratulate the Government on securing the services of this highly trained specialist, and hopes that his knowledge and advice may lead to a marked advance in the development of the fishing industry of the Dominion.

I have, &c.,

GEO. M. THOMSON,
Chairman.

The Hon. the Minister of Marine, Wellington.

TABLES.

STATEMENT OF REVENUE FOR THE YEAR ENDED 31ST MARCH, 1925, IN COMPARISON WITH THE PREVIOUS YEAR.

Item.	1923–24.	1924–25.
	£ s. d.	£ s. d.
Shipping and Seamen Act—		
Light dues	76,867 15 6	80,467 6 2
Engagement and discharge fees, &c.	4,026 15 5	4,155 5 8
Survey fees	4,785 2 6	5,010 0 4
Examination fees	369 12 0	417 5 0
Miscellaneous	1,389 8 0	1,175 6 3
Harbours Act—		
Pilotage, port charges, &c.	768 13 1	842 18 7
Foreshore revenue	2,909 0 4	4,393 19 1
Inspection of Machinery Act—		
Inspection fees, &c.	16,125 11 2	17,256 2 10
Examination fees	634 18 0	648 18 0
Fisheries Act—		
Net profit from sale of oysters	2,310 19 9	2,139 10 1
Fishing-boat license fees, &c.	627 4 1	365 4 9
Renta of toheroa-beds	300 0 0	300 0 0
Tramways Act—		
Examination fees	104 0 0	84 0 0
Government steamers—		
Freight, passage-money, &c.	2,788 1 8	4,793 0 10
Miscellaneous revenue—		
Sale of charts, books, &c.	584 16 8	528 10 10
Sale of Nautical Almanac	135 18 2	129 13 3
Rents of buildings and reserves	154 2 8	235 9 8
Sale of trout-ova	..	112 9 9
Sale of stores	939 14 11	67 16 1
Ross Sea Dependency—Revenue	200 0 0	200 0 0
Miscellaneous	35 11 11	..
Totals, General accounts	116,057 5 10	123,322 17 2
Westport Harbour Account	42,285 7 4	50,378 11 0
Totals	£158,342 13 2	£173,701 8 2

N.B.—The figures quoted for 1924–25 are subject to audit.

SUMMARY OF EXPENDITURE FOR THE YEAR ENDED 31ST MARCH, 1925, IN COMPARISON WITH THE PREVIOUS YEAR.

Branch.	1923–24.	1924–25.
	£ s. d.	£ s. d.
Head Office	8,574 3 2	9,292 7 4
Harbours	3,739 17 5	3,921 2 11
Lighthouses	25,302 19 4	26,823 6 5
Meteorological	5,572 6 2	5,863 19 2
Mercantile marine	16,585 15 1	17,896 11 0
Inspection of machinery	25,802 1 2	26,124 16 11
Fisheries	3,743 11 8	2,890 13 10
Government steamers	22,819 8 9	21,837 5 4
Miscellaneous services	3,939 7 5	1,734 3 1
Grants and subsidies	900 0 0	150 0 0
Totals, General accounts*	116,979 10 2	116,534 6 0
Westport Harbour Account	47,213 7 10	43,602 5 11
Totals	£164,192 18 0	£160,136 11 11

* Excludes depreciation and interest on capital.

N.B.—The figures quoted for 1924–25 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, 1925.

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	2,914	280 6 0	3,019	296 14 0	2,828	235 10 0	2,898	243 18 0	5,742	515 16 0	5,917	540 12 0	11,659	1,056 8 0
Dunedin and Port Chalmers ..	941	90 10 0	935	89 7 0	600	53 10 0	685	58 15 0	1,541	144 0 0	1,620	148 2 0	3,161	292 2 0
Gisborne	19	1 14 0	24	2 4 0	115	8 18 0	143	9 8 0	134	10 12 0	167	11 12 0	301	22 4 0
Greymouth	74	7 8 0	64	6 18 0	19	1 18 0	37	3 5 0	93	9 6 0	101	10 3 0	194	19 9 0
Hokianga	3	0 6 0	4	0 8 0	7	0 14 0	3	0 6 0	10	1 0 0	7	0 14 0	17	1 14 0
Hokitika	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Invercargill	85	8 8 0	93	9 4 0	23	1 12 0	19	1 17 0	108	10 0 0	112	11 1 0	220	21 1 0
Kaipara	..	..	..	..	14	0 15 0	12	1 4 0	14	0 15 0	12	1 4 0	26	1 19 0
Lyttelton	822	81 12 0	816	81 2 0	943	80 6 0	930	76 18 0	1,765	161 18 0	1,746	158 0 0	3,511	319 18 0
Napier	38	3 6 0	65	4 11 0	461	33 3 0	428	31 17 0	499	36 9 0	493	36 8 0	992	72 17 0
Nelson	7	0 14 0	6	0 12 0	630	51 8 0	602	48 10 0	637	52 2 0	608	49 2 0	1,245	101 14 0
New Plymouth	27	2 2 0	11	1 2 0	38	2 10 0	25	2 8 0	65	4 12 0	36	3 10 0	101	8 2 0
Oamaru	14	1 8 0	11	1 2 0	6	0 12 0	2	0 4 0	20	2 0 0	13	1 6 0	33	3 6 0
Onehunga	..	..	..	..	403	34 13 0	397	34 11 0	403	34 13 0	397	34 11 0	800	69 4 0
Patea	..	..	..	..	25	1 10 0	27	1 14 0	25	1 10 0	27	1 14 0	52	3 4 0
Picton	10	1 0 0	22	2 2 0	19	1 15 0	27	2 5 0	29	2 15 0	49	4 7 0	78	7 2 0
Thames	..	..	..	..	10	1 5 0	13	1 5 0	10	1 5 0	13	1 5 0	23	2 10 0
Timaru	51	5 2 0	49	4 18 0	58	5 5 0	56	5 1 0	109	10 7 0	105	9 19 0	214	20 6 0
Wairau	..	..	..	..	34	2 2 0	41	2 0 0	34	2 2 0	41	2 0 0	75	4 2 0
Wanganui	38	3 16 0	31	3 0 0	102	7 6 0	120	8 18 0	140	11 2 0	151	11 18 0	291	23 0 0
Wellington	4,216	387 0 0	4,023	369 12 0	2,293	203 2 0	2,268	203 14 0	6,509	590 2 0	6,291	573 6 0	12,800	1,163 8 0
Westport	22	2 4 0	19	1 18 0	20	2 0 0	14	1 8 0	42	4 4 0	33	3 6 0	75	7 10 0
Whangape	..	..	..	..	..	..	1	0 2 0	..	..	1	0 2 0	1	0 2 0
Whangarei	..	..	..	..	..	..	1	0 2 0	..	..	1	0 2 0	1	0 2 0
Totals	9,281	876 16 0	9,192	874 14 0	8,648	729 14 0	8,749	739 10 0	17,929	1,606 10 0	17,941	1,614 4 0	35,870	3,220 14 0

TABLE SHOWING TOTAL COST OF MAINTENANCE OF NEW ZEALAND COASTAL LIGHTHOUSES FOR THE YEAR ENDED 31ST MARCH, 1925.

Name of Lighthouse.	Salaries and Wages.	Oil consumed.		Stores and Maintenance.	Totals.
		Gallons.	Value.		
	£ s. d.		£ s. d.	£ s. d.	£ s. d.
Akaroa Head	441 10 5	638	47 17 0	113 5 6	602 12 11
Brothers	751 13 1	684	51 6 0	203 9 9	1,006 8 10
Cape Brett	738 0 9	716	53 14 0	299 17 7	1,091 12 4
Cape Campbell	523 17 8	745	55 17 6	158 12 0	738 7 2
Cape Egmont	463 14 3	740	55 10 0	196 0 0	715 4 3
Cape Foulwind	489 12 7	745	55 17 6	100 19 7	646 9 8
Cape Maria	703 5 9	820	61 10 0	135 11 3	900 7 0
Cape Palliser	560 14 11	610	45 15 0	165 7 5	771 17 4
Cape Saunders	487 15 0	608	45 12 0	107 2 10	640 9 10
Castlepoint	496 7 0	661	49 11 6	71 5 11	617 4 5
Centre Island	726 19 4	624	46 16 0	153 15 11	927 11 3
Cuvier Island	693 17 4	826	61 19 0	185 12 6	941 8 10
Dog Island	720 2 4	555	67 1 3	161 10 0	948 13 7
East Cape	553 17 6	756	56 14 0	319 18 8	930 10 2
Farewell Spit	779 3 11	654	49 1 0	353 16 5	1,182 1 4
French Pass	312 15 6	212	20 1 5	78 2 1	410 19 0
Godley Head	497 16 7	738	55 7 0	224 14 4	777 17 11
Jack's Point	283 10 10	289	21 13 6	109 11 1	414 15 5
Kaipara Heads	778 3 10	864	64 16 0	220 7 5	1,063 7 3
Kahurangi Point	719 5 3	617	46 5 6	229 15 1	995 5 10
Manukau Heads	496 1 8	639	47 18 6	130 8 8	674 8 10
Moeraki	540 5 9	603	45 4 6	79 1 5	664 11 8
Moko Hinou	766 8 7	653	48 19 6	176 16 3	992 4 4
Nugget Point	696 11 0	691	51 16 6	121 5 4	869 12 10
Pencarrow Head	510 8 4	744	55 16 0	175 0 5	741 4 9
Portland Island	699 17 1	792	59 8 0	133 1 4	892 6 5
Puysegur Point	701 15 2	760	57 0 0	211 1 2	969 16 4
Stephens Island	722 0 0	691	51 16 6	260 1 5	1,033 17 11
Tory Channel	100 0 0	184	22 4 8	..	122 4 8
Tiritiri	427 1 10	637	47 15 6	85 17 9	560 15 1
Waipapapa Point	475 13 0	738	55 7 0	188 0 4	719 0 4
Automatic lights	..	..	..	396 4 5	396 4 5
Totals	17,858 6 3	..	1,555 11 10	5,545 13 10	24,959 11 11

TABLE SHOWING THE NUMBER OF STEAM TRAWLERS, OIL-ENGINE TRAWLERS, AND OTHER VESSELS EMPLOYED IN DANISH SEINING, LINE AND SET-NET FISHING, WITH THE NUMBER OF PERSONS ENGAGED IN THE INDUSTRY, AT EACH PORT, FOR THE YEAR ENDED 31ST MARCH, 1925.

(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	..	..	..	13	16	..	16
Russell	..	..	..	41	157	30	187
Whangarei	..	..	..	12	22	6	28
Kaipara	..	..	..	28	40	15	55
Auckland (including Thames, Coromandel, and Manukau)	8	..	22	123	470	250	720
Tauranga	..	..	..	39	40	10	50
Gisborne	1	..	..	21	33	11	44
Napier	10	19	..	83	167	20	187
New Plymouth	1	..	..	36	73	28	101
Wanganui	..	..	..	6	8	4	12
Foxton	..	..	..	23	46	..	46
Wellington	1	..	..	120	282	105	387
Picton	1	..	..	38	76	..	76
Blenheim	..	6	..	3	15	3	18
Nelson	..	5	..	73	115	..	115
Westport	1	3	..	14	20	..	20
Greymouth	1	..	..	9	10	6	16
Hokitika	..	..	..	1	1	8	9
Kaikoura	..	..	..	18	30	2	32
Lyttelton	2	2	..	13	18	3	21
Kaiapoi	..	..	..	29	29	..	29
Rangiora	..	..	..	13	13	..	13
Southbridge	..	..	..	20	20	..	20
Akaroa	..	2	..	13	23	..	23
Timaru	3	18	..	4	27	8	35
Oamaru	..	..	..	10	12	..	12
Moeraki	..	..	..	26	28	9	37
Otago District	4	9	..	90	180	120	300
Invercargill	1	..	..	31	50	20	70
Bluff	4	..	..	49	104	16	120
Stewart Island	..	..	..	31	75	11	86
Chatham Islands	..	..	..	10	24	12	36
Totals	22	64	22	1,060	2,224	697	2,921

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, 1925.

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

Name of Port.	Principal Kinds of Fish caught.	Quantity.	Total Value.
		Cwt.	£ s. d.
Russell	Mullet, snapper, crayfish, hapuku, flounder, kingfish	17,700	10,620 0 0
Whangarei ..	Snapper, mullet, flounder, hapuku, trevally..	2,299	3,131 16 0
Kaipara.. ..	Mullet, snapper, flounder..	4,350	7,750 0 0
Auckland (including Thames, Coromandel, and Manukau	Snapper, flounder, sole, gurnard, mullet, trevally, hapuku, tarakihi, john-dory, kahawai, crayfish, moki, kingfish, butterfish, garfish, mussels	134,552	126,151 0 0
	Mussels	1,900 (sacks)	475 0 0
		Cwt.	
Tauranga ..	Hapuku, trevally, kahawai, snapper, flounder, gurnard, moki, mullet, garfish, kingfish	2,100	3,150 0 0
Gisborne ..	Tarakihi, gurnard, snapper, flounders, sole, hapuku, crayfish ..	2,183	3,735 0 0
Napier ..	Tarakihi, snapper, moki, kahawai, gurnard, trevally, hapuku, barracouta, john-dory, flounder, sole, brill, cockles, mussels	20,948	27,964 15 0
	Crayfish	720 (sacks)	1,350 0 0
	Cockles, mussels	225 (sacks)	140 12 6
		Cwt.	
New Plymouth ..	Snapper, hapuku, tarakihi, kahawai, red cod, gurnard, crayfish	1,983	2,921 0 0
Wanganui ..	Snapper, flounder, hapuku, blue cod	277	440 0 0
Foxton	Flounder, snapper, hapuku, kahawai, whitebait	400	1,400 0 0
Wellington ..	Butterfish, tarakihi, hake, gurnard, moki, blue cod, groper, flounder, sole, warehou, ling, snapper	*	*
Picton	Blue cod, moki, hapuku, crayfish, butterfish, red cod, snapper	7,520	11,280 0 0
Blenheim ..	Flounder, sole, snapper, groper, gurnard, blue cod, red cod, butterfish, crayfish, whitebait	1,450	2,700 0 0
Nelson	Kahawai, barracouta, blue cod, red cod, hapuku, gurnard, flounder, sole, snapper	2,063	2,488 0 0
Westport ..	Blue cod, crayfish, groper, flounder, gurnard, herrings, kahawai, snapper, whitebait	683	1,467 15 0
Greymouth ..	Blue cod, groper, herring, flounder, sole, snapper, whitebait ..	80	448 0 0
Hokitika ..	Whitebait, herring, flounder, red cod, snapper	461	2,363 10 0
Kaikoura ..	Butterfish, tarakihi, hake, trumpeter, groper	3,600	4,000 0 0
Lyttelton ..	Moki, flounder, sole, ling, gurnard, groper, barracouta, butterfish, crayfish, blue cod, red cod, tarakihi, trumpeter, trevally	1,800	3,450 0 0
Kaiapoi.. ..	Flounder, whitebait, kahawai, red cod	194	1,048 0 0
Rangiora ..	Flounder, herring, whitebait, red cod	15	215 0 0
Southbridge ..	Flounder, herring, red cod	400	2,000 0 0
Akaroa	Moki, butterfish, kahawai, barracouta, red cod, blue cod, flounder, sole, groper, ling, conger-eel, crayfish	1,000	1,800 0 0
Timaru	Red cod, barracouta, gurnard, elephant-fish, groper, flounder, sole, brill, ling	9,857	14,785 10 0
Oamaru.. ..	Blue cod, red cod, moki, barracouta, groper, crayfish ..	1,785	1,622 0 0
Moeraki.. ..	Groper, moki, trumpeter, blue cod, red cod, barracouta, ling, crayfish	3,618	4,602 0 0
Otago District ..	Moki, trumpeter, bream, tarakihi, trevally, garfish, groper, kingfish, ling, blue cod, red cod, barracouta, gurnard, elephant-fish, flounder, sole, brill, skate	42,620	43,500 0 0
Invercargill ..	Groper, moki, flounder, ling, blue cod, red cod, sole, barracouta	1,700	4,000 0 0
Bluff	Groper, flounder, trevally, blue cod, trumpeter, sole	8,913	20,459 0 0
Stewart Island ..	Groper, butterfish, blue cod, trumpeter, moki, crayfish ..	7,664	13,927 0 0
Chatham Islands..	Blue cod, groper, trumpeter, tarakihi	4,074	10,779 0 0
	Totals	286,289 (cwt.) 4,074 (sacks)	336,163 18 6

* Not obtainable

TABLE SHOWING THE NUMBER OF SACKS AND VALUE OF THE OYSTERS DISPOSED OF IN THE DOMINION AND EXPORTED FOR THE YEAR ENDED 31ST DECEMBER, 1924.

Locality.	Disposed of in Dominion.	Exported.		Total Number.		Total Value (Wholesale).
Dredge-oysters.	Sacks.	Sacks.	Cases.	Sacks.	Cases.	£ s. d.
Foveaux Strait	23,274	522	360	23,796	360	14,873 0 0
Rock-oysters.						
Bay of Islands (including Whangarei)	161	..	..	161	..	
Hauraki Gulf	3,726	..	..	3,726	..	
Kaipara	2,011	..	..	2,011	..	8,395 9 3
Great Barrier	620	..	..	620	..	
Coromandel	323	..	..	323	..	
Totals	30,115	522	360	30,637	360	£23,268 9 3

TABLE SHOWING THE TOTAL QUANTITY AND VALUE OF FISH IMPORTED INTO AND EXPORTED FROM NEW ZEALAND DURING THE YEAR ENDED 31ST DECEMBER, 1924.

Fish imported.

Description of Fish.	Quantity.	Value. £	Description of Fish.	Quantity.	Value. £
Anchovies, salted (in bulk)	1 cwt.	7	Fish, preserved in tins ..	4,256,032 lb.	173,760
Oysters, fresh	Nil	Nil	Fish, frozen, smoked, dried, pickled, and salted	1,808 cwt.	5,986

Fish exported.

Description of Fish.	New Zealand Produce.		Not New Zealand Produce.	
	Quantity.	Value.	Quantity.	Value.
Anchovies, salted (in bulk)	Nil	Nil	Nil	Nil
Oysters, fresh	52,283 doz.	£571	Nil	Nil
Fish, preserved in tins	164,627 lb.	£14,773	72,529 lb.	£2,634
Fish, frozen, smoked, dried, pickled, and salted ..	17,589 cwt.	£43,644	Nil	Nil

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, 1925.

Name of Seaman.	Balance to Credit of the Estate on 31st March, 1924.	Amount received.	Amount paid.	Balance to Credit of the Estate on 31st March, 1925.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Ahlblad, C.	13 7 10	..	13 7 10	..
Anderson, E.	..	5 5 2	..	5 5 2
Bell, W.	..	51 3 3	51 3 3	..
Boate, P. C.	..	3 6 6	3 6 6	..
Calland, C.	..	3 15 3	..	3 15 3
Campbell, D.	..	21 18 1	21 18 1	..
Cannon, W. J.	..	6 13 10	6 13 10	..
Cavey, P. G.	..	3 6 11	3 6 11	..
Chidley, R. A.	..	19 7 8	19 7 8	..
Cliffe, F.	..	5 14 0	0 3 6	5 10 6
Crawford, D.	..	9 12 6	9 12 6	..
Darling, J.	..	1 8 8	..	1 8 8
Dawson, Ed.	..	8 14 4	8 14 4	..
Flynn, Wm.	11 13 6	..	11 13 6	..
Geige, G.	20 16 3	..	20 16 3	..
Gourley, J.	3 16 9	..	3 16 9	..
Gustafsson, B.	..	5 2 3	5 2 3	..
Harris, G.	..	14 9 2	14 9 2	..
Healey, P.	8 14 7	1 15 5	10 10 0	..
Johansen, B.	..	3 6 11	3 6 11	..
Knip, B.	10 15 3	..	10 15 3	..
Laird, J.	..	22 0 11	..	22 0 11
Logan, J.	5 11 10	..	5 11 10	..
MacAllister, D.	..	4 18 9	4 18 9	..
Martini, S.	9 1 10	..	9 1 10	..
Meban, W.	..	17 17 9	17 17 9	..
McEvoy, J.	0 6 10	..	0 6 10	..
McGregor, D.	4 14 8	..	4 14 8	..
Nelson, R.	..	5 0 8	3 19 1	1 1 7
Nielson, J.	..	8 3 7	8 3 7	..
Nicholson, T. M.	..	5 17 5	5 17 5	..
Norling, J. A.	..	20 10 0	20 10 0	..
Offer, J.	..	7 1 7	7 1 7	..
O'Flaherty, B.	1 17 8	..	1 17 8	..
Smith, G.	..	19 6 6	19 6 6	..
Squires, W. C.	..	3 5 4	3 5 4	..
Thomasen, N.	..	0 19 1	0 19 1	..
Way, J.	..	7 10 3	7 10 3	..
Williamson, R.	..	5 5 2	5 5 2	..
Wright, E.	18 16 1	..	18 16 1	..
	109 13 1	292 16 11	363 7 11	39 2 1

Return showing Amounts received prior to 1st April, 1924, 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
Cossar, B., late cook, s.s. "Karamu" ..	3	8	5
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
Kerfontain, P. M., late A.B., s.s. "Kaituna"	4	12	10
Larsen, A., late A.B., s.s. "Queen of the South"	7	16	0
Larseni, C., late fireman, s.s. "Manuka" ..	21	16	7
Linddahl, J., late A.B., s.s. "Kapuni" ..	5	2	5
Lundgren, V., late A.B., barquentine "Lyman D. Foster"	13	16	10
Manchin, J., late fireman, s.s. "Maori" ..	26	12	9
Millet, D., late A.B., barquentine "Lyman D. Foster"	17	17	2
Mitchelson, F., late A.B., s.s. "Te Teko" ..	4	14	11
Morley, J., late fireman, s.s. "Waimarino" ..	1	11	10
McIntyre, A., late A.B., barquentine "Lyman D. Foster"	11	8	7
Peterson, F., late A.B., s.s. "Tiroa" ..	32	1	7
Riley, J., late fireman, s.s. "Poherua" ..	8	9	0
Staw, C., late A.B., s.s. "Waihora" ..	7	1	4
Victor, C., late cook, s.s. "Kiritona" ..	17	8	4
Wold, H., late A.B., barquentine "Lyman D. Foster"	10	5	4
	£239	0	10

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	2	3	25	31	56	4	3	7	..	..	..	..	..	..	30	36	66
Voluntary examination in compass deviation	..	..	..	2	3	5	..	..	..	..	..	..	..	..	..	2	3	5
Home-trade masters and mates	4	8	12	1	10	11	2	2	4	..	..	..	..	..	..	7	20	27
Masters of river-steamers ..	6	1	7	1	3	4	..	1	1	..	..	..	..	..	..	7	5	12
Seagoing engineers (steam)	29	21	50	20	24	44	16	11	27	17	20	37	18	14	32	100	90	190
River-steamer engineers ..	2	2	4	2	1	3	3	..	3	..	..	..	2	1	3	9	4	13
Marine engine-drivers ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1
Seagoing engineers (oil) ..	14	5	19	7	1	8	..	1	1	..	..	..	11	2	13	32	9	41
River engineers (oil) ..	37	7	44	1	1	2	2	..	2	..	..	..	40	..	40	80	8	88
Totals ..	93	46	139	59	74	133	27	18	45	17	20	37	72	17	89	268	175	443

Table showing Number and Species of Whales taken, and Value of Products.

Whaling-station.	Number of Whales taken.	Species.	Yield of Oil.	Quantity of Bonedust or Fertilizer.	Total Value.
			Tons.		£ s. d.
Whangamumu ..	55	Humpback ..	30	50 tons bonedust	7,500 0 0 (oil).
					500 0 0 (bonedust).
Marlborough Sounds and Cook Strait	52	Humpback	336	3 cwt. whalebone	7,191 11 0 (oil).
	2	Right whale			30 0 0 (whalebone).
Totals ..	109	..	366	..	15,221 11 0

RETURN OF STEAMERS AND OIL-ENGINE VESSELS TO WHICH CERTIFICATES OF SURVEY WERE ISSUED IN NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1925. (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.
Ahuriri	33	17	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
Akaroa	24	28	110	Compound ..	Screw ..	Home trade ..	1	1	..	..
Albert San ..	81	56	..	Triple expansion	Screw ..	Home trade ..	2	2	..	..
*Alexander ..	185	72	360	Compound ..	Twin screw	Home trade ..	4	3	..	..
*Alma	21	45	..	Oil engine ..	Screw ..	Home trade ..	..	..	..	..
Apanui	135	28	221	Triple expansion	Screw ..	Home trade ..	4	2	..	..
Arahura ..	771	145	1,378	Triple expansion	Twin screw	Home trade ..	7	6	3	3
Arapawa ..	128	47	299	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Aupouri ..	220	55	411	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Awahou ..	151	74	284	Compound ..	Twin screw	Home trade ..	4	3	..	..
Awarua ..	87	50	163	Compound ..	Screw ..	Home trade ..	..	..	..	..
Baroona ..	54	24	149	Compound ..	Screw ..	Home trade ..	2	2	..	..
Breeze	286	84	315	Triple expansion	Screw ..	Home trade ..	5	3	..	..
Calm	523	550	689	Triple expansion	Screw ..	Home trade ..	6	3	..	..
Canopus ..	835	250	1,058	Triple expansion	Screw ..	Home trade ..	6	3	2	3
Clansman ..	338	99	598	Compound ..	Screw ..	Home trade ..	5	3	..	..
Claymore ..	119	54	434	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Corinna ..	791	141	819	Compound ..	Screw ..	Home trade ..	6	3	2	3
Coronation ..	59	50	..	Oil-engine ..	Screw ..	Home trade ..	..	..	..	..
Countess ..	57	28	180	Compound ..	Screw ..	Home trade ..	2	2	..	..
Cowan	30	24	140	Compound ..	Screw ..	Home trade ..	1	2	..	..
Cygnet	70	43	200	Compound ..	Screw ..	Home trade ..	2	2	..	..
Dominion ..	5	24	..	Oil-engine ..	Screw ..	Home trade ..	..	..	..	..
Dredge 350 ..	488	117	762	Triple expansion	Twin screw	Home trade ..	6	3	..	..
Dunedin ..	125	500	1,053	Triple expansion	Twin screw	Home trade ..	4	3	2	3
Echo	98	90	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Endeavour ..	54	30	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
Excelsior ..	6	46	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
*Fairburn ..	60	60	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Futurist ..	90	385	463	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Gael	55	20	86	Compound ..	Screw ..	Home trade ..	2	2	..	..
Gale	287	450	392	Triple expansion	Screw ..	Home trade ..	5	3	..	..
Gilbert San ..	81	56	..	Triple expansion	Screw ..	Home trade ..	2	2	..	..
Glenelg	156	75	265	Compound ..	Screw ..	Home trade ..	4	3	..	..
Hananui II ..	44	58	249	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Hawera ..	92	31	183	Compound ..	Screw ..	Home trade ..	2	2	..	..
Hikurangi ..	163	64	283	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Holmdale ..	295	99	485	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Inaha	116	300	..	Motor ..	Twin screw	Home trade ..	4	..	..	..
Invercargill ..	123	41	228	Compound ..	Screw ..	Home trade ..	4	2	..	..
Isabella de Fraine	76	60	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
James C. ..	1	60	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
James Cosgrove ..	114	61	468	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Jane Gifford ..	6	19	..	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	661	Triple expansion	Screw ..	Foreign trade	5	3	..	..
Kahu (Napier) ..	96	40	236	Compound ..	Screw ..	Home trade ..	2	2	..	..
Kaiaia	24	30	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Kaiapoi ..	1,246	201	967	Triple expansion	Screw ..	Foreign trade	8	3	2	3
Kaikorai ..	1,860	430	1,708	Triple expansion	Screw ..	Foreign trade	9	6	3	3
Kaimanawa ..	1,247	213	1,150	Triple expansion	Screw ..	Home trade ..	7	3	2	3
Kaitoa	141	65	298	Compound ..	Twin screw	Home trade ..	4	3	..	..
Kaitoke	1,862	434	1,470	Triple expansion	Screw ..	Foreign trade	9	6	3	3
Kaituna ..	1,208	200	999	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Kaiwarra ..	1,847	2,000	1,884	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Kakapo ..	949	150	740	Triple expansion	Screw ..	Foreign trade	7	3	..	..
Kamo	725	159	747	Triple expansion	Screw ..	Foreign trade	6	3	2	3
Kamona ..	903	117	735	Triple expansion	Screw ..	Foreign trade	6	3	2	3
Kapiti	114	35	217	Compound ..	Screw ..	Home trade ..	4	2	..	..
Kapua	6	31	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Kapuni	97	30	185	Compound ..	Screw ..	Home trade ..	2	2	..	..
Karori	1,194	147	932	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Karu	197	27	119	Compound ..	Screw ..	Foreign trade	4	2	..	..
*Katie S. ..	6	12	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Katoa	1,382	335	1,614	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Kauri	1,830	304	1,316	Triple expansion	Screw ..	Foreign trade	9	3	2	3
Kawatiri ..	1,856	429	1,630	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Kawau	53	20	99	Compound ..	Screw ..	Home trade ..	2	1	..	..
Kennedy ..	131	38	..	Compound ..	Twin screw	Home trade ..	4	2	..	..
Kiritona ..	75	150	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..

* 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.
Kittawa ..	708	120	725	Triple expansion	Screw ..	Foreign trade	6	3	3	..
Koau	77	170	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Kohi	20	90	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Kokiri	713	135	800	Triple expansion	Screw ..	Foreign trade	6	3	2	3
*Komata ..	1,294	260	1,223	Triple expansion	Screw ..	Home trade ..	8	3	2	3
Koromiko ..	1,541	313	1,382	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Koutunui ..	98	26	153	Compound ..	Twin screw	Home trade ..	2	2	..	..
*Kurow	1,540	333	1,037	Triple expansion	Screw ..	Foreign trade	8	6	3	3
Lady Eva ..	3	120	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Lyttelton (Auckland)	24	108	270	Compound ..	Paddle ..	Home trade ..	1	3	..	..
*Maggie	6	8	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Maheno ..	3,318	600	6,000	Turbine ..	Twin screw	Foreign trade	12	15	9	3
Mahoe	14	50	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Mahurangi ..	95	80	214	Compound ..	Screw ..	Home trade ..	2	2	..	..
Mako	247	65	460	Triple expansion	Screw ..	Home trade ..	5	3	..	..
Manaia	630	104	934	Triple expansion	Twin screw	Home trade	7	3	2	3
Manuka.. ..	2,813	357	3,479	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	4,998	Triple expansion	Twin screw	Foreign trade	13	12	6	3
Mararoa ..	1,329	530	2,935	Triple expansion	Screw ..	Home trade ..	8	9	6	3
Matangi ..	635	233	1,224	Triple expansion	Twin screw	Home trade ..	7	3	2	3
Moeraki.. ..	2,715	357	3,665	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 ..	5	3	..	..
Naumai.. ..	18	12	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
Navua	1,773	220	1,759	Triple expansion	Twin screw	Home trade ..	9	6	3	3
*Ngahau ..	21	80	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Ngahere ..	556	118	748	Triple expansion	Screw ..	Foreign trade	6	3	..	..
Ngaio	718	130	972	Triple expansion	Screw ..	Home trade ..	7	3	2	3
Ngakuta ..	944	248	1,255	Triple expansion	Screw ..	Foreign trade	6	3	2	3
Ngapuhi ..	311	160	1,118	Triple expansion	Twin screw	Home trade ..	6	3	2	3
Ngatiawa ..	220	55	418	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Ngatoro ..	584	118	748	Triple expansion	Screw ..	Foreign trade	5	3	..	..
Nikau	98	55	277	Compound ..	Twin screw	Home trade ..	2	3	..	..
Nile	18	12	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
Nora Niven ..	66	35	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	123	Compound ..	Screw ..	Home trade ..	2	1	..	..
Opawa	54	120	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
Opihi	638	116	606	Triple expansion	Screw ..	Home trade ..	6	3	..	..
Opua	288	80	483	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Orepuki.. ..	224	78	410	Compound ..	Screw ..	Home trade ..	4	3	..	..
Oreti	72	30	182	Compound ..	Screw ..	Home trade ..	2	2	..	..
Orini	19	120	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Otimai	111	160	..	Oil-engine ..	Twin screw	Home trade ..	4	..	..	..
Parera	251	85	408	Triple expansion	Screw ..	Home trade ..	5	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	324	Compound ..	Screw ..	Home trade ..	1	3	..	..
*Rakanoa ..	1,367	200	931	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Rakiura ..	13	10	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
*Rama	244	97	429	Triple expansion	Screw ..	Foreign trade	4	3	..	..
Rarawa.. ..	460	140	1,183	Triple expansion	Twin screw	Home trade ..	6	3	2	3
Regulus.. ..	232	150	587	Compound ..	Twin screw	Home trade ..	4	3	..	..
Rimu	169	95	618	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Ripa	186	70	240	Compound ..	Screw ..	Home trade ..	4	3	..	..
Ronaki	129	270	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Ruru	62	50	166	Compound ..	Screw ..	Home trade ..	2	2	..	..
Savaii	9	16	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
Scot	16	16	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Serfib	82	58	340	Triple expansion	Screw ..	Home trade ..	2	3	..	..
Simpleton ..	69	75	..	Compound ..	Screw ..	Home trade ..	2	1	..	..
Southern Cross ..	403	117	442	Triple expansion	Twin screw	Foreign trade	6	3	..	..
Storm	371	94	497	Triple expansion	Screw ..	Home trade ..	4	3	..	..
Te Aroha ..	57	125	..	Oil-engine ..	Twin screw	Home trade ..	2	..	..	..
Te Awhina ..	87	99	420	Triple expansion	Twin screw	Home trade ..	2	3	..	..
Terawhiti ..	102	99	846	Triple expansion	Screw ..	Home trade ..	4	3	2	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.
Tees	247	78	385	Triple expansion	Screw ..	Foreign trade	4	3	..	..
Theresa Ward ..	9	95	453	Triple expansion	Screw ..	Home trade ..	1	3	..	..
*Thomas Currell ..	84	75	..	Triple expansion	Screw ..	Home trade ..	2	2	..	..
Tiroa	93	31	130	Compound ..	Screw ..	Home trade ..	2	2	..	..
Titoki	247	86	539	Triple expansion	Twin screw	Home trade ..	5	3	..	..
Tofua	2,634	354	2,543	Triple expansion	Twin screw	Foreign trade	11	9	6	3
Toiler	22	13	..	Compound ..	Screw ..	Home trade ..	1	1	..	..
Torea	28	60	..	Oil-engine ..	Twin screw	Home trade ..	1	..	..	..
Tuatea	58	28	256	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	1,619	Triple expansion	Screw ..	Foreign trade	10	6	3	3
Waikonini ..	6	60	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Waikouaiti ..	2,379	327	1,916	Triple expansion	Screw ..	Foreign trade	9	9	3	3
Waimea ..	207	100	382	Triple expansion	Twin screw	Home trade ..	4	3	..	..
Wainui	411	99	550	Compound ..	Screw ..	Home trade ..	6	3	..	..
Waiotahi ..	168	56	371	Compound ..	Twin screw	Home trade ..	4	3	..	..
Waipu	76	50	211	Compound ..	Twin screw	Home trade ..	2	2	..	..
Wairau	56	20	135	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
Wakatu.. ..	95	30	141	Compound ..	Screw ..	Home trade	2	2	..	..
Waterlily ..	23	20	..	Oil-engine ..	Screw ..	Home trade ..	1	..	..	..
Wanaka ..	1,505	280	1,185	Triple expansion	Screw ..	Home trade ..	8	3	2	3
Waverley ..	93	25	124	Compound ..	Twin screw	Home trade ..	2	1	..	..
Westland ..	8	86	449	Compound ..	Paddle	Home trade ..	1	3	..	..
Whakarire ..	449	120	642	Compound ..	Twin screw	Home trade ..	5	3	..	..
Whangape ..	1,900	280	1,013	Triple expansion	Screw ..	Foreign trade	8	3	2	3
*Will Watch ..	48	45	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..
*Wingatui ..	1,344	1,300	1,231	Triple expansion	Screw ..	Foreign trade	7	3	2	3
Wootton ..	90	33	128	Compound ..	Screw ..	Home trade ..	2	2	..	..
Zita	73	60	..	Oil-engine ..	Screw ..	Home trade ..	2	..	..	..

* Surveyed twice.

RETURN OF SAILING-VESSELS SURVEYED DURING THE YEAR ENDED 31ST MARCH, 1925, 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	..
Altair	57	Home trade	2	..	..
Combine	24	Home trade	1	..	..
Deveron	26	Home trade	1	..	..
Elsie Mary	99	Home trade	2	1	..
Ethel Wells	19	Home trade	1	..	..
Haere	99	Home trade	2	1	..
Herald	73	Home trade	2	1	..
*Hero	25	Home trade	1	..	..
Holmwood	696	Foreign trade ..	8	1	..
Huanui	99	Home trade	2	1	..
Huon Belle	25	Home trade	1	..	..
Kiatia	20	Home trade	1	..	..
Kitty Fraser	25	Home trade	1	..	..
Louis Theriault	385	Foreign trade ..	6	1	1
Maroro	200	Foreign trade ..	5	1	..
Ngaru	66	Home trade	2	1	..
Owhiti	9	Home trade	1	..	..
Piri	195	Foreign trade ..	4	..	..
Rangi	86	Home trade	2	1	..
Rimu	21	Home trade	1	..	..
Rira	100	Foreign trade ..	2	1	..
Saucy Kate	25	Home trade	1	..	..
Seagull	25	Home trade	1	..	..
Talisman	70	Home trade	2	1	..
The Portland	59	Home trade	2	..	..
War Lord	99	Home trade	2	1	..
Zingara	90	Home trade	2	1	..

* Surveyed twice.

Return of Wrecks and Casualties to Shipping reported to the Marine Department from the 1st April, 1924, to the 31st March, 1925.

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.		
1923.													
Dec. 7	Rimu, sail, 29 years	Ketch ..	21	4	..	..	Broken jibboon ..	..	Whangarei	S.W.	L.	Vessel was being towed down Whangarei River when the tug-boat eased down, causing "Rimu" to lose way, and the tide, which was running strong, set her on railway-bridge, breaking the jibboon	R. Chisholm.
„ 18	Kaiaia, o.e.v., 14 years	Ketch ..	24	4	..	Benzine, 20 tons	Struck rock; £40 damage	..	Flat Rock, Whakatane Harbour	W.	L.	Owing to beacon having been washed away, vessel struck Flat Rock, knocking in four planks and two stringers in port bow	Arthur Berridge
1924.													
Mar. 11	Ngahau, sail, 2½ years	Schooner	85	3	..	..	Capsized	..	Off Whangarei Heads	S.E.	Hurricane	When half a mile outside heads on way to Whangaruru, vessel was struck by heavy squall, which capsized her, breaking off masts, washing out bulwarks on port side, and smashing dinghy	H. E. Cardy.
„ 16	Britannia, sail, 18 years	F. and A.	10	4	20–25	Stores ..	Stranded ..	..	Colac Bay	E.	3	A breeze sprang up from the east and took vessel inshore, where, owing to falling tide, she took the ground on soft bottom, but doing no damage to ship or cargo	Chas. W. Bradshaw.
April 8	Kurow, s.s., 16 years	F. and A.	1,540	34	..	Timber and general	Damaged bulwarks	..	Auckland Harbour ..	E.	Moderate	Whilst "Maheno" was berthing, tide caught her and swept her down on the "Kurow," whose after-starboard bulwarks were slightly damaged	H. Dryden.
„ 9	Kennedy, s.s., 59 years	Schooner	131	12	..	Produce; 228 tons	Stranded ..	..	Foxton Harbour ..	Calm	Light ..	When entering harbour, vessel stranded owing to scant tide, but subsequently refloated without sustaining any damage	A. M. Stuart.
	Truro City, s.s., 14 years	F. and A.	2,903	42	..	General, 5,600 tons (approx.)	Furnaces dropped; £1,000 damage	..	Between New York and Auckland	..	..	On 20th April, at Auckland, it was found that six furnaces in three boilers had fallen down from 1 in. to 3 in. from some unknown cause, but no damage was done to ship or cargo	W. Bryden.
„ 13	Waiwera, s.s., 25 years	Schooner	3,775	62	..	Sugar and general	Grounded ..	..	Wanganui Harbour ..	V.	Light ..	When going to anchorage, vessel failed to gain sternway, although engines run "Full astern," resulting in vessel grounding, but without damaging ship or cargo	Chas. Wood.
„ 13	Hawera, s.s., 12 years	Ketch ..	91	10	..	General, 25 tons	Grounded ..	..	Patea River ..	N.W.	Light ..	When entering port, there being very little water, vessel touched bottom, and, failing to square up in sufficient time, fouled eastern wall, but not doing any damage to vessel with the exception of breaking about 8 ft. of belting	A. McKinnon.
„ 24	Rarawa, s.s., 21 years	Schooner	460	42	100	General, 90 tons	Damaged bridge and deck, £150	..	Manukau Bar ..	S.W.	..	When crossing the bar, shipped a heavy sea, which carried away woodwork on bridge, steering-compass stand, two telegraphs, twisted steam-pipe on deck, and strained bulkhead of smoking-room	W. Bark.

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.		
1924.													
April 28	Thelma, o.e.v., 20 years	..	3	1	22	Luggage ..	Collision	..	Lake Wakatipu ..	Calm	..	Both vessels left Queenstown about same time, but from different wharves, the "Thelma" setting a course to take her through passage in reef, and the "Riverton" a course to round the reef end; however, their courses converged, causing vessels to collide with their bows and "Thelma" to heel over considerably	John Edgar.
„ 28	Riverton, o.e.v., 9 years	..	5	1	24	Luggage ..							John Thomson.
„ 28	Onerahi, o.e.v., 13 years	Ketch ..	6	..	..	Coal	Fire; total loss ..	..	Off Tairua, N.Z. ..	..	..	The Court held that the casualty was caused by combustion of inflammable mixture of benzine-vapour and air in engine-room, such combustion being started by a hurricane-lamp left in engine-room by master to enable him to fill the tank; that there was no evidence of negligence or wilful act by any person on board; and that casualty could have been avoided had electric light been fitted in engine-room, or if tank-filling pipe, originally fixed from deck, had not been removed; but there was no evidence to show by whom it had been removed. Court ordered master's certificate to be returned, and made no order as to costs	J. W. Brown.
May 8	Waiotahi, s.s., 33 years	Schooner	164	19	4	General, 30 tons	Grounded ..	..	Parenga Harbour ..	S.W.	Light ..	When proceeding up harbour, stake marking blind channel was down, resulting in vessel grounding; but she subsequently refloated when tide rose, no damage being done to vessel or cargo	E. J. Wann.
„ 10	Tamuri, o.e.v., 8 years	Cutter ..	4	1	..	..	Fire; total loss, £700	..	Auckland Harbour ..	W.	..	Engine back-fired, setting fire to benzine-tank; and, as there was no way of extinguishing the fire, vessel was scuttled, but was subsequently raised, although a total loss	A. S. Watkin.
„ 12	Ngahere, s.s., 16 years	Schooner	556	23	..	Coal, 757 tons; timber 444 tons	Stranded; total loss—ship, £40,000; cargo, £2,350	..	Greymouth Bar ..	S.W.	5	The Court held that the master made all necessary and reasonable inquiries regarding, as well as a personal inspection of, the depth of water on the bar, before deciding to go to sea; that the Harbourmaster committed an error of judgment in advising the master that there was sufficient water on the bar, and in not notifying him that the "Regulus," which had preceded the "Ngahere," and was drawing 3 ft. 4 in. less, had touched the bar; that the master and his officers were not responsible for the disaster, and were accordingly exonerated from all blame; and that the Marine Department pay the costs of the inquiry, including £12 12s. fee for the master's counsel	James Green.

1924. May 16	Lomen, s.s., 22 years	Schooner	15	4	..	General, 3½ tons	Struck submerged object	..	Tangiteroria, Kaipara Harbour	E.	2	On voyage from Dargaville vessel struck submerged object, causing her to leak, and subsequently to sink after reaching her destination	Geo. H. Vause.
„ 25	Toi Toi, o.e.v., 4 years	Launch	5	2	1	..	Foundered; total loss	1	Lyttelton	N.E.	7 to 8 ..	When rounding Adderley Head vessel broached to with a heavy quarterly sea, causing her to swamp and founder, and resulting in a passenger named Clarence Barton, about fifteen years of age, being drowned, although provided with a lifebuoy	Henry Grinnell.
„ 25	Muriel, s.s., 17 years	Schooner	22	5	..	..	Grounded ..	..	Akaroa Harbour ..	N.E.	3	When entering harbour, vessel steered too close to land, resulting in grounding on a shelving rock, but came off in an hour with flood tide with apparently no damage to ship	J. Sandvick.
„ 26	Southern Cross, s.s., 21 years	Schooner	403	23	5	Missionary stores, 100 tons	Grounded ..	..	Pallu Passage, Br. Solomon Islands	S.E.	Calm ..	Vessel was proceeding at slow speed when she grounded on small uncharted shoal, and floated off an hour later on rising tide—no damage being done to ship or cargo	A. H. W. Burgess.
„ 3	Pakeha, s.s., 14 years	..	5,055	82	..	Frozen meats and general, 1,530 tons	Struck obstruction	..	Bluff Harbour ..	N.N.E.	3	The Court found that the accident happened in the vicinity of Mararoa Rock; and, while it was impossible to say what were the exact causes, the Court considered that the low state of the tide, position of vessel in channel, and draught and list of ship with some barely perceptible range in channel were factors which acted to bring about damage; that Court could not accept contention of Harbour Board that no obstruction existed in the channel, as it was satisfied that damage was not sustained prior to entering Bluff Harbour, and exonerated master, officers, and pilot from all blame	W. P. Clifton-Mogg.
June 14	Sunlight, o.e.v., 11 years	Cutter ..	4	2	..	..	Struck submerged object	..	1 mile off Tawharanui Point, Hauraki Gulf	E.S.E.	Fresh ..	Vessel struck submerged object, causing her to make water quickly, and preventing engine working; therefore vessel was headed for beach, where she became a total wreck	John Buchan.
„ 23	Waihemo, s.s., 4 years	Schooner	3,540	46	..	Ballast ..	Leaking	..	Foveaux Strait ..	N.N.W. to S.W.	Heavy gale	Vessel met with heavy weather, causing leakage from tanks into No. 2 hold, and damaging piping owing to ceiling washing about and putting pumps out of action, and necessitating ship's putting back to port	D. Todd.
„ 23	Kione, s.s., 9 years	Smack	347	15	..	Dredging spoil, 300 tons	Leak in starboard tunnel	..	Wanganui Harbour ..	N.W.	Breeze ..	When proceeding to sea to deposit spoil, vessel bumped mole, lost way, and drifted shorewards, but prevented by ladder and anchor being dropped and spoil eased out, which enabled vessel to be berthed at Castlecliff Wharf, the damaged being confined to portion of ladder having carried away and slight leak in starboard tunnel	L. B. Sheppard.

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.		
1924.													
June 23	Kauri, s.s., 19 years	..	1,830	36	..	Coal and poles, 4,413 tons	Cracked plate in forehead peak	..	Tasman Sea ..	W.	Gale ..	On voyage Newcastle to Bluff a leak was discovered in the forepeak, resulting from a vertical crack of 8 in. in one of the plates, which was cemented until repairs could be carried out at port	R. L. Davies.
„ 24	Thomas Currell, s.s., 5 years	Ketch ..	84	10	..	..	Struck submerged object	..	1½ miles off Great King, North Cape, N.Z.	W.	Fair ..	Vessel struck submerged object, but shock so light that fishing was continued, and on return to Auckland examination showed keel about 6ft. from bow was slightly bent for about 8 in., but no other damage	F. Johnstone.
July 4	Waiotapu, s.s., 11 years	F. and A.	3,736	20	..	9,500 tons ..	Fire; damage £1 ..	..	Auckland	S.	6	Portion of a towel was found smouldering on deck by a greaser, who threw a bucket of water over it, and on deck being examined it was found that planking, 1 ft. by 6 in. by 3 in. deep, was charred	J. S. F. Brown.
„ 6	Daphne, s.s., 20 years	Cutter ..	100	16	10	..	Rocking-shaft main engine carried away; £10 damage	..	10¾° S.E. of Cape Brett	S.E.	Moderate	At 10.40 p.m. it was discovered that from some unknown cause rocking-shaft, main engines, had carried away, thereby putting circulating-pumps out of action, but not causing damage to ship or cargo; therefore donkey-pump put into action, and vessel proceeded to Auckland under easy steam	E. H. S. Goertz.
„ 7	War Lord, sail, 7 years	Top sail schooner	98	8	..	70 tons ..	Stranding, total loss; £5,000	..	Waikokopu	S.	Gale ..	The Court held that the casualty was caused through the breaking of the starboard anchor-chain, and that not only was the casualty not caused by any wrongful act or default on the part of the master, but that he was to be commended for the seamanlike manner in which he beached the vessel, thus avoiding loss of life	J. Lowry.
„ 21	Tees, s.s., 12 years	Schooner	247	17	15	General, 60 tons	H.P. cylinder cracked	..	Lat. 43° 48′ S., long. 179° 31′ W.	S.S.W.	7	Vessel was proceeding fullspeed in moderate sea when she was suddenly struck on starboard side by heavy sea in shape of a tidal wave, causing her to heel over extremely, and water to find its way into engine-room and stokehold, cracking h.p. cylinder. Vessel was slowed down and subsequently stopped for repairs	A. T. Dowell.
„ 27	Mako, s.s., 10 years	F. and A.	247	21	6	400 tons ..	Stearing-chain carried away; £5 damage	..	Auckland	..	Calm ..	Whilst warming up engines preparatory to leaving wharf, put helm hard-a-starboard when chain carried away	W. S. Clark.
..	Progress, s.s., 42 years	Schooner	181	12	..	General, 250 tons	Bumped wharf ..	..	Wellington	N.	Strong	When berthing with starboard side to No. 13 wharf, ship bumped wharf, doing slight damage to top plate on starboard bow, but no damage to wharf	H. T. Hay.

Aug. 7	Ripple, s.s., 19 years	Schooner	187	16	2	General, 450 tons	Foundered ..	18	Off Cape Palliser ..	S.W.	Gale ..	The Court found that vessel foundered with all hands, supposedly as result of breakdown of machinery leaving her at mercy of the heavy seas; that she was seaworthy, well found, manned, and equipped, cargo properly and safely stowed, and deck cargo securely lashed; that the weather conditions were not of sufficient severity to warrant master's delaying his departure from Wellington; that prompt steps were taken by owners to divert "Mararoa" in response to master's Morse message through lightkeepers; and that it is doubtful whether, if the "Ripple" had had wireless and got in touch with the "Maori," the latter vessel would have arrived in time to save any of the lives, owing to the heavy weather conditions and low visibility	J. A. Norling.
,, 13	Corinna, s.s., 42 years	Schooner	791	33	..	General, 700 tons	Bumped wharf ..	..	Wellington	S.E.	Light ..	Whilst berthing at King's Wharf, port side touched wharf, fracturing plate and frame in port bow	J. Bruce.
,, 13	Rio Claro, s.s., 2 years	Schooner	2,510	36	..	General, 6,000 tons	Fire; £40 damage..	..	Auckland Harbour ..	..	Calm ..	At 2 a.m. smoke observed issuing from bunker, and hatch and deck heated at after starboard end, but fire extinguished by ship's hose and local fire brigade	J. T. Cheavins.
,, 16	Huanui, sail, 10 years	Ketch ..	99	7	..	General, 60 tons	Bumped breakwater; no damage	..	Gisborne	S.W.	Moderate	When vessel was being towed out of port, the tow-boat, on slacking out line and before getting on way again, allowed vessel to bump her port quarter against breakwater	C. Thomsen.
,, 22	Trelyon, s.s., 5 years	Steamer	3,232	41	..	General,7,000 tons	Broken steering-gear ..	..	Lat. 24° 52′ S., long. 179° 8′ E.	E.S.E.	Gale (8)	Owing to heavy strain on chains through the labouring of the vessel, the steering-lead casting carried away, but was temporarily repaired when vessel was stopped for four hours and a half, after which vessel continued her voyage	W. L. Harris.
,, 22	Wootton, s.s., 24 years	Ketch ..	90	10	..	Produce, 75 tons	H.P. piston-rod broken and cylinder-cover smashed ..	..	7½ miles N.E. by ½ E. off Pencarrow Light	N.N.W.	Moderate	On voyage from Lyttelton to Wellington the h.p. piston-rod broke, smashing the cover of the h.p. cylinder; the vessel was brought to port by the tug "Pelican"	L. Larsen.
,, 24	Kennedy, s.s., 59 years	Schooner	131	3	..	General, 55 tons	Damaged rudder ..	..	Kapiti Island ..	N.W.	Light ..	When swinging ship to land a horse, the engine, contrary to master's orders, was put astern, resulting in vessel touching bank and damaging rudder, wheel-chains, and pinion-wheel	A. M. Stuart.
,, 25	Rio Claro, s.s., 2 years	Schooner	2,510	36	..	General, 1,500 to 2,000 tons	Fire	..	Wellington Harbour ..	..	Calm ..	At 9 p.m. fire occurred in bridge-space bunker, resulting from spontaneous combustion, but was extinguished with assistance of local fire brigade; damage confined to ten bulkhead boards being charred	J. T. Cheavins.
,, 27	Claymore, s.s., 22 years	F. and A.	139	18	7	General ..	Grounded ..	..	Whangarei Harbour ..	..	..	When proceeding up to Town Wharf in dense fog and ebb tide, the vessel stuck on soft mud-bank one mile from wharf, but floated off on next tide without damage	A. Johnson.

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.		
1924.													
Aug. 27	Ngaio, s.s., 26 years	F. and A.	725	40	108	General, about 30 tons	Grounded; no damage	..	Port Nelson ..	..	Calm ..	Vessel was unable to proceed owing to thick fog in the morning, when pilot-boat appeared and Harbourmaster advised that it was safe to follow him into port, which "Ngaio" proceeded to do, but grounded on soft sandy bottom, where she remained until 4 p.m., when she was towed off by s.s. "Regulus"	W. A. Wildman.
Sept. 2	Tuhoe, o.e.v., 12 years	Schooner	97	8	..	..	Broken bowsprit ..	..	Whangarei Harbour ..	S.E.	Strong	When going through bridge vessel struck on port bow, cannoned off into starboard bow, when bowsprit got foul of bridge and carried away	C. W. Cumming.
,, 5	Mavis, o.e.v., — years	Lugsail	13	1	..	Nil; fishing ..	Damaged bow; £2	..	Auckland Harbour ..	N.	Fresh breeze	The scow "Daphne" was being towed to sea and ran into the "Mavis," breaking off the man-helper and slightly straining the cabin-top	R. Hawthorn.
,, 6	Whakatu, s.s., 45 years	Schooner	95	11	..	General, 10 tons	Stranded, total loss	..	Waipapa Point ..	S.E.	Fresh (6)	The Court held that the vessel was well found in every respect; that in altering his course at 2.20 a.m. and again at 2.40 a.m. the master adopted a safe course; that, while he should have streamed his log, his not doing so did not contribute in any way to the stranding, which was caused by a strong set owing to the action of the wind and tide and the fact that the vessel was lightly laden; that costs be borne by the respective parties	D. Robertson.
,, 9	Barge No. 1, 20 years	..	54	6	..	..	Collision; £25 damage to Mahuta	..	Inner Harbour, Napier	..	Calm	The barge was being towed out as the "Mahuta" was entereing the Iron Pot, and the view being obscured by vessels anchored the barge collided with the "Mahuta," slightly damaging the latter's bulwarks	J. Lauratson.
,, 9	Mahuta, s.s., 25 years	Schooner	6	3	..	8 cwt. fish							V. Montaperto.
,, 13	Kaikoura, s.s., 21 years	Schooner	5,631	71	..	General, 2,600 tons	Fire	..	Wellington	N.W.	7	At 11.40 p.m. a fire was discovered in No. 5 shelter-decks amongst cargo of copra, timber, and flax, and was extinguished at 3.40 a.m. next day by combined efforts of fire brigade and crew, the cargo being damaged by fire, smoke, and water, and the wood sheathing the deck being burnt, rivets started, and plates buckled	M. M. Dounton.
,, 16	Elsie, o.e.v., 21 years	Ketch ..	24	4	3	General foodstuff, 15 tons	Stranded	..	Jackson's Bay ..	N.	6–7	Owing to lack of engine-power on lea shore, with strong northerly and rough sea, the vessel stranded, without damaging herself or cargo	A. C. Ingram.

Sept.	28	Excelsior aux. schnr., 28 years	Schooner	6	3	..	..	Collision	..	Auckland Harbour ..	..	..	When the "Excelsior" was going down the harbour a launch collided with her broadside on, striking her abaft the forward rigging, but doing no damage	J. Clark.
,,	28	Name unknown, launch	..	..	..	..	..							
,,	29	Katoa, s.s., 12 years	F. and A.	1,271	34	..	900 tons telegraph poles	Steam-valve chamber cracked	..	Auckland Harbour ..	..	..	When port boiler auxiliary valve was being opened up to pump up boiler a crack developed in valve chamber of starboard boiler	D. Ritchie.
Oct.	8	Mahurangi, s.s., 16 years	Schooner	95	11	..	160 tons cement	Touched bottom, damaging vessel's stern	..	Auckland Harbour ..	N.W.	Light ..	When proceeding to wharf, the tide being very low, the vessel took the bottom, and, finding she would not steer, the master ordered "Full speed astern," resulting in vessel hitting the wharf and carrying away part of her stern.	F. Savage.
,,	10	Kaimanawa, s.s., 15 years	F. and A.	1,247	31	..	3,000 tons coal	Leaking boiler; £50 damage	..	Newcastle, New South Wales	..	..	The chief engineer reported that a boiler was leaking (which he temporarily repaired) and that vessel was fit to proceed on voyage, on which no further trouble occurred	A. B. Sizer.
,,	11	Dauntless, o.e.v., 15 years	F. and A. Launch	3	2	..	..	Collision	..	Nelson Street Wharf, Auckland	N.W.	3	When the "Dauntless" was going alongside the wharf the engine stalled and vessel collided with the stern of the "Fox," which was moored at wharf, doing £10 damage	Alex. Cole.
,,	11	Fox, o.e.v., fishing launch (age not known)	Lugger..	4	2	..								A. Polecondriotis.
,,	17	Coronation, aux., 16 years	Schooner	59	6	..	General, 120 tons	Stranded.. ..	..	Parenga Harbour ..	S.W.	Gale ..	Vessel went for shelter, but owing to narrow channel was not able to give much cable, resulting in vessel dragging her anchor and resting on mud-bank, from which she was refloated, no damage having been done to herself or cargo	H. Anderson.
,,	19	Elsie, o.e.v., 21 years	Ketch ..	24	4	3	General foodstuffs, 15 tons	Stranded ..	..	Jackson's Bay ..	W.	3	Vessel ran for shelter, but, owing to lack of engine-power and to anchor not holding, vessel began to drift inshore, where master beached her, enabling crew and passengers to walk ashore	A. G. Ingram.
,,	24	Isabella de Fraine, o.e.v., 22 years	Schooner	76	7	..	81,000 ft. timber	Fore-top-mast, &c., carried away; £250 damage	..	South Cape Brett ..	W.S.W.	Moderate	The screw on bobstay carried away, causing bowsprit to snap off at gammoning-band, bringing down foretopmast, all of which resulted from bad weather encountered on west coast	J. D. Bell.
,,	25	Ruapehu, s.s., 24 years	F. and A.	5,797	127	359	General ..	Leaking valve in steam-pipe	..	Mersey River ..	S.E.	3	A heavy leakage was found in the flange of auxiliary steam-pipe of the starboard boiler, which was repaired on arrival at Auckland	A. W. McKeller.
,,	29	Opihi, s.s., 38 years	F. and A.	674	25	..	961 tons ..	Damaged plate in bow	..	Wellington Harbour ..	N.W.	7–8	When approaching wharf, starboard bow of vessel came in contact with wharf, cracking and holeing one plate in bow	W. H. D. Gardiner.
,,	31	Zita, aux., 46 years	F. and A.	73	8	..	Timber ..	Touched bar ..	..	Hokianga Bar ..	N.E.	Moderate	When proceeding over bar, outward bound, master altered course to south, as directed by semaphore signals, and continued south-west after arm dropped, but touched bar several times	J. Francis.
Nov.	9	Port Melbourne, s.s., 11 years	F. and A.	5,852	104	11	General, 11,000 tons	Meat door No. 2 'tween deck injured	..	Liverpool Dock, England	..	..	When ship passing from Cumister Dock to Sandon on currents, and when scraping along, pressed against meat-door on No. 2 'tween deck, and although apparently no damaged done, yet thirty-eight days out she began to leak, and on arrival at Auckland repairs were effected	F. J. Kearney.

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

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				Crew.	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1924.													
Nov. 11	Ihumata, s.s., 13 years	F. and A.	653	23	..	Ballast ..	Grounded ..	..	Wanganui River ..	S.W.	Light ..	When giving way to incoming vessel in channel "Ihumata" took sheer to starboard and grounded on side channel, owing to flood tide catching vessel on port bow, making her slow to answer helm, but not causing any apparent damage	C. Ostenfeld.
„ 14	Hauraki, motor, 3 years	Schooner	4,425	48	..	General, 10,500 tons	Fire	..	Lat. 21° N., long. 137° 30′ W.	E.N.E.	4	Through coal heating at forward bulkhead, fire occurred in galley-bunker, but no damage done to ship or cargo	J. D. Frew.
„ 15	City of Edinburgh, s.s., 26 years	Schooner	4,014	80	..	General, 8,375 tons	Collision	..	Lat. 40° 24′ N., long. 73° 51′ W.	W.	4	Vessel collided with oil-barge which was being towed by tug, resulting in former having bow plating slightly dented, but not sufficient to require repairs	H. Spencer.
„ 16	Arahura, s.s., 19 years	F. and A.	771	49	55	General, 30 tons	Starboard propellor lost	..	Hauraki Gulf ..	N.N.W.	Moderate	It was found necessary to stop starboard engine, as either shaft was fractured or propeller gone; the latter was afterwards found to be the trouble	A. Reed.
„ 17	Rama, s.s., 29 years	Schooner	244	21	..	Bunker-coal and fish, 200 tons	Stranded; total loss	..	Okawa Bay, Chatham Islands	N.	6–7	The Court held that the vessel struck an unchartered rock; that the master, officers, and crew took commendable steps to save ship and cargo and ensure that there was no loss of life; that a proper survey of the Chatham Islands should be made; and made no order as to costs	E. Cartner.
„ 18	Opua, s.s., 24 years	Schooner	288	18	..	..	Grounded ..	..	Farewell Spit ..	Variable	Light ..	Owing to strong set to westward, of which master was unaware, and during passing showers and light winds, vessel grounded on extreme end of spit; but vessel came off on flood tide, and was found not to have sustained any damage	F. Mackenzie.
„ 21	Flora, s.s., 40 years	Schooner	818	29	..	General ..	Grounded ..	..	Otago Harbour ..	N.E.	1 to 2	When leaving wharf master kept vessel too wide of flashing light, resulting in passing to west of No. 37 red beacon, which master failed to see, and, continuing, took the bank 300 ft. outside channel, but doing no damage to ship or cargo	C. McLeod.
„ 24	Admiral, s.s., 41 years	Cutter ..	29	5	..	Wool, 140 bales ..	Struck submerged object	..	Cook Strait	N.	V. Light	The Court found that vessel struck submerged object in vicinity of Toms Rock, but whether submerged floating log or a rock Court was unable to say, but was of opinion that, in view of favourable weather conditions, the course steered by the master was a proper one, and that no negligence attributable to him or other members of crew	C. Croucher.

Nov. 25	Kaiaia, o.e.v., 15 years	Ketch ..	24	1	..	Benzine, 1,250 cases	Explosion	..	Auckland	N.E.	Moderate	The Court found that explosion was caused by Seaman Singer entering forepeak, against master's orders, to light riding-light, where gas from petroleum cargo had found its way, that owing to dangerous nature of cargo, Court submitted conditions under which carriage of same should be governed both above and below deck; and that for no purpose whatever should it be carried unless under certificate of Engineer Surveyor of Ships, who should certify period not exceeding one year for that carried above, and for one voyage only in the case of that carried below	J. Stewart.
„ 27	Tui, s.s., — years	Cutter	6	2	..	..	Fire	..	Auckland Harbour ..	W.	Moderate	Through the vessel rolling, the asbestos around the wooden coaming of the light and air space worked off, allowing the kindling which was on fire on top of boiler to ignite the woodwork on coaming	A. E. Ragg.
„ 28	Cobar, s.s., 21 years	Cutter ..	69	6	12	..	Collision ..	..	Wellington Harbour ..	N.	Light	"Cobar" was approaching Ferry Wharf when "Wairau" came out from Queen's Wharf, and, although both vessels rang "Full speed astern," the "Wairau" caught "Cobar" a glancing blow amidships with her bow, causing damage to the extent of £2. It is considered that accident could have been avoided had "Wairau" taken a wider course from wharf, enabling her to see and be seen by "Cobar"	J. W. Gower.
„ 28	Wairau, s.s., 14 years	Schooner	56	8	..	General, 40 tons							E. Jackson.
„ 30	Clifton, o.e.v., 24 years	Ketch ..	24	2	..	Light ..	Struck wharf ..	..	Thames River ..	Calm	..	When going up river, vessel struck wharf belonging to the Lands Department, below and on opposite side river to Kopu, damaging jib and carrying away bowsprit	A. W. Humphreys.
Dec. 11	Kapuni, s.s., 12 years	Ketch ..	97	10	..	General ..	Grazed western wall	..	Patea Harbour ..	W. by N.	Fresh breeze	At the entrance, vessel grazed the western wall, springing her stem slightly and causing her to leak a little in the forepeak. She was beached, and temporary repairs effected, after which she proceeded to Wanganui	R. McLachlan.
„ 14	Kawau, s.s., 34 years	Cutter (staysail only)	37	7	..	..	Auxiliary check feed-valve leaking	..	Hauraki Gulf ..	S.W.	Strong	As water could not be got into boiler as it came back through auxiliary check-valve, the fires were drawn, and vessel towed back to Auckland, where it was found that some substance had got between the valve and seat, otherwise valve was in good order	Edward Henry.
„ 17	Inaha, motor, 1 year	Cutter ..	116	11	..	Cheese, 180 tons	Struck wharf ..	..	Wellington Harbour ..	S.	Strong ..	Owing to engines refusing to go astern, and to fresh southerly, the vessel when berthing struck King's Wharf end on, bending and cracking her stern, and bending plates on both sides	A. P. Gibson.
„ 19	Sheafmount, s.s., 11½ years	Schooner	3,207	44	..	General, 8,000 tons	Fire	..	Lat. 20° 26′ N., long. 138° 20′ W.	E.S.E.	Moderate	Bunker coal caught fire as result of spontaneous combustion, but no damage was done to ship or cargo	C. V. Groves.
„ 22	Konini, s.s., under 1 year	Schooner	833	23	..	Salt, 767 tons; gypsum, 830 tons	Stranded; total loss	..	Near Bluff Peninsula	Variable	..	The Court held that, the patent log not having been in use, and the bearings taken off Centre and Dog Islands being too approximate, and from the fact that neither land nor lights could be seen, and vessel being in confined waters, the master should have altered his course when Dog Island was lost, by heading vessel into clear of strait and awaiting clearer weather, and that master was guilty of wrongful act by continuing at full speed under the circumstances; but, while censuring him, the Court did not suspend his certificate, but ordered that he pay £40 towards the cost of the inquiry	S. Vint.

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.		
1924.													
Dec. 26	Pupuke, ferry steamer, 15 years	F. and A.	68	4	100	..	Broken piston-rod, circulating-pump: £10 damage	..	Auckland Harbour ..	E.	Light ..	The piston-rod of the circulating-pump broke, necessitating the vessel being towed to wharf	J. Stewart.
,, 26	Awahou, s.s., 12 years	Schooner	157	17	..	General, 10 tons	Leaking; £10 damage	..	Off Mercury Islands ..	N.E.	..	As No 1 hold was found to be leaking, vessel was headed with all speed for Auckland, where an examination revealed a small hole in one of the plates in the after end of hold	W. S. Clark.
,, 28	Admiral, s.s., 42	F. and A.	30	6	..	..	Fire	..	Wellington ..	..	..	Slight outbreak of fire through heat from galley-stove igniting surrounding woodwork and damaging two planks to extent of 1 ft.	H. D. J. McArthur.
,, 30	Storm, s.s., 5 years	..	371	17	..	General, 300 tons	Stranded	..	Wanganui River ..	W.	Light ..	Whilst proceeding up-river at half-speed, vessel touched shoal on south side, and remained fast until the 9th January, 1925, when she refloated under her own power	C. E. Goodyear.
1925.													
Jan. 10	Tekoa, s.s., 3 years	Steamer	5,369	56	..	General ..	Portion of main thrust blocks overheated	..	Lat. 22° 44′ S., long. 177° 11′ E.	N.E.	4	The white metal in ahead pads on main thrust-block became overheated and scored ahead side of collar, necessitating spare pads being fitted at sea	S. W. Somersome.
,, 16	Pakeha, s.s., 14 years	Schooner	5,055	82	3	General, 2,020 tons	Fire	..	Tokomaru Bay ..	S.	Light ..	Smoke was discovered coming out No. 1 lower hold, and on examination being made several carcases of lamb were seen to be scorched and cloths burned, but no damage done to ship	W. P. Clifton-Mogg.
,, 16	Dredge 222, s.s., 35 years	Dredge	502	11	..	Light ..	Propeller-blades stripped	..	Otago Harbour ..	S.	8	When going astern vessel was struck by a strong southerly squall, causing vessel's stern to swing to port, and bringing propellers in contact with bottom of mooring-beacon and stripping three blades off port propeller	R. Scollay.
,, 25	North Bend Sail (U.S.A.), 4 years	Schooner	847	11	2	Oregon timber, 2,000 tons	Stranded	..	Mangawai River-entrance	S.E.	Light ..	The vessel was being towed when the bitts of one of tow-boats carried away, and, although tow-line was twice got aboard tow-vessel, it carried away, and ebb slewed "North Bend" broadside on, when she took the bottom; but she subsequently floated off on rising tide, sustaining no damage	T. Hansen.
,, 27	Ohia, o.e.v., 20 years	Ketch ..	5	2	..	Benzine, &c., 28 cases	Fire: total loss, £810; and cargo, £47 4s. 8d.	..	Tauranga Harbour ..	N.E.	Fresh ..	When proceeding under sail with both engines going an explosion occurred in engine-room, which broke into flames, quickly spreading, and destroying ship and cargo	A. H. Fletcher.
Feb. 7	Kawau, s.s., 21 years	Cutter ..	53	9	..	General, 3 tons	Grounded; £30 damage	..	Mangawai Bar ..	E.S.E.	Strong	When crossing the bar vessel touched, injuring rudder-post and losing two propeller-blades, eventually putting into Marsden Point, from which she was towed to Auckland	E. Olsen.
,, 13	Condor, s.s., 22 years	Ferry-steamer	188	4	20 (about)	..	Struck wharf ..	..	Auckland	Variable	..	Owing to engine not reversing, the vessel struck the wharf, causing damage to the belting to the extent of £27	G. W. T. Webb.
,, 15	Elsie Mary, sail, 25 years	Topsail Schooner	99	6	..	Coal and timber, 138 tons	Stranded	..	Tauranga	N.E.	Gale ..	Whilst sheltering, vessel dragged her anchor and grounded on a mudbank, whence she was towed off three days later, and was found not to have sustained any damage	T. Stephens.

Feb.	19	Oreti, s.s., 25 years	Schooner	72	10	..	70 tons ..	Propeller fouled by dredger-chain	..	Dunedin	..	..	A dredge mooring-chain was hove taut under stern of "Oreti," fouling her propeller, but on being docked she was found not to have sustained any damage.	A. T. Murray.
,,	19	Waireka, s.s., 15 years	Cutter ..	72	6	40	..	Collision	..	Otago Harbour ..	N.E.	6–7	The vessels were meeting in the small channel in shallow water when the heel of the "Waireka" touched ground, causing her to swing round against helm, and resulting in her striking the "Waikana" with her stern, damaging her slightly, but doing little damage to the "Waireka"	J. Fraser.
,,	19	Waikana, s.s., — years	Cutter ..	67	5	20								J. McA. Eadie.
,,	24	Port Denniston, s.s., 7 years	Schooner	5,152	80	..	Wool, meat, and tallow, 400 tons	Carried away buoy in harbour	..	Bluff Harbour ..	S.W.	4	When berthing, the vessel was carried north by wind and tide, carrying away buoy which marked middle bank of harbour, but doing no damage to ship or cargo	John Ferris.
,,	26	Kaione, s.s., 10 years	Smack	347	15	..	..	Bumped submerged hulk	..	Wanganui	W.	5	When backing into the swinging-basin at Castlecliff on strong flood tide the ship's bow was caught by tide, swinging her broadside on across bow of submerged hulk, the anchor not holding owing to sandy bottom, resulting in vessel sustaining damage to extent of £100	Harold Harris.
,,	28	Rimu, sail, 30 years	Ketch ..	21	3	..	Shingle, 75 tons	Stranded	..	Hauraki Gulf ..	S.W.	7	When loading shingle on beach the wind shifted from north-east to south-west, causing vessel to bore off and then drag ashore before sail could be got on her; but she subsequently floated off when she had sufficient water	J. M. McKinnon.
Mar.	4	Onewa, s.s., 16 years	Cutter ..	31	4	20	..	Lost propeller	..	Auckland	..	Calm ..	On trip from Waiheke Island the tail-shaft broke, resulting in propeller being lost, and necessitating vessel being towed to port	H. F. Joyce.
,,	7	Kakapo, s.s., 24 years	..	949	27	..	Coal, 2,300 tons	Junk bolt broken in cylinder	..	Off Westport Light ..	S.S.W.	3	The junk-bolt in the cylinder broke, bending piston-rod, but not doing any damage to vessel or cargo	A. W. Crease.
,,	7	Mana, s.s., 34 years	Paddle-steamer	51	9	..	..	Collision ..	..	Buller River ..	Nil	..	The "Kakapo" was being towed by "Mana" when the current caught the latter, causng her to swing down-stream and collide with the "Kakapo," damaging "Mana's" taffrail	W. Earl.
,,	7	Kakapo, s.s., 24 years	..	949	27	..	Coal, 2,300 tons							A. W. Crease.
,,	10	Corinna, s.s., 43 years	Schooner	791	32	..	General, 600 tons (approx.)	Broken tail-shaft ..	..	Off Cape Egmont ..	S.S.W.	3	While on passage from Nelson to New Plymouth the tail-shaft broke, disabling the the ship, which was picked up and towed into New Plymouth	James Green.
,,	12	Navua, s.s., 20	..	1,773	44	..	General ..	Fire	..	Off Banks Peninsula ..	E.	Light ..	At 6.30 a.m. fire discovered amongst cargo in No. 3 'tween-deck and lower hold, causing small quantity of cargo to be damaged by fire and water, and wooden fore and after and Nos. 3 and 4 hatches burned and charred	Charles Elders.
,,	12	Kent, s.s., 8 years	Steamer	5,444	51	..	4,000 tons ..	Cable broken and anchor lost	..	Napier	Calm	..	Whilst at anchor, head on to moderate southerly swell during calm weather, the cable parted at hawse-pipe, resulting in loss of starboard anchor and 65 fathoms cable	M. Downton.
,,	14	Echo, o.e.v., 20 years	Schooner	90	10	..	General, 68 tons	Foremast carried away	..	Wellington	N.	5	When coming up harbour the vessel's foremast carried away, but no damage was done to ship or cargo.	F. Radford.

Summary of Casualties to Shipping reported to the Marine Department during the Year ended 31st March, 1925.

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	1,484	..	1	98	..	4	1,582	..	1	244	..	..	..	..	1	244	..	5	1,826	..
Slight damage	3	239	..	..	..	..	3	239	..	1	5,852	..	..	..	..	1	5,852	..	4	6,091	..
No damage	15	7,287	..	3	956	..	18	8,243	..	1	403	..	..	..	..	1	403	..	19	8,646	..
Total strandings	21	9,010	..	4	1,054	..	25	10,064	..	3	6,499	..	..	..	..	3	6,499	..	28	16,563	..
Collisions—																					
Total loss	1	4	..	..	..	..	1	4	..	..	..	..	..	..	..	..	..	..	1	4	..
Partial loss	1	15	..	..	..	..	1	15	..	..	..	..	..	..	..	..	..	..	1	15	..
Slight damage	29	16,723	..	1	21	..	30	16,744	..	1	4,014	..	..	..	..	1	4,014	..	31	20,758	..
No damage	4	14	..	1	99	..	5	113	..	..	..	..	..	..	..	..	..	..	5	113	..
Total collisions	35	16,756	..	2	120	..	37	16,876	..	1	4,014	..	..	..	..	1	4,014	..	38	20,890	..
Fires—																					
Total loss	3	15	..	..	..	..	3	15	..	..	..	..	..	..	..	..	..	..	3	15	..
Slight damage	7	16,196	..	..	..	..	7	16,196	..	..	..	..	..	..	..	..	..	..	7	16,196	..
No damage	1	5,055	..	..	..	..	1	5,055	..	2	7,632	..	..	..	..	2	7,632	..	3	12,687	..
Total fires	11	21,266	..	..	..	..	11	21,266	..	2	7,632	..	..	..	..	2	7,632	..	13	28,898	..
Foundered—																					
Total loss	2	192	19	..	..	..	2	192	19	..	..	..	..	..	..	..	..	..	2	192	19
Total founderings	2	192	19	..	..	..	2	192	19	..	..	..	..	..	..	..	..	..	2	192	19
Miscellaneous, including damage by heavy seas to hull and cargo, loss of masts, sails, &c., and breakdown of machinery	19	14,465	..	1	85	..	20	14,550	..	6	20,378	..	..	..	..	6	20,378	..	26	34,928	..
Total miscellaneous	19	14,465	..	1	85	..	20	14,550	..	6	20,378	..	..	..	..	6	20,378	..	26	34,928	..
Total number of casualties reported	88	61,689	19	7	1,259	..	95	62,948	19	12	38,523	..	..	..	..	12	38,523	..	107	101,461	19

Return of the Number of Land Boilers and Machinery inspected during the Financial Year ended 31st March, 1925.

Boilers.

Class.	Not exceeding 5 Horse-power.	Exceeding 5 but not exceeding 10 Horse-power.	Exceeding 10 Horse-power.	Total.
Stationary	2,996	737	2,388	6,121
Portable	207	1,102	514	1,823
Totals	3,203	1,839	2,902	7,944

Machinery.

Class.	Number.	Class.	Number.
Hydraulic lifts	264	Oil-engines	12,521
Electric ,,	877	Gas-engines	1,156
Gas ,,	5	Electric-motors	11,457
Oil ,,	2	Miscellaneous	21
Steam ,,	15		
Gas, hydraulic, and electric-motor hoists	1,090	Total	27,853
Water-engines, peltons, turbines, and water-wheels	445		

Return of New Boilers inspected for the Year ended 31st March, 1925.

District.	Made in Dominion.		Imported.		Total.	
	Number.	Horse-power.	Number.	Horse-power.	Number.	Horse-power.
Auckland	44	1,098	56	1,409	100	2,507
Auckland North	2	713	1	4	3	717
Auckland South	14	88	1	5	15	93
Canterbury North	23	178	48	285	71	463
Canterbury South	3	16	2	10	5	26
Gisborne	2	100	6	30	8	130
Hawke's Bay	6	33	5	62	11	95
Nelson	5	20	..	..	5	20
Otago	19	134	15	204	34	338
Southland	5	26	1	11	6	37
Taranaki	3	82	2	37	5	119
Taranaki North	4	87	2	10	6	97
Wellington	27	728	40	810	67	1,538
Wellington North	9	43	..	..	9	43
Westland	10	217	8	151	18	368
Totals	176	3,563	187	3,028	363	6,591

Return of the Number of Certificates issued to Land Engineers, Engine-drivers, and Electric-tram Drivers during the Year ended 31st March, 1925.

Class.	Number.	Class.	Number.
Service—		Competency—*continued.*	
First-class engine-driver	11	Steam-winding-engine driver	9
Second-class engine-driver	2	Electric-winding-engine driver	2
Locomotive- and traction-engine driver	1	Locomotive- and traction-engine driver	85
		Locomotive-engine driver	6
Competency—		Traction-engine driver	59
Extra first-class engineer	2	Electric-tram driver	83
First-class engine-driver	25		
Second-class engine-driver	278	Total	563

RETURN OF LAND-ENGINE DRIVERS' AND ELECTRIC-TRAM DRIVERS' EXAMINATIONS HELD THROUGHOUT NEW ZEALAND DURING THE YEAR ENDED 31ST MARCH, 1925, SHOWING THE NUMBER OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES.

Place.	Extra First.		First Class.		Second Class.		Winding.				Locomotive and Traction		Locomotive.		Traction.		Electric-tram Driver.		Total.		Grand Total.
							Steam.		Electric.												
	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	P.	F.	
Auckland	..	..	4	6	36	16	..	..	..	..	14	2	2	2	2	..	36	4	94	30	124
Blenheim	..	..	..	..	3	..	..	..	..	..	..	..	..	..	2	..	..	..	5	..	5
Carterton	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Christchurch	..	2	1	..	8	7	..	..	1	..	3	1	..	..	16	1	20	1	49	12	61
Dannevirke	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Dunedin	..	2	..	3	9	5	1	..	..	..	4	..	..	1	7	2	8	..	31	11	42
Gisborne	..	..	..	..	6	2	..	..	..	..	..	1	..	..	..	..	..	..	6	3	9
Greymouth	..	..	2	4	20	2	..	..	..	..	3	..	3	1	..	..	..	..	28	7	35
Hamilton	..	..	4	7	35	7	3	2	1	..	6	1	..	..	1	1	..	..	50	18	68
Invercargill	..	..	1	1	27	15	..	..	..	..	1	..	..	..	10	1	1	..	40	17	57
Mangonui	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	2
Napier	..	..	..	..	9	6	..	..	..	..	..	1	..	..	3	..	..	..	12	7	19
Nelson	..	..	..	2	8	3	..	..	..	..	..	..	1	..	5	2	..	..	14	7	21
Nevis	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
New Plymouth	..	..	1	1	20	11	..	..	..	..	..	2	..	..	..	1	..	..	21	15	36
Palmerston North	..	..	3	1	28	15	..	..	..	..	..	4	..	..	2	1	..	..	37	17	54
Te Kopuru	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Timaru	..	..	..	..	3	1	..	..	..	..	..	..	..	..	5	2	..	..	8	3	11
Wanganui	..	..	..	..	8	1	..	..	..	..	1	..	..	..	1	..	1	..	11	1	12
Wellington	..	..	2	4	13	12	..	..	..	..	..	1	..	..	1	3	10	1	26	21	47
Whangarei	..	..	3	1	20	3	3	..	..	..	9	1	..	..	1	..	..	..	36	5	41
Totals	..	2	2	21	30	258	107	7	2	2	..	46	10	6	4	56	14	76	6	474	175	649

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