

1885.

NEW ZEALAND.

MARINE DEPARTMENT

(ANNUAL REPORT OF THE).

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

SIR,—

Marine Department, Wellington, 28th May, 1885.

I do myself the honour to submit the following report of this department for the year ended on the 31st March last:—

LIGHTHOUSES, ETC.—The various lighthouses on the coast of New Zealand under the control of this department, now amounting to twenty-nine, have been kept in good order during the past year. A slight accident occurred at Portland Island, which prevented the machinery from working; the acting principal keeper telegraphed to Wellington for assistance as soon as possible; in the meantime the light was caused to revolve by means of the hand-gear. On receipt of the telegram the “Stella” was at once despatched to Portland Island, and repairs were executed. It is to be noted that two steamers passed close to Portland Island in daylight, when signals for assistance were flying from the lighthouse flagstaff, but no notice was taken of them, nor was the circumstance reported to this office. At Cape Campbell the end of the winding-shaft broke off, rendering it necessary to work the light by hand until the morning, when the end of the shaft was reduced to suit the handle, and has since worked all right. During the year one principal keeper was reduced to the rank of assistant keeper; one assistant keeper was dismissed, he being the keeper referred to in last report as having gone to sleep on watch; the services of one keeper were dispensed with on the ground of ill-health; one keeper was paid off; one probationary keeper was not confirmed in his appointment; and five assistant keepers resigned their appointments: eleven keepers were appointed on probation during the same period.

Kaipara Heads.—The works in connection with this lighthouse were so far advanced as to enable the light to be exhibited on the 1st December last. The light is a ten-second flashing white light of the second order dioptric.

Bean Rock.—The stonework that protects the foundation of this lighthouse was damaged by the easterly gale in March last. It has since been repaired.

French Pass.—This light was first exhibited on the 1st October last. It was found practicable, in addition to the fixed red light on the mainland, to show a white light from the beacon on the reef by means of an ordinary ship's riding-light, with an enlarged reservoir, so that it will burn, if necessary, for two or three days. It has to be kept burning night and day as the beacon can only be visited at slack-water. Of course, if the light should go out during the night, it will not, as a rule, be possible to re-light it; as yet this has only occurred twice, namely, on the 8th January, when the light on the beacon was out from 10 p.m. to 6.30 a.m. on the 9th, and on the 27th January, when the light was out from 6 to 8 p.m. In the Notice to Mariners respecting this light special attention was drawn to the fact that it was not implicitly to be relied on. A supply of a superior description of riding-lights has been since received from England, and it is anticipated that by using one of these the light will not be liable to go out. On the 20th January the schooner “Reward” ran into the beacon, damaging it and completely smashing the lamp.

Light at the Eastern Entrance to Hauraki Gulf.—A survey of the best position for this light was made by the Marine Engineer (Mr. Blackett) and Captain Johnson; they reported in favour of the site on Cuvier Island, as being better than that on Red Mercury Island. No further action has been taken in the matter beyond preliminary steps to acquire the land.

Dog Island.—A new oil-store has been built at this station by the keepers.

Cape Foulwind.—The tower has been thoroughly overhauled, and some decayed portions have been renewed.

Farewell Spit.—Portions of the balcony that had become rotten have been repaired.

Telephone Lines to Lighthouses.—Communication has been established between Akaroa Head Lighthouse and Akaroa Township. The following lighthouses are also connected by telephone with the telegraph system of the colony, namely, Tiri Tiri, Taiaroa Head (to signal station), Cape Saunders, and Nugget Point; and I understand that it is shortly proposed to extend it to Farewell Spit Lighthouse.

Jackson's Head Beacon.—An iron and timber beacon on the reef off Jackson's Head was completed just after the commencement of the financial year, at a total cost of £691 9s. 4d. This beacon was unfortunately carried away during the gale of the 13th and 14th March last. It is to be remarked, as an indication of the strength of the wind and the height of the sea on that occasion, that some cases that had been lying at the foot of the main tram-line at the Brothers Lighthouse ever since the tower was completed in 1877 were all swept away, together with some oil and coal that had been landed just before the gale came on. This was the gale that did so much damage at Opunake. A sum of money has been placed on the estimates for the purpose of erecting another beacon,

HARBOURS.—There are now Harbour Board Acts in force at twenty-one ports, but, owing to want of funds or other reasons, four of these Boards, namely, Hokitika, Gisborne, Wairoa, and Foxton, do not undertake the management of the harbour and pilot establishments, who have therefore to be paid by the Government, and consequently remain under the control of this department. This practice leads to a divided authority, and is therefore very objectionable.

Manukau.—Ten new iron buoys, which were contracted for last year at a cost of £150, have been delivered and placed in position; the whole of the buoys have been thoroughly cleaned and overhauled.

Kaipara.—The new steam-launch referred to in last report was completed and delivered at Kaipara in June; she proved to be a very useful vessel for the pilot service. Unfortunately she caught fire at her moorings on the 8th January, and was considerably damaged. An investigation was held as to the cause of the fire, but no evidence could be obtained that gave any clue to its origin. A contract was let for the sum of £289 to repair the launch; this contract was completed shortly after the end of the financial year, and the launch is again in working order. Arrangements have been made for the lighthouse-keepers to act as signalmen at this station; this effects a considerable annual saving.

Mokau.—A survey of the bar and entrance to this river was made at a total cost of £323 6s. 4d. The plan made from the survey has been published, and copies have been sent to the Hydrographer to the Admiralty for his information.

Wairau.—The pilot's house being in a very dilapidated condition, plans were prepared and tenders called for the erection of a new house, which is to be situated on a reserve that has just been made near the existing dwelling.

Waitapu.—Leading lights have been erected at this port; they are under the management of the County Council, who are paid a fixed sum for maintaining them.

Greymouth and Westport.—By the passing of the Greymouth and Westport Harbour Board Acts of last session, the control of these harbours was, from the date of the passing of the Acts (6th November, 1884), vested in the Harbour Boards. The practical control was handed over on the 15th December, on which date the Boards held their first meeting. The Boards, having received the revenues derivable from their endowments, &c., from the date of the passing of the Acts, have (since the end of the financial year) refunded the amount expended by this department on the harbours from that date until the 31st December, 1884.

Orders in Council.—The following Orders in Council under the provision of the Harbours Acts have been issued during the year 1884–85:—

April 3: Approving of plans of additions to Queen's Wharf, Wellington.

April 3: Approving of plans of boom across Hikutaia River, Thames.

April 3: Licensing R. Blair to use portion of foreshore of Hikutaia River for construction of boom.

April 25: Licensing J. L. Campbell to use foreshore at Te Kopuru for erection of wharf.

May 13: Approving of plans of jetty in Pigeon Bay.

June 24: Approving of plans of bridge over Turanganui River, Gisborne.

August 1: Approving of plans of Southland Frozen Meat Company's works at the Bluff.

August 1: Licensing A. Stenhouse to use portions of foreshore of Kaiarara and Wairahi Creeks, Great Barrier Island, for construction of booms.

August 5: Vesting management of Karamea Wharf in Buller County Council.

August 5: Vesting management of Mongonui Wharf in Mongonui County Council.

August 5: Vesting management of Whangaroa Wharf in Mongonui County Council.

August 19: Approving of plans of booms across Oruaiti River, Mongonui.

August 19: Licensing Auckland Timber Company (Limited) to use portion of foreshore of Oruaiti River for construction of booms.

August 29: Approving of plans of Calliope Dock, Auckland.

September 30: Approving of plans of jetty at Port Levy.

October 14: Approving of plans of New Zealand Iron and Steel Company's landing-place, Manukau Harbour.

October 14: Licensing New Zealand Iron and Steel Company to use portion of foreshore, Manukau Harbour, for construction of landing-place.

December 15: Approving of plans of Kaihu Valley Railway Company's bridge across Kaihu Creek.

December 22: Approving of plans of bridge across north branch of Waimakariri River.

January 5: Approving of Sir John Coode's plans of harbour works at Westport.

January 17: Approving of plans of W. Brownlee's wharf, Pelorus River.

January 17: Licensing W. Brownlee to use portion of foreshore of Pelorus River for construction of a wharf.

January 17: Approving of plans of wharf at Timaru.

January 17: Approving of plans of Mr. Barlow's fish-pond at Matakoho, Kaipara.

January 17: Approving of Sir John Coode's plans of harbour works at Greymouth.

January 24: Approving of plans of bridge and landing-stage, Awanui River.

February 23: Approving of plans of W. Brownlee's bridge across tidal creek of Pelorus River.

February 23: Approving of plans of boom across Kaimarama Creek, Mercury Bay.

February 23: Licensing Mercury Bay Timber Company to use portion of foreshore of Kaimarama Creek for construction of booms.

February 23: Approving of plans of extension of outer tee of Queen's Wharf, Wellington.

March 5: Approving of plans of Contract No. 1, extension of south breakwater, Greymouth.

March 5: Approving of plans of works at Orawaiti overflow, Buller River.

March 5: Approving of plans of works at Buller Relief-channel.

March 5: Approving of plans of railway-siding on foreshore at Anderson's Bay, Otago Harbour.

March 5: Licensing Dunedin, Forbury, and Peninsula Railway and Tramway Company to use portion of foreshore at Anderson's Bay for construction of siding.

March 11: Approving of plans of temporary wharf in lagoon at Westport.

March 11: Approving of plans of wharf at Endeavour Inlet, Queen Charlotte Sound.

March 11: Licensing E. H. Crease and others to use portion of foreshore at Endeavour Inlet for erection of wharf.

March 11: Vesting management of Port Albert Wharf in Rodney County Council.

March 11: Vesting management of Russell Wharf in Bay of Islands County Council.

March 27: Vesting management of Havelock Wharf in Pelorus Road Board.

Notices to Mariners.—Fifty-five Notices to Mariners were issued during the year; of these, twenty-three related to matters within the colony. The following is a list of them:—

Kaipara.—North Head flagstaff shifted.

Kaipara.—Banks forming below Tauhara Creek.

Lyttelton Harbour.—Yards to be braced up, to avoid collision with electric lights.

Greymouth.—Beacon on north edge of south training-wall.

Waimakariri.—Depth of water on bar. Flagstaff removed to South Spit. Channel up river marked with buoys.

Timaru Harbour.—Position of wreck of "Duke of Sutherland."

New Plymouth.—Alteration of position of lights.

Bay of Islands.—Buoys placed near entrance to Port Tepuna and Kerikeri River.

Bay of Islands.—Light on railway wharf, Opua.

Buller River.—Removal of front up-river beacon.

Waitapu.—Leading lights.

Kaipara Heads Lighthouse.—Preliminary notice.

Greymouth.—Light on end of staging, wharf extension.

Buller River.—Bar and danger signals at night.

Picton.—Stumps of piles of old boat-wharf above bottom.

Oamaru.—Leading lights on beacons, and night signals to steamers.

French Pass.—Exhibition of light.

Westport.—Lights on dredge.

Kaipara Heads.—Exhibition of light.

Waitapu.—Alteration of colour of leading lights.

Oamaru.—*Re* dredging operations.

Bay of Islands.—Buoy on rock near Opua Wharf.

Bluff.—Exhibition of leading lights.

Light Dues.—The sum of £8,526 0s. 8d. was collected as light dues during the year, this being £332 0s. 8d. more than was collected during the previous financial year. No amount has this year been paid to the credit of light dues by the General Post Office on account of light dues on the San Francisco mail steamers, or on account of the direct steamers, all of which vessels are, when they carry an English mail, exempted from paying light dues. A fresh Order in Council fixing light dues to be collected at Kaipara and New Plymouth was issued last year. Dues are only collected in respect of foreign-going and intercolonial trading vessels, no light dues having been collected on coasters since the 1st April, 1880.

Government Vessels.—The "Hinemoa" has as usual been employed on special service. It was found necessary last October to re-tube her boilers, and it is anticipated that it will soon be necessary to renew them. The "Stella" has been continuously employed attending to lighthouses, buoys, beacons, &c. Her services have, in addition, been made available as far as possible for other departments of the Government service. She made a special trip from Port Chalmers to Lyttelton, having the torpedo-boat in tow. A new funnel has been supplied, a fog-horn fitted, and sundry

improvements made to her. The combustion-chamber of her boiler shows signs of wear, the question of repairs has been considered, and it has been decided that, at the proper time, it would be cheaper in the long run to put in a new boiler. Plans and specifications have accordingly been prepared for the construction of a new steel boiler, fitted with Fox's corrugated furnaces, to carry 80lb. pressure per square inch, and it is proposed shortly to call for tenders for its construction, the specification allowing nine months for its completion. During the year the "Stella" steamed 18,890 miles, was 2,529 hours under steam, and burnt 816½ tons of coal; she landed 1,267 tons of cargo, and carried 266 passengers.

The schooner "Kekeno" has been employed in making visits to the Auckland and Campbell Islands, and the West Coast Sounds, in connection with the protection of the seal fisheries. The provisions and clothing referred to in last report as having been sent to replenish the dépôts at the Auckland and Campbell Islands have all been safely housed.

In connection with the rescue of the crew of the United States sealing schooner "Sarah W. Hunt" by the "Kekeno" and "Stella," in December, 1883, the President of the United States sent two handsome gold watches, suitably inscribed, to be presented to Captains Greig and Grey. This presentation was accordingly made: that to Captain Grey by his Excellency the Governor at a meeting of the Executive Council in Wellington, and to Captain Greig, at Invercargill, by the Mayor on behalf of the Governor.

Examination of Masters, Mates, and Engineers.—One hundred and eighty-four candidates passed their examination; of these, 131 being masters, mates, and engineers of sea-going vessels, and 53 masters and engineers of river steamers.

Survey of Steamers.—Certificates of survey under "The Shipping and Seamen's Act, 1877," have been issued to 183 steamers of 25,245 aggregate tonnage and 8,884 horse-power, being nine steamers more than were surveyed last year.

Wrecks and Casualties.—The table on next page shows an analysis of the various casualties reported.

It will be seen that the casualties are not so numerous as last year, being on the coast of the colony 63 of 9,222 tons, as against 91 of 16,382 tons last year. The total losses, however, were greater, being 18 of 4,236 tons, as against 18 of 3,293 tons last year. The lives lost also number more than last year, 48 having been lost, against 31 last year. Of the lives lost on or near the coast of the colony, 7 were lost in the "Tauranga" (all hands), 18 in the "Lastingham," 17 in the "Clyde," and 1 each from the "Waireka," "City of Sparta," "Marmion," "Four Sisters," "Beautiful Star," and "Glenelg." Of those lost beyond the colony, 1 was lost from each of the following vessels: "Lapwing," "Albion," "Loch Fergus" (on two different occasions), "Jasper," "Elderslie," and "Lord of the Isles."

Inspection of Machinery.—The annual reports from the Chief Inspector and the several other Inspectors of Machinery are attached. I feel it to be my duty to state that, as the districts are now constituted and the survey of steamers arranged, the Inspectors are quite unable to cope with the work they have to do. To enable the Acts relating to the inspection of machinery and the survey of steamers to be properly administered, it is absolutely necessary to appoint additional Inspectors, and to make a complete revision of the duties carried out by them, both in connection with the inspection of machinery and the survey of steamers.

Fisheries.—The close season for the seal fisheries having been found to have had a good effect, it was decided to extend it until the 1st June, 1886. The passing of "The Fisheries Conservation Act, 1884," enabled some urgently-needed regulations to be made for the protection of the local fisheries. An Order by the Governor in Council was accordingly issued on the 27th March, which provides for close seasons for taking the various kinds of oysters, the minimum size of fish and oysters to be taken, the minimum size of nets to be used, &c. It cannot be doubted that these regulations will have a most beneficial effect on what is likely to become one of the most important industries of this colony.

Harbour Improvement Plans.—Only two Harbour Boards, viz., Dunedin and Timaru, have forwarded plans this year for publication; these are attached hereto.

Returns.—The usual annual returns, wreck chart, &c., are appended hereto.

I have, &c.,

WILLIAM SEED,

The Hon. the Minister having Charge of the Marine Department.

Secretary.

SUMMARY of CASUALTIES to SHIPPING and SEAMEN reported to the Marine Department during the Financial Year ended the 31st March, 1885.

Nature of Casualties.	Casualties on or near the Coasts of the Colony.						Casualties outside the Colony.						Total Number of Casualties reported.		
	Steamers.			Sailing-vessels.			Steamers.			Sailing-vessels.			Total outside Colony.		
	No. of Vessels.	Tonnage.	No. of Lives Lost.	No. of Vessels.	Tonnage.	No. of Lives Lost.	No. of Vessels.	Tonnage.	No. of Lives Lost.	No. of Vessels.	Tonnage.	No. of Lives Lost.	No. of Vessels.	Tonnage.	No. of Lives Lost.
Strandings,—															
Total wrecks	4	525	35	13	3,650	35	17	4,175	35	17	4,175	35	17	4,175	35
Partial loss	7	1,359	..	7	939	..	14	2,298	..	14	2,298	..	14	2,298	..
Slight damage	8	783	..	2	98	..	10	881	..	11	1,675	..	11	1,675	..
No damage	1	442	..	2	585	..	3	1,027	..	8	1,027	..	8	1,027	..
Total strandings	20	3,109	..	24	5,272	35	44	8,381	35	45	9,175	35	45	9,175	35
Foundering,—															
Total loss	..	..	7	1	61	7	1	61	7	..	..	..	1	61	7
Collisions,—															
Partial loss	1	43	..	..	140	..	1	43	..	1	43	..	1	43	..
Slight damage	3	157	..	2	..	..	5	297	..	5	297	..	5	297	..
Total	4	200	..	2	140	..	6	340	..	6	340	..	6	340	..
Miscellaneous, including damage to boilers and machinery, hull, yards, and sails, and one vessel capsized	4	269	..	3	171	1	7	440	1	1	1,306	..	8	1,746	1
Total casualties to shipping	28	3,578	..	30	5,644	43	58	9,222	43	2	2,100	..	60	11,322	43
Loss of life only	2	..	2	3	..	3	5	..	5	7	..	7	12	..	12
Total number of casualties reported	30	3,578	2	33	5,644	46	63	9,222	48	2	2,100	5	72	11,322	55

RETURN showing the Total Ordinary Expenditure of the Marine Department during the
Financial Year ended the 31st March, 1885.

Nature of Expenditure.						Details.	Totals.	Grand Totals.
						£ s. d.	£ s. d.	£ s. d.
HEAD OFFICE :—								
Secretary	..	..	..	..	..	200 0 0		
Chief Clerk	..	..	..	..	..	370 0 0		
2 Clerks	..	..	..	..	..	390 0 0		
Marine Engineer	..	..	..	..	..	300 0 0		
Draftsman	..	..	..	..	..	220 0 0		
Nautical Adviser	..	..	..	..	..	300 0 0	1,780 0 0	
HARBOURS :—								1,780 0 0
Manukau,—								
Salaries	..	..	..	..	..	708 0 0		
Buoys	..	..	..	..	..	254 16 9		
Repairs to signal station	..	..	..	..	..	32 5 11		
Contingencies	..	..	..	..	..	33 19 0	1,029 1 8	
Russell,—								
Salaries	..	..	..	..	..	300 0 0		
Contingencies	..	..	..	..	..	7 2 6	307 2 6	
Hokianga,—								
Salaries	..	..	..	..	..	418 0 0		
Contingencies	..	..	..	..	..	5 2 9	423 2 9	
Kaipara,—								
Salaries	..	..	..	..	..	774 16 4		
Steam-launch, balance of cost	..	..	..	..	..	1,632 8 6		
Coal for steam-launch	..	..	..	..	..	76 5 6		
Buoys and beacons	..	..	..	..	..	115 0 11		
Repairs and alterations to houses	..	..	..	..	..	63 0 3		
Stores and contingencies	..	..	..	..	..	118 12 5	2,780 3 11	
Kawhia,—								
Contingencies	..	..	..	..	..	..	7 9 6	
Mokau,—								
Survey of river	..	..	..	..	..	..	302 7 3	
Mercury Bay,—								
Contingencies	..	..	..	..	..	..	5 15 6	
Opunake,—								
Salary	..	..	..	..	..	60 0 0		
Stores	..	..	..	..	..	1 12 0	61 12 0	
Rangitikei,—								
Salary	..	..	..	..	..	127 15 0		
Contingencies	..	..	..	..	..	9 16 3	137 11 3	
Foxton,—								
Salaries	..	..	..	..	..	327 15 0		
Contingencies	..	..	..	..	..	27 8 1	355 3 1	
Wairoa,—								
Salary	..	..	..	..	..	100 0 0		
Contingencies	..	..	..	..	..	15 18 0	115 18 0	
Wangawehi,—								
Maintenance of light	..	..	..	..	..	..	40 0 0	
Whakatane,—								
Removal of rocks	..	..	..	..	..	..	98 12 7	
Tauranga,—								
Salaries	..	..	..	..	..	318 0 0		
Material and fittings for new pilot-boat	..	..	..	..	..	31 19 8		
Contingencies	..	..	..	..	..	57 14 2	407 13 10	
Gisborne,—								
Salaries	..	..	..	..	..	355 0 0		
Contingencies	..	..	..	..	..	29 8 4	384 8 4	
Wairau,—								
Salary	..	..	..	..	..	145 0 0		
Contingencies	..	..	..	..	..	26 9 10	171 9 10	
Picton,—								
Salaries	..	..	..	..	..	129 0 0		
Contingencies	..	..	..	..	..	22 14 0	151 14 0	
Havelock,—								
Salary	..	..	..	..	..	20 0 0		
Contingencies	..	..	..	..	..	0 18 0	20 18 0	
Nelson,—								
Salaries	..	..	..	..	..	920 0 0		
Contingencies	..	..	..	..	..	64 17 9	984 17 9	
Motueka,—								
Repairs to buoy	..	..	..	..	..	..	4 3 7	
Riwaka,—								
Salary of lightkeeper	..	..	..	..	..	18 0 0		
Contingencies	..	..	..	..	..	1 17 0	19 17 0	
Waitapu,—								
Salary	..	..	..	..	..	31 5 0		
Leading lights	..	..	..	..	..	44 15 10	76 0 10	
Collingwood,—								
Salary of lightkeeper	..	..	..	..	..	25 0 0		
Contingencies	..	..	..	..	..	14 17 0	39 17 0	
Westport,—								
Salaries	..	..	..	..	..	388 10 0		
Subsidy for sounding bar	..	..	..	..	..	70 5 6		
Contingencies	..	..	..	..	..	114 8 11	573 4 5	
Carried forward						..	8,498 4 7	1,780 0 0

RETURN showing the Total Ordinary Expenditure of the Marine Department, &c.—continued.

Nature of Expenditure.	Details.	Totals.	Grand Totals.
	£ s. d.	£ s. d.	£ s. d.
Brought forward	..	8,498 4 7	1,780 0 0
HARBOURS—continued.			
Nile River,—			
Maintenance of signals	..	30 19 6	
Karamea,—			
Contingencies	..	58 19 8	
Greymouth,—			
Salaries	488 17 1		
Contingencies	165 4 10		
Hokitika,—		654 1 11	
Salaries	374 0 0		
Contingencies	41 19 5		
Okarito,—		415 19 5	
Salary	50 0 0		
Contingencies	37 19 0		
Kakanui,—		87 19 0	
Salary	22 19 8		
Contingencies	1 5 0		
Catlin's River,—		24 4 8	
Salary	125 0 0		
Contingencies	39 9 6		
Fortrose,—		164 9 6	
Salary	..	100 0 0	
Riverton,—		120 0 0	
Salary	..		
Akaroa,—		22 18 4	
Salary	..		
Waimakariri,—		120 0 0	
Salary	..		
Kaikoura,—			
Salary	75 0 0		
Contingencies	12 10 2		
Compensation to Harbourmaster at Greymouth for loss of office	..	87 10 2	
General Harbour Contingencies,—		168 4 10	
Port lights	261 4 3		
Buoy chain	85 18 4		
Buoys and sundries	226 13 7		
		573 16 2	
LIGHTHOUSES:—			11,127 7 9
Salaries of keepers	7,538 2 3		
Lightkeepers' travelling expenses	83 8 11		
Oil	699 3 10		
Stores and contingencies	1,859 19 2		
Pension to widow of late Lightkeeper Deck	24 0 0		
Lighthouse artificer	16 18 4		
"Stella," s.s.,—		10,221 7 6	
Repairs	284 3 3		
Wages, coal, stores, provisions, &c. ..	4,650 6 1		
	4,934 9 4		
Less amount earned by steamer	342 10 2		
		4,591 19 2	
Relief of distressed seamen	..	24 0 2	
Inquiries into wrecks and casualties	..	211 17 0	
Departmental travelling expenses	..	69 11 11	
Charts	..	50 12 0	
Coastal buoys and beacons	..	35 7 11	
Survey of Steamers,—			
Salary of engineer surveyor	500 0 0		
Travelling expenses	295 8 4		
		795 8 4	
Sundries	..	73 10 0	
Replenishing provision dépôts for castaways, Auckland Islands	..	118 11 9	
Inspection of Machinery,—			1,373 19 1
Salaries of 4 Inspectors	1,300 0 0		
Travelling expenses	559 11 0		
Gratuities to Inspectors	100 0 0		
Cost of collection of fees	72 6 0		
Sundries	36 10 5		
		2,068 7 5	
Examination of Masters and Mates,—			2,068 7 5
Salaries	525 0 0		
Contingencies	39 10 1		
		564 10 1	
Protection of Seal Fisheries,—			564 10 1
Schooner "Kekeno," wages, stores, &c. ..	..	..	692 3 2
"Hinemoa," s.s.,—			
Repairs	562 0 5		
Wages, coals, stores, provisions, &c. ..	6,193 2 9		
	6,755 3 2		
Less amount earned by steamer	149 8 0		
		6,605 15 2	
Amount of judgment and costs in case of Williams v. Queen, re damage to s.s. "Westport" at Westport	..	..	6,605 15 2
			2,425 15 7
Less amounts credited to vote	..	..	41,456 4 11
			171 2 11
			£41,285 2 0

RETURN showing the Amount of Pilotage, Port Charges, &c., collected during the Year ended the 31st March, 1885.

Name of Port.	Pilotage.	Port Charges, &c.	Total.
	£ s. d.	£ s. d.	£ s. d.
Auckland*	2,099 13 1	484 11 0	2,584 4 1
Russell	9 7 6	..	9 7 6
Onehunga	..	131 19 9	131 19 9
Kaipara	426 14 6	315 17 4	742 11 10
Thames*	39 19 7	..	39 19 7
Mongonui	..	81 17 3	81 17 3
Hokianga	82 4 9	..	82 4 9
Tauranga	18 14 2	..	18 14 2
Gisborne	138 19 3	..	138 19 3
Waitara*	86 0 5	35 6 3	121 6 8
New Plymouth*	47 8 6	30 16 4	78 4 10
Wanganui*	359 9 8	..	359 9 8
Foxton	134 7 8	..	134 7 8
Patea*	32 8 1	3 7 0	35 15 1
Wairoa	130 5 0	5 1 9	135 6 9
Napier*	1,418 10 0	623 12 11	2,042 2 11
Wellington*	1,463 9 0	2,714 4 5	4,177 13 5
Nelson	956 5 2	..	956 5 2
Hokitika	14 10 2	..	14 10 2
Lyttelton*	3,459 8 0	2,530 0 5	5,989 8 5
Timaru*	..	415 8 4	415 8 4
Oamaru*	567 9 3	542 9 8	1,109 18 11
Dunedin*	4,609 6 0	3,602 12 1	8,211 18 1
Invercargill*	..	81 14 10	81 14 10
Bluff*	766 3 0	535 19 8	1,302 2 8
Totals	16,860 12 9	12,134 19 0	28,995 11 9

* Harbour Board revenue.

RETURN showing the Amount of Light Dues collected during the Year ended the 31st March, 1885.

	£ s. d.
Auckland	2,037 15 6
Whangaroa	2 15 8
Kaipara	15 17 0
Thames	8 2 0
Russell	25 1 0
Mongonui	10 2 0
Poverty Bay	6 8 0
New Plymouth	5 3 0
Wanganui	7 0 8
Pictou	6 9 8
Wellington	1,696 7 10
Napier	94 14 0
Nelson	60 6 4
Westport	23 4 0
Greymouth	55 1 4
Lyttelton	1,195 8 10
Timaru	209 10 8
Oamaru	168 4 8
Dunedin	1,932 13 2
Bluff	965 15 4
Total	£8,526 0 8

RETURN showing the Cost of Erection of the New Zealand Coastal Lighthouses.

Name of Lighthouse.	Cost of Erection.
	£ s. d.
Pencarrow Head	6,422 0 4
Nelson	2,824 8 9
Tiri Tiri	5,747 7 2
Mana Island*	5,513 0 1
Taiaroa Head	4,923 14 11
Godley Head	4,705 16 4
Dog Island	10,480 12 8
Farewell Spit	6,139 11 8
Nugget Point	6,597 3 7
Cape Campbell	5,619 2 6
Manukau Head	4,975 2 4
Cape Foulwind	6,955 9 1
Brothers	6,241 0 0
Portland Island	6,554 14 5
Moeraki	4,288 13 2
Centre Island	5,785 19 0
Puysegur Point	9,958 19 5
Cape Maria van Diemen	7,028 14 8
Akaroa Head	7,150 6 5
Cape Saunders	6,066 6 3
Cape Egmont†	3,353 17 11
Moko Hinou	8,186 5 0
Waipapapa Point	5,969 18 11
Ponui Passage‡	..
Kaipara Head	5,571 8 0
French Pass	1,427 17 5
Cost of telegraph cable to Tiri Tiri	1,085 19 6
Miscellaneous and unallocated	1,322 2 2
Total	£150,895 11 8

* Light discontinued; moved to Cape Egmont.

† Cost of iron tower, lantern, and apparatus, which were removed from Mana Island, is not included in this.

‡ Built by Provincial Government of Auckland; cost not known in Marine Department.

RETURN showing Expenditure on New Lighthouses, &c., out of Public Works Loan, during the Year ended the 31st March, 1885.

Nature of Expenditure.	Amount.
	£ s. d.
French Pass Light	1,106 2 2
Jackson's Reef Beacon	314 6 3
Kaipara Head Lighthouse	4,876 4 8
Tiritiri, cost of telegraph cable	1,085 19 6
Total	£7,382 12 7

RETURN showing the Certificates of Service issued to Masters, Mates, and Engineers during the Year ended the 31st March, 1885.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
William Norris*	Master	Home trade	17 April, 1884	2524
John Edward Westrup	"	"	1 July, "	2525
Charles Houghton Mills	"	"	24 Sept., "	2526
John McDonald	"	Foreign trade	30 " "	2527
Thomas Joyce	"	Home trade	20 Oct., "	2528
John Sullivan	"	"	20 " "	2529
George Crichton	"	"	19 Nov., "	2530
William Lloyd*	"	"	3 Mar., 1885	2532
William Lloyd*	Mate	Foreign trade	3 " "	2531
James Binstead*	Engineer	Second class	24 Nov., 1884	1041

* Renewals.

DESCRIPTIVE RETURN of New Zealand Coastal Lighthouses.

Name of Lighthouse.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower built of	Dwellings built of	Date first lighted.
Cape Maria van Diemen	1st order dioptric	Revolving	1'	White	Timber	Timber	24 Mar., 1879
	..	Fixed	..	Red, to show over Columbia Reef	..	..	..
Moko Hinou	1st order dioptric	Flashing	10"	White	Stone	Timber	18 June, 1883
Tiri Tiri..	2nd "	Fixed	..	White, with red arc over Flat Rock	Iron	"	1 Jan., 1865
Ponui Passage	5th "	"	..	White and red ..	Timber	"	29 July, 1871
	2nd "	Revolving	30"	White	"	"	10 Feb., 1878
Portland Island	..	Fixed	..	Red, to show over Bull Rock	..	..	..
Pencarrow Head	2nd order dioptric	"	..	White	Iron	Timber	1 Jan., 1859
Cape Egmont	2nd "	"	..	"	"	"	1 Aug., 1881
Manukau Heads	3rd "	"	..	"	Timber	"	1 Sept., 1874
Kaipara Head	2nd "	Flashing	10"	"	"	"	1 Dec., 1884
	2nd "	"	10"	"	"	"	24 Sept., 1877
Brothers	..	Fixed	..	Red, to show over Cook Rock	..	..	..
Cape Campbell	2nd order dioptric	Revolving	1'	White	Timber	Timber	1 Aug., 1870
Godley Head	2nd "	Fixed	..	"	Stone	Stone	1 April, 1865
Akaroa Head	2nd "	Flashing	10"	"	Timber	Timber	1 Jan., 1880
Moeraki	3rd "	Fixed	..	"	"	"	22 April, 1878
Taiaroa Head	3rd "	"	..	Red	Stone	Stone	2 Jan., 1865
Cape Saunders	2nd "	Revolving	1'	White	Timber	Timber	1 Jan., 1880
Nugget Point	1st "	Fixed	..	"	Stone	Stone	4 July, 1870
Waipapapa Point	2nd "	Flashing	10"	"	Timber	Timber	1 Jan., 1884
Dog Island	1st order catadioptric	Revolving	30"	"	Stone	Stone	1 Aug., 1865
Centre Island	1st order dioptric	Fixed	..	White, with red arcs over inshore dangers	Timber	Timber	16 Sept., 1878
Puysegur Point	1st "	Flashing	10"	White	"	"	1 Mar., 1879
Cape Foulwind	2nd "	Revolving	30"	"	"	"	1 Sept., 1876
Farewell Spit	2nd "	"	1'	White, with red arc over Spit end	"	"	17 June, 1870
Nelson	4th "	Fixed	..	White, with red arc to mark limit of anchorage	Iron	"	4 Aug., 1862
French Pass	6th "	"	..	Red, with white light on beacon	"	"	1 Oct., 1884

RETURN showing the Fees, &c., received under the Shipping and Seamen's Act, the Merchant Shipping Act, the Inspection of Machinery Act; and for Pilotage and Port Charges, and Sale of Charts, &c.

Nature of Receipts.	Amount.
Shipping and Seamen's Act,—	£ s. d.
Fees for shipping and discharge of seamen, and sale of forms	1,093 10 2
Survey of steamers	1,070 5 0
Examination of masters, mates, and engineers	220 10 0
Light dues	8,526 0 8
Merchant Shipping Act	116 2 0
Inspection of Machinery Act	2,739 0 0
Pilotage and port charges	2,446 4 3
Sale of charts	64 5 6
Sundries	339 11 7
Total	£16,615 9 2

RETURN of Steamers to which Certificates of Survey were issued in New Zealand during the
Year ended the 31st March, 1885.

Name of Vessel.	Tons Register.	Horse- power of Engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Remarks.
Akaroa	43	28	Compound ..	Screw ..	Extended river	
Alexandra	73	30	Non-condensing	Paddle ..	River	
Antrim	35	30	" ..	" ..	" ..	
Arawata	623	300	Compound ..	Screw ..	Sea-going	
Argyle	129	40	" ..	" ..	" ..	
Awarua	59	80	" ..	Paddle ..	" ..	New tug.
Balclutha	84	50	Non-condensing	Stern-wheel	River	
Beautiful Star ..	146	30	Condensing ..	Screw ..	Sea-going	
Bee	..	2	Non-condensing	" ..	River	Launch.
Bella	12	12	" ..	" ..	Extended river	
Birkenhead	55	16	" ..	Paddle ..	River	New vessel.
Blanche	8	9	" ..	Screw ..	Extended river	
Boojum	14	12	Compound ..	" ..	River "	
Callope	11	7	Non-condensing	Twin-screw	River "	Launch, late "Jo."
Canterbury	..	24	" ..	" ..	Extended river	New launch.
Charles Edward ..	140	60	Compound ..	" ..	Sea-going	
City of Cork	42	46	Non-condensing	Paddle ..	Extended river	
Coromandel	67	25	Compound ..	Screw ..	" ..	
Delta	60	30	Non-condensing	Paddle ..	River "	
Devonport	24	12	" ..	" ..	" ..	
Diamond of the Avon	..	10	" ..	" ..	" ..	Launch.
Dispatch	38	40	Condensing ..	" ..	Sea-going	Tug.
Douglas	55	30	" ..	Screw ..	" ..	
Durham	53	30	Compound ..	" ..	River "	
Echo	..	3	Non-condensing	" ..	" ..	Launch.
Effort	13	12	" ..	Paddle ..	" ..	Launch.
Elsie	..	8	" ..	Screw ..	Extended river	New launch.
Enterprise	61	32	" ..	Paddle ..	" ..	
Erin	..	4	" ..	Screw ..	River "	New launch.
Explorer	171	40	Condensing ..	" ..	Sea-going	
Fairy	32	15	Non-condensing	" ..	Extended river	
Fairy	..	4	" ..	" ..	River	Launch.
Fanny	..	5	" ..	" ..	" ..	Launch.
Fingal	22	13	Condensing ..	" ..	Extended river	
Fly	..	3	Non-condensing	" ..	River	Launch.
Glenelg	156	75	Compound ..	" ..	Sea-going	
Go-Ahead	129	45	" ..	" ..	" ..	
Grafton	297	123	" ..	Twin-screw	" ..	
Hannah Mokau ..	35	15	" ..	Screw ..	Extended river	
Hauraki	59	18	" ..	" ..	Sea-going	
Hauroto	1,276	253	" ..	" ..	" ..	
Hawea	462	160	" ..	" ..	" ..	
Heathcote	94	35	" ..	" ..	River	Hopper barge.
Herald	356	85	" ..	" ..	Sea-going	New vessel.
Hokianga	..	7	Non-condensing	" ..	River	Launch.
Huia	90	25	Compound ..	" ..	Sea-going	
Huia	..	6	Non-condensing	" ..	River	Launch.
Ida	12	10	" ..	" ..	" ..	
Ino	32	20	" ..	" ..	Extended river	
Iona	61	45	" ..	" ..	River	
Iona	159	65	Compound ..	Stern-wheel	River	
Iron Age	36	30	Condensing ..	Screw ..	Sea-going	
Jane Douglas	75	20	Compound ..	Paddle ..	River	
Jane Williams ..	33	15	Non-condensing	Screw ..	Sea-going	
Kakanui	57	22	Compound ..	" ..	River	
Katikati	27	8	Condensing ..	" ..	Sea-going	
Kawai	..	24	Non-condensing	" ..	Extended river	
Kawatiri	286	70	Compound ..	" ..	River	Dredge.
Kennedy	138	50	" ..	" ..	Sea-going	
Kina	39	15	" ..	Twin-screw	River	
Kiwi	132	30	" ..	Screw ..	Sea-going	
Kopuru	28	20	Non-condensing	" ..	River	
Koputai	5	120	Compound ..	" ..	Sea-going	Tug.
Koramui	301	80	Compound ..	Paddle ..	River	
Kotuku	41	40	Non-condensing	Screw ..	Sea-going	
La Buona Ventura	4	4	" ..	Three screws	Extended river	
Lady Barkly	39	18	Compound ..	Screw ..	River	Launch.
Lalla Rookh	44	15	" ..	" ..	Extended river	
Lilie	10	10	Non-condensing	Paddle ..	River "	
Lily	20	10	" ..	" ..	" ..	
Little George	..	4	" ..	Twin-screw	" ..	
Lyttelton	6	14	" ..	Screw ..	" ..	Launch.
Lyttelton	86	25	Condensing ..	Twin-screw	Extended river	Launch.
Lyttelton	39	80	Compound ..	Paddle ..	Sea-going	
Macgregor	163	60	" ..	" ..	" ..	Tug.
Macgregor	205	80	" ..	Screw ..	" ..	
Mahinapua	..	10	Non-condensing	Twin-screw	" ..	
Mahinapua	..	80	Non-condensing	Stern-wheel	River	Launch.
Manaia	62	30	" ..	Paddle ..	Sea-going	
Manapouri	1,020	300	Compound ..	" ..	" ..	
Manawatu	112	40	" ..	Screw ..	" ..	
Manukau	45	15	Non-condensing	" ..	River	
Matau	50	40	" ..	" ..	" ..	New vessel.
Matau	..	..	" ..	Stern-wheel	" ..	

RETURN of Steamers to which Certificates of Survey were issued, &c.—*continued.*

Name of Vessel.	Tons Register.	Horse-power of Engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Remarks.
Maori	17	8	Non-condensing	Screw ..	Extended river	
Maori	118	60	Condensing ..	" ..	Sea-going	
Mawhera	340	75	Compound ..	" ..	" ..	New vessel.
Memsahib	6	4	Non-condensing	" ..	River ..	Launch.
Merle	..	12	" ..	Stern-wheel ..	" ..	New launch.
Minnie Casey	43	25	Compound ..	Screw ..	" ..	
Miranda	..	4	Non-condensing	" ..	" ..	Launch.
Moa	50	25	Condensing ..	" ..	Extended river	
Mohaka	20	12	Non-condensing	" ..	" ..	
Moki	10	4	" ..	Screw ..	River ..	Launch.
Mountaineer	66	25	Compound ..	Paddle ..	" ..	
Murray	78	18	Condensing ..	Screw ..	Sea-going	
Napier	48	24	Compound ..	" ..	" ..	
Neptune	44	18	" ..	" ..	Extended river	
Noko	15	9	Non-condensing	" ..	River ..	Launch.
No. 222	502	120	Compound ..	Twin-screw ..	Sea-going	Dredge.
Ohau	411	92	" ..	Screw ..	" ..	New vessel.
Omapere	352	160	" ..	" ..	" ..	
Orawaiti	283	120	" ..	" ..	" ..	
Oregon	17	14	Non-condensing	Paddle ..	River ..	
Oreti	138	43	Compound ..	Screw ..	Sea-going	
Patiki	37	22	Non-condensing	Paddle ..	River ..	
Pearl	9	7	" ..	Screw ..	Extended river	
Pelorus	18	12	" ..	" ..	River ..	
Penguin	442	180	Compound ..	" ..	Sea-going	
Piako	..	6	Non-condensing	" ..	River ..	New launch.
Picton	7	8	" ..	" ..	Extended river	Launch.
Pioneer	5	5	" ..	" ..	River ..	Launch.
Planet	13	8	" ..	" ..	Extended river	
Plucky	29	40	Compound ..	" ..	Sea-going	Tug.
Progress	200	50	" ..	" ..	" ..	Hopper-dredge.
Rangiriri	30	30	Non-condensing	Stern-wheel ..	River ..	
Result	13	10	" ..	Paddle ..	Extended river	
Result	..	6	" ..	Screw ..	River ..	New launch.
Reynolds	..	14	" ..	" ..	" ..	Launch.
Ringarooma	623	300	Compound ..	" ..	Sea-going	
Riro Riro	4	4	Non-condensing	" ..	River ..	Launch.
Rose Casey	99	40	Compound ..	" ..	Extended river	
Rosina	21	14	Non-condensing	" ..	" ..	
Rotoiti	17	15	" ..	Twin-screw ..	River ..	
Rotomahana	864	450	Compound ..	Screw ..	Sea-going	
Rotomahana	139	45	Condensing ..	" ..	" ..	
Rotorua	576	172	Compound ..	" ..	" ..	
Rowena	74	30	" ..	" ..	" ..	
Ruby	32	14	" ..	" ..	Extended river	
Scotchman	30	10	Non-condensing	" ..	River ..	
Sea Gull	..	3	" ..	" ..	" ..	Launch.
Shag	31	27	" ..	" ..	Sea-going	
Sir Donald	29	12	Condensing ..	" ..	Extended river	
Snark	..	6	Non-condensing	" ..	River ..	
Southern Cross	158	50	Compound ..	" ..	Sea-going	
Staffa	40	25	Condensing ..	" ..	" ..	
Star of the South	175	45	Compound ..	" ..	" ..	Wrecked.
St. Kilda	174	45	Condensing ..	" ..	" ..	
Stormbird	137	40	Compound ..	" ..	" ..	
Summer	94	35	Non-condensing	" ..	River ..	Hopper-barge.
Suva	177	55	Compound ..	" ..	Sea-going	
Taiaroa	228	110	" ..	" ..	" ..	
Tainui	41	22	Non-condensing	Paddle ..	River ..	
Tainui	..	8	" ..	Screw ..	Extended river	Launch.
Takapuna	57	20	" ..	Paddle ..	River ..	
Tam O'Shanter	22	12	" ..	Screw ..	Extended river	
Tamsui	919	160	Compound ..	" ..	Sea-going	
Tangihua	20	15	Non-condensing	" ..	River ..	
Tarawera	1,269	250	Compound ..	" ..	Sea-going	
Taupo	408	92	" ..	" ..	" ..	New vessel.
Te Anau	1,028	250	" ..	" ..	" ..	
Te Aroha	50	14	Non-condensing	Paddle ..	River ..	
Terror	..	10	" ..	Screw ..	" ..	Launch.
Te Wae	..	16	" ..	Twin-screw ..	" ..	Dredge.
Thomas Russell	151	60	Compound ..	Screw ..	Sea-going	New vessel.
Timaru	279	70	" ..	" ..	" ..	New vessel.
Titan	21	55	Condensing ..	Paddle ..	" ..	Tug.
Tongariro	39	10	Non-condensing	" ..	Extended river	
Tongariro	62	25	" ..	" ..	River ..	
Tui	55	22	Compound ..	Screw ..	Sea-going	
Victoria	93	40	Non-condensing	Paddle ..	River ..	
Vivid	16	14	" ..	Screw ..	Extended river	
Waiatu	3	3	" ..	" ..	River ..	Launch.
Waihi	63	20	Compound ..	" ..	Sea-going	
Waihora	1,269	265	" ..	" ..	" ..	
Waikato	61	20	Non-condensing	Paddle ..	River ..	
Waipara	70	13	" ..	Twin-screw ..	Sea-going	
Wairarapa	1,023	292	Compound ..	Screw ..	" ..	

RETURN of Steamers to which Certificates of Survey were issued, &c.—*continued.*

Name of Vessel.	Register.	Horse-power of Engines.	Nature of Engines.	Nature of Propeller.	Class of Certificate.	Remarks.
Wairoa	48	16	Condensing ..	Screw ..	Extended river	New vessel.
Waitaki	228	90	Compound ..	" ..	Sea-going	
Waitara	11	15	Non-condensing	" ..	River	
Waitara	26	16	Condensing ..	" ..	Extended river	New vessel.
Waitoa	27	16	Non-condensing	Twin-screw	River	
Waiwera	6	10	Compound ..	Screw ..	Extended river	Launch.
Wakatipu	1,157	256	" ..	" ..	Sea-going	
Wakatu	75	30	" ..	" ..	" ..	
Wallabi	101	25	Condensing ..	" ..	" ..	
Wallace	64	50	" ..	" ..	" ..	Altered from paddle.
Wanaka	278	120	Compound ..	" ..	" ..	
Wareatea	288	70	" ..	" ..	" ..	New vessel.
Waverley	76	25	" ..	Twin-screw	" ..	
Weka	53	20	" ..	Screw ..	" ..	
Wellington ..	279	80	" ..	" ..	" ..	
Westland	35	60	Condensing ..	Paddle ..	" ..	New tug.
Zephyr	..	12	Non-condensing	Screw ..	River ..	New launch.

RETURN of Masters, Mates, and Engineers to whom Certificates of Competency were issued during the Year ended the 31st March, 1885.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
John Munro	Master Ordinary ..	Foreign trade ..	4 April, 1884 ..	368
Wilbert Dimmock Nicoll ..	" ..	" ..	9 " " ..	257
John Robertson	First Mate ..	" ..	25 " " ..	369
William Hutchinson Gresham ..	" ..	(renewal)	8 May, " ..	370
John Strasburg	Only Mate ..	" ..	8 " " ..	371
Henry Bowling	Master Ordinary ..	" ..	19 " " ..	314
Thomas Hugh Casement ..	Second Mate ..	" ..	2 June, " ..	372
Alexander Cameron	First Mate ..	" ..	18 " " ..	373
Frank Johnston	" ..	" ..	23 " " ..	374
William Lamb	Master Ordinary ..	(renewal)	27 " " ..	375
Norman Ferguson	Only Mate ..	" ..	1 July, " ..	376
George Turner Joss	Second Mate ..	" ..	10 " " ..	377
Arthur Clark	Master Ordinary ..	" ..	15 " " ..	378
Murdoch McDonald	" ..	" ..	15 " " ..	254
William Jacob Henry Wobling ..	Only Mate ..	" ..	24 " " ..	379
Hugh Monro	Master Ordinary ..	" ..	30 " " ..	326
Thomas William Ash	First Mate ..	" ..	30 " " ..	380
William Laird Whitby	Master Ordinary ..	" ..	16 Aug., " ..	381
John Henry Percival	" ..	" ..	26 " " ..	242
Thomas Harries	First Mate ..	" ..	26 " " ..	382
Walter Powell Lewis	Master Ordinary ..	" ..	5 Sept., " ..	383
Adam Arthur Scott	" ..	" ..	5 " " ..	384
Thomas James Chaplin	Only Mate ..	" ..	5 " " ..	385
Thomas Mahon	" ..	" ..	5 " " ..	386
Robert Henry Offord	" ..	" ..	9 " " ..	387
William Davis	Second Mate ..	" ..	9 " " ..	388
Murdoch McKenzie	Master Ordinary ..	" ..	9 " " ..	293
Alexander Churchill Fisher ..	Second Mate ..	" ..	17 " " ..	389
John Metcalfe	First Mate ..	" ..	19 " " ..	390
James Anderson	Master Ordinary ..	" ..	19 " " ..	312
Johan Anderson	Only Mate ..	" ..	8 Oct., " ..	391
John Galloway	Second Mate ..	" ..	8 " " ..	392
Mordaunt Hunter Smalpage ..	First Mate ..	" ..	8 " " ..	393
Charles Ferdinand Johnson ..	Only Mate ..	" ..	8 " " ..	394
Thomas Morton Rogers	" ..	" ..	8 " " ..	395
Edward Peterson	Master Ordinary ..	" ..	28 " " ..	396
William George North	" ..	" ..	1 Nov., " ..	238
George McKenzie	Only Mate ..	" ..	4 " " ..	397
Alfred Stoddart	First Mate ..	" ..	8 " " ..	398
Thomas Waters	Second Mate ..	" ..	14 " " ..	399
Alexander Perry	" ..	" ..	20 " " ..	400
Henry Matheson	First Mate ..	" ..	20 " " ..	401
Frank Newcomb	" ..	" ..	21 " " ..	402
John Bushell	Master Ordinary ..	(renewal)	26 " " ..	403
James Robinson	Second Mate ..	" ..	29 " " ..	404
James Henry Briggs	Only Mate ..	" ..	1 Dec., " ..	405
John Morgan	Master Ordinary ..	" ..	2 " " ..	241
Lewis Cameron Noble	First Mate ..	" ..	10 " " ..	406
Maitland Wood Grant	" ..	" ..	16 " " ..	407
George Herbert Keyworth ..	" ..	" ..	16 " " ..	268
William John Alfred Cole ..	Second Mate ..	" ..	29 " " ..	408
Thomas Morton Rogers	Master Ordinary ..	" ..	30 " " ..	395
Donald McLean	Second Mate ..	" ..	2 Jan., 1885 ..	409
George Crawshaw	Master Ordinary ..	" ..	14 " " ..	300

RETURN of Masters, Mates, and Engineers, to whom Certificates of Competency were issued, &c.
—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Peter Nordstrum	Master Ordinary ..	Foreign trade ..	15 Jan., 1885 ..	410
Reginald Claudius Clifford	First Mate ..	" ..	30 " " ..	411
Neil McDonald	Master Ordinary ..	" (renewal) ..	4 Feb., " ..	412
William Burnip Manley	Second Mate ..	" ..	7 " " ..	413
John Sinclair Stuart	First Mate ..	" ..	9 " " ..	414
Caroline Frederick Scott Maundrell	" ..	" ..	21 " " ..	279
Andrew McClymont	Only Mate ..	" ..	25 " " ..	415
William Bishop	" ..	" ..	25 " " ..	416
John Burgell	Master Ordinary ..	" ..	25 " " ..	417
Norman Beaumont	First Mate ..	" ..	2 March, " ..	418
George Charles Sutton	Master Ordinary ..	" ..	2 " " ..	419
Arthur Henry Austen	" ..	" (renewal) ..	9 " " ..	420
William Burton	First Mate ..	" ..	17 " " ..	321
Charles Granquist	Second Mate ..	" ..	19 " " ..	421
Norman McDonald	Master Ordinary ..	" ..	25 " " ..	422
Martin Huggett	" ..	" ..	25 " " ..	170
Thomas Walsh	" ..	" ..	25 " " ..	330
Samuel Dodd	Only Mate ..	" ..	25 " " ..	423
Nils Anderson	" ..	" ..	30 " " ..	424
Edward John Syvret	First Mate ..	" ..	31 " " ..	425
William Henry Burgess	Master ..	Home trade ..	9 April, 1884 ..	5,264
Robert Cargill	Mate ..	" ..	16 " " ..	5,265
Joseph Gambaro	" ..	" ..	25 " " ..	5,266
John Nicolas	" ..	" ..	25 " " ..	5,267
John West	Master ..	" ..	3 May, " ..	5,224
Henry Williams	Mate ..	" ..	22 " " ..	5,268
Lauchlin Alexander McLean	Master ..	" ..	24 " " ..	5,222
John Wilson	Mate ..	" ..	2 June, " ..	5,269
Alexander Craig	" ..	" ..	18 " " ..	5,270
Peter Andersen	" ..	" ..	4 July, " ..	5,271
John Frederick Hansen	Master ..	" ..	15 " " ..	5,243
Alexander Wise	Mate ..	" ..	24 " " ..	5,272
George Semple Johnson	" ..	" ..	30 " " ..	5,273
John Broadbent Hall	" ..	" ..	30 " " ..	5,274
Frederick William Joslin	Master ..	" ..	26 Aug., " ..	5,275
John Trotman	Mate ..	" ..	9 Sept., " ..	5,276
John Nelson	Master ..	" ..	15 " " ..	5,255
Angus Campbell	Mate ..	" ..	17 " " ..	5,277
John Andrew Millar	Master ..	" ..	22 " " ..	5,246
Samuel Stephenson	" ..	" ..	22 " " ..	5,199
George Kilvington	Mate ..	" ..	7 Oct., " ..	5,278
George Kassens	" ..	" ..	27 " " ..	5,279
William Travers Paul	Master ..	" ..	1 Nov., " ..	5,280
Israel Quick Gregory	" ..	" ..	18 " " ..	5,281
Frederick John Beach	Mate ..	" ..	24 " " ..	5,282
Lionel Campbell Hugh Worrall	" ..	" ..	4 Dec., " ..	5,283
John Sullivan	Master ..	" ..	18 " " ..	5,284
John Collinson	Mate ..	" ..	29 " " ..	5,285
John Devitt	Master ..	" ..	30 Jan., 1885 ..	5,244
George Martin	" ..	" ..	19 March, " ..	5,239
Robert William Urquhart	1st Class Engineer ..	Foreign trade ..	9 April, 1884 ..	86
William Mouat McLaren	2nd Class Engineer ..	" ..	2 May, " ..	105
William George Lodder	1st Class Engineer ..	" ..	15 " " ..	70
John James Cormack	2nd Class Engineer ..	" ..	11 June, " ..	106
John Brown	" ..	" ..	23 " " ..	107
John George Seed	" ..	" ..	1 July, " ..	108
William Robertson	" ..	" ..	7 " " ..	109
Alexander Cullen	1st Class Engineer ..	" ..	7 " " ..	47
William Westwood	2nd Class Engineer ..	" ..	16 Aug., " ..	110
George Gow	" ..	" ..	6 Oct., " ..	111
James Ewing	" ..	" ..	14 " " ..	112
Alexander McVicar	1st Class Engineer ..	" ..	21 " " ..	113
William Cullen	2nd Class Engineer ..	" ..	1 Nov., " ..	114
William Grundy Croll	1st Class Engineer ..	" ..	6 " " ..	81
James Edward Robinson	" ..	" ..	6 " " ..	82
David Davies	2nd Class Engineer ..	" ..	6 " " ..	115
James Muir	" ..	" ..	6 " " ..	116
Thomas Robins Wallace	" ..	" ..	19 " " ..	117
John Telfer	1st Class Engineer ..	" ..	30 Dec., 1884 ..	118
Duncan Cargil Paton	2nd Class Engineer ..	" ..	30 " " ..	119
John Davidson	1st Class Engineer ..	" ..	14 Jan., 1885 ..	120
Samuel Johnson	2nd Class Engineer ..	" ..	14 " " ..	121
Charles Lovel Riby	" ..	" ..	19 " " ..	122
James Smith	" ..	" ..	14 Feb., " ..	123
Archibald Kelly	1st Class Engineer ..	" ..	2 March, " ..	2
Charles Richard Massey	2nd Class Engineer ..	" ..	2 " " ..	124
Clifford John Johnson	" ..	" ..	16 " " ..	125
James McLean	" ..	" ..	21 " " ..	126
Charles Frederick Sundstrom	Master, passed in steam ..	" ..	7 July, 1884 ..	194
Carl William August Petersen	Master ..	River trade ..	9 April, " ..	3,088
James Gilbert Simmers	" ..	" ..	9 " " ..	3,089
George Young Dennis	" ..	" ..	25 " " ..	3,090
William Cox	" ..	" ..	3 May, " ..	3,091
James McLeod	" ..	" ..	14 " " ..	3,092

RETURN of Masters, Mates, and Engineers, to whom Certificates of Competency were issued, &c.
—continued.

Name of Person.	Rank.	Class of Certificate.	Date of Issue.	No.
Henry Alexander	Master	River trade	19 May, 1884	3,093
Thomas Smith	"	"	9 July, "	3,094
Alexander Wise	"	"	24 " "	3,095
Lawrence Brennari	"	"	28 " "	3,096
Walter Parker	"	" (renewal)	26 Aug., "	3,097
William Gash	"	"	22 Sept., "	3,098
George Page	"	"	7 Oct., "	3,099
Rudolph Prohl	"	"	7 " "	3,100
Samuel Phipps	"	"	7 " "	3,101
John Severn	"	"	20 Nov., "	3,102
Joseph Crequer	"	"	21 " "	3,103
John Griffiths	"	"	18 Dec., "	3,104
Charles Frederick Dalin	"	"	14 Jan., 1885	3,105
John Wilson	"	"	17 " "	3,106
Alexander Rollo	"	"	26 " "	3,107
Richard Liddle	"	"	2 Mar., "	3,108
Robert Clark	"	"	25 " "	3,109
Robert Moore	Engineer	"	1 April, 1884	1,445
Francis James Roche	"	"	16 " "	1,446
John Owen Lucas	"	"	28 May, "	1,447
Frank Wilson Pope	"	"	13 June, "	1,448
George Henry Harris	"	"	13 " "	1,449
George Ernest Hobroyde	"	"	21 July, "	1,450
Joseph Alexander Fleming	"	"	21 " "	1,451
Job Hartwell	"	"	5 Aug., "	1,452
Jonathan Pickering	"	"	5 " "	1,453
Henry White	"	"	5 " "	1,454
John Harvey	"	"	26 " "	1,455
Thomas Stark	"	"	26 " "	1,456
Charles Thomas Pattie	"	"	11 Sept., "	1,457
Albert Henry Gyde	"	"	16 " "	1,458
William Meikle	"	"	16 " "	1,459
David Mitchell	"	"	16 " "	1,460
John Atkinson	"	"	30 " "	1,461
James Morrison	"	"	30 " "	1,462
George Boustead Snowdon	"	"	6 Oct., "	1,463
Angus Ross	"	"	27 " "	1,464
Anstin Felix Dugdale	"	"	12 Nov., "	1,465
William Whidden Holford.. .. .	"	"	3 Dec., "	1,466
Henry James Hansen	"	"	8 " "	1,467
John Rees Jones	"	"	22 " "	1,468
George Howe	"	"	31 " "	1,469
Robert Binnie	"	"	6 Jan., 1885	1,470
James Verran	"	"	6 " "	1,471
Michael John Mulholland	"	"	9 " "	1,472
Frederick Moore	"	"	14 Feb., "	1,473
Osmond Butler	"	"	2 March, "	1,474
James William Gillice	"	"	5 " "	1,475
Henry Beavis	"	"	9 " "	1,476
David McDougall.. .. .	"	"	17 " "	1,477
Charles James	"	"	27 " "	1,478

RETURN showing the Number of Masters, Mates, and Engineers examined during the Year ended the 31st March, 1885, distinguishing the Number of Successful and Unsuccessful Candidates.

Class of Certificate.	Auckland.			Wellington.			Lyttelton.			Dunedin.			Napier.			Totals.		
	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign-going masters and mates	21	21	42	6	1	7	13	5	18	32	6	38	..	..	..	72	33	105
Home-trade masters and mates	12	4	16	7	1	8	3	1	4	2	..	2	6	..	6	30	6	36
River-steamer masters	14	3	17	..	..	..	..	..	..	2	..	2	1	..	1	17	3	20
Sea-going engineers	5	2	7	11	..	11	..	..	..	13	1	14	..	..	..	29	3	32
River-steamer engineers	13	1	14	3	..	3	2	..	2	2	1	3	..	..	..	20	2	22
Totals	65	31	96	27	2	29	18	6	24	51	8	59	7	..	7			
Thames.			Gisborne.			New Plymouth.			Waitara.			Wanganui.						
Passed.			Passed.			Passed.			Passed.			Passed.						
Failed.			Failed.			Failed.			Failed.			Failed.						
Total.			Total.			Total.			Total.			Total.						
River-steamer masters	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3
River-steamer engineers	2	..	2	1	..	1	1	1	2	1	..	1	1	..	1	6	1	7
Totals	5	..	5	1	..	1	1	1	2	1	..	1	1	..	1			
Hokitika.			Greymouth.			Bluff.			Havelock.			Riwaka.						
Passed.			Passed.			Passed.			Passed.			Passed.						
Failed.			Failed.			Failed.			Failed.			Failed.						
Total.			Total.			Total.			Total.			Total.						
River-steamer engineers	2	..	2	1	..	1	1	..	1	2	..	2	1	..	1	7	..	7
Totals	2	..	2	1	..	1	1	..	1	2	..	2	1	..	1	184	48	232

RETURN showing the Cost of Maintenance of the New Zealand Lighthouses, and the Quantity of Oil consumed at each, during the Year ended the 31st March, 1885.

Name of Lighthouses.	Salaries.	Oil.		Stores and Contingencies.	Totals.
		Gallons consumed.	Value.		
Cape Maria van Diemen ..	£ s. d. 350 3 11	941	£ s. d. 72 10 8	£ s. d. 104 6 3	£ s. d. 527 0 10
Moko Hinou ..	378 9 4	858	66 2 9	146 4 4	590 16 5
Tiri Tiri ..	260 0 0	497	38 6 2	89 8 8	387 14 10
Bean Rock ..	150 0 0	40	4 6 8	7 6 6	161 13 2
Ponui Passage ..	160 0 0	78	6 0 3	6 5 1	172 5 4
Portland Island..	341 13 4	693	53 8 4	89 7 7	484 9 3
Napier Bluff ..	36 0 0	Gas	29 13 11	4 4 11	69 18 10
Pencarrow Head ..	250 0 0	872	67 4 4	79 8 9	396 13 1
Somes Island ..	253 0 4	215	16 11 6	24 15 8	294 7 6
Cape Egmont ..	306 13 4	449	34 12 2	36 18 4	378 3 10
Manukau Heads ..	260 0 0	518	39 18 7	39 12 8	339 11 3
Kaipara Heads*	95 16 8	135	10 8 1	13 7 0	119 11 9
Brothers ..	446 14 2	639	49 5 1	74 3 3	570 2 6
Tory Channel ..	67 10 0	175	13 9 6	7 6 6	88 6 0
Cape Campbell ..	250 0 0	591	45 11 1	80 18 5	376 9 6
Godley Head ..	236 5 0	511	39 7 9	67 0 9	342 13 6
Akaroa Head ..	251 5 0	514	39 12 5	45 15 5	336 12 10
Moeraki ..	266 16 1	496	38 4 8	46 0 11	351 1 8
Taiaroa Head ..	267 10 0	508	39 3 2	54 9 0	361 2 2
Cape Saunders ..	248 6 8	514	39 12 5	81 19 5	369 18 6
Nugget Point ..	253 6 8	970	74 15 5	69 14 3	402 16 4
Waipapapa Point ..	280 0 0	503	38 15 5	89 12 8	408 8 1
Dog Island ..	333 0 9	834	64 5 9	136 14 8	534 1 2
Centre Island ..	375 0 0	823	63 8 9	76 11 9	515 0 6
Puysegur Point ..	368 6 8	814	62 14 11	88 2 8	519 4 3
Cape Foulwind ..	289 8 9	530	40 17 1	†165 11 9	495 17 7
Farewell Spit ..	357 10 0	495	38 3 1	\$105 6 1	500 19 2
Nelson ..	298 6 8	212	16 6 10	19 16 6	334 10 0
French Pass†	101 18 11	55	4 7 9	9 9 5	115 13 1
Totals	7,538 2 3	14,440	1,147 1 6	1,859 19 2	10,545 2 11

* Lighted 1st December, 1884. † Lighted 1st October, 1884. ‡ This amount includes cost of repairs, £76 13s. 9d. § This amount includes cost of repairs, £34 0s. 9d.

RETURN of WRECKS and CASUALTIES to SHIPPING reported to the Marine Department, from the 1st April, 1884, to the 31st March, 1885.

Date of Casualty.	Name of Vessel, also Age and Class.	Reg.	Number of		Nature of		Number of Lives Lost.	Place where Casualty occurred.	Wind.		Decision of Court of Inquiry, &c.	Name of Master.
			Crew	Passengers.	Cargo.	Casualty.			Direction.	Force.		
1883.												
Dec. (arrived at Lyttelton).	Oamaru, 10 years	Ship ..	1306	36	General	Loss of sails and part of bulwarks	..	Indian Ocean	..	Heavy gale	While running down her easting on voyage from London to Lyttelton, met with heavy gale, which carried away part of her bulwarks, killed some live-stock on deck, and injured two of her boats. Some sails were also blown away	H. P. Wright.
1884.												
April 4	Coromandel, s.s., 5 years	Schooner	68	9	General	Collision; slight damage	..	Near Brown's Island, Hauraki Gulf	N.E.	Light ..	Master of "Coromandel" in default in leaving the deck, the wheel being in charge of incompetent person. Court suspended his certificate for four months, and ordered him to pay the costs of inquiry	Thomas Scott.
"	Norah, 6 months	Schooner	50	4	Timber, logs	Ditto ..	..	Waitara Bar..	N.E.	Gale ..	Stranding caused through insufficient water on bar	S. L. Bolt.
"	Hauraki, s.s., 10 years	Schooner	59	11	Ballast..	Stranded; partl. loss	..	North Spit, Buller River	N.W.	Gentle breeze	Insufficient water on bar for vessel ..	Edward Harvey.
"	Orawaitei, s.s., 1 year	Schooner	283	17	Coal ..	Stranded; partl. loss	..	Catlin's River Bar ..	S.W.	Light ..	Casualty caused through wind falling when crossing bar	John Campbell.
"	Catlin, 9 years	Ketch ..	46	4	General	Stranded; partl. loss	..	Reef about 28 miles off Cape Upstart, east coast of Australia	S.E. to E.	Gentle breeze	Vessel struck on coral reef when entering Flinder's Passage	William Hanning.
"	Lanarkshire, 11 years	Ship ..	794	17	Ballast..	Stranded; slight damage	..	North Spit, Mokau River	S.W.	Light	Master probably drank more intoxicating liquor than a master should at sea; but proximate cause of casualty was wrong placing of beacon-fires on shore	Alex. Livingstone.
"	Irishman, s.s., 17 years	Cutter ..	14	3	General	Stranded; slight damage	..	Between Port Charles and Waikawau	S.W.	Variable	Master of "Rowena" in default in going below and leaving incompetent man in charge. Court suspended his certificate for two months, and ordered him to pay costs of inquiry	Eugene McCarthy.
"	Rowena, s.s., 12 years	Schooner	74	5	General	Collision; slight damage	..	Lat. 36° 20' S., long. 160° 20' E.	N.E.	Half a gale	Master of "Rowena" in default in going below and leaving incompetent man in charge. Court suspended his certificate for two months, and ordered him to pay costs of inquiry	William Norris.
"	Kauri ..	Schooner	90	4	Timber, logs	Ditto ..	1	Entrance to Grey River	..	Calm ..	An A.B., George Wilmott, while engaged aloft, fell overboard and was lost	James McDermod.
"	Lapwing, 7½ years	Brigantine	243	8	Coal ..	Loss of life only	..	¼ mile West of Turanganui River, Poverty Bay	S.S.W.	Squally	Vessel struck on shingle-bank, which had formed in the interval between two tides	Theodore Thos. Watts.
"	Oreti, s.s., 8 years	Schooner	117	16	Coal ..	Stranded; partl. loss	..	Bowler's Reef, Cape Campbell	S.E.	Light ..	Chain parted, and vessel dragged second anchor, which was let go, and went ashore	William Robertson.
"	Rio Grande, 17 years	Brig ..	200	8	Coal ..	Stranded; total loss	..	Bar at entrance to Otago Harbour	N.N.E.	Gale ..	Master held responsible for loss of vessel, as he took the vessel much nearer the shore than was prudent or justified by the sailing directions. Court suspended his certificate for three months, and ordered him to pay costs of inquiry	William Macquaker.
May 2	Kangaroo, s.s., 21 years	Schooner	185	14	Coal ..	Stranded and foundered; total loss	..	Blind Bay, Nelson	N.N.W.	Hard ..	Vessel missed stays and drifted on to rocks ..	Joseph Dyball.
"	Latona, 18 years, A1	Barque..	282	9	Wheat ..	Stranded; partl. loss	..				Master misunderstood signals	John Jeffery.
"	Prospect, 15 years	Ketch ..	21	2	Coal ..	Stranded; total loss	..					Henry Brown.

21	Waireka	Schooner	..	7	..	Coal and general	Loss of life only	1	Off Cape Egmont	S.E.	Gale	..	An O.S., named Henry Wade, washed overboard by heavy sea	Olof Johnson.
"	City of Sparta	Ship	..	..	..	Coal	Loss of life only	1	Cook Strait	S.E.	Gale	..	An A.B., named Alfred Hawes, while assisting to make fast the mizentopsail, fell from the yard overboard, and was drowned	Alexander Reid Johnston.
"	Marmion, 9 years	Schooner	92	6	..	N.Z. produce	Deck swept; slight damage	1	35 miles N.W. of Cape Egmont	S.E.	Gale	..	A heavy sea broke on board at 3 a.m., sweeping the decks and carrying the mate, John Edward Dale, overboard	William Johnston.
June 5	Four Sisters, 21 years	Cutter	..	2	..	Firewood	Loss of life only	1	Off Whangaparaoa Reef, Auckland	..	..	..	One of the crew, Charles Anderson, supposed to have fallen overboard when putting vessel about	Chris. Lawson.
"	Albion, s.s.	..	..	..	..	Coal	Loss of life only	1	Lat. 39° 20' S., long. 166° 28' E.	..	..	..	The boatswain, James Herchcliff, while engaged in rigging up a purchase to heave water up by the steam-winch (the vessel having sprung a leak and the pumps being choked), was caught by the whip and dragged round the barrel of the winch. He died from the injuries received	John Moore Lamont.
"	Hannah Mokau, s.s., 6 years	Ketch	..	7	..	Timber	Partly burnt	..	On passage from Kaipara to New Plymouth, Albion Point bearing E. 40 miles	S.E.	Gale	..	Fire broke out on board, through heat of boiler igniting either coal in bunkers or bulkhead, immediately forward of boiler	H. Wyvil Dale.
"	Hero, 20 years	Cutter	..	3	..	Ballast	Loss of mast, sails, &c.	..	Near North Head, Akaroa Harbour	S.S.W.	Gale	..	Wind having become baffling, vessel had to anchor, to avoid being driven ashore. To prevent her dragging, the mast had to be cut away	Samuel Benney.
"	Tauranga, 21 years	Schooner	61	6	1	Timber, flour, and salt meat	Supposed to be foundered; total loss	Supposed 7; all hands	Supposed on voyage from Port Chalmers to South Sea Islands	..	..	..	Vessel sailed from Port Chalmers on the 10th June, 1884, and has not since been heard of	James Duncan.
July 20	Owake Belle, 7 years	Ketch	..	3	..	General	Stranded; total loss	..	North Spit, entrance to Jacob's River	S.S.E.	Gale	..	Being caught in sudden squall, whilst vessel was being put about, mizensail was blown from ropes, and, to get headsails down, anchor was let go to bring her head to wind. Whilst sails were being secured, vessel dragged and began to bump heavily. Anchor was then slipped, and she was allowed to drift on to the beach	Edward Owens.
"	Tui, s.s., 9 years	Schooner	55	12	..	N.Z. produce	Stranded; loss of rudder	..	Bar of Manawatu River	W.	Moderate	..	Casualty caused by striking when crossing the bar	Charles Pope.
Aug. 11	Irishman, s.s.	Cutter	..	3	..	Coal	Stranded; total loss	..	Mouth of Mokau River	..	..	..	Vessel having got on to a rock, the crew went ashore to get tea, and while on shore she came off the rock, and getting into the breakers on the bar she was driven ashore	Alexander Boswell.
"	Lady Barkly, s.s., 22 years	Schooner	39	7	9	Ballast	Collapse of crown of furnace of boiler	..	Off Nelson Harbour	S.	Light	..	Crown of furnace collapsed	John Walker.

RETURN of WEEKS and CASUALTIES to SHIPPING reported to the Marine Department, &c.—*continued.*

Date of Casualty.	Name of Vessel, also Age and Class.	Rig.	Register Tonnage.	Number of		Nature of		Place where Casualty occurred.	Wind.		Decision of Court of Inquiry, &c.	Name of Master.
				Crew.	Passengers.	Cargo.	Casualty.		Dirrec-tion.	Force.		
1884. Aug. 16	Ringarooma, s.s., 9 years	Schooner	623	46	15	General	Stranded; partl. loss	South Head, Akaroa Harbour	N.W.	Light ..	Vessel was on her way from Dunedin to Lyttelton, steering the ordinary course, when she struck on a rock in a dense fog. Before casualty speed was reduced from eleven to eight and then to four knots an hour. When fog was so dense, master should have directed his course more to the eastward and made more frequent use of the lead. Accident is probably to be attributed to the presence of a possibly imperceptible but still very strong current. After the vessel struck, extreme order prevailed, and the boats were handled and manned, and the safety of the passengers provided for. Ship was being worked into the harbour, when she grounded on a shoal through master not making sufficient allowance for the state of the tide	James Tozer.
"	Genevieve M. Tucker, 14 years	Barque..	519	13	10	Coal	Stranded; no damage	Half a mile S. of Ward Island, Wellington Harbour	N.W.	Light ..	No blame attaches to master or crew. The vessel being run too far to leeward was caused by the misdirection of the semaphore arm, which was made to point in a wrong direction, an accident which arose from the insufficiency of the pilot staff at the New River	W. Dow Wood.
"	Augusta, 13 years	Brig'ntine	138	7	..	Coal	Stranded; total loss	Point Island, entrance to New River, Invercargill	W.N.W.	Moderate	Current running out of river slowed vessel to northward	Robert Murdoch.
"	Douglas, s.s., 2 years	Ketch ..	60	9	1	General	Stranded: slight damage	North Spit, Waitara River	W.S.W.	Strong breeze	Casualty caused by striking when crossing the bar	Walter Francis Norbury.
"	Jane Douglas, s.s., 9 years	Schooner	75	12	8	Ballast..	Stranded; rudder post broken	Bar of Manawatu River	N.W.	Moderate	Loss of ship attributable to error in judgment on part of master in that, after ascertaining his position off Kapiti, he put her on starboard tack, and left her to drift, on chance of picking up the Brothers light, instead of running through Cook Strait. When upon the starboard tack, she went much farther to the westward than he allowed for, and entered Gore Bay, where she was embayed, and, striking on the rocky beach, became a total wreck. Master was lost in vessel	James W. G. Fraser.
Sept. 1	Lastingham, 7 years	Ship ..	1143	26	6	General	Stranded; total loss	One mile from Jackson's Head, Port Gore, Cook Strait	N.W.	Gale ..	Vessel filled through plug coming out, and capsized	Alexander Morrison.
"	Norah, 11 months	Schooner	50	3	..	Timber, logs	Capsized; partl. loss	Abreast of Waikawanu, near Kennedy's Bay, Auckland, about 3 miles off shore	N.W.	Moderate		George Roff.

Oct.	1	Loch Fergus ..	Barque..	845	18	1	General	Loss of life only	1	Lat. 24° 15' S., long. 26° 45' W.	N.	Light ..	An apprentice, Henry Percy Warren, whilst engaged aloft in making mizen-topmast-stay-sail fast, fell on to the deck, and was killed to miss stays	Richard Jones.
"	16	Una, 11 months	Schooner	44	3	..	Sawn timber	Stranded; partl. loss	..	Between Tupetu Point and Old Man Rock, near Hole in the Wall, Auckland	W.N.W.	Squally	Wind suddenly headed vessel, and caused her to miss stays	Charles Johnson.
"	16	Opotiki, 8 years	Ketch ..	34	3	16	Maize, hides, & tallow	Stranded; total loss	..	Sunken rock off Te Tui, Mercury Bay	W.S.W.	Fresh ..	Struck on sunken rock	Charles Henry Pankow.
"	22	Start, 12 years	Cutter ..	27	3	..	Sawn timber	Stranded; partl. loss	..	On reef near Kawau (Takatu side), Auckland	S.W.	Very heavy	Casualty caused through vessel missing stays, and anchors being insufficient to hold her	George Egern.
"	26	Star of the South, s.s., 21 years	Schooner	175	14	3	General	High pressure cylinder & cover & circulating pump-cover broken	..	Ten miles N.W. of Jackson's Head, Cook Strait	N.W.	Light ..	Casualty due to breaking of crank brass bolts, metal of which had probably, by change of molecular structure under vibration, become short	Charles Hodge.
"	26	Jane, 14 years	Cutter ..	25	3	..	Ballast..	Stranded; total loss	..	Rock about ¼ mile W. of Caroline Head, Ruapuke Island, Foxe Strait	N.W.	Light ..	When vessel was being put round, she would not stay, and, the anchor dragging before she could be got clear, the tide carried her on to the rock	John McMillan.
"	28	Loch Fergus ..	Barque..	845	18	1	General	Loss of life only	1	Lat. 43° 10' S., long. 60° 10' E.	N.E.	Gale ..	An apprentice, Patrick Joseph O'Keefe, was sent aloft to assist in taking in sail, and was missed from maintop-sail-yard. Supposed to have fallen overboard	Richard Jones.
"	31	Go-ahead, s.s., 17 years	Schooner	129	12	4	N.Z. produce	Stranded; loss of rudder and rudder-post	..	Inner edge of bar, Wanganui River, in line with leading lights	W.	Moderate	Vessel struck on something hard, which caused her rudder and rudder-post to break short off	Saml. Plumley.
Nov.	4	Jasper ..	Barquentine	..	..	..	..	Loss of life only	1	Lat. 39° S., long. 77° 20' E.	S.W.	Gale ..	The mate, Edmund Watts Houghton, washed overboard and drowned while on a voyage from Mauritius to Port Chalmers	William Stan-nard.
"	6	Olyde, 10 years	Barque..	562	14	4	Sugar ..	Stranded; total loss	17	Snuffie Nose, Horseshoe Bay, about 4 miles from Akaroa South Head	S.E.	Gale ..	The vessel, which was on her way from Dunedin to Lyttelton, struck on a rock at 4.30 a.m., and became a total wreck	Edward S. Culmer.
"	7	Golden Isle, 16 years	Schooner	78	5	..	Ballast..	Stranded; slight damage	..	Close to Ferry Head, Palliser Bay	S.E.	Gale ..	Vessel driven ashore by force of gale ..	Thomas Sparrow Carmichael.
"	12	Cygnat, 9 years	Cutter ..	20	3	..	Grain and timber	Stranded; slight damage	..	Inside Pilot Station, Riverton Harbour	N.E.	Light ..	Vessel attempted to sail in with very little wind, and had to anchor near the bar. Her stern canting to the south on flood-tide, she took the ground	Thomas Rodri-gues.
"	21	Mohaka, s.s., 7 years	Schooner	20	..	..	N.Z. produce	Propeller-shaft damaged	..	Cloudy Bay, 15 miles off Wairau Bar	S.	..	Accident probably caused through defective welding	Thos. Eckford.
"	22	Beautiful Star, s.s.	Schooner	146	15	17	General	Loss of life only	1	Between Shag Point and Moeraki	N.E.	Strong breeze	A passenger, J. Udall, fell overboard and was drowned	William Alexander White.

RETURN of WRECKS and CASUALTIES to SHIPPING reported to the Marine Department, &c.—*continued.*

Date of Casualty.	Name of Vessel, also Age and Class.	Rig.	Register		Number of		Nature of		Number of Lives Lost.	Place where Casualty occurred.	Wind.		Decision of Court of Inquiry, &c.	Name of Master.
			Age.	Passengers.	Cargo.	Casualty.					Direction.	Force.		
1894.														
Nov. 27	Murray, s.s., 25 years	Schooner	78	16	General	Stranded; slight damage	..	Mouth of Hokitika River	..	On breakwater or protective works at mouth of Grey River	W.S.W.	Strong breeze	The sea being heavy, and the propeller having been stripped, the vessel went ashore	Mark Furneaux.
Dec. 22	Star of the South, s.s., 21 years	Schooner	175	14	General	Stranded; total loss	..	..	..	..	W.	Gale ..	Vessel lost when entering Grey River by being dashed against the stone protective works on the left bank of the river after crossing the bar and getting inside the entrance, there being at the time a strong fresh in the river. Court was of opinion that the wreck was caused by the culpable rashness of the master in persisting in the attempt to enter the river in reckless disregard of harbour signals. His certificate was suspended for twelve months, and he was ordered to pay the costs of inquiry	Charles Hodge.
1895.														
Jan. 2	Annabell, 6 years	Brig ..	348	10	Ballast..	Stranded; total loss	..	Tory Shoal, Kaipara Harbour	..	..	S.E.	Fresh ..	Casualty caused by leading marks being concealed by a haze over the land	Neil McDonald.
" 3	Island Lily, 8 years	Brig'ntine	123	8	General and ballast	Stranded; total loss	..	Middle Reef, Teraki Harbour, Chatham Islands	..	..	N.E.	Light ..	Wind failing when in mid-passage, strong southerly current set vessel on to reef. No blame attributable to master or mate	Robert Carnie.
" 17	Wallace, s.s., 17 years	Schooner	108	14	General	Stranded; partl. loss	..	Beef Barrel Rocks, Current Basin, French Pass	..	..	..	Light ..	Casualty caused by want of vigilance on the part of the chief officer, William Travers Paul, whose certificate was suspended for three months	Alfred Bruce.
" 17	Camille, 20 years	Brig'ntine	221	8	Timber..	Stranded; partl. loss	..	Inner Shoal, Kaipara Bar	..	..	S.W.	Moderate	Master made too free with banks, not knowing set of tide in locality	Ole Helgeson.
" 17	Wave, 35 years	Brig ..	174	7	Timber..	Stranded; partial loss; since condemned	..	Inner banks, Kaipara Bar	..	..	S.W.	Moderate	Master should not have brought vessel to wind again before getting into deep water	John Christian.
" 22	Elderslie, s.s. ...	Barque..	1801	48	General	Loss of life only	1	Lat. 46° 50' N., long. 9° 20' W.	1	..	S.	Gale ..	Thomas Poulson, mess-room steward, washed overboard by heavy sea, while on voyage from London to Oamaru	William Hewat.
" 23	Akaroa, s.s., 10 years	Schooner	43	9	Ballast..	Collision; partl. loss	..	Near end of Screw-pile Jetty, Lyttelton	..	..	..	..	In the absence of any local rule for signalling when leaving the wharf, the collision was purely accidental	William De Lacy Cameron.
" 27	Canterbury, s.s., 3 years	Nil, steam launch	15	2	..	Ditto	..	New River Estuary, Foveaux Strait	..	..	..	..	Vessel touched on flats off Sandy Point, and afterwards, when alongside wharf, she was found to be making water	William Eden.
" 27	Sarah and Mary, 20 years	Brig'ntine	145	7	General	Stranded; partl. loss	..	..	..	..	..	..	Vessel chartered by St. Paul's Vestry for a picnic to Motui. On return trip to Auckland, one of the children, having got away from those in charge, accidentally fell overboard from the stern and was drowned	Henry Priest.
" 29	Glendg, s.s., 5 years	Schooner	156	15	..	Loss of life only	1	Nearly abreast North Head, Auckland Harbour	1	..	E.	Fresh ..	..	Frank Amodeo.

Feb.	3	Penguin, s.s. ...	Schooner	442	..	..	Entrance channel, Nelson Harbour	N.W.	Strong gale	Vessel touched on sandspit	George Allman.
"	4	Thomas Russell, s.s., 2 years	Schooner	151	15	..	1½ to 2 miles N.W. of East Cape Island Lat. 44° 5' S., long. 72° 27' E.	W.	Calm	No default on part of master	Charles Frederick Helander. D. H. Shearer.
"	9	Lord of the Isles	Schooner	..	..	1	About a mile south of Kiourangi Point, west coast, Middle Island	N.W.	Gale	An A.B. Antonio Laurigge Francis, washed overboard by heavy sea on voyage from Mauritius to Wellington	Henry Edward Hill.
"	17	Grafton, s.s., 31 years	Schooner	297	..	..	North Spit end, Kaipara entrance	..	Calm	Chief officer, A. Stoddart, judged distance from land incorrectly. His certificate was suspended for one month, and he was ordered to pay costs of inquiry	J. W. Carpenter.
"	20	Mary Ann Annison, 19 years	Barque..	298	10	5	East point of reef off Motunui Island, Pegasus Bay	Variable	Light	Master should not have sailed when wind was uncertain	James Wills.
"	20	Wakatu, s.s., 6 years	Schooner	75	..	4	North-west side of Motunui Island, Pegasus Bay	North	Light	Chief officer, George Balding, who was in charge, committed error of judgment. The night was hazy, and he took no steps to determine his position. He was ordered to pay costs of inquiry	Antonius Claassen.
March	1	Plejadon, 18 years; Hamburg X 3/8 L.I.1 for 4 yrs.	Barque..	356	12	..	North-west side of Motunui Island, Pegasus Bay	..	..	Vessel having sprung a leak, master considered it necessary to run her ashore to save life	Charles Frederick Helander.
"	13	Thomas Russell, s.s., 2 years	Schooner	151	14	4	Oruti Point, east coast, North Island	E.	Light	Wreck caused by default of master. When coming on deck midway, as he supposed, between Cape Runaway and Oruti Point anchorage, he should have ascertained his exact position before putting the ship full speed ahead. When man at lead reported 9½ fathoms, master ought to have stopped and anchored. Court suspended his certificate for six months, and ordered him to pay costs of inquiry	John Pratt.
"	14	Blanche, s.s., 3 years	Schooner	18	4	..	Off breastwork, Railway Wharf, Auckland	N.E.	Gale	Gale caused vessel to drag while crew were ashore	Magnus Carl Magnusson.
"	26	Mathieu, 15 years	Barque..	367	10	1	North Beach, entrance to Kaipara Harbour	Variable	Baffling	Loss of vessel attributable to baffling nature of wind, but master seems to have stood too near in to North Beach, when wind first headed him on his return up the harbour, before going about	Thomas Bailey.
"	28	Dunedin, 24 years	Schooner	66	5	..	Boat - landing, inside Teuacwae Point, Bluff Harbour	W.	Gale	Vessel had to anchor, and high wind caused her to drag.	

APPENDIX.

ANNUAL REPORT ON LIGHTHOUSE WORKS, ETC., BY THE MARINE ENGINEER.

The MARINE ENGINEER to the SECRETARY, Marine Department.

SIR,—

Marine Department, 31st March, 1885.

I have the honour to forward, for the information of the Hon. the Minister having charge of the Marine Department, the annual report on works executed for new lighthouses, and for other works during the year, viz.:—

Kaipara.—The whole of the works in connection with this lighthouse have been completed, and the light was first exhibited on the 1st December, 1884. The light is of the second order, flashing every ten seconds.

French Pass.—All the works have been satisfactorily completed, and the lights were first exhibited on the 1st October, 1884, viz., one light on the mainland, a sixth-order port-light; and a smaller one, a ship's ordinary riding-light, on the beacon.

Jackson's Head.—The beacon described in the last annual report was completed on the 19th April, 1884, and remained intact until the middle of March, 1885, when it was destroyed during a severe storm. It is proposed to replace it by another beacon of different and more substantial design.

Removal of Rocks, Whakatane River.—It is expected that this contract will be completed towards the end of next month.

Light at Eastern Entrance of Hauraki Gulf.—In April, 1884, this locality was inspected with the view of determining the best site for a lighthouse, and Red Mercury and Cuvier Islands were carefully examined, with the result that the latter island seemed to offer the best site for the purpose intended; and a report to this effect was forwarded in June.

I have, &c.,

JOHN BLACKETT,
Marine Engineer.

The Secretary, Marine Department.

ANNUAL REPORT ON INSPECTION OF MACHINERY.

The CHIEF INSPECTOR OF MACHINERY to the SECRETARY, Marine Department.

SIR,—

Office of Chief Inspector of Machinery, Wellington, 4th June, 1885.

I have the honour to submit the eleventh annual report on the working of the Inspection of Machinery Acts during the year ended the 31st March, 1885.

The number of boilers inspected during the year was 1,475. Of this number, 41 were found dangerous and 139 more or less defective. The accompanying reports of the District Inspectors fully explain the nature and extent of such defects.

Accidents to life or limb to men working about machinery have materially decreased during the year as compared with former years, and will, I feel sure, continue to do so, as in each year there is a less number of dangerous parts of machinery requiring the attention of the Inspectors; all such parts being most securely fenced. Boilers also are much better looked after, and their fittings are kept in better order, so lessening the risk of accidents in connection with them. At the same time, with all the precautions possible, accidents will happen; as, for instance, in the case of a circular saw breaking, which no inspection could prevent. In such cases, the only safeguards are care and attention on the part of the men, who have sole charge of this kind of machinery.

All new boilers are, when the Inspectors' time will admit, examined during construction at the makers' yards. I attach great importance to this portion of the Inspectors' duties, as any defects can be pointed out and rectified before a boiler is fixed into its place for work. I may further state that the hydraulic test is applied to all new boilers to twice the working pressure.

I have much pleasure in reporting that no boiler explosion has taken place in the colony during the year. This, I think, is very satisfactory, and is doubtless due, in a great measure, to the zeal and intelligence of the Inspectors. As compared with Great Britain this result is very marked. There, during last year, 49 explosions took place, causing 31 deaths and 65 cases of personal injury. This comparison, I consider, shows that our system of Government inspection is preferable to and a safer guarantee against explosions than any voluntary system. In nearly all the cases of explosion above referred to the boilers were inspected by the Inspectors or agents of some kind of insurance or guarantee companies. During the past ten years five persons have met their death by the explosion of four boilers in New Zealand, while in England during the same period 421 boilers exploded, causing 626 deaths and 830 cases of personal injury.

It has been urged that men employed to fire a boiler on land should be required to pass an examination and hold a certificate; but to this it is objected that the owner should be held responsible, as in most cases of explosion the owners appear to be at fault. A good boiler, well equipped, is a simple machine to manage, and requires only ordinary care on the part of the man who has charge of it. I propose issuing to all boiler-owners plain printed instructions for the use of the men having charge of boilers. This course, it appears to me, will be more satisfactory than attempting to issue certificates.

Lifts and hoists have, as far as the Inspectors' time would allow, been examined; and, in the majority of cases, have been fitted with safety-catches, in order to prevent accidents, should the chain or rope break.

The Inspectors continue to give their special attention to the fencing-in of machinery, including hoists and lifts.

No accidents to persons working about machinery have taken place during the year in the Wellington, Hawke's Bay, Taranaki, Nelson North, Nelson South, or Marlborough Districts; one, not fatal, occurred in Canterbury; one fatal and one not fatal in Otago; and two fatal and three not fatal in the Auckland District. This number is much less than in previous years.

Attached is the annual report of each Inspector, which will give full information as to the details of the work done, together with tables showing the number of boilers and machinery inspected in each district, the nature and extent of the various kinds of machinery, and the purposes for which they are used; also particulars of any special kind of defects found in boilers.

The number of boilers continues to increase so fast that it will be necessary to increase the staff by at least another Inspector.

I also attach tables showing the number of boilers inspected and the amount of fees payable for the year.

I have, &c.,

J. NANCARROW,

Chief Inspector of Machinery.

The Secretary, Marine Department, Wellington.

RETURN showing the NUMBER of LAND BOILERS INSPECTED during the Financial Year ended the 31st March, 1885.

Name of District.	Number of Portable Boilers.			Number of Stationary Boilers.			Total.	
	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	Boilers.	Fees.
Otago ...	20	117	14	83	39	90	363	£ 684
Canterbury ...	9	110	6	101	39	42	307	530
Auckland ...	15	47	24	100	28	128	342	613
Wellington ...	5	23	13	24	35	66	166	312
Marlborough ...	2	12	3	5	8	14	44	93
Taranaki ...	...	12	5	3	12	10	42	94
Nelson North ...	3	21	6	18	16	8	72	137
Nelson South ...	...	3	7	7	...	28	45	102
Westland ...	...	4	2	19	6	6	37	59
Hawke's Bay ...	4	12	6	5	13	17	57	117
Totals ...	58	361	86	365	196	409	1,475	2,741

The INSPECTOR of MACHINERY, AUCKLAND DISTRICT, to the CHIEF INSPECTOR of MACHINERY.

SIR,—

Auckland, 7th April, 1885.

I have the honour to submit to you my annual report on boilers and machinery inspected in the Auckland District during the financial year ended the 31st March, 1885. The appended returns give the number and description of the boilers and machinery, fees payable, defects found in boilers, notices to repair boilers and protect dangerous parts of machinery; and accidents to life and limb in this district.

I have, &c.,

The Chief Inspector of Machinery.

W. J. JOBSON.

RETURN showing the NUMBER and DESCRIPTION of BOILERS INSPECTED, and FEES for the same.

Nature of Boiler.	Number.			Fees.	Remarks.
	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.		
Portable boilers ...	...	3	4	£ s. d.	At £5 each, employed at 36 establishments.
Stationary boilers ...	5	2	85	180 0 0	
Locomotive boilers ...	...	...	2		
Portable boilers ...	10	42	17	433 0 0	Charged for at per horse-power of each boiler.
Stationary boilers ...	95	26	43		
Locomotive boilers ...	5	2	1		
Seven machinery inspections	...	...	...	7 0 0	
Total ...	115	75	152	620 0 0	

Thirty-seven new boilers have been brought into use, 22 of which were made in Great Britain and 15 in this colony. Twenty-eight have been repaired, 24 changed owners, and 69 remained uninspected at the end of the year.

RETURN of DEFECTS found in BOILERS and FITTINGS in the AUCKLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Description.					Dangerous.	Ordinary.	Total.
Furnaces and fire-boxes out of shape	...	...	...	...	1	4	5
Blistered plates	...	...	...	...	...	3	3
Fractured plates	...	...	...	...	...	1	1
Pitted and grooved plates	...	...	...	...	...	2	2
Corrosion, internal	...	...	...	...	...	5	5
Corrosion, external	...	...	...	...	1	11	12
Joints sprung	...	...	...	...	...	3	3
Tubes	...	...	...	...	...	5	5
Stays	...	...	...	...	1	3	4
Total defects in boilers					3	37	40
Defective fittings—							
Safety-valves	...	...	...	...	...	7	7
Pressure-gauges	...	...	...	...	...	7	7
Water-gauges	...	...	...	...	...	11	11
Blow-off taps	...	...	...	...	...	3	3
Spring-balances	...	...	...	...	...	2	2
Omissions—							
Boilers without water-gauges	...	...	...	...	...	1	1
Boilers without sludge-holes	...	...	...	...	...	1	1
Gross total					3	69	72

RETURN of NOTICES given to REPAIR BOILERS in the AUCKLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Boiler.	Nature of Repairs ordered.
1884.		
April 9 ...	Cylindrical ...	New top end, and vertical stay to be fitted.
May 3 ...	Portable ...	Screw-patch to be fitted, and other parts caulked in lower parts of fire-box.
May 28 ...	Cornish ...	New plate in bottom of boiler.
May 30 ...	Cornish ...	New plate in bottom of boiler.
June 4 ...	Cylindrical ...	One fore-and-aft stay to be fitted.
June 11 ...	Portable ...	Screw-patch to be fitted to the shell, and two stays to top of fire-box.
June 13 ...	Portable ...	Two patches fitted to fire-box, and new water-gauge.
June 16 ...	Cornish ...	New feed-pipe to be fitted, and safety-valve overhauled.
June 17 ...	Portable ...	To be re-tubed, and four stays and fusible plug fitted.
June 18 ...	Locomotive ...	About one-half of the fire-box to be renewed.
July 4 ...	Portable ...	New plate in the shell.
July 5 ...	Locomotive ...	Patch in fire-box renewed, and six new tubes fitted.
July 8 ...	Portable ...	New pressure- and water-gauges to be fitted.
July 14 ...	Portable ...	One of the malleable cast-iron stay-bars on top of fire-box broken through the middle; two wrought-iron ones have been fitted.
Aug. 9 ...	Cornish ...	Parts of the bottom which rested on the side walls reduced by corrosion to $\frac{1}{8}$ in. thick; the bottom to be renewed.
Aug. 14 ...	Vertical flue ...	Two patches to be fitted round sludge-holes.
Aug. 28 ...	Vertical tubular ...	Safety-valves and water-gauge to be overhauled.
Aug. 29 ...	Vertical tubular ...	New flue from crown of furnace to crown of boiler.
Sept. 3 ...	Vertical tubular ...	New top end tube-plate, and patch to the shell.
Oct. 14 ...	Cylindrical ...	Two riveted patches fitted to bottom.
Nov. 17 ...	Portable ...	New safety-valve, and two patches fitted to fire-box.
Nov. 28 ...	Cornish ...	Two angle-iron rings fitted to furnace-flue.
Dec. 12 ...	Vertical tubular ...	Re-tubed, and vertical flue repaired.
Dec. 23 ...	Longitudinal tubular ...	Two screw-patches to be fitted to the lower part of the fire-box.
1885.		
Jan. 3 ...	Portable ...	Patch fitted to fire-box, and new pressure- and water-gauges.
Jan. 7 ...	Vertical tubular ...	Re-tubed, and vertical flue fitted.
Jan. 20 ...	Portable ...	Three tubes renewed, and water-gauge fitted.
Jan. 26 ...	Cornish ...	Fractured part of end plate in flue taken out and renewed.
Mar. 10 ...	Cornish ...	One-half of the front end-plate to be renewed.

RETURN of MACHINERY INSPECTED in the AUCKLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Description.	Steam.	Steam and Wind.	Steam and Water.	Water.	Gas.	Wind.
Assaying	1	...	...	...	...	...
Boiling-down	3	...	...	...	...	...
Brick works	4	...	...	...	...	...
Bakeries	2	...	...	...	...	...
Bone-mills	2	...	...	...	...	...
Breweries	10	...	...	...	...	...
Block and pump works	2	...	...	...	...	...
Boat-building	2	...	...	...	...	...
Chemical works	1	...	...	...	...	...
Cabinet-making factories	4	...	...	...	...	...
Coach factory	1	...	...	...	...	...
Chair factory	1	...	...	...	...	...
Cheese and butter factories	5	...	...	...	...	...
Chaff-cutting	15	...	...	...	...	...
Coffee mills	2	...	...	...	...	...
Cordial works	3	...	...	...	...	...
Dredging	1	...	...	...	...	...
Dock	1	...	...	...	...	...
Fellmongeries	2	...	...	...	...	...
Flour-mills	8	...	...	...	...	...
Firewood-cutting	9	...	...	...	1	...
Fire-engine	1	...	...	...	...	...
Fruit-preserving	1	...	...	...	...	...
Flock-mill	1	...	...	...	...	...
Gasworks	2	...	...	...	...	...
Hoisting	17	...	...	...	...	...
Hauling	8	...	...	...	...	...
Iron works and foundries	23	...	...	...	...	...
Lead works	1	...	...	...	...	...
Lifts or elevators	2	...	...	2	...	...
Mortar-mills	12	...	...	...	...	...
Meat-canning factories	3	...	...	...	...	...
Laundry	1	...	...	...	...	...
Pumping and winding	15	...	...	...	...	...
Phormium-dressing	4	...	...	...	...	...
Printing	2	...	...	...	1	...
Potteries	4	...	...	...	...	...
Pile-driving	1	...	...	...	...	...
Quartz-crushing	6	...	...	...	...	...
Refrigerating works	2	...	...	...	...	...
Road-roller	1	...	...	...	...	...
Rope works	1	...	...	...	...	...
Saw-mills	46	...	...	...	...	...
Sash and door factories	4	...	...	...	1	...
Stone-sawing	1	...	...	...	...	...
Sausage machines	3	...	...	...	...	...
Tobacco factory	1	...	...	...	...	...
Threshing	8	...	...	...	...	...
Tanneries	6	...	...	...	...	...
Vinegar factory	1	...	...	...	...	...
Wool-dumping	2	...	...	...	2	...
Waterworks	2	...	...	...	...	...

RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the AUCKLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Machinery.	Parts requiring to be fenced.
1884.		
April 28 ...	Freezing machine ...	Engine fly-wheel and connecting-rod.
May 2 ...	Bakery ...	Pair of wheels on dough machine.
May 12 ...	Pumping machinery ...	Two pairs of wheels.
July 9 ...	Saw-mill ...	Two driving-belts on planing machine.

RETURN of NOTICES to FENCE DANGEROUS PARTS of MACHINERY in the AUCKLAND DISTRICT—
continued.

Date of Notice.	Description of Machinery.	Parts requiring to be fenced.
1884.		
July 10 ...	Saw-mill	Four lengths of shafting, two fly-wheels of breaking-down saw, and two driving-belts.
July 10 ...	Saw-mill	Driving-belt of breaking-down saw, and feed spindle of same.
July 16 ...	Steam-lift... ..	Safety-gear, to be fitted,
July 16 ...	Saw-mill	Driving-belts on moulding machine, driving-belts on two sash-bar machines, and driving-belts on two planing machines.
Aug. 23 ...	Saw-mill	Three fly-wheels on breaking-down saws.
Aug. 27 ...	Saw-mill	Two lengths of shafting.
Sept. 18 ...	Cheese factory ...	Engine fly-wheel.
Oct. 18 ...	Saw-mill	Fly-wheels of breaking-down saw, driving-belt of circular saw, and driving-belt of planing machine.
Oct. 26 ...	Saw-mill	Twelve lengths of shafting, two driving-belts on circular saws, and four fly-wheels of breaking-down saws.
Oct. 27 ...	Pumping machinery	One pair of pinion-wheels.
Nov. 5 ...	Saw-mill	Two belts of vertical saw.
Nov. 6 ...	Saw-mill	Three lengths of shafting and coupling on engine-shaft.
Nov. 8 ...	Saw-mill	Driving-belt of planing machine, and fly-wheel of vertical saw.
Nov. 11 ...	Saw-mill	Pair of wheels on winch, and driving-belt of circular saw.
Nov. 25 ...	Colliery	Connecting-rod of vertical saw, engine fly-wheel, and pulley on driving-shaft
Dec. 11 ...	Wool-pressing ...	Fly-wheel and driving-belt.
Dec. 13 ...	Wool-pressing ...	Fly-wheel and driving-belt.
Dec. 19 ...	Printing	Driving-belts leading through the floor and the machine.
Dec. 30 ...	Steam-lift... ..	Safety-gear to be fitted.

RETURN of ACCIDENTS to LIFE and LIMB which have occurred in connection with LAND BOILERS and MACHINERY in the AUCKLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Name and Address of Owner.	Description of Machinery.	Name of Person injured.	Nature of Accident.	Fatal or not.	Cause of Accident, and Remarks.
Messrs. Bycroft and Co., Auckland	Flour-mill	Edward Campbell	Arm broken in two places, and one rib broken, 19th May	Not ..	Was employed as a fireman. It appears one of the belts wrapped round the shaft. When attempting to unwrap it in motion, instead of stopping the engine, as the instructions were, he got entangled with it, and was swung round with the revolving shaft.
Mr. B. Kean, Auckland	Brick and tile works	Alfred Bowden, aged 14 years	Left hand crushed, 8th July	Not ..	It appears he was near the brick-making machine, when he slipped on a piece of wet clay; in falling he threw out his hands to save himself; the left hand was drawn in between the guard and pinion, and badly crushed, which necessitated amputation. The machine is guarded as far as practicable.
Mr. H. Coupland, Auckland.	Firewood-cutting	Michael McNamee, aged 24 years	Right arm cut off, the left nearly severed, 16th July	Fatal	It appears he got up on the circular-saw bench to get down a piece of sacking to use as an apron, when, owing to it being wet and slippery, he accidentally fell backward against the saw, which took off the right arm and nearly severed the left. The unfortunate man died shortly afterwards. He ought to have stopped the saw before getting on the bench. At the inquest a verdict of accidental death was returned.

RETURN of ACCIDENTS to LIFE and LIMB in the AUCKLAND DISTRICT—*continued*.

Name and Address of Owner.	Description of Machinery.	Name of Person injured.	Nature of Accident.	Fatal or not.	Cause of Accident, and Remarks.
New Zealand Timber Co., Whangapoua.	Saw-mill	John Turner, aged 22 years	Both arms taken off, 16th Oct.	Fatal	Employed removing saw-dust from below the mill. Part of his clothing and the grindstone-belt were found entangled on the shaft. The grindstone was not in motion five minutes previous to the accident, the belt being off and hanging on a nail in the wall. The deceased was seen near to it at this time. He never spoke after the accident, so it will remain a mystery as to how it occurred: his duties did not take him near it, as he had nothing whatever to do with the machinery. At the inquest a verdict of accidental death was returned.
Mr. H. Maguire, Auckland	Wood-working machinery, circular saw	Thomas Hobson	Thumb and two fingers off right hand, 2nd Dec.	Not ..	Was employed cutting timber. While pushing it to the saw he kept his right hand on too long, and the saw, getting through the cut, took off the thumb and two fingers.

The INSPECTOR of MACHINERY, WELLINGTON DISTRICT, to the CHIEF INSPECTOR of MACHINERY.
SIR,—

Office of Inspector of Machinery, Wellington, 30th May, 1885.

I have the honour to forward you the annual report on the boilers and machinery in the Wellington, Marlborough, Nelson North, Taranaki, and Hawke's Bay Districts for the year ended the 31st March, 1885. I am glad to be able to state that during the above period no accidents have occurred to life or limb; only two accidents of at all a serious nature have occurred to boilers; in connection with machinery, none.

There are 505 workable boilers in the above districts, 381 of which have been inspected during the year, 62 have extended certificates, 32 are idle, and 30 were still to inspect at the end of the year. The above numbers include 8 new boilers, 6 of which have been manufactured in the colony and 2 imported.

Appended are returns showing the class, horse-power, and number of boilers inspected; the fees payable for the inspection of boilers and machinery; the number of notices given to fence dangerous parts of machinery; the number of notices given to repair boilers; the number of accidents to boilers; and the number and description of machinery inspected in the different districts. Verbal notices to fence machinery and also to repair boilers have been given when the work was of a trivial nature, and could be done while I was on the spot.

The Chief Inspector of Machinery.

I have, &c.,

H. A. MCGREGOR.

RETURN showing the NUMBER of LAND BOILERS INSPECTED in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

Name of District.	Number of Portable Boilers.			Number of Stationary Boilers.			Total.
	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	
Wellington ...	5	23	13	24	35	66	166
Marlborough ...	2	12	3	5	8	14	44
Nelson North ...	3	21	6	18	16	8	72
Taranaki ...	...	12	5	3	12	10	42
Hawke's Bay ...	4	12	6	5	13	17	57
Total ...	14	80	33	55	84	115	381

RETURN of FEES payable for the INSPECTION of BOILER and MACHINERY in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

Name of District.					Fees payable in respect of Boilers.	Fees payable in respect of Machinery.	Total.
					£ s. d.	£ s. d.	£ s. d.
Wellington	...	...	...	...	369 0 0	3 0 0	372 0 0
Marlborough	...	...	...	...	92 0 0	1 0 0	93 0 0
Nelson North	...	...	...	...	137 0 0	...	137 0 0
Taranaki	...	...	...	...	94 0 0	...	94 0 0
Hawke's Bay	...	...	...	...	117 0 0	...	117 9 0
Total	...	...	...	...	809 0 0	4 0 0	813 0 0

RETURN of MACHINERY INSPECTED in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

Description of Machinery.	Wellington.				Marlborough.			Nelson North.		Taranaki.			Hawke's Bay.		Total.
	Steam.	Steam and Water.	Water.	Gas.	Steam.	Steam and Water.	Water.	Steam.	Water.	Steam.	Water.	Wind.	Steam.	Water.	
Phormium-dressing ..	..	..	..	..	2	..	2	2	1	..	..	..	1	..	8
Printing ..	2	..	..	5	..	..	..	..	..	..	..	..	..	..	7
Flour-mills ..	10	1	4	..	..	..	3	4	4	1	3	..	2	2	34
Saw-mills ..	23	..	..	..	9	1	..	24	2	6	1	..	10	..	76
Sash and door factories	9	..	..	..	..	..	..	4	..	3	..	1	3	..	20
Foundries ..	6	..	..	..	1	..	..	2	..	1	..	..	1	..	11
Quartz-crushing ..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2
Thrashing machines ..	28	..	..	..	12	..	..	7	..	5	..	..	18	..	70
Soap and candle works	1	..	..	..	..	..	..	1	..	..	..	..	1	..	3
Cordial factories ..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	4
Boiling-down establishments	12	..	..	..	4	..	..	..	..	5	..	..	6	..	27
Sheep-dips ..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	2
Brick-making machines	6	..	..	..	..	..	..	1	..	..	..	..	..	..	7
Biscuit factories ..	3	..	..	..	..	..	..	3	..	..	..	..	..	..	6
Chaff-cutting machines	6	..	..	..	1	..	..	4	..	1	..	..	1	..	13
Breweries ..	5	..	..	..	1	..	..	1	..	1	..	..	3	..	11
Drain-pipe works ..	4	..	..	..	..	..	..	1	..	..	..	..	..	..	5
Hoisting machinery ..	10	..	..	..	1	..	..	1	..	7	..	..	1	..	20
Hauling machinery ..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	2
Dredging machinery ..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2
Pumping machinery ..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2
Coffee- and spice-mills	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Tanneries ..	3	..	..	..	..	..	..	2	..	..	..	..	..	..	3
Electric-light machines	2	..	..	..	..	..	..	2	..	..	..	..	..	..	4
Turneries ..	2	..	..	..	2	..	..	..	..	..	..	..	..	..	4
Wool-dumping ..	2	..	..	..	..	..	..	..	..	..	..	..	3	..	5
Ice machines ..	1	..	..	..	..	..	..	1	..	..	..	..	1	..	3
Sausage machines ..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Tobacco-cutting ..	1	..	..	..	4	..	..	2	..	..	..	..	..	..	7
Traction-engines ..	3	..	..	..	..	..	..	1	..	1	..	..	..	..	5
Gasworks ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Mortar-mills ..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	2
Machine shops ..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Meat-preserving works	4	..	..	..	..	..	..	..	..	..	..	..	1	..	5
Locomotives ..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Rice-mill ..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Freezing machines ..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	3
Hydraulic lifts ..	16	..	..	..	..	..	..	..	..	..	..	..	..	..	16
Wool-scouring machines	2	..	..	..	..	..	..	1	..	..	..	..	2	..	5
Total ..	184	1	4	5	39	1	5	66	8	32	4	1	59	2	401

RETURN of NUMBER of NOTICES given to REPAIR BOILERS in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

District, and Date of Notice.	Description of Boiler.	Nature of Repairs ordered.
WELLINGTON—		
1884.		
April 2 ^d ...	Fire-box ...	The mud-hole door at smoke-box end repaired, and two new screw-stays fitted in fire-box.
Sept. 22 ...	Multitubular ...	Three new tubes, and new nut on stay.
Dec. 3 ...	Cornish* ...	Crown of flue set up.
Dec. 20 ...	Cylindrical shell ...	Seven rivets in gusset-stays.
Dec. 22 ...	Cornish ...	Covering-plate on corroded part of shell where blow-off cock is fitted.
1885.		
Jan. 6 ...	Cornish ...	New crown in flue, and new angle-iron at each end.
Jan. 22 ...	Vertical and tube ...	New lum-leg to be fitted.
MARLBOROUGH—		
1884.		
June 10 ...	Lancashire ...	One of the angle-iron rings connecting the flue and the shell screwed half round, and small blister on bottom repaired.
July 5 ...	Multitubular ...	Crack in tube-plate patched, and tube-ends expanded.
July 5 ...	Portable ...	Three new dog-stays on fire-box crown.
NELSON NORTH—		
1884.		
Aug. 7 ...	Vertical shell ...	Flange of lum-leg repaired.
Oct. 22 ...	Portable ...	Patch on front of fire-box shell.
TARANAKI—		
1884.		
Nov. 6 ...	Multitubular ...	Blistered plate removed and new one fitted.
HAWKE'S BAY—		
1885.		
Jan. 28 ...	Portable ...	Tube-ends in fire-box expanded.
Feb. 12 ...	Vertical, Field's patent ...	The lower part of fire-box faced and caulked.
Feb. 16 ...	Cornish ...	A stay to be fitted between shell and crown of flue.
Feb. 16 ...	Cornish* ...	The crown of flue set up or fitted with an angle-iron girder-stay.

* Dangerous

RETURN of ACCIDENTS to BOILERS and MACHINERY reported as having occurred in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Accident.	Name and Address of Owner.	Nature and Cause of Accident.
Dec. 3, 1884 ...	The Wellington Meat Export Company (Limited), Wellington	Partial collapse of furnace-flue, caused, in my opinion, by the fire-bars and brick bridge being too high, thus causing the heat of the furnace to impinge on that particular part.
Feb. 16, 1885 ...	Nelson Bros.' Freezing Works, Tamona, Hawke's Bay.	Partial collapse of furnace-flue, caused partly from the bridge being too high, and partly on account of the deposit of lime allowed to gather on the plate.

RETURN showing NUMBER of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the WELLINGTON DISTRICT during the Financial Year ended the 31st March, 1885.

District, and Date of Notice.	Description of Machinery.	Parts required to be fenced.
WELLINGTON—		
1884.		
April 11 ...	Bush saw-mill ...	The counter-shaft.
April 15 ...	Bush saw-mill ...	The main driving-belts of circular saws.
April 22 ...	Flour-mill ...	The gearing on engine and counter-shaft.
Dec. 17 ...	Bush saw-mill ...	The driving-belt of circular saw.
Dec. 22 ...	Bush saw-mill ...	A passage between engine and bench.
1885.		
Jan. 15 ...	Tannery ...	Counter-shaft and driving-belts.
Jan. 20 ...	Bush saw-mill ...	Main driving-belt and saw-spindle.
MARLBOROUGH—		
1884.		
May 20 ...	Coal-pit ...	The top of winding-shaft, and pump connecting-rod.
May 31 ...	Saw-mill ...	The main driving-belt and pulleys.
June 7 ...	Flax-mill ...	The under sides of stripping-drums.
June 9 ...	Pumping plant ...	The gangway leading to pump-box.
NELSON NORTH—		
1884.		
Aug. 18 ...	Cutting chaff and fire-wood	The fly-wheel of engine, and main belt.
Sept. 3 ...	Bush saw-mill ...	The fly-wheel of engine, and three main belts.
TARANAKI—		
1884.		
Nov. 7 ...	Bush saw-mill ...	The fly-wheel of engine, and the counter-shaft and pulleys.
Nov. 8 ...	Bush saw-mill ...	The fly-wheel of engine, fence to be run all round the engine and on each side of driving-belt.
HAWKE'S BAY—		
1885.		
Jan. 24 ...	Bridge-building ...	Air-pump gear and driving-belts.
Jan. 28 ...	Bush saw-mill ...	The fly-wheel of engine, counter-shaft, and belts of saw and planing machine.
Feb. 16 ...	Brewery ...	The engine to be fenced all round.
Feb. 17 ...	Freezing-works ...	Hand-rail round small engine for driving electric light.

The INSPECTOR of MACHINERY, OTAGO DISTRICT, to the CHIEF INSPECTOR of MACHINERY.

SIR,—

Office of Inspector of Machinery, Dunedin, 8th May, 1885.

I have the honour to forward you the annual report of inspection of machinery for the financial year ended the 31st March, 1885, for the Otago District, contained in the appended tables.

In forwarding this report I am glad to be able to state that the number of accidents to life and limb reported to me are fewer in number than has been in any previous year since the commencement of the Act, there being only two, but one of these, I regret very much to say, terminated fatally. Full details are given in the table. You will likewise see that neither of these accidents was preventable. There have been no explosions of any sort throughout this district during the past year.

The number of inspections made during the year were 363 boilers and 48 machinery, making a total of 411 land inspections.

At the end of March this would leave about 150 or 160 still remaining to be inspected in this district.

The number of imported engines (mostly portable) of which I have received notice during the past year was 20; locally made, 11: total, 31.

I am sorry to have to report that trade has been in an unusually depressed state throughout this district during the past year.

The Chief Inspector of Machinery, Wellington.

I have, &c.,

ALEXANDER CRAWFORD.

RETURN showing the NUMBER of LAND BOILERS INSPECTED in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Name of District.	Number of Portable Boilers.			Number of Stationary Boilers.			Total.
	5 h.p. and under.	5 to 10 h.p.	Over 10 h.p.	5 h.p. and under.	5 to 10 h.p.	Over 10 h.p.	
Otago	20	117	14	83	39	90	363

RETURN of FEES payable for the INSPECTION of BOILERS and MACHINERY in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Name of District.	Fees payable in respect of Boilers.			Fees payable in respect of Machinery.			Total.		
Otago—	£	s.	d.	£	s.	d.	£	s.	d.
Portable	262	0	0	...	...	...	684	0	0
Stationary	374	0	0	...	...	...			
Machinery	...	...	...	48	0	0			

RETURN of MACHINERY INSPECTED in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Description.	Steam.	Steam and Water.	Water.	Steam and Wind.	Description.	Steam.	Steam and Water.	Water.	Steam and Wind.
Aerated water	1	...	...	...	Hoists	16	...	...	...
Agricultural-implement shops	7	...	...	...	Hydraulic lifts	...	...	47	...
Bakeries	4	...	...	...	Joineries	6	...	...	...
Boiling-down	4	...	...	...	Laundries	2	...	...	...
Bone-mills	4	...	...	...	Locomotives	10	...	...	...
Brick and tile works	4	...	...	...	Lead-pipe works	1	...	...	...
Breweries	9	...	...	...	Machine shops	4	...	...	...
Cabinet-making	5	...	...	...	Oil-mill, linseed	1	...	...	...
Candle and soap works	3	...	...	...	Paper-mills	1	1	...	...
Chaff-cutting	11	...	...	...	Pottery	1	...	...	...
Chemical works	1	...	...	...	Pipe works, clay	2	...	...	...
Cooking	1	...	...	...	Printing	2	...	...	...
Collieries	6	...	...	...	Pumping water	3	...	...	...
Corn-crushers	2	...	...	...	Refrigerating works	1	...	...	...
Copper and brass works	1	...	...	...	Rope works	1	...	...	...
Coffee and spice works	2	...	...	...	Sawmills	41	1	...	...
Confectionery	3	...	...	...	Steam roller (road)	1	...	...	...
Cranes	10	...	...	...	Seed-dressing	1	...	...	...
Dairy (cheese factory)	1	...	...	...	Stone-crushers	6	...	...	...
Dredgers, harbour	6	...	...	...	Tanneries	2	...	...	...
Dredger, gold	1	...	...	...	Tramway cable	2	...	...	...
Engine-shops	4	...	...	...	Threshing machines	89	...	...	...
Flour-mills	8	4	1	1	Traction-engine	1	...	...	...
Flock-mills	2	...	...	...	Turnery, wood	2	...	...	...
Foundries	10	...	...	...	Venetian blind	1	...	...	...
Fire-grate and range works	3	...	...	...	Wool-pressing	4	...	...	...
Firewood-cutting	1	...	...	...	Woollen factories	3	...	...	...
Fruit-preserving	2	...	...	...	Woodware factories	3	...	...	...
Gasworks	1	...	...	...					

RETURN of NOTICES given to REPAIR BOILERS in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Boiler.	Nature of Repairs ordered.
<i>Written.</i> 1884.		
April 5 ...	Portable, No. 5427 ...	New crown-plate to be put in fire-box of Lowmoor.
June 5 ...	Portable, No. 5266 ...	Bolted patch on outer fire-box, 15in. by 15in. by $\frac{5}{16}$ in, with four screwed stays coming through; also patch inside of fire-box to be renewed.
July 28 ...	Cornish tubular (2), Nos. 5198, 5199	12ft. in length by an average of 3ft. 3in. or thereabouts in breadth to be cut out of the bottom of shell of each boiler, and renewed; also plate 24in. by 24in. to be renewed underneath the safety-valve of each boiler.
Aug. 1 ...	Vertical, No. 5170 ...	A new uptake to be put in.
Aug. 14 ...	Vertical tubular, No. 5245	New vertical stay to be put in between crowns, also mud-hole to be patched.
Aug. 20 ...	Vertical field, No. 5227	Plates at mud-holes to be patched.
Aug. 26 ...	Vertical tubular, No. 5267	To be re-tubed.
Nov. 15 ...	Longitudinal tubular, No. 5520	Longitudinal seam on top of shell to be caulked.
Dec. 10 ...	Longitudinal tubular, No. 5329	Several rivets to be renewed, and longitudinal seam re-caulked.
Dec. 23 ...	Semi-portable, No. 5543	Cracked plate in bottom of fire-box to be repaired by an over-all-plate pinned on, also new safety-valve to be got (3in. diameter).
1885.		
Jan. 8 ...	Vertical tubular, No. 5548	New pressure-gauges to be got, and bottom of shell to be caulked.
Jan. 12 ...	Portable, No. 5552 ...	Six screwed stays to be renewed; compensation-ring round man-hole, 3in. by $\frac{1}{2}$ in.; also tubes expanded.
Jan. 28 ...	Portable, No. 5570 ...	New spring-balance to be got.
Jan. 29 ...	Portable, No. 5573 ...	Compensation-ring round front door, 1 $\frac{1}{2}$ in. by $\frac{3}{4}$ in.; also plate at mud-hole repaired.
Feb. 14 ...	Traction, No. 5586 ...	Two new spring-balances to be got.
Feb. 14 ...	Portable, No. 5490 ...	A new crown to be put in fire-box.
Feb. 25 ...	Portable, No. 5595 ...	Plate 20in. by 16in. by $\frac{1}{4}$ in. to be put in smoke-box, with three stays coming through.
Mar. 30 ...	Portable, No. 5608 ...	New pressure-gauge to be got.
<i>Verbal.</i> 1884.		
May 14 ...	Portable, No. 5490...	New pressure-gauge to be got.
May 26 ...	Longitudinal tubular, No. 5137	Water-gauge fittings to be renewed.
June 6 ...	Vertical tubular, No. 5279	Plug-hole to be re-tapped.
July 14 ...	Steam-digester, No. 5506	Angle-irons for stays, top and bottom, to be renewed.
Aug. 9 ...	Longitudinal tubular, No. 5252	Compensation-ring round man-hole; several rivets to be renewed, and seam caulked.
Aug. 9 ...	Longitudinal tubular, No. 5510	To be re-tubed.
Nov. 17 ...	Cornish, No. 5149 ...	Seam at bottom of steam-dome to be caulked.
Nov. 24 ...	Steam-dome, No. 5321	Stay to be put through ends.
Nov. 24 ...	Steam-digester door, No. 5322	To be strengthened.
Nov. 24 ...	Longitudinal tubular, No. 5277	Expansion-joint on steam-pipe; two safety-rods.
Dec. 12 ...	Locomotive tramway, No. 5525	Tube to be renewed, and two through longitudinal stays put in.
Dec. 18 ...	Semi-portable, No. 5337	Nuts and washers on longitudinal stays to be re-jointed.
1885.		
Jan. 24 ...	Egg-end ...	Safety-rods on expansion-joint of steam-pipe.

RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Class of Machinery.	Parts requiring to be fenced.
1884.		
Sept. 9 ...	Hydraulic lift, No. 2	The doors at lift-frame on second floor to have gates across.
Sept. 10 ...	Hydraulic lift, No. 3	The framework of lift on upper flat to be fenced round about.
Sept. 11 ...	Hydraulic lift, No. 5	The framework of lift to be fenced round about at first floor.
Sept. 19 ...	Hydraulic lift, No. 19	A railed fence running round the framework of lift at first floor.
Oct. 11 ...	Hydraulic lift, No. 31	Top frame of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 32	Top frame of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 35	Top frame of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 36	Top frame of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 37	Top frame of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lifts, Nos. 33 and 38	Top framework of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 39	Top framework of cage to be protected by a hood of wood or iron.
Oct. 11 ...	Hydraulic lift, No. 40	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 1	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 2	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 3	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 4	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 5	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 6	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 7	Top framework of cage to be protected by a hood of wood or iron.
Oct. 23 ...	Hydraulic lift, No. 46	The doorway on each flat to be securely fenced by two movable cross iron bars, 3ft. 6in. in height.
Oct. 23 ...	Hydraulic lift, No. 47	Top framework of cage to be protected by a hood of wood or iron.
Nov. 3 ...	Hydraulic lift, No. 50	Top framework of cage to be protected by a grating of wood.
Nov. 5 ...	Hydraulic lift, No. 51	Top framework of cage to be protected by a hood of wood or iron.
Nov. 14 ...	Saw-mill ...	NOTE.—The owners of hydraulic lifts Nos. 1 to 51 have all been served with a notice to put on patent safety-catches on each lift, with the exception of the following: Nos. 9, 13, 27, 29, 42, 43, 48, and 49. Main driving-belt; belt on break-saw; belt on planing machine; breaking-down saw to be protected on lower side at pit, and fly-wheel of engine.
Oct. 13 ...	Hydraulic lift, No. 19	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 20	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 21	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 22	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 23	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 24	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 26	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 28	Top framework of cage to be protected by a hood of wood or iron.
Oct. 22 ...	Hydraulic lift, No. 44	Side of framework at upper floor, fence 3ft. by 3ft. 9in.; also hood on top of framework of cage, of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 8	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 10	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 11	Top framework of cage to be protected by a hood of wood or iron.

RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the OTAGO DISTRICT
—continued.

Date of Notice.	Nature of Machinery.	Parts requiring to be fenced.
1884.		
Oct. 13 ...	Hydraulic lift, No. 12	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 13	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 14	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 15	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 16	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 17	Top framework of cage to be protected by a hood of wood or iron.
Oct. 13 ...	Hydraulic lift, No. 18	Top framework of cage to be protected by a hood of wood or iron.
Dec. 10 ...	Twin-saw frame ...	To be bolted together and strengthened.
Dec. 15 ...	Main driving-belts ...	To be all renewed.
Dec. 24 ...	Flour-mill ...	Two vertical shafts for smutter; one vertical shaft for silks.
1885.		
Jan. 28 ...	Flour-mill ...	Laying shaft on first floor.

RETURN of DEFECTS found on INSPECTION of BOILERS and FITTINGS in the OTAGO DISTRICT
during the Financial Year ended the 31st March, 1885.

Description.	Dangerous.	Ordinary.	Total.
Blow-off ...	...	2	2
Blistered furnace-plates ...	...	1	1
Corrosion, internal ...	...	3	3
Corrosion, external ...	2	8	10
Fire-box crowns cracked ...	2	...	2
Grooving ...	...	2	2
Man-holes weak ...	...	3	3
Man-hole door cracked ...	1	...	1
Man-holes wasted through leakage ...	...	3	3
Plugs screwed badly ...	3	...	3
Steam-pipe expansion-joints safety-rods...	...	3	3
Steam pressure-gauges bad ...	...	6	6
Spring-balances bad ...	...	6	6
Safety-valve... ..	1	...	1
Screwed stays ...	...	1	1
Stay longitudinal disconnected ...	...	1	1
Tubes leaking ...	...	3	3
Tube-plates cracked (vertical tubular) ...	1	...	1
Uptakes (vertical) ...	1	1	2
Water-gauges ...	...	1	1
Total ...	11	44	55

RETURN of DEFECTS found on the INSPECTION of MACHINERY in the OTAGO DISTRICT during
the Financial Year ended the 31st March, 1885.

Description.	Dangerous.	Ordinary.	Total.
Cages, hydraulic lifts ...	...	8	8
Chains, hydraulic lifts ...	7	2	9
Rope, hydraulic lift ...	...	1	1
Circular saws ...	4	...	4
Circular saw, frame ...	1	...	1
Total ...	12	11	23

RETURN of NOTICES given to REMOVE DANGEROUS PARTS of MACHINERY inspected in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Machinery.	Nature of Machinery to be removed.
1884.		
Sept. 18 ...	Hydraulic lift ...	Chain.
Sept. 22 ...	Hydraulic lift ...	Chain.
Sept. 23 ...	Hydraulic lift ...	Chain.
Sept. 23 ...	Hydraulic lift ...	Chain.
Oct. 1 ...	Hydraulic lift ...	Chain.
Oct. 1 ...	Hydraulic lift ...	Chain.
Oct. 11 ...	Hydraulic lift ...	Rope.
Oct. 22 ...	Hydraulic lift ...	Chain.
Sept. 13, 22	Hydraulic lift ...	Chains (two repaired).
Dec. 8 ...	Saw-mill ...	Top saw of twin circular saw.
Dec. 10 ...	Saw-mill ...	Top saw of twin circular saw.
1885.		
Jan. 13 ...	Saw-mill ...	Lower saw of twin circular saw.
Feb. 7 ...	Saw-mill ...	Breaking-down circular saw.
1884.		
Dec. 10 ...	Saw-mill ...	The framework of twin circular saw to be repaired.

RETURN of NOTICES given to REPAIR MACHINERY inspected in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Machinery.	Nature of Machinery repaired.
1884.		
Sept. 9 ...	Cage of hydraulic lift	Framework to be strengthened by iron straps and bolts.
Sept. 13 ...	Cage of hydraulic lift	New shackles.
Sept. 17 ...	Cage of hydraulic lift	Framework to be strengthened by iron straps and bolts.
Sept. 17 ...	Cage of hydraulic lift	Framework to be strengthened by iron straps and bolts.
Sept. 18 ...	Cage of hydraulic lift	Framework to be strengthened by iron straps and bolts.
Sept. 22 ...	Cage of hydraulic lift	Framework to be strengthened by iron straps and bolts, and new swivel.
Sept. 25 ...	Cage of hydraulic lift	Regulator to be altered.
Sept. 26 ...	Cage of hydraulic lift	Framework to be strengthened, and levers keyed.

RETURN of ACCIDENTS to BOILERS and MACHINERY reported as having occurred in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Accident.	Name and Address of Owner.	Nature and Cause of Accident.
1884.		
April 5 ...	John Nicholson, Kai-korai, No. 5427	Portable boiler: Crown of fire-box cracked completely across; caused through the water being low in the boiler.
1885.		
Feb. 14 ...	John Tough, Milton, No. 5490	Portable boiler: Crown of fire-box cracked across; caused through the water being low in the boiler.
Feb. 28 ...	Messrs. Thomson Brothers, Port Chalmers, No. 5441	Longitudinal tubular boiler: Fired externally; plate bagged and cracked in bottom of shell over fire. When the plate was cut out it showed no signs of any scale or dirt. The only way I can account for it is through oil coming in contact with the plate, thereby driving the water off. As it appears to me, an excessive quantity of oil had been used in connection with the refrigerating machinery, which, mixing with the feed-water, was pumped into the boiler.

RETURN of ACCIDENTS to LIFE and LIMB which have occurred in connection with LAND BOILERS and MACHINERY in the OTAGO DISTRICT during the Financial Year ended the 31st March, 1885.

Name and Address of Owner.	Description of Machinery.	Name of Person injured.	Nature of Accident.	Fatal or not.	Cause of Accident, and Remarks.
The Dunedin Iron and Woodware Company, Dunedin	Circular saw ..	James Pollock, aged nineteen	Four fingers off left hand; 29th October, 1884	Not ..	James Pollock, aged nineteen years, employed as tailer at small breast-bench circular - saw. After having tightened up the belt, was trying the saw with a small piece of timber, similar to a bucket-stave. In cutting it, he kept his hand too long on the timber, and, the saw coming through, cut four fingers off left hand.
Alfred Tapper, Longbush, Invercargill	Laying-shaft, saw-mill machinery	J. Walker Miller, aged fifty years, engine-driver and fireman, four yrs.	Right leg broken in two places, right arm completely destroyed, ribs and breast-bone broken	Fatal	This accident took place about 2.30 p.m. on the 2nd December last, at A. Tapper's lower mill, Longbush.

The accident was not witnessed by any person, the first intimation being by a boy, who saw something wrong with the belt, and who immediately ran and shut steam off, when the deceased was found entangled in the belt of the firewood-saw and wound around the laying-shaft, having received so much injury that he died shortly after being removed to the hospital at Invercargill. At the inquest on the body there, the jury returned a verdict of accidental death, no one being to blame, as the machinery was all well fenced.

As far as I can form an opinion as to how this accident occurred, it was evident he was going to repair this particular belt, as he had the tools there for that purpose. Instead of throwing off the belt in the usual way, it is supposed he used his foot, possibly losing his balance, and, falling, was entangled in the belt and wound round the laying-shaft.

SUMMARY OF INSPECTIONS.

Number of Inspections	...	...	...	...	...	411
Machinery inspected	...	...	...	...	...	379
Return of Defects found in Boilers	...	...	...	...	...	55
Return of Written Notices given to repair Boilers	...	...	...	...	...	18
Return of Verbal Notices given to repair Boilers	...	...	...	...	...	14
Return of Notices given to fence Dangerous Parts of Machinery	...	...	...	...	...	47
Return of Defects found on the Inspection of Machinery	...	...	...	...	...	23
Return of Accidents to Boilers and Machinery	...	...	...	...	...	3
Return of Accidents to Life and Limb occasioned in connection with Land Boilers and Machinery during the Year ended the 31st March, 1885	...	...	...	...	...	2

The INSPECTOR of MACHINERY, CANTERBURY DISTRICT, to the CHIEF INSPECTOR of Machinery.
SIR,— Christchurch, 9th May, 1885.

I have the honour to forward to you annual report on boilers and machinery inspected by me in the Canterbury, Westland, and Nelson South Districts up to the 31st March, in the same forms as last year.

I am thankful to be able to report but one accident to life or limb during the year, and no serious accidents to boilers or machinery.

There is an increase in the number of boilers inspected, although, for want of time, that part of my district between the Rangitata and Rakaia Rivers has not been inspected.

You will observe that for threshing purposes portable-engines are being superseded by traction-engines.

I shall be glad to supply any further information you may require.

The Chief Inspector of Machinery, Wellington. I have, &c.,
GEORGE CROLL.

RETURN showing the NUMBER of LAND BOILERS INSPECTED during the Financial Year ending the 31st March, 1885.

Name of District.	Portable.			Stationary.			Total.
	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	Under 5 h.p.	5 to 10 h.p.	Over 10 h.p.	
Canterbury	9	110	6	101	39	42	307
Westland	...	4	2	19	6	6	37
Nelson South	...	3	7	7	...	28	45
Total	9	117	15	127	45	76	389

As part of the Westland and Nelson South Districts were inspected at the beginning of the financial year and again at the close, this return does not show the correct number of boilers in these districts, although the correct number of inspections for the year.

RETURN of MACHINERY INSPECTED in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Description.	Steam.	Steam and Water.	Water.	Steam and Wind.	Gas.
Saw-mills	30	...	...	...	...
Threshing machines	54	...	...	...	...
Foundries and iron works	25	...	...	...	...
Flour-mills	6	...	1	...	...
Brick and pottery works	6	...	...	...	...
Coal-mining	3	...	...	...	...
Phormium-dressing	5	...	...	...	...
Soap works	4	...	...	...	...
Coffee works	2	...	...	...	...
Stone-sawing	1	...	...	...	...
Chaff-cutting	13	...	...	...	...
Wood-working	11	...	...	...	...
Breweries	8	...	...	...	...
Coach factories	2	...	...	...	...
Sawing firewood	9	...	...	...	...
Tramway engines	8	...	...	...	...
Butchers'	16	...	...	...	...
Cranes and winches	21	...	...	...	...
Cordials and confectioners'	6	...	...	...	...
Traction-engines*	17	...	...	...	...
Road-roller	1	...	...	...	...
Fire-engines	4	...	...	...	...
Pumping and drainage	3	...	...	...	...
Dock	1	...	...	...	...
Landing service	1	...	...	...	...
Woollen mill	1	...	...	...	...
Wool-washing and dumping	5	...	...	...	...
Tanneries	4	...	...	...	...
Bone-mills	3	...	...	...	...
Glue works	1	...	...	...	...
Refrigerating works	1	...	...	...	...
Chemical works	1	...	...	...	...
Boiling down	3	...	...	...	...
Printing	2	...	...	...	1
Carpet works	1	...	...	...	...
Rope works	1	...	...	...	...
Baths	1	...	...	...	...
Laundry	1	...	...	...	...
Paper-making	1	...	...	...	...
Concrete-mixing	1	...	...	...	...
Stone-breaking	1	...	...	...	...
Barbed-wire works	1	...	...	...	...
Gasworks	2	...	...	...	...

* Used for threshing.

RETURN showing FEES payable for the INSPECTION of BOILERS and MACHINERY in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Name of District.	Fees payable in respect of Boilers.			Fees payable in respect of Machinery.			Total.		
	£	s.	d.				£	s.	d.
Canterbury	530	0	0	...			530	0	0
Westland	59	0	0	...			59	0	0
Nelson South	102	0	0	...			102	0	0
Total	691	0	0	...			691	0	0

RETURN of MACHINERY INSPECTED in the WESTLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Description.	Steam.	Steam and Water.	Water.	Steam and Wind.	Other Kinds.
Breweries	5	...	...	...	...
Cranes and winches	11	...	...	...	...
Wood-working	2	...	...	...	...
Coffee works	1	...	...	...	...
Saw-mills	8	...	...	...	...
Fire-engine	1	...	...	...	...
Foundries and iron works	2	...	...	...	...
Coal-mining	1	...	...	...	...
Winding and sawing	1	...	...	...	...
Printing	1	...	...	...	...
Locomotives	2	...	...	...	...
Sluicing, &c.	2	...	...	...	...

RETURN of MACHINERY INSPECTED in the NELSON SOUTH DISTRICT during the Financial Year ended the 31st March, 1885.

Description.	Steam.	Steam and Water.	Water.	Steam and Wind.	Other Kinds.
Saw-mills	5	...	...	...	...
Quartz-crushing	4	...	...	...	...
Coal-mining	3	...	...	...	...
Winding in mining	5	...	...	...	...
Iron works	1	...	...	...	...
Brewery	1	...	...	...	...
Wood-working	1	...	...	...	...

As part of this district was inspected at the beginning of the year and again at the close, the above return shows correctly the steam machinery in this district.

MACHINERY INSPECTED at the Beginning of the Year (included in foregoing Return).

Description.	Steam.	Steam and Water.	Water.	Steam and Wind.	Other Kinds.
Saw-mills	5	...	...	...	...
Quartz-crushing	2	...	...	...	...
Coal-mining	1	...	...	...	...
Winding in mining	3	...	...	...	...
Iron works	1	...	...	...	...
Brewery	1	...	...	...	...
Wood-working	1	...	...	...	...

RETURN of DEFECTS found on the INSPECTION of BOILERS and FITTINGS in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Description of Defect.	Dangerous.	Ordinary.	Total.
Uptake out of shape	1	1	2
Gusset-stays loose	...	1	1
Rivets loose and leaking	...	1	1
Leakage at bottom of boiler	...	1	1
Stays in fire-box wasted	...	2	2
Back tube-plate corroded	1	...	1
Inside of boiler very dirty	...	2	2
Fire-box and foundation-ring wasted	3	...	3
Barrel of boiler wasted from leakage	...	1	1
Cracks in bottom of boiler	2	...	2
Leakage from patches in fire-box	...	4	4
Pitting in inside of boiler	...	3	3
Leakage at tubes, and cracks in tube-plate	...	3	3
External corrosion from leakage at joints and doors	1	4	5
Patches in fire-box of portable boilers	...	6	6
Crown of fire-box down	...	3	3
Pressure-gauges bad	9	...	9
Fire lit, boiler being empty... ..	1	...	1
Fire lit, water being low	1	...	1
Total	19	32	51

RETURN of DEFECTS found on the INSPECTION of BOILERS and FITTINGS in the WESTLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Description of Defect.	Dangerous.	Ordinary.	Total.
Blow-off cock and pipe bad... ..	...	1	1
Internal corrosion... ..	1	...	1
Corrosion from leakage of joints	...	1	1
Corrosion from leakage in furnace	1	...	1
Crown of boiler not stayed	1	...	1
Uptake gone at neck	1	...	1
Tubes wasted at ends	1	...	1
Patches on bottom	...	2	2
Pressure-gauges bad	...	2	2
Total	5	6	11

RETURN of DEFECTS found on the INSPECTION of BOILERS and FITTINGS in the NELSON SOUTH DISTRICT during the Financial Year ended the 31st March, 1885.

Description of Defect.					Dangerous.	Ordinary.	Total.
Corrosion from leakage of joints	...	...	...	...	...	1	1
Internal corrosion and pitting	...	...	...	...	...	4	4
Stays wasted	...	...	...	...	1	...	1
Total	...	...	...	...	1	5	6

RETURN of NOTICES given to REPAIR BOILERS in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Boiler.			Nature of Repairs ordered.	
1884.					
May 14	...	Vertical	...	Verbal.	New uptake in boiler.
June 9	...	Tubular	...	Verbal.	Gusset-stays properly secured.
June 9	...	Cornish	...	Verbal.	Five rivets renewed and re-caulked.
June 10	...	Cornish	...	Verbal.	Re-caulk three ring-seams on bottom.
June 11	...	Portable	...	Verbal.	Two new screw-stays in fire-box.
June 18	...	Portable	...	Written.	Twelve new screw-stays in fire-box.
June 18	...	Locomotive-type	...	Written.	New back tube-plate.
June 30	...	Vertical	...	Verbal.	New foundation-ring and bottom plates.
July 24	...	Tubular	...	Verbal.	New plates on bottom over fire.
Aug. 4	...	Tubular	...	Verbal.	New plates on bottom over fire.
Sept. 16	...	Portable	...	Verbal.	New pressure-gauge.
Sept. 22	...	Traction	...	Verbal.	New pressure-gauge.
Oct. 4	...	Tubular	...	Written.	Renew all joints on top of boiler, and a proper weight for safety-valve.
Oct. 23	...	Tubular	...	Verbal.	New sludge-hole door, and rebuild flues.
Oct. 24	...	Vertical	...	Verbal.	Re-caulk seams in fire-box.
Dec. 3	...	Portable	...	Verbal.	New pressure-gauge.
Dec. 3	...	Portable	...	Verbal.	New pressure-gauge.
Dec. 4	...	Portable	...	Verbal.	New pressure-gauge.
Dec. 22	...	Vertical	...	Written.	New plate in furnace.
1885.					
Jan. 29	...	Portable	...	Verbal.	New pressure-gauge.
Feb. 5	...	Portable	...	Verbal.	New pressure-gauge.
Feb. 5	...	Portable	...	Verbal.	New pressure-gauge.

RETURN of NOTICES given to REPAIR BOILERS in the WESTLAND DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Boiler.			Nature of Repairs ordered.	
1885.					
Feb. 20	...	Tubular	...	Verbal.	New blow-off-cock and pipe.
Feb. 23	...	Cornish	...	Verbal.	Bolted patch on bottom to be removed, and wasted plate and angle-iron renewed before next inspection.
Feb. 23	...	Cornish	...	Verbal.	To be replaced by new boiler before next inspection.
Feb. 26	...	Vertical	...	Written.	New fire-box.
Feb. 27	...	Vertical	...	Verbal.	Four stays in crown of boiler.
Feb. 27	...	Vertical	...	Written.	New uptake.
Mar. 4	...	Locomotive	...	Verbal.	New set of tubes.
Mar. 16	...	Portable	...	Verbal.	New pressure-gauge.
Mar. 16	...	Vertical	...	Verbal.	New pressure-gauge.

RETURN of NOTICES given to REPAIR BOILERS in the NELSON SOUTH DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Boiler.	Nature of Repairs ordered.
1885. Mar. 23 ...	Tubular	Verbal. Longitudinal stays to be renewed.

RETURN of ACCIDENTS to BOILERS and MACHINERY reported as having occurred in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Accident.	Name and Address of Owner.	Nature and Cause of Accident.
1884. Aug. 4 ...	Thomas Crompton, Christchurch	Reported a leakage on bottom. On inspection, found it necessary to remove brickwork, and then discovered a crack in plate, caused by accumulation of dirt immediately over fire.
July 24 ...	Thomas York, Woolston	Reported a leakage on bottom. Upon inspection, found a patch (which I have allowed as a temporary repair) cracked. Had all the bottom renewed. Caused by impingement of heat in front of bridge.
Oct. 9 ...	T. J. Watters, Christchurch	Furnace leaking all over, caused by lighting fire when boiler was empty by mistake.
Dec. 23 ...	Springfield Colliery Company, Springfield	Reported leaking in furnace; caused by lighting fire in furnace, water, being low, having leaked out through blow-off cock in the night. Had front angle-iron and bad plates renewed.

I have no notices of above nature from Westland or Nelson South Districts.

RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Machinery.	Parts required to be fenced.
1884. June 12 ...	Saw-mill	Verbal. Driving-belt from fly-wheel of engine.
June 23 ...	Saw-mill	Verbal. Driving-belt from fly-wheel of engine.
July 2 ...	Foundry	Written. Fly-wheels and driving-belts of two engines.
July 24 ...	Printing	Verbal. Printing machinery being erected in new building.
Aug. 2 ...	Firewood saw-bench	Written. Top of saw-bench to be removed, and replaced by a top to slide with the wood to be cut.
Sept. 22 ...	Flax-mill	Verbal. Mouth of scutching-machine too open; directed how to protect.
Dec. 19 ...	Bone-mill	Written. Driving-belts from engine to shaft and from shaft to bone-mill.
1885. Jan. 30 ...	Flour-mill, water-power	Verbal. Belts passing through floor for driving the various machines.

I have always found owners very willing to comply with instructions to fence belts, &c.

RETURN of NOTICES given to FENCE DANGEROUS PARTS of MACHINERY in the NELSON SOUTH DISTRICT during the Financial Year ended the 31st March, 1885.

Date of Notice.	Description of Machinery.	Parts required to be fenced.
1884. April 22 ...	Saw-mill, Westport...	Verbal. To further protect driving-belt from first driving-pulley to shaft.

I did not require to give notice to fence in Westland District.

RETURN of ACCIDENTS to LIFE and LIMB which have occurred in connection with BOILERS and MACHINERY in the CANTERBURY DISTRICT during the Financial Year ended the 31st March, 1885.

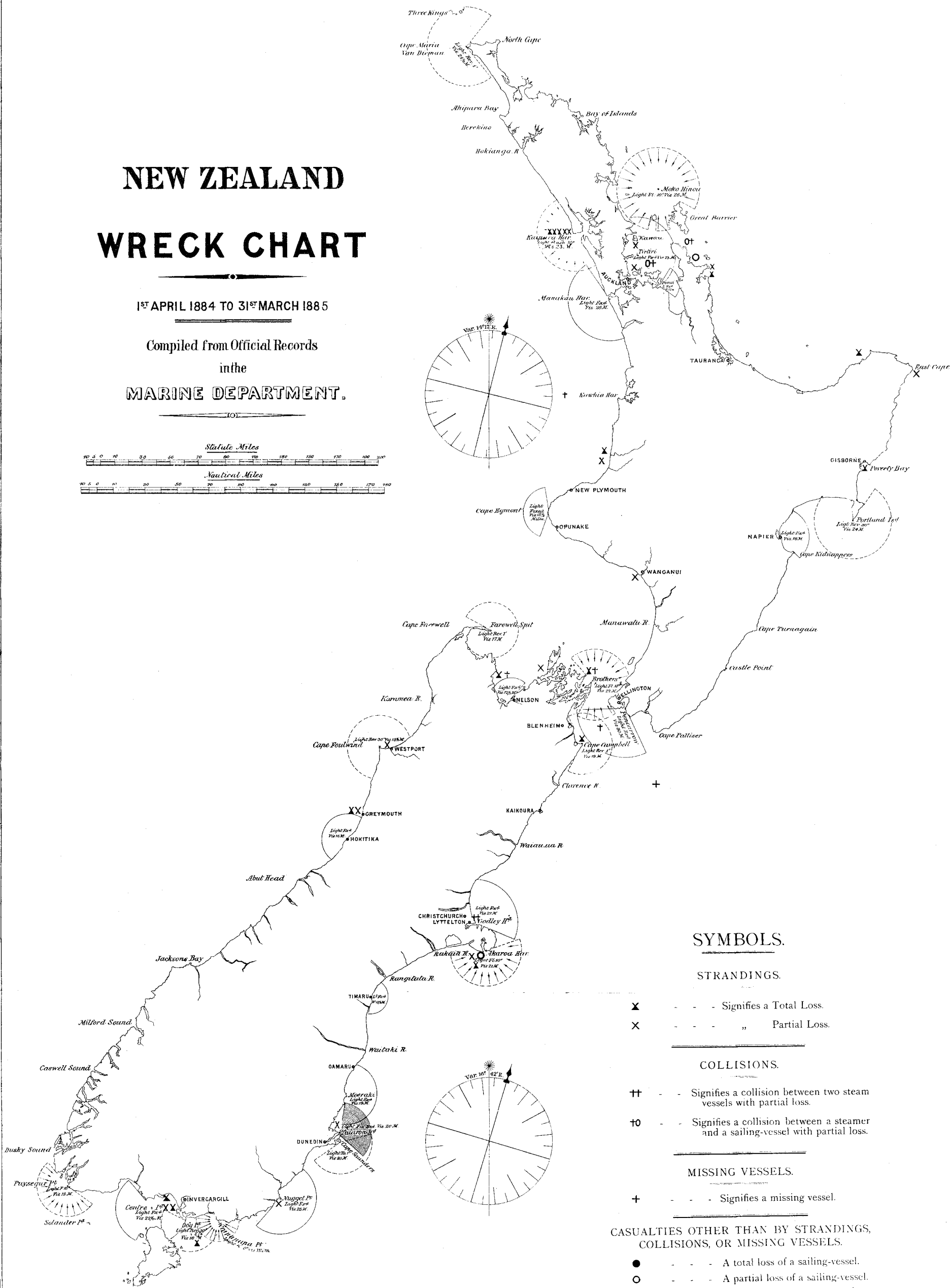
Name and Address of Owner.	Description of Machinery.	Name of Person injured.	Nature of Accident.	Fatal or not.	Cause of Accident, and Remarks.
William Smith, Ohoka	Threshing-machine	Patrick Quill	Loss of left hand	Not...	In feeding threshing-machine his hand became entangled and was drawn in.

The above is the only accident I have to report for Canterbury, and have none for Westland or Nelson South Districts.

NEW ZEALAND WRECK CHART

1ST APRIL 1884 TO 31ST MARCH 1885

Compiled from Official Records
in the
MARINE DEPARTMENT.



SYMBOLS.

STRANDINGS.

- X - - - Signifies a Total Loss.
- x - - - " Partial Loss.

COLLISIONS.

- ++ - - Signifies a collision between two steam vessels with partial loss.
- to - - Signifies a collision between a steamer and a sailing-vessel with partial loss.

MISSING VESSELS.

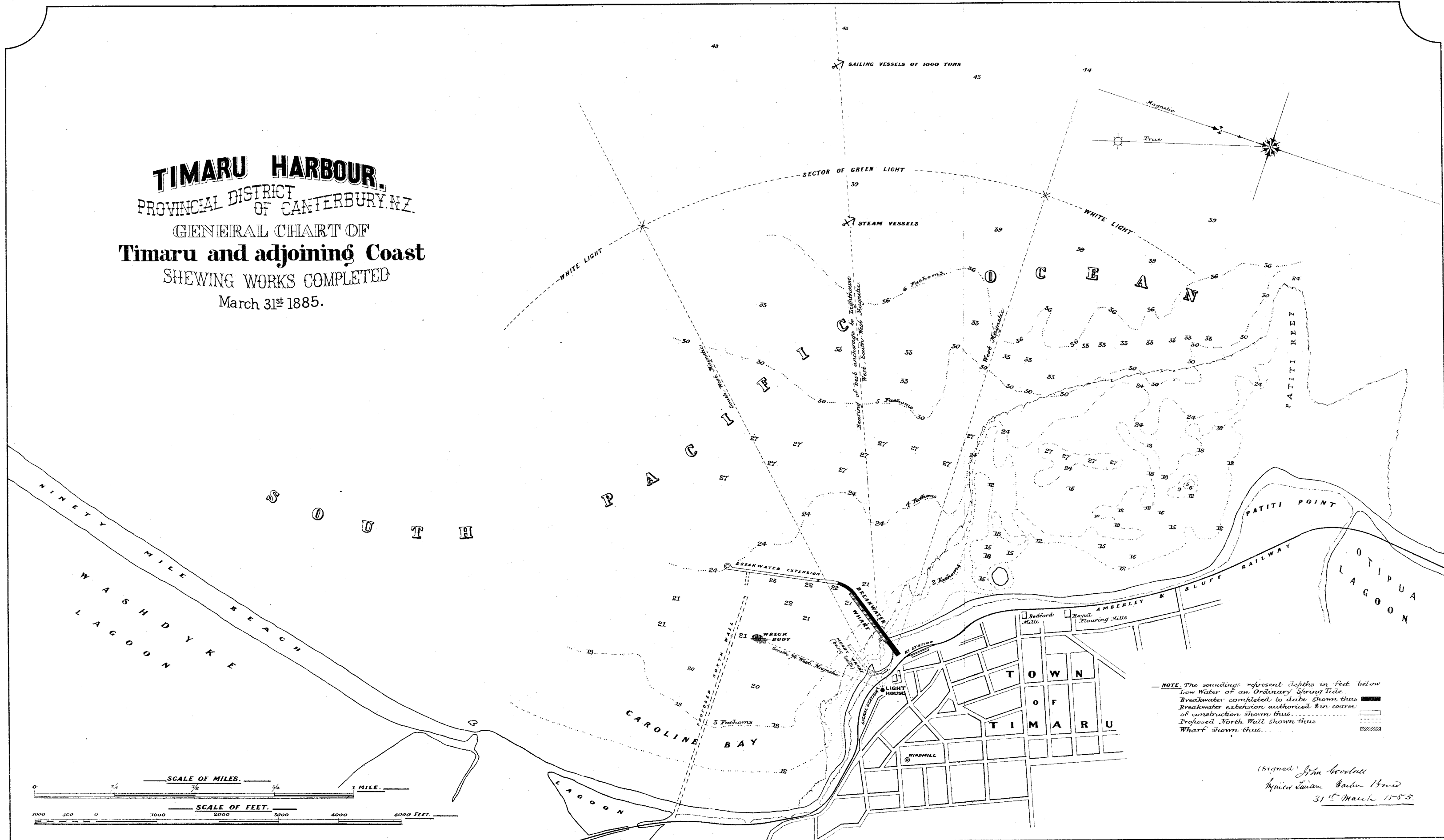
- + - - - Signifies a missing vessel.

CASUALTIES OTHER THAN BY STRANDINGS, COLLISIONS, OR MISSING VESSELS.

- - - - A total loss of a sailing-vessel.
- - - - A partial loss of a sailing-vessel.
- ↑ - - - A total loss of a steam-vessel.
- † - - - A partial loss of a steam-vessel.

Note.—Casualties resulting in slight damage are not shown on this chart.

TIMARU HARBOUR.
 PROVINCIAL DISTRICT
 OF CANTERBURY, N.Z.
 GENERAL CHART OF
Timaru and adjoining Coast
 SHEWING WORKS COMPLETED
 March 31st 1885.



NOTE. The soundings represent depths in feet below Low Water of an Ordinary Spring Tide.
 Breakwater completed to date shown thus
 Breakwater extension authorized & in course of construction shown thus
 Proposed North Wall shown thus
 Wharf shown thus

(Signed) John Goodall
 Hydrographic Surveyor
 31st March 1885.

PORT OF TIMARU.

THE Port of Timaru, which is the natural outlet of the large and fertile district of South Canterbury, whose export business in a few years will equal that of any port in New Zealand, is situated at a slight projection of the coast line at the south-west extremity of the Ninety-Mile Beach, south of Banks Peninsula. The Town of Timaru stands near the sea shore, partly on a rise. The lighthouse and flagstaff (only 40ft. apart) are on a cliff towards the north end of the town, in latitude $44^{\circ} 23' S.$; longitude $171^{\circ} 17' 20'' E.$ The breakwater, which is now 1,700ft. long, and is rapidly being pushed seawards, extends from the beach in a N.E. by N. direction, and will be seen when viewed from the sea to be in a line with the flagstaff.

The coast line from Banks Peninsula to Timaru is low, and cannot be seen in thick weather, or by night, until close in with the breakers, while southwards of the Town of Timaru the cliffs are from 30ft. to 50ft. high. This is a sure guide to Timaru—viz., low shingle beach northward, moderately high cliffs and headlands to the southward.

If the weather is clear, the high mountain range will be seen behind Timaru long before the coast line has risen. Burke's Pass, a remarkable gorge, almost directly behind Timaru, is a good landmark, showing a distinct gap, and should be steered for on a course W.S.W. magnetic; the cliffs above mentioned will prevent any mistake.

Directions.—Vessels bound for Timaru, after rounding Banks Peninsula, should steer S.W. by W. southerly unless the wind be strong from E.S.E., which causes an inset, when it is necessary to keep three-quarters of a point more southerly.

The shore from the end of the breakwater to Patiti Point, a long mile, S.S.E., is fronted by sand and shoal patches, with outlying reefs of rocks and kelp, always breaking, the reef extending nearly two-thirds of a mile direct to seaward from Patiti Point, and one and a half miles to the south-east from the breakwater at Timaru. "The reef off Patiti Point runs out a quarter of a mile further than is marked on the charts, and should have a wide berth."

From Patiti Point southward the coast is again formed of low cliffs, fronted by a shingle beach, and extends thirty miles in a south direction to Waitangi (chart, Waitaki) River, with several small streams intervening. A high mountain range 3,500ft. (the Hunter Hills), approach within a few miles of the coast, between Timaru and Waitaki River.

The Timaru lighthouse is 30ft. high; it is built of wood and painted white. The light is a fixed white light of the fifth order, dioptric, and shows a green sector of 45° (four points) from W. to S.W., magnetic, as viewed from seaward. It stands 85ft. above the sea level, and, allowing 15ft. for the height of the observer's eye, should be visible in clear weather at a distance of fourteen nautical miles.

The GREEN LIGHT is intended as a guide to vessels approaching Timaru during the night. Masters of vessels are particularly cautioned that on nearing the port, and while laying at anchor, they must not lose sight of the green light; also, that while under way, the lead-line should always be kept going.

Two red lights, 10ft. apart, are exhibited from the outer end of the breakwater, when weather permits, and show all round to seawards.

The accommodation for shipping under the shelter of the breakwater is now very considerable, and is being rapidly increased as the work extends. Moorings are laid down, to which several vessels can be well secured, moored head and stern. There are besides about 1000ft. available wharfage for berthing vessels. The depth of water is from 10ft. to 20ft. at low water, spring tides, and vessels drawing up to 16ft. are discharged and loaded with great facility, as the railway runs the whole length of the wharf, and steam cranes are always available.

A contract has been let for the construction of the Moody Wharf, as shown on the plan, and the work is now in progress.

In order to better secure the safety of the shipping of the port, and to give additional despatch, the Harbour Board has purchased a powerful tug, of 56 h.p. nominal, which is at all times available to facilitate the berthing and loading of vessels.

The towage rates have been made exceedingly liberal, to induce masters of vessels to avail themselves to the utmost of the services of the tug.

Signals.—The New Zealand General Signals are used.

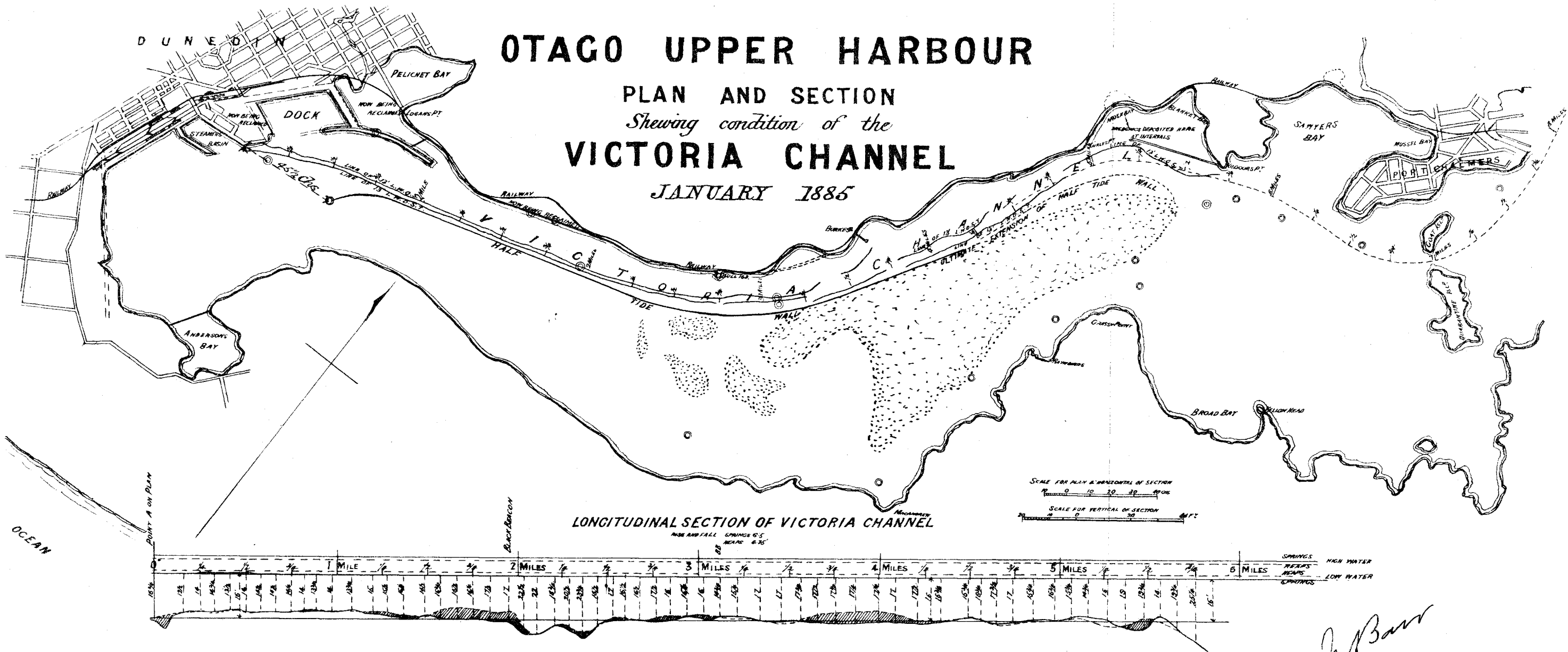
Vessels requiring a pilot may always rely upon being boarded.

It has been notified by the Harbourmaster that vessels frequenting the port should be provided with at least one extra heavy anchor and strong cable, and that vessels of large tonnage, say 800 tons register and over, must not anchor in less than seven fathoms of water, the flagstaff bearing W.S.W. Vessels of less tonnage may anchor closer in on the same bearing, but not within a mile and a half of the breakwater, and in no case must approach the breakwater or moorings without permission, in consequence of the rapid extension of the harbour works.

On the plan are marked the best anchorages for all classes of vessels, also the bearings from the lighthouse. High water, F. and C., at 3h. 30min.; spring tides, rise and fall, 6ft. 6in.

WM. WEBSTER, Harbourmaster.

Timaru, 31st March, 1885.

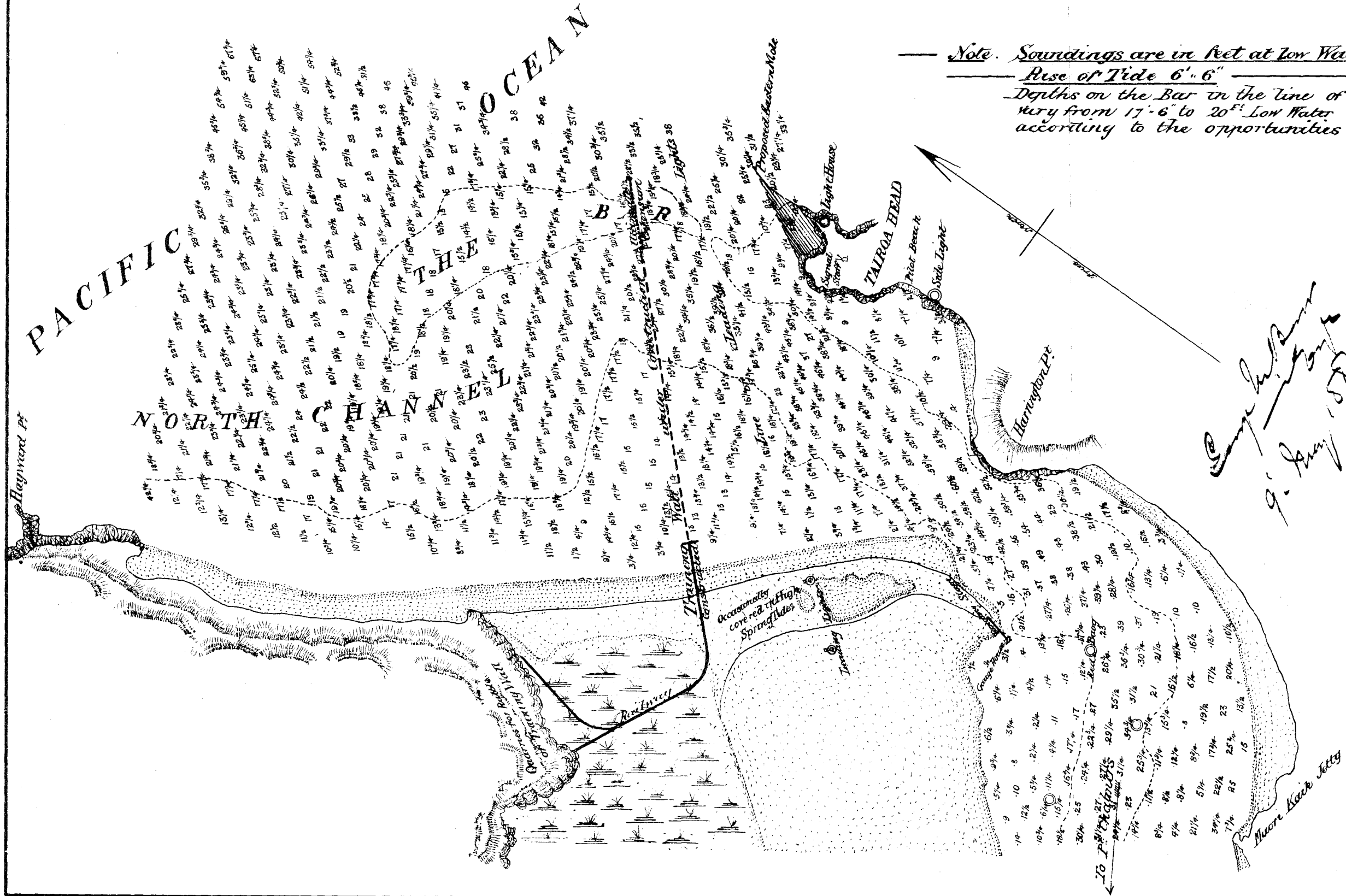
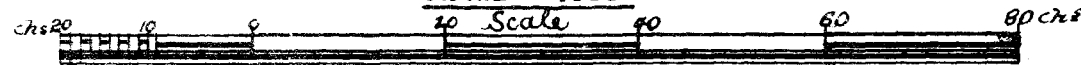


Bottom as in January 1884 Shewn thus: ---
 1885
 Portion Dredged during 1884 hatched thus:
 Portion scoured during 1884 Shewn thus:

Guy M Barr
9 May 1885

PLAN Shewing Works in progress at OTAGO HEADS

APRIL 1885



Note. Soundings are in feet at Low Water of Spring Tides

Rise of Tide 6' 6"

Depths on the Bar in the line of the Leading Lights vary from 17' 6" to 20' Low Water of Spring Tides according to the opportunities for Dredging

George J. J. J.
9. Aug. 1885

