

1877.  
NEW ZEALAND.

# MARINE DEPARTMENT

(ANNUAL REPORT OF THE).

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

MY LORD,—

Office of the Commissioner of Customs,  
Wellington, 4th September, 1878.

I do myself the honor to transmit herewith, for your Lordship's information, the Report of the Marine Department of this colony, for the financial year ended the 30th June last.

I have, &c.,

To His Excellency the Most Honorable  
the Marquis of Normanby, K.C.M.G., &c.,  
Governor of New Zealand.

G. GREY,  
Commissioner of Customs.

## REPORT.

SIR,—

Marine Department,  
Wellington, 2nd September, 1878.

I have the honor to submit the following report on the working of the Marine Department for the year ended 30th June last :—

The Government having decided to separate the Marine from the Customs Department, I was appointed Officer in Charge, and I assumed the duties of the office on the 9th April. A good deal of the local work of the Department is, however, done by the Collectors of Customs at the various ports, and I desire to thank those officers for the cordial manner in which they have carried out the instructions conveyed to them.

*Lighthouses.*—During the year the following lights have been exhibited for the first time, viz. :—Brothers on 24th September, Portland Island on 10th February, and Moeraki on 22nd April. The Brothers is a flashing white light of the second order dioptric, showing a flash every ten seconds, and there is a fixed red light in the lower part of the tower, which is seen from the direction of Cook's Rock. Portland Island is a revolving white light of the second order dioptric, attaining its greatest brilliancy every thirty seconds; here, too, there is a fixed red light in the lower part of the tower, which is seen from the direction of Bull Rock. Moeraki Light is a fixed white light of the third order dioptric. On the same night that the Brothers Light was first exhibited, the light on Mana Island was discontinued. It is proposed to use the Mana apparatus and tower for the Cape Egmont Light, and steps will be taken to move them to that place as soon as a site can be obtained from the Natives.

The local light at Timaru was finished towards the end of June, and was lighted on the 1st July last. This light is under the control of the Timaru Harbour Board.

It is anticipated that the Centre Island Light will be lighted in September, and the lights at Puysegur Point and Cape Maria Van Diemen in December or January next. Apparatus for a new local light at Hokitika, for which gas is to be used, has been ordered from England, but advice of its shipment has not yet been received. The lamps at Nelson, Godley Head, and Soames Island have been altered so as to burn paraffin, and, it being found that the mechanical lamps at Nugget Point were not so suitable for burning paraffin as the ordinary fountain lamps, a set of these latter has been ordered from Great Britain for that place.

Works in connection with the lighthouse to be built at Akaroa Head have been commenced, and it is believed that the tower and necessary buildings will be finished during the summer.

A report by the Marine Engineer on works in connection with lighthouses which have been executed under his direction during the past year is appended.

The harbour lights at several of our ports are not of sufficient power, and it is supposed that this is due to faultiness in the lamps and reflectors used. Three of the small port lights manufactured by Messrs. Chance Brothers and Co., of Birmingham, have been ordered as an

experiment. These should give a much better light than those commonly in use, whilst they will burn little, if any, more oil. Should they prove a success, I would recommend that a few of them should be imported, to be sold at cost price to any Harbour Boards that may require them. Two of these lights might also be very advantageously used for lighting the entrance to Tory Channel, where leading lights are much required.

Owing to the increased number of lighthouses, the duty of supplying them with oil and stores is constantly becoming more onerous. In connection with this fact, I desire to indorse the remarks made in previous reports by the Secretary of Customs as to the necessity for a store for the Marine Department. At present there is only a very small store in the Customhouse yard: it is quite full, and there is no place for storing spare articles for lighthouse use, or the spare gear belonging to the Government steamers. It is urgently necessary, therefore, that, as soon as the Thorndon Reclamation is finished, the site allocated for a store for this department should be handed over, and the necessary buildings be at once erected. The cost of the store will be recouped in a very few years by the saving it will make possible.

The following accidents have occurred during the year in connection with lighthouse works:—At Puysegur Point, on the 16th September, two of the contractor's men went in a small boat to try to cross Otago Retreat to Coal Island, where it was believed a fire was burning, which was presumed to have been lighted by shipwrecked men. It was afterwards found, however, that spray from a waterfall had been mistaken for smoke. At the time the men started it was blowing a heavy gale from seaward, and the boat is supposed to have been capsized, as a portion of her was found washed up on an island. The bodies of the men were not found. At the Brothers, on the 29th August, two men (a keeper and one of the carpenters employed on the works) were being lowered down the tramway, when the rope slipped, and the truck descended at a great speed. The carpenter threw himself off, and was stunned, but not much hurt; while the keeper was thrown over the rocks, and had his thigh broken. The same keeper, in June last, a few days after he had returned to the Brothers cured, fell down the lighthouse stairs, and again broke his thigh. He is now in the Wellington Hospital.

*Light Dues.*—The light dues collected at the various ports of the colony during the year amounted to £11,517 19s. 2d., being £482 15s. more than for the previous year.

*Government Steamers.*—Both the "Hinemoa" and the "Stella" are now under the control of this department. Regulations as to discipline, &c., and for insuring economy with regard to stores, have been brought into force. They also provide that the officers and crew are to wear uniform. The "Stella" has been almost exclusively employed on services connected with the department, such as landing materials for the construction of new and stores for the maintenance of existing lighthouses, placing in position and overhauling buoys and beacons, and executing small surveys. Now that there are lighthouses from the northern extremity of the North Island to the southern extremity of the Middle Island she will be kept almost constantly at lighthouse-service work; but in connection with this the various buoys and beacons under the control of the department can be attended to and small surveys can be made.

*Examination of Masters, &c.*—Certificates of competency have been issued to 141 candidates, 108 being for masters, mates, and engineers of sea-going vessels, and 33 for masters and engineers of river steamers.

*Steam Navigation.*—Passenger certificates have been issued to 109 steamers, of 10,164 tons and 3,937 horse power, being, in the aggregate, 2 steamers and 1,502 tons and 312 horse power less than were surveyed last year.

*Harbours.*—Various repairs and improvements have been carried out in connection with several harbours. A new house for the pilot has been built at Foxton; the signalman's house at Manukau Heads has been repaired; the removal of rocks in the Turanganui River (Poverty Bay) has been completed; a contract for the erection of beacon in Kaipara River has been let; and numerous buoys have been placed or renewed.

*Wharves.*—Advantage has been taken, in several instances, of the powers conferred upon the Governor in Council by "The Marine Act Amendment Act, 1877," to transfer the control of wharves at out-ports to Road Boards or other local authorities, it being believed that better management will thus be secured.

*Surveys.*—During the year the entrance to Hokianga Harbour and the bar there have been surveyed. Great changes were found to have taken place since the previous survey. New sailing directions were therefore prepared, and an amended chart of the bar is being prepared. A survey of the Galatea Channel over the Kaipara bar has also been completed, and an amended chart will shortly be issued. The southern channel over the Manukau bar, too, has again been surveyed, but the necessity for publishing a new chart for it is not great, as the signalman on the South Head can always discover the deepest water, and guide vessels through it by means of the shifting beacons and the semaphore. There are still several small surveys on various parts of coast that should be done.

*Naval Training School.*—The able report of the manager is forwarded herewith. The great difficulties at present in the way of proper management of the school are the want of quarters for the instructors, and the presence of a criminal element amongst the boys. The latter is the more important. If it can be got rid of through the establishment of a reformatory, the Kohimarama School may no doubt be made a success; but at present masters and owners of vessels, knowing what some of the boys have been, hesitate to take any of them as apprentices.

The "Southern Cross" has not been found suitable for an exercising vessel; but, if a small schooner (for the purchase of which a sum is on the estimates) is obtained, so that the boys can be taken on short cruises in Auckland Harbour or the Hauraki Gulf, great good to the school will no doubt result.

*Weather Reporting.*—I forward herewith a report by Captain Edwin on the Weather Reporting Office. It was found necessary about the close of the financial year to appoint an officer to assist Captain Edwin. The number of warnings sent during the year has been very great, and, according to the returns, a large percentage proved correct, although many of the warnings did not refer to great or marked changes in the weather. I propose to instruct Harbour Masters at the various ports under the control of this department, and all lightkeepers, to keep simple tidal and meteorological records, which I have no doubt will be valuable aids towards the more important work of the Weather Reporting Department.

*Wrecks and Casualties.*—During the year, 61 casualties were reported to this office, 52 of which occurred on or near the coasts of the colony. Of these, 23, affecting vessels of an aggregate of 4,162 tons, were cases of total wreck (in this, however, is included the "Hydrabad," which it is possible may be recovered), while 29, affecting vessels of 3,479 tons in all, were cases of partial loss only. The number of lives lost on or near the coasts of the colony was 20, viz., 5 from the "Lionel," 6 from the "Excelsior," and 4 from the "Clan Alpine" (all hands in these vessels being lost), 2 each from the "Echo" and the "Zion," and 1 from the "Queen Bee." Nine casualties were reported as having occurred beyond the colony, consisting of 6 total wrecks, with an aggregate tonnage of 1,615, 2 partial losses (tonnage 2,588), and 1 case of only loss of life. The total of lives lost in these cases was 12, viz., 7 from the "Hinemoa" (lost with all hands), 2 from the "Emma," and 1 each from the "Bencleuch," "Kedar," and "Kentish Tar."

The usual returns showing expenditure, wrecks, and casualties, &c., are appended hereto, as is also the usual wreck chart.

I have, &c.,

R. JOHNSON,

Officer in Charge.

The Hon. the Commissioner of Customs, Wellington.

### Enclosure 1.

The MARINE ENGINEER to the OFFICER IN CHARGE, Marine Department.

SIR,—

Marine Office, Wellington, 30th June, 1878.

I have the honor to forward, for the information of the Hon. the Commissioner of Customs, the annual report on works executed for new lighthouses during the year, viz.:—

*Brothers.*—At date of last annual report all the works in connection with this lighthouse were near completion, and the light was first exhibited on the 24th September, 1877.

*Portland Island.*—The contract for this work was completed after considerable delay, and the light established on the 10th February, 1878. The description of the light is as follows:—Tower, 28 feet high, of timber, painted white; the light is of the second order revolving white light, visible all round; greatest brilliancy every thirty seconds. It is 300 feet above the level of the sea, and, allowing 15 feet for height of eye, it will be seen 24 nautical miles, in clear weather.

A fixed red light, having an arc of about six degrees, is shown in the direction of the Bull Rock, from the lower part of the tower.

*Centre Island, Foveaux Strait.*—The works of this lighthouse have been all satisfactorily completed under contract; the lantern and apparatus have since been fixed, and it is expected that everything will be ready for lighting up about the end of August. The light is of the first order, fixed; with red arcs thrown over the inshore dangers.

*Puysegur Point, Preservation Inlet.*—The contract works at this lighthouse have also been satisfactorily completed, and the tower is now ready to receive the lantern and apparatus, the erection of which will be begun in a few days.

*Moeraki.*—Since my last report all the works have been completed under contract, the lantern and apparatus fixed, and the light exhibited on the 22nd April, 1878. This is a third order fixed white light, visible 19 miles. The site of this lighthouse is on the southern extremity of the Moeraki Peninsula, overlooking the Kargiti Beach.

*Timaru Harbour Light.*—As reported last year, tenders were called for this work, which consisted of the lighthouse tower and a dwelling for the keeper. A contract was entered into, which, after numerous delays and difficulties, was completed long after the contract time. The lantern and apparatus were then fixed, and the light will be exhibited on the 1st July, 1878. The official description of the light is as follows:—It is a fixed white light of the fifth order; it will be visible from N. 20° W. to S. 20° E. The tower is 30 feet in height. The light is elevated 85 feet above the sea, and will be seen, in clear weather, at a distance of 14½ miles.

*Hokitika Harbour Light.*—The lantern and apparatus for this have been ordered from Home, but no advice of their shipment have been received.

*Cape Maria.*—A working party was sent to this place in August last, and I am now glad to be able to report that all the buildings at this station will be completed about the end of August, and ready for the reception of the lantern and light apparatus. The works here have gone on very steadily, and without hitch of any kind, although the landing-place at times offers serious difficulties in landing materials under certain states of the wind.

*Akaroa*.—As previously arranged, an overseer and working party were despatched to this place in April last, since which they have been engaged in preparing a landing-place and cutting a roadway, mostly in rock, from it to the site of the lighthouse. Plans have been prepared for the tower and dwellings, and the material for their erection will be despatched as soon as the roads and other works of excavation are complete.

*Cape Saunders*.—Surveys have been made of the new site, with a view of acquiring the land, but the question of determining the best landing-place has delayed the completion of the plans. This, however, will be decided on on the next southern trip of the “*Stella*,” about the middle of July, and the plans will then be completed as speedily as possible.

*Mokohinau, Hauraki Gulf*.—It was hoped that the land required for a site for this lighthouse would have been acquired before this; but, as no reasonable terms can be arranged with the owner, it will be necessary to take it under “The Public Works Act, 1876,” arrangements for doing which are now in hand.

During the year I have visited the following lighthouses, where works were in progress or contemplated :—

1877. 13th September, Portland Island, to inspect progress of works; 15th December, the same; 25th December, Cape Maria, to inspect progress of works, and to arrange for erection of permanent tramway, and preparation of landing-place, fixing of crane, &c.

1878. 5th February, Cape Farewell, to inspect generally, but more particularly state of wood framing of the tower, which I found to be satisfactory; 14th March, Moeraki, to inspect progress of works; 18th April, Hokitika, inspected site, and obtained general information.

I have, &c.,

JOHN BLACKETT,  
Marine Engineer.

The Officer in Charge, Marine Department.

## Enclosure 2.

### REPORT ON NAVAL TRAINING SCHOOL, KOHIMARAMA.

The MANAGER, Naval Training School, Kohimarama, to the OFFICER IN CHARGE, Marine Department.

SIR,—

Naval Training School, Kohimarama, 30th June, 1878.

I have the honor to transmit, for the information of the Hon. the Commissioner of Customs, the following report on the abovenamed institution for the past twelve months.

The health of the boys generally has been very good; there have been but few serious cases, and those mostly resulting from accidents. Full information on these subjects will be found in the report of the Medical Officer, which is attached hereto.

Table A gives the educational progress of the boys, which is, on the whole, I think, satisfactory; the frequent change of schoolmaster has been a considerable drawback, but I trust that the person at present holding the position will be willing to retain it.

In seamanship the progress has not been what I could desire. This I attribute to the want of a suitable vessel for training the boys; but, despite this drawback, some of them have made considerable progress.

Table C gives the list of clothing made and other work done in the school, under the efficient instruction given by Mrs. Speight; the boys generally continue to improve in sewing. During the last six months cap-making has been undertaken; so that, with the exception of boots and socks, every article of clothing is now manufactured in the school.

Twenty-nine boys have been admitted and thirty-seven discharged, leaving seventy-one now on the register, of which number two are out on license (*see* table D).

Table B contains the record of visits paid by clergymen for holding Divine service and imparting religious instruction.

The conduct of the boys has not been so satisfactory as I could wish. This is, in my opinion, mainly attributable to the presence of a few very bad characters, who, to a great extent, give the tone to the others. Both sections 9 and 10 of the Act have contributed their quota of these: the former of these sections is in many instances too liberally interpreted (*see* table E), but it is also a fact that some of the worst-behaved and most irreclaimable boys have been sent here under the provisions of section 10, whilst it is particularly noticeable that section 8, under which eleven twenty-fifths of the boys have been sent here, has contributed only a couple of really bad characters. Cases of absconding have been numerous: particulars of these are given in table L. In most cases, I believe, the boys go simply for the sake of a little change; a vessel for cruising would, I think, afford this. It is worthy of remark that since apprenticing to shore trades has ceased, a little over four months, there have been thirty-five cases of absconding, and only six during the previous eight months, when the boys were being rapidly discharged to service.

The garden and farm work connected with the school has been carried on with good results, and is a source of considerable profit.

Table I. gives the number of boys who have been apprenticed during the twelve months, and the trades to which they have been indentured. A considerable demand continues to exist for boys from this institution for farm-work, particularly in those districts to which boys have already been sent from the school.

Table K. shows the conduct of boys who have been apprenticed from the school since its establishment, and gives a result of a most satisfactory nature.

The appearance of the boys is, I think, evidence that they are well fed. The cost of ration for the past twelve months has been a little under sixpence per head per diem (5·827 pence), which includes fuel, lights, soap, seeds for farm and garden, and, for the last six months, the cost of conveying the provisions from Auckland to the school.

Subject to the approval of His Lordship the Bishop of Melanesia, the trustees of the mission have consented to resume the charge of the old schooner at present attached to the school; and I trust that before long His Lordship's consent to this may be received. The question of providing a suitable vessel is one to which I would urge special attention. For general purposes I believe a small schooner of from twenty to forty tons would be the best. She could be fitted with exercising yards, and would, at most, entail but one additional hand, and would be available for cruising, fetching stores, &c., in all weathers; whilst a large vessel could not be got under weigh safely from this anchorage with the wind strong from N.E. by way of North to N.W., and for sea-cruising would require an additional staff of at least four men and two officers; at the same time, it cannot be doubted that the boys visiting the different ports in a vessel worked mainly by themselves would bring the institution more prominently under the notice of shipowners.

The erection of cottages to enable the instructors to have their families residing near them would, I imagine, go far towards keeping men for long periods. Single men soon, as a rule, tire of the worry and confinement, and, having no ties, seldom remain long. Recently there has been great difficulty in obtaining men, and for two months, prior to the increase of pay recently authorized for seamen-instructors, the schoolmaster and myself had to carry on the entire duties of the school, which not only entailed a very harassing increase of work, but materially interfered with the efficient conduct of the school. During this period several married men applied for employment, but, on finding that they could not bring their families with them, declined to join.

I referred in my last report to the establishment of a penal school, and my subsequent experience has confirmed me in the opinion that great advantage would accrue from the existence of such an institution.

I would also recommend that a space should be housed in for the boys to play in in wet weather and in the evenings—at present the schoolroom, lumbered as it is with desks and forms, is the only place they have to go to; also that a closet should be attached to the dormitory for night use, the system at present in force of using buckets in the building being very objectionable on sanitary grounds.

In conclusion, I have great pleasure in testifying to the energy of the existing staff, and to the ready co-operation I receive from them at all times.

I have, &c.,

G. R. BRETON,

Manager.

The Officer in Charge, Marine Department.

A.—TABLE showing the Educational State of Boys.

Particulars.	Read.				Write.				Cipher.			
	Well.	Indiffer- ently.	Not.	Total.	Well.	Indiffer- ently.	Not.	Total.	Well.	Indiffer- ently.	Not.	Total.
Remaining on 30th June, 1877...	22	55	2	79	18	55	6	79	10	66	3	79
Admitted during year ending 30th June, 1878 ...	10	12	7	29	3	17	9	29	7	8	14	29
Total ...	32	67	9	108	21	72	15	108	17	74	17	108
Discharged during year ending 30th June, 1878 ...	14	22	1	37	25	11	1	37	11	19	7	37
Remaining on 30th June, 1878...	42	27	2	71	33	31	7	71	9	58	4	71
Total ...	56	49	3	108	58	42	8	108	20	77	11	108

B.—TABLE showing the Visits of Clergymen for Divine Service and Religious Instruction during the Year ending 30th June, 1878.

Roman Catholic.	Church of England.
28	49

C.—RETURN of Articles Manufactured and Work done in the School during the Twelve Months ending the 30th June, 1878, with estimated Cost of Labour employed.

Articles.	Quantity.	Rate.	Price.	Articles.	Quantity.	Rate.	Price.
		s. d.	£ s. d.			s. d.	£ s. d.
Trousers, serge ... ..	155	1 10	14 4 2	Amount brought forward ...	...	...	42 10 5
„ duck ... ..	130	1 0	6 10 0	Caps, serge ... ..	102	1 0	5 2 0
„ oilskin ... ..	16	1 0	0 16 0	„ duck... ..	24	1 0	1 4 0
Frocks, serge ... ..	126	1 5½	9 3 9	Sheets ... ..	10	0 6	0 5 0
Jumpers, duck ... ..	79	1 0	3 19 0	Oars repaired ... ..	12	0 6	0 6 0
„ oilskin ... ..	15	1 0	0 15 0	Windows glazed ... ..	40	0 6	1 0 0
Flannel shirts ... ..	201	0 7	5 17 3	Fencing erected ... ..	3 chains	6 0	0 18 0
Mattress covers ... ..	64	0 6	1 12 0	Shed for storing potatoes ...	...	...	1 0 0
Pillow „ ... ..	42	0 1½	0 5 3	Sundry repairs and alter-	...	...	8 0 0
Neckerchiefs ... ..	48	0 2	0 8 0	ations... ..	...	...	...
Amount carried forward ...	...	...	42 10 5	Total ... ..	...	...	61 5 5

D.—RETURN of Admissions and Discharges during the Year ending 30th June, 1878.

Admitted.	Number.	Discharged.	Number.
Committals ... ..	29	Apprenticed ... ..	22
Remaining on 30th June, 1877 ...	79	Time expired ... ..	5
		On application of relatives ...	8
		Sent to gaol ... ..	2

Remaining on 30th June, 1878, 71; two of whom are out on license.

E.—TABLE showing particulars of Parentage of Boys received during Year ending 30th June, 1878.

Number of Boys Received.	Both Parents Living.	One Parent Living.	Both Parents Dead.	Unknown.
29	13	14	2	...

Circumstances as shown in Register.

Sent under Section 8 of Act ... ..	5	Charged with larceny ... ..	1
„ 9 „ ... ..	8	Father in gaol for stabbing a man ...	1
„ 10 „ ... ..	13	Charged with robbing several dwelling-houses ;	
„ 11 „ ... ..	3	pleaded guilty to same ... ..	1
		Father drowned at sea ... ..	1
		Father deserted ... ..	1
		Father invalid ... ..	2
		Stepmother ... ..	2
		Stopfather ... ..	1
		Stealing from a dwelling ... ..	1
		Stealing from dwelling ; previous complaint of	
		same nature stealing on board steamer ...	1
		Robbing orchards ... ..	1
		Mother destitute and drunkard ... ..	2
		Obtaining goods by false pretences ...	1
		Bad ; stolen five pounds ... ..	1
		False pretences and stealing ... ..	1
		No particulars received ... ..	11
Total ... ..	29	Total ... ..	29

F.—TABLE showing from whence Boys have been received during Year ending 30th June, 1878.

Newcastle ... ..	2	Greymouth ... ..	3
Shortland ... ..	1	Nelson ... ..	1
Westport ... ..	1	Invercargill ... ..	2
Napier ... ..	1	Wellington ... ..	3
Hamilton ... ..	1	Dunedin ... ..	2
Thames ... ..	5		—
Oamaru ... ..	1	Total ... ..	29
Auckland ... ..	6		

G.—TABLE showing Ages of Boys received during Year ending 30th June, 1878.

Number of Boys Received.	Aged						
	10	11	12	13	14	Under 15	Not given.
29	3	8	7	6	2	1	2

H.—TABLE showing Religion of Boys received during Year ending 30th June, 1878.

Protestant.	Roman Catholic.	Baptist.	Church of England.	Presbyterian.	Total.
2	8	2	11	6	29

I.—TABLE showing the number of Boys Apprenticed during Year ending 30th June, 1878.

Seamen.	Farmers.	Stock Farmers.	Servant and Messenger.
8	9	4	1

K.—TABLE showing particulars of Conduct of Boys apprenticed from the School.

Number Apprenticed.	Good Report.	Indifferent Report.	Bad Report.	No Report.
39	27	4	6	2

RETURN of Absconders during Twelve Months ending 30th June, 1878.

Names.	No.	No of times absconded during above-named period.	Previous to 30th June, 1877.	Remarks.
Keighley, Edward ...	126	1	...	Broke into a house ; sent to gaol.
Ryan, John ...	35	1	1	Not apprenticed, but discharged at expiration of his time.
Wilson, Palmer ...	117	3	2	Last two occasions came back voluntarily.
Harvey, Thomas ...	118	2	1	Ditto.
Nicholson, Antonio ...	60	1	...	Apprehended by police.
King, Henry ...	83	1	...	Ditto.
Buden, James ...	87	1	...	Ditto.
Megerney, Edwin ...	112	1	1	Last time came back voluntarily.
Quin, Thomas ...	18	3	3	Apprehended by police.
Hanson, James ...	90	2	...	Ditto.
Towers, Edgar ...	100	2	...	Ditto.
O'Connor, Michael ...	122	3	...	Ditto.
Agnew, Benjamin ...	135	3	...	Ditto.
Roberts, Edward ...	40	2	3	Last time came back voluntarily.
Walsh, Thomas ...	140	1	...	Stole a boot ; sent to gaol.
Smith, Henry ...	16	1	...	Apprehended by police.
Negus, Charles ...	114	2	...	Ditto.
Moore, Isaac ...	47	1	...	Ditto.
Westlake, Samuel ...	103	1	...	Ditto.
Reid, Hugh ...	111	2	1	Ditto.
McGrath, Patrick ...	115	1	1	Last time came back voluntarily.
Jesser, James Thomas ...	110	1	1	Ditto.
Weston, Joseph ...	139	1	...	Brought back by his mother.
Mourilyan, Wm. Thomas ...	57	1	...	Apprehended by police.
Heatly, Charles ...	143	2	...	Ditto.
Courtis, Arthur ...	150	1	...	Ditto.

## Enclosure 3.

Dr. GOLDSBRO' to the OFFICER in CHARGE, Marine Department.

SIR,—

Auckland, 30th June, 1878.

I have the honor to report that during the past year the health of the inmates of the Naval Training School has been on the whole satisfactory.

There have been several severe cases, requiring considerable attention and surgical aid. One of these, E. Wilton, had an injury to the right leg, caused by a fall, followed by erysipelas

of a most violent type, and resulting in disease of the leg, requiring many operations for the removal of diseased bone, upwards of twenty-eight pieces having been extracted by myself. The wounds are now almost closed, the boy able to walk about, and resume light duty.

Another, William Miller, had a severe injury to the ankle-joint before admission into the school, and, from a sprain, violent inflammation supervened, and this case also required many operations, and gave enormous trouble for many months not only to myself but to the school authorities. He is now quite recovered.

I have inspected every boy in the school weekly, examined every one on admission, made eighty visits during the year, and attended 569 cases, exclusive of a large number of boys suffering from scabies (itch and Maori pock), which have given considerable trouble for the last six months to all concerned, and I have only this week been enabled to give a clean bill of health to the establishment as regards these diseases.

The accommodation for the sick is inefficient, and the supply of hospital requisites of a most meagre character, and it reflects considerable credit on all concerned that so much has been done with so few appliances.

I have made three night journeys during the year; these I made in an open boat. The cases requiring such attendance were of an urgent type, such as inflammation of the windpipe and strangulated hernia. These journeys took several hours to accomplish, and gave the manager and boys in the boat hard work.

In consequence of the breaking down of the Government steam launch, I have been compelled to go by land for several months. The road is bad and rough, and at times, especially during winter months, frequently dangerous. I have necessarily been compelled to hire a strong carriage to enable me to make my weekly journeys, and last Saturday I had great difficulty in paying my visit under any circumstances, the road being so rough and cut up in consequence of continual bad weather.

I have again to thank Captain Breton, the Manager, for the assistance given to me, the great promptitude shown in cases of emergency, and his unwearied attention to the surgical ones requiring more than ordinary care. He has personally taken me to and brought me back from the school in the night, and when possible brought cases of accident up to town to visit me, thus preventing the double journey and extra fatigue to myself and the boys forming the boat's crew.

I would suggest that a small supply of hospital appliances and necessaries be granted to this institution, rendering treatment more easy, and conducing to the comfort of the patients under medical supervision; also, that some provision be made for isolating cases of itch, Maori pock, &c., thus rendering the spread of disease more difficult, and enabling medical treatment to be carried out more satisfactorily in future.

I append a list of the most serious cases attended during the year (no death has occurred during the year):—Smith, consumption; Bentley, epilepsy; Shield, T., strangulated hernia, reduced without operation, and a truss fitted; special journey from 10 p.m., 10th December, to 1 a.m., 11th December, 1877. Good, W., and Edmunds, A., jaundice; Jesse, W., incised wound opening into elbow-joint. Keen, M. H., acute rheumatism.; special journey at night. Wm. Miller, old injury to ankle, causing abscess of joint, &c., requiring many operations; Bateman, W., acute laryngitis; two attacks, requiring night visits from 10.30 p.m., on 9th July, to 1 a.m. 10th July, 1877. Wilton, E., disease of bones of leg; this case was upwards of nine months in hospital, and underwent many operations, both under chloroform and without.

I have, &c.,

CHARLES F. GOLDSBRO', M.D., M.R.C.P., M.R.C.S.,  
The Officer in Charge, Marine Department. Medical Officer.

Average number of boys in the school during the year commencing 1st July, 1877, and ending 30th June, 1878: seventy-one and two-twelfths:—

1877.			1878.		
July	..	77	January	..	68
August	..	78	February	..	64
September	..	78	March	..	65
October	..	74	April	..	69
November	..	75	May	..	68
December	..	71	June	..	67

#### Enclosure 4.

Commander R. A. EDWIN to the Hon. the COMMISSIONER of CUSTOMS.

Wellington, 6th August, 1878.

I BEG to submit for your consideration the fourth yearly report upon the experimental system of storm warning, and in doing so am desirous of drawing your attention to return No. 1, showing the value of the storm warnings received at individual stations during a period of nine months. I had hoped to be able to afford this information for the whole year, but unfortunately an illness caused a suspension of the work for some time, and I have therefore only included in this year's returns the period during which I am confident the duties were fully resumed. No returns have



been received from Grahamstown, and those for Lyttelton and Bluff, being only made out for six months, are not included in table 1. The percentages of correct forecast at these places are: Lyttelton, direction of wind, 84·4; force of wind, 43·8; barometer movement, 65·5; and sea movement, 66·6. At Bluff, direction of wind, 80·7; force of wind, 52·9. But no result has been given for forecast of barometer and sea movement.

The percentages of direction of wind and barometer movement are the best test of the value of the weather forecast, but the lower percentage of force of wind would at first appear to indicate that the warnings are sent out more frequently than is necessary; as, however, few places are exposed to all winds, it follows that, should gales come from directions from which many of the stations are sheltered, the force as given in the returns will be lower than would be the case under other circumstances; but the barometer movement would be the same in either case, and therefore it is a truer test of the value of the work; but this movement cannot always be anticipated under present circumstances. The forecast of sea movement is frequently sent, and the result is shown in the table. It is 8 per cent. less than that of last year, but the information afforded by this forecast has proved useful on the coast, and it is also of value in ascertaining whether the warnings have been issued on reliable data, for at times there is much sea on the coast though the wind remains moderate. The sea is thus an evidence that the disturbance was in our neighbourhood. This table also shows the proportion of gales which were experienced at each place without warning having been sent of their approach. These instances have in a great measure arisen from the interruption caused to the weather report by Sundays and holidays. The mean for the whole period is 0·4 per cent., as against 1·09 of last year. At the foot of this table a mean value of each description of forecast is given. Return No. 2 shows the monthly result for the whole colony, the mean of which is found to be nearly the same as that for each place individually.

No. 3 is a comparative return. It shows the monthly result of each description of forecast during the same period in the last two years, and is very instructive.

Returns No. 4 and No. 5 illustrate the manner in which the warnings are distributed, and show the result at each place. The warnings of the 17th May, 1878, comprised the whole colony, as the forecast showed the approach of disturbance of very large area; those of the 29th and 30th May show the manner in which the warnings are usually issued, the telegrams for the North being sent a day later than those for the southern districts. About 30 per cent. only of the warnings are sent to places situated north of Napier.

The remaining returns illustrate the manner in which the information sent to the various stations is returned to the central office. It is from such material that the accompanying returns of percentage value are derived, and I beg to draw your attention to the results of forecasts of high tides and cold weather, as shown in these returns, which will, I hope, be found worthy of perusal.

As the results of the warnings are in all cases decided by the officers who receive them, it is hoped that they will be considered as unbiassed information. I have made no return of the result for Wellington, as I should have to make them out myself, and they might therefore be considered too favourable. The results for New Plymouth may be considered the same as those for Opuake.

During the past year the work of this office has on more than one occasion been favourably noticed by the Press, and for the last seven months daily forecasts have been published in the Wellington evening papers. From the experience already gained, I have no hesitation in saying that a daily forecast could now be sent to such other evening papers as care to publish it. The Press Agency would no doubt undertake to forward it; but, to insure the forecast being in time for daily publication at all other places, it will be absolutely necessary to have the report complete by 10 a.m. at the latest. To enable the morning papers throughout the colony to publish a weather forecast, a second complete daily weather report will be required at a later hour, as, under the present circumstances, so far as the morning papers are concerned, the interval between the completion of the forecast and its publication is so great that the information is of very little use.

It has been a matter of much regret to me that the recommendation of the Committee on Weather Reporting last session was not confirmed, but in the interval I have received every facility from Dr. Lemon and the officers of the Telegraph Department.

Since the latter part of June last the Government have afforded me the much-needed assistant, and, should this gentleman have higher remuneration offered to him than he receives at present, I have every hope that he will become efficient in the duties of weather forecast. During the last visit of H.M.S. "Wolverine" to this colony, Commodore Hoskins frequently availed himself of such information as I could afford him relative to probable changes in the weather, and was good enough to express himself very favourably as to the result of the forecasts received.

R. A. EDWIN,  
Commander R.N.

The Hon. the Commissioner of Customs.  
2—H. 12.

RETURN showing Percentage of Correct Forecast at the under-mentioned Places during Nine Months ending 30th June, 1878.

Place.	Forecast of Direction of Wind.	Forecast of Force of Wind.	Forecast of Barometer Movement.	Forecast of Sea Movement.	Gales Without Warning.	Remarks.
	%	%	%	%	%	
Hokianga ... ..	97.2	64.0	82.9	...	...	The warnings are limited to area of 12 points of the compass.
Russell ... ..	93.2	71.7	69.0	71.4	2.2	
Whangarei ... ..	100.0	39.5	77.7	...	...	
Coromandel ... ..	82.9	22.5	77.0	...	...	Force—7 of Beaufort scale is the lowest for which warnings are considered as being verified.
Tokatea (altitude, 1,200 feet) ...	75.0	56.5	80.9	...	...	
Manukau (altitude, 900 feet) ...	97.7	51.1	73.2	78.3	...	
Auckland ... ..	87.0	39.0	65.8	...	...	
Cambridge (altitude, 200 feet) ...	93.2	71.4	72.5	...	...	
Tauranga ... ..	75.5	63.2	77.7	43.0	2.0	
Opotiki ... ..	90.7	46.0	88.0	84.2	2.3	
Taupo (altitude, 1,200 feet) ...	95.6	72.7	75.6	...	...	
Gisborne (Poverty Bay) ...	82.1	52.6	75.0	92.3	...	
Opunake (altitude, 100 feet) ...	91.3	54.9	75.3	77.7	1.2	
Napier ... ..	96.2	65.4	87.5	85.7	1.8	
Wanganui ... ..	98.7	61.0	72.5	...	1.3	
Castlepoint ... ..	96.1	52.7	90.0	100.0	...	
Nelson ... ..	91.3	28.3	86.4	...	...	
Tophouse (altitude, 2,200 feet) ...	87.5	87.5	70.2	...	...	
Blenheim ... ..	92.8	36.8	73.4	...	...	
Westport ... ..	71.2	25.0	75.7	61.5	...	
Kaikoura ... ..	53.1	52.1	80.5	...	...	
Kekerangu ... ..	97.1	91.2	89.1	75.0	...	
Hokitika ... ..	94.9	25.3	89.2	77.7	...	
Bealey (altitude, 2,180 feet) ...	94.9	61.0	70.9	...	...	
Lyttelton ... ..	...	...	...	...	...	
Timaru ... ..	77.2	63.6	72.4	21.5	...	
Oamaru ... ..	83.5	47.2	66.2	31.5	...	
Naseby (altitude, 2,000 feet) ...	94.7	23.8	85.0	...	...	
Port Chalmers ... ..	87.5	65.6	73.8	...	...	
Balclutha ... ..	98.0	43.1	76.9	...	...	
Queenstown (altitude, 1,100 feet) ...	100.0	58.0	86.2	...	1.8	
Roxburgh (altitude, 300 feet) ...	90.2	44.3	92.2	...	...	
Mean average for nine months ...	89.23	52.80	78.99	67.67	0.40	

RETURN showing Monthly Percentage of Correct Forecasts for the whole Colony for Nine Months, October, 1877, to June, 1878.

Month.	Forecast of Direction.	Forecast of Force.	Forecast of Barometer.	Forecast of Sea.	Without Warning.	Remarks.
	%	%	%	%	%	
October, 1877 ... ..	85.44	60.14	77.54	68.00	...	The warnings are limited to an area of 12 points of the compass.
November, 1877 ... ..	92.50	47.52	80.72	56.52	...	
December, 1877 ... ..	86.85	35.39	85.54	67.57	...	
January, 1878 ... ..	88.88	57.64	77.67	61.22	...	Force—7 of Beaufort scale is the lowest for which warnings are considered as being verified.
February, 1878 ... ..	83.05	44.83	69.94	57.14	...	
March, 1878 ... ..	87.65	57.70	80.24	71.43	...	
April, 1878 ... ..	89.70	54.23	77.17	76.08	...	
May, 1878 ... ..	92.70	57.55	79.40	75.00	...	
June, 1878 ... ..	88.00	34.90	79.80	76.00	...	
Mean of the average for nine months	88.31	49.99	77.56	68.77	...	

COMPARATIVE RETURN showing Monthly Percentage of Correct Forecast for Six Months, January to June, 1877, and same period 1878.

Forecast of	January.		February.		March.		April.		May.		June.		Mean of six months.		Remarks.
	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.	
Direction of Wind	79.25	88.88	80.18	83.05	81.0	87.65	79.43	89.70	88.10	92.70	87.97	88.0	82.32	88.33	The warnings are limited to an area of 12 points of the compass. Force—7 of Beaufort scale is the lowest for which warnings are considered as being verified.
Force of Wind	50.55	57.64	38.60	44.83	23.21	57.70	37.27	54.23	49.59	57.55	40.53	34.9	41.29	51.41	
Barometer Movement	73.81	77.67	76.19	69.94	77.77	80.24	6.78	77.17	80.21	79.40	79.94	79.08	74.95	77.37	
Sea Movement	71.43	61.22	91.66	57.14	76.54	71.43	77.78	76.08	88.46	75.0	74.50	76.0	80.02	69.48	

## RETURN showing Result of a Storm-Warning, 1878.

Warning Sent.	Month.	Place sent to.	Result.			
			Direction of Wind.	Force of Wind.	Barometer Movement.	Sea Movement.
No warning sent, as gale not expected ...	May 17	Auckland ...	...	...	...	...
Bad weather probable any direction between North-east and North and West, further fall of glass, and wind back	"	Lyttelton ...		No	return.	
	"	Timaru ...	N.W.	Heavy gale	Good	
	"	Port Chalmers...	N.W.	Heavy gale	Good	
	"	Oamaru ...	N.W.	Gale	Good	
Bad weather probable any direction between North-east and North-west; glass fall again soon; sea increase	"	Greymouth ...	Line	down on	18th.	
	"	Hokitika ...	N.W.	Gale	Good	Good
Bad weather probable any direction between North and West and South-west; glass falling soon; expect heavy sea	"	New Plymouth	N.W.	Mod. gale	Wrong	
	"	Opunake ...	W.N.W.	Fresh	Wrong	Good
	"	Westport ...	N.W.	Gale	Good	Good
	"	Napier ...	N.W.	Gale	Good	
	"	Wanganui ...	West	Mod. gale	Good	
	"	Nelson ...	S.W.	Gale	Good	
	"	Tophouse ...	S.W.	Heavy gale	Good	
	"	Blenheim ...	North	Fresh	Good	
	"	Kaikoura ...	S.E.	Heavy gale	Wrong	
	"	Bluff ...		No	return.	
	"	Queenstown ...	N.W.	Gale	Good	
	"	Roxburgh ...	S.W.	Mod. gale	Good	
	"	Balclutha ...	N.W.	Gale	Good	
	"	Naseby ...		No	return.	
	"	Bealey ...	North	Gale	Good	
	"	Grahamstown ...		Mod. gale	Good	
	"	Tauranga ...	S.W.	Gale	Good	
	"	Gisborne ...	South	Mod. gale	Wrong	
	"	Coromandel ...	S.W.	Gale	Good	
	"	Tokatea ...	S.W.	Fresh	Good	
	"	Taupo ...	West	Fresh	Good	
	"	Cambridge ...	West	Fresh	Wrong	
Bad weather probable any direction between North and West and South-west; glass fall; heavy sea	"	Opotiki...	N.W.	Gale	Good	Good
	"	Manukau ...	N.W.	Fresh	Wrong	
Indication strong winds any direction between North and West and South-west	"	Russell ...	N.W.	Fresh	Good	
	"	Whangarei ...	N.W.	Light	Good	
	"	Hokianga ...	...	Light	Wrong	
Bad weather probable any direction between North and West and South-west, and glass further fall	April 29	Port Chalmers...	W.S.W.	Gale	Good	
	"	Lyttelton ...		No	return.	
	"	Bluff ...		No	return.	
	"	Roxburgh ...	N.W.	Gale	Wrong	
	"	Queenstown ...	N.W.	Gale	Good	
	"	Bealey ...	N.W.	Gale	Good	
	"	Timaru ...	W.S.W.	Light	Good	
	"	Oamaru ...	S.W.	Light	Good	
	"	Kaikoura ...	N.W.	Gale	Good	
	"	Kekerangu ...	N.W.	Gale	Good	
	"	Balclutha ...	N.W.	Gale	Wrong	
	"	Wanganui ...	N.W.	Gale	Good	
	"	Blenheim ...	N.W.	Mod. gale	Good	
	"	Tophouse ...	West	Mod. gale	Good	
	"	New Plymouth	N.N.W.	Gale	Good	
Bad weather probable any direction between North and West and South-west, and further fall of glass; expect increase sea	"	Greymouth ...	North	Fresh	Good	
	"	Hokitika ...	North	Gale	Good	Good
	"	Westport ...	W.N.W.	Gale	Good	Good
	"	Opunake ...	North	Heavy gale	Good	Good
	"	Castlepoint	N.W.	Fresh	Good	Good
Bad weather probable any direction between North and West and South-west, and glass further fall	30	Grahamstown ...		No	return.	
	"	Gisborne ...	S.W.	Gale	Wrong	
	"	Cambridge ...	N.W.	Gale	Good	
	"	Auckland ...	N.W.	Light	Good	
	"	Hokianga ...	N.W.	Heavy gale	Good	
	"	Russell ...	N.N.W.	Gale	Good	
	"	Whangarei ...	N.W.	Heavy gale	Good	
	"	Coromandel ...	S.W.	Heavy gale	Good	
	"	Tokatea ...		No	return.	
	"	Tauranga ...	West	Light	Good	
	"	Taupo ...	West	Gale	Good	
Bad weather probable any direction between North and West and South-west; further fall of glass; expect much sea	"	Opotiki...	N.W.	Gale	Good	Good
	"	Manukau ...	N.W.	Heavy gale	Good	Wrong
Gale in before warning sent ...	"	Napier ...	N.W.	Gale	Good	

RETURN No. 1, showing Results of Storm-Warnings received at Hokianga during the Month of February, 1878.

Date and Hour Received.	Indicated Weather.	Result.		Remarks.
		Direction of Wind.	Force of Wind.	
6th, 3.55 p.m.	Bad weather probable, any direction between S.W. and S. and E., and glass fall	Good	Gale	Barometer good ; wind from S.W. on 7th and 8th.
13th, 2.50 p.m.	Bad weather probable, any direction between N. and W. and S.W.	Good	Mod. gale	Barometer good ; had heavy rain on 14th, with wind from N.W. shifting round W. to S.W.
15th, 10.10 a.m.	Bad weather probable, any direction between S.E. and S. and W.	Good	Mod. gale	Barometer steady ; wind from W. and S.W., with indications of bad weather.
20th, 2.40 p.m.	Bad weather probable, any direction between N. and N.W., and glass fall very much	Good	Gale	Barometer good ; wind from N.E. on 20th round by N. to N.W.
21st, 2.10 p.m.	Bad weather probable, any direction between N.W. and W. and S., and glass rise	Good	Mod. gale	Barometer good ; strong winds from S.W. on 22nd.

THOS. L. MILLER, Telegraphist.

RETURN No. 1, showing Results of Storm-Warnings received at Russell during the Month of February, 1878.

6th, 3.22 p.m.	Bad weather probable, any direction between S.W. and S. and E., and further fall glass	Good	Gale	Barometer good ; on 7th wind S.W. ; glass fell one-tenth.
13th, 2.55 p.m.	Bad weather probable, any direction between N. and W. and S.W. ; glass considerable fall	Good	Fresh	Barometer good, fell two-tenths ; wind N.N.W.
14th, 5.33 p.m.	Bad weather probable, any direction between S.W. and S. and W. ; further fall glass	Good	Light	Barometer wrong ; wind S.W.
20th, 4.37 p.m.	Bad weather probable, any direction between N.E. and N. and W. ; glass fall very much ; expect rock break	Good	Fresh	Barometer good ; wind N.W. ; rock not breaking ; sea moderate.
21st, 1.26 p.m.	Bad weather probable, any direction between N.W. and W. and S. ; glass rise soon	Good	Mod. gale	Barometer good ; wind S.W. on 22nd.

J. F. MARTIN, Telegraphist.

RETURN No. 1, showing Results of Storm-Warnings received at Castlepoint during the Month of February, 1878.

6th, 4.45 p.m.	Expect southerly gale ; glass rise	Good	Gale	Warning late ; southerly gale commenced 3 p.m., with heavy rain, squalls continuing to night of 7th.
9th, 5.11 p.m.	Bad weather probable, any direction between N. and W. and S.W. ; falling glass	Good	Fresh	Fresh N.W. wind ; barometer wrong.
12th, 3.42 p.m.	Bad weather probable, any direction between N.E. and N. and W. ; falling glass	Good	Gale	Barometer good ; strong N.W. gale.
13th, 5.19 p.m.	Bad weather probable, any direction between W. and S. and S.E. ; falling glass	Good	Mod. gale	Barometer good ; appearances very bad ; swell made considerably eastward on 15th.
15th, 2.10 p.m.	Bad weather probable on shift of wind to S.W.	Good	Gale	p.m. of 16th, S.S.W. gale.

J. F. FABIAN, Telegraphist.

RETURN No. 1, showing Results of Storm-Warnings received at Kekerangu during the Month of February, 1878.

8th, 2.18 p.m.	Bad weather probable, any direction between N. and W. and S.W. ; further fall of glass	Good	Gale	Barometer good ; 9th, wind W. ; heavy easterly sea and drizzling rain ; glass fell.
11th, 4 p.m.	Bad weather probable, any direction between N.W. and W. and S., and falling glass ; expect much sea	Wrong	Gale	Barometer good ; sea good ; gale from N.E., set in at 3 p.m. on 11th ; glass fell.
12th, 3.39 p.m.	Bad weather probable, any direction between N.E. and N. and W., and further fall of glass ; southerly swell probable for a few hours	Wrong	Gale	Barometer good ; sea good ; strong gale from S.S.W., set in at 10 a.m. on 13th, with continuous rain and heavy sea.
14th, 2.39 p.m.	Bad weather probable, any direction between N. and W. and S.W. ; falling glass	Good	Heavy gale	Barometer good ; gale from N.N.W. ; glass fell.

W. H. HAMILTON, Telegraphist.

RETURN No. 2, showing Results of Storm-Warnings received at Bealey (altitude, 2,180 feet) during the Month of May, 1878.

Date and Hour (Received.)	Indicated Weather.	Result.		Remarks.
		Direction of Wind.	Force of Wind.	
14th, 4.24 p.m.	Bad weather probable, any direction between W. and S. and S.E.; glass rise fast	Good	Gale	Barometer wrong; 8 p.m., thunderstorm and heavy rain; 10 p.m., S.W. gale.
17th, 1.40 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass further fall	Good	Gale	Barometer good; 10 a.m., N., with violent squalls; 11 a.m., wind increased, with heavy squalls; 5 p.m., thunderstorm and hail, very threatening.
30th, 2.54 p.m.	Bad weather probable, any direction between N.E. and N. and W., and further fall glass	Good	Fresh	Barometer good; wind N.E.

J. M. MUNCE, Telegraphist.

RETURN No. 2, showing Results of Storm-Warnings received at Taupo (altitude, 1,200 feet) during the Month of June, 1878.

21st, 3.40 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass fall	Good	Gale	Barometer fell five-tenths; gale from W. to S.W.
24th, 3.35 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass further fall	Good	Gale	Barometer good; heavy gale from W.; glass fell.
28th, 3.35 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass fall again; likely blow hard	Good	Gale	Barometer good; blew very hard from S.W. during the night.

GEO. CROSSMAN, Telegraphist.

RETURN No. 2, showing Results of Storm-Warnings received at Manukau (altitude, 900 feet) during the Month of June, 1878.

15th, 5.30 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass fall two-tenths; expect much sea	Good	Gale	Barometer fell two-tenths; sea good; wind N.W. to N., 4 to 8 steady; heavy rain; 16th, squally weather, heavy swell setting in.
20th, 1.15 p.m.	Bad weather probable, any direction between N.E. and N. and W.; and glass further fall	Good	Mod. gale	Barometer good; wind N.W., with heavy rain.
22nd, 1 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass rise; expect increase sea	Good	Gale	Barometer good; 22nd, barometer rose three-tenths; wind W.N.W.; bar breaking heavily.
24th, 5.30 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass fall again; expect hard gale and heavy sea	Good	Gale	Barometer good; 24th, barometer fell two-tenths; wind W.S.W., frequent heavy squalls, with rain; sea continues heavy.
26th, 5.15 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass rise; sea likely continue	Good	Gale	Barometer good; 27th, barometer rose three-tenths; wind W.S.W., squally weather, with heavy sea.
28th, 5.15 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass further fall; expect hard gale and heavy sea	Good	Gale	Barometer good; wind W.S.W. to N.W., frequent heavy squalls; bar breaking heavily.

R. J. PALTRIDGE, Signalman.

RETURN No. 2, showing Results of Storm-Warnings received at Wanganui during the Month of June, 1878.

20th, 12.8 p.m.	Bad weather probable, any direction between N. and W. and S.W.; indications imply lightning; expect glass further fall	Good	Gale	Barometer fell six-tenths; blew gale, force 9 to 10, on night of 22nd, with rain and hail, direction westerly, veered to S. at 2 p.m.
24th, 1.44 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass fall three-tenths; from report expect heavy gale W. round by S. to S.E., when glass rises	Good	Heavy gale	Barometer good; 4.10 p.m., severe thunderstorm passed from N.W. to S.E., accompanied by lightning, and the heaviest rain that fell for years.
26th, 4.54 p.m.	Bad weather probable, any direction between N. and W. and S.W.; expect falling glass	Good	Gale	Barometer good; 9 p.m., severe gale set in from W.N.W., with heavy rain; 6 a.m., 27th, severe gale passed over, accompanied by loud peals of thunder, vivid flashes of lightning, and heavy hail; lasted about an hour, force 10 to 12.

H. CALDERS, Telegraphist.

**RETURN No. 2, showing Results of Storm-Warnings received at Hokitika during the Month of June, 1878.**

Date and Hour Received.	Indicated Weather.	Result.		Remarks.
		Direction of Wind.	Force of Wind.	
21st, 1.20 p.m.	Bad weather probable, any direction between W. and S. and S.E.; expect heavy sea; glass may fall one-tenth; indications show hard gale	Good	Mod. gale	Barometer good; sea good; barometer fallen one-tenth between night of 21st and morning of 22nd; wind S.W., with clouds moving fast north-eastward, indicating strong winds in the offing.
25th, 5.30 p.m.	Bad weather probable, any direction between N.W. and W. and S.; indications show glass may fall again	Good	Gale	Barometer good; sea good; barometer, which had been very unsteady for some days at a low range, fell p.m. 26th, with a heavy rolling sea from S.W., and much rain; at 8.30 a heavy gale of wind broke on this part of the coast from S.W., with much lightning, thunder, and rain; this continued all night. This gale sent a heavy southerly sea in on the coast.

THOMAS TURNBULL, Harbourmaster.

**RETURN No. 2, showing Results of Storm-Warnings received at Roxburgh (altitude, 300 feet) during the Month of June, 1878.**

21st, 12.15 p.m.	Bad weather probable, any direction between W. and S. and S.E.; glass should be rising now; weather unusually cold	Good	Gale	Barometer good. These warnings eventuated in a S.W. gale, blowing hard, with heavy snow and intense cold, with successive hard frosts.
25th, 5.58 p.m.	Bad weather probable, any direction between N.W. and W. and S.; indications show falling glass	Good	Mod. gale	Barometer good; wind variable until night of 26th, when it settled to S.E., with snow.
28th, 4.48 p.m.	Bad weather probable, any direction between N. and W. and S.W.; falling glass	Good	Heavy gale	Barometer good; blew heavy N.W. gale during night of 29th, shifting to S.W.

THOS. COOK, Telegraphist.

**RETURN No. 2, showing Results of Storm-Warnings received at Tophouse (altitude, 2,200 feet) during the Month of June, 1878.**

22nd, 2.55 p.m.	Bad weather probable, any direction between S.E. and S. and E.; likely to have fall of snow and sharp frosty weather	Good	Gale	Barometer good; hard gales from E.S.E. during p.m. of 22nd; snow from W.S.W. on a.m. of 23rd.
26th 4.50 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass likely to rise	Good	Gale	Barometer rose three-tenths; strong gale during night of 26th from N.N.W., with heavy snow-storm.
28th 4.15 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass further fall; indications for heavy gale	Good	Heavy gale	Barometer good; heavy gale on p.m. of 30th from S.W., with heavy snow-storm.

W. J. WHITE, Telegraphist.

**RETURN No. 2, showing Results of Storm-Warnings received at Nelson during the Month of June, 1878.**

7th, 3.30 p.m.	Bad weather probable, any direction between N. and W. and S.W.; glass rise soon	Good	Under 7	Barometer good; at 9 a.m. on 7th barometer 29.33; at 9 a.m. on 9th, barometer 29.42; winds generally moderate.
10th, 4.30 p.m.	Bad weather probable, any direction between S.E. and E. and N.E.; likely have very high tide	Good	Under 7	9 a.m., 11th, 29.56; rose to 29.70 by 9 a.m. 12th; winds generally moderate, with unusually high tides; heavy swell in the mouth of the harbour. In the straits, appearances very bad.
14th, 7 p.m.	Bad weather probable, any direction between N.E. and N. and W., with heavy rain	Good	Under 7	Glass fell from 29.84 on 14th, to 29.76 at 3 p.m., with N.W. 4 to 5; and at 9 p.m. on 16th was down to 29.44. An immense quantity of rain fell during this period.

WM. TUCKER, Telegraphist.

**RETURN No. 2, showing Results of Storm-Warnings received at Port Chalmers during the Month of June, 1878.**

20th, 3.20 p.m.	Bad weather probable, any direction between N.W. and W. and S.; glass likely rise soon	Good	Heavy gale	Barometer wrong; experienced heavy W.S.W. gale, with falling glass, and a considerable fall of snow on 22nd.
25th, 8 p.m.	Bad weather probable, any direction between N.W. and W. and S.; indications show glass may fall	Good	Gale	Barometer good; experienced fresh W.S.W. gale, with falling barometer, on the 26th.
27th.	Bad weather probable, any direction between N.W. and W. and S.; indications show wind backing.	Good	Gale	Experienced strong gales from W.S.W. to N.W.

WM. THOMSON, Harbourmaster.

RETURN showing the Total Ordinary Expenditure of the Marine Department during the Financial Year ended the 30th June, 1878.

Nature of Expenditure.						Details of Expenditure.	Totals.	Grand Total.
						£ s. d.	£ s. d.	£ s. d.
Officer in Charge	...	...	...	...	...	200 0 0		
Clerk	...	...	...	...	...	140 0 0		
Extra Clerk	...	...	...	...	...	137 16 0		
Messenger	...	...	...	...	...	120 0 0		
Marine Engineer	...	...	...	...	...	300 0 0		
Inspector of Steamers and Nautical Assessor	...	...	...	...	...	400 0 0		
Inspector of Steamers and Engineer Surveyor	...	...	...	...	...	250 0 0		
Local Inspectors of Steamers	...	...	...	...	...	100 0 0		
Examiner of Masters and Mates	...	...	...	...	...	100 0 0		
Local Examiners of Masters and Mates	...	...	...	...	...	225 0 0		
Expenses under "Enquiry into Wrecks Act"	...	...	...	...	...	145 7 9		
Survey of Unseaworthy Ships	...	...	...	...	...	14 1 6	2,132 5 3	
Harbours :—								2,132 5 3
Auckland,—								
Bean Rock Lighthouse,—								
Salaries	...	...	...	...	...	150 0 0		
Oil and Contingencies	...	...	...	...	...	41 19 4	191 19 4	
Manukau,—								
Salaries	...	...	...	...	...	708 0 0		
Cleaning and Repairing Buoys	...	...	...	...	...	110 17 11		
Repairs to Signalman's House	...	...	...	...	...	82 19 0		
Contingencies	...	...	...	...	...	37 12 0	939 8 11	
Thames (six months),—								
Salaries	...	...	...	...	...	259 14 0		
Contingencies	...	...	...	...	...	80 17 5	340 11 5	
Russell,—								
Salaries	...	...	...	...	...	270 0 0		
Contingencies	...	...	...	...	...	22 10 2	292 10 2	
Whangaroa,—								
Salaries	...	...	...	...	...	100 0 0	100 0 0	
Hokianga,—								
Salaries	...	...	...	...	...	408 0 0		
Contingencies	...	...	...	...	...	36 13 4	444 13 4	
Kaipara,—								
Salaries	...	...	...	...	...	879 16 5		
Buoys and Beacons	...	...	...	...	...	496 8 6		
Repairs, &c., to Steam Launch	...	...	...	...	...	245 9 11		
Contingencies	...	...	...	...	...	140 11 11	1,762 6 9	
Waitara,—								
Salaries	...	...	...	...	...	100 0 0		
Contingencies	...	...	...	...	...	23 16 8	123 16 8	
New Plymouth,—								
Salaries	...	...	...	...	...	320 0 0		
Contingencies	...	...	...	...	...	6 14 6	326 14 6	
Patea,—								
Salaries	...	...	...	...	...	100 0 0		
Contingencies	...	...	...	...	...	18 17 8	118 17 8	
Wanganui,—								
Repairs to Pilot Station	...	...	...	...	...	152 8 1	152 8 1	
Foxton,—								
Salaries	...	...	...	...	...	428 8 0		
Additions, &c., to Signal Station	...	...	...	...	...	536 12 7		
Contingencies	...	...	...	...	...	57 12 6	1,022 13 1	
Rangitikei,—								
Salaries	...	...	...	...	...	150 0 0		
Contingencies	...	...	...	...	...	9 0 3	159 0 3	
Wellington,—								
Salaries	...	...	...	...	...	2,369 12 2		
Contingencies	...	...	...	...	...	67 1 3		
Soames' Island Lighthouse,—								
Salaries	...	...	...	...	...	271 4 2		
Contingencies	...	...	...	...	...	65 1 6	2,772 19 1	
Wairoa,—								
Salaries	...	...	...	...	...	100 0 0	100 0 0	
Carried forward	...	...	...	...	...	...	8,847 19 3	2,132 5 3

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

Nature of Expenditure.					Details of Expenditure.	Totals.	Grand Total.
					£ s. d.	£ s. d.	£ s. d.
Brought forward ... ..					...	8,847 19 3	2,132 5 3
Harbours— <i>continued.</i>							
Wangawehi,—							
Light ... ..					60 0 0	60 0 0	
Tauranga,—							
Salaries ... ..					294 0 0		
Contingencies ... ..					64 13 7	358 13 7	
Gisborne,—							
Salaries ... ..					291 10 0		
Removal of rocks ... ..					174 0 0		
Contingencies ... ..					154 12 9	620 2 9	
Wairau,—							
Salaries ... ..					132 0 0		
Contingencies ... ..					18 9 5	150 9 5	
Picton,—							
Salaries ... ..					119 0 0		
Contingencies ... ..					34 8 10	153 8 10	
Havelock,—							
Salaries ... ..					50 0 0		
Beacons ... ..					80 0 0	130 0 0	
Nelson,—							
Salaries ... ..					1,420 0 0		
Contingencies ... ..					97 14 9	1,517 14 9	
Westport,—							
Salaries ... ..					410 0 0		
Contingencies ... ..					145 5 10	555 5 10	
Greymouth,—							
Salaries ... ..					435 0 0		
Alterations to Signal Station ... ..					140 11 4		
Contingencies ... ..					130 5 7	705 16 11	
Hokitika,—							
Salaries ... ..					722 0 0		
Repairs to Signal Station ... ..					204 16 0		
Contingencies ... ..					147 2 11	1,073 18 11	
Okarito,—							
Salaries ... ..					50 0 0		
Contingencies ... ..					64 2 3	114 2 3	
Riverton (ten months),—							
Salaries ... ..					125 0 0		
Contingencies ... ..					88 11 9	213 11 9	
Catlin's River,—							
Salaries ... ..					125 0 0		
Contingencies ... ..					41 11 10	166 11 10	
Waikawa,—							
Salaries ... ..					50 0 0		
Contingencies ... ..					3 17 4	53 17 4	
Port Chalmers Graving Dock,—							
Wages and Contingencies ... ..					1,152 12 7		
Interest on Dock Loan ... ..					1,704 0 0	2,856 12 7	
Waikouaiti,—							
Salaries ... ..					75 0 0		
Contingencies ... ..					12 3 5	87 3 5	
Moeraki (eight months),—							
Salaries ... ..					66 13 4	66 13 4	
Kakanui,—							
Salaries ... ..					150 0 0	150 0 0	
Akaroa,—							
Salaries ... ..					25 0 0		
Contingencies ... ..					16 11 8	41 11 8	
Carried forward ... ..					...	17,923 14 5	2,132 5 3



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

Nature of Expenditure.						Details of Expenditure.	Totals.	Grand Total.
						£ s. d.	£ s. d.	£ s. d.
Brought forward						...	17,923 14 5	2,132 5 3
Harbours— <i>continued.</i>								
Sumner,—								
	Salaries	...	...	...	...	110 0 0		
	Contingencies	...	...	...	...	7 16 1	117 16 1	
Kaiapoi,—								
	Salaries	...	...	...	...	120 0 0		
	Contingencies	...	...	...	...	0 19 6	120 19 6	
Kaikoura,—								
	Salaries	...	...	...	...	50 0 0		
	Contingencies	...	...	...	...	1 18 6	51 18 6	
Collingwood,—								
	Salaries	...	...	...	...	12 10 0		
	Contingencies	...	...	...	...	19 15 0	32 5 0	
Karamea,—								
	Contingencies	...	...	...	...	12 8 0	12 8 0	
Motupipi,—								
	Contingencies	...	...	...	...	6 12 0	6 12 0	
Waitapu,—								
	Salaries	...	...	...	...	7 10 6		
	Contingencies	...	...	...	...	11 10 9	19 1 3	
Motueka,—								
	Contingencies	...	...	...	...	2 18 6	2 18 6	
Martin's Bay,—								
	Salaries	...	...	...	...	40 1 1		
	Contingencies	...	...	...	...	124 18 3	164 19 4	
Riwaka,—								
	Contingencies	...	...	...	...	4 18 0	4 18 0	
Whangarei,—								
	Subsidy to Ferryman	...	...	...	...	50 0 0	50 0 0	
Mongonui,—								
	Contingencies	...	...	...	...	0 10 0	0 10 0	
Napier Bluff Lighthouse,—								
	Salaries	...	...	...	...	254 16 0		
	Contingencies	...	...	...	...	73 1 10	327 17 10	
Stewart Island,—								
	Salaries	...	...	...	...	10 0 0	10 0 0	
Port Lights...								
		...	...	...	...	109 11 11	109 11 11	
Lighthouses :—								18,955 10 4
Superintendent of Lights						350 0 0	350 0 0	
Tiritiri,—								
	Salaries	...	...	...	...	340 0 0		
	Oil, Stores, and Contingencies	...	...	...	...	153 7 6	493 7 6	
Ponui Passage,—								
	Salaries	...	...	...	...	150 0 0		
	Oil, Stores, and Contingencies	...	...	...	...	45 9 0	195 9 0	
Portland Island,—								
	Salaries	...	...	...	...	188 2 1		
	Oil, Stores, and Contingencies	...	...	...	...	95 12 7	283 14 8	
Pencarrow Head,—								
	Salaries	...	...	...	...	299 10 0		
	Oil, Stores, and Contingencies	...	...	...	...	196 14 3	496 4 3	
Mana Island,—								
	Salaries	...	...	...	...	97 5 8		
	Oil, Stores, and Contingencies	...	...	...	...	64 14 8	162 0 4	
Manukau Heads,—								
	Salaries	...	...	...	...	293 15 0		
	Oil, Stores, and Contingencies	...	...	...	...	186 17 2	480 12 2	
Carried forward ...						...	2,461 7 11	21,087 15 7

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

Nature of Expenditure.					Details of Expenditure.	Totals.	Grand Totals.
					£ s. d.	£ s. d.	£ s. d.
Brought forward ... ..					...	2,461 7 11	21,087 15 7
Lighthouses— <i>continued.</i>							
Brothers,—							
Salaries ... ..					499 17 2		
Oil, Stores, and Contingencies ... ..					310 9 0	810 6 2	
Cape Campbell,—							
Salaries ... ..					271 9 2		
Oils, Stores, and Contingencies ... ..					188 18 9	460 7 11	
Godley Head,—							
Salaries ... ..					350 0 0		
Oil, Stores, and Contingencies ... ..					234 3 11	584 3 11	
Moeraki,—							
Salaries ... ..					71 0 10		
Oil, Stores, and Contingencies ... ..					42 18 7	113 19 5	
Taiaroa Head,—							
Salaries ... ..					275 5 7		
Oil, Stores, and Contingencies ... ..					141 16 8	417 2 3	
Nugget Point,—							
Salaries ... ..					315 0 0		
Oil, Stores, and Contingencies ... ..					187 13 0	502 13 0	
Dog Island,—							
Salaries ... ..					384 15 0		
Oil, Stores, and Contingencies ... ..					236 12 3	621 7 3	
Centre Island,—							
Salaries ... ..					98 0 0		
Contingencies ... ..					1 17 6	99 17 6	
Puysegur Point,—							
Salaries ... ..					51 2 3		
Contingencies ... ..					13 6 7	64 8 10	
Cape Foulwind,—							
Salaries ... ..					320 0 0		
Oil, Stores, and Contingencies ... ..					230 5 3	550 5 3	
Farewell Spit,—							
Salaries ... ..					415 0 0		
Contingencies ... ..					156 15 4	571 15 4	
Nelson,—							
Salaries ... ..					240 0 0		
Oil, Stores, and Contingencies ... ..					117 6 0	357 6 0	
Probationary Keepers,—							
Salaries ... ..					70 17 0		
Passages ... ..					6 9 6	77 6 6	
Total Cost of Lighthouses ... ..					...		7,692 7 3
Sundries and General Contingencies ... ..					...	359 3 2	
Departmental Travelling Expenses ... ..					...	367 9 11	
Coastal Buoys and Beacons ... ..					...	318 10 8	
Charts ... ..					...	122 2 4	
Lighthouse Artificer ... ..					...	...	1,167 6 1
"Stella," s.s. ... ..					...	...	240 0 0
"Hinemoa," s.s. ... ..					...	...	*5,354 7 0
Naval Training School, Kohimarama,—							5,016 1 10
Salaries ... ..					570 14 7		
Provisions, Clothing, and Contingencies ... ..					1,400 0 9	1,970 15 4	1,970 15 4
Weather Reporting,—							
Officer in Charge... ..					300 0 0		
Salaries of Officers at Out-stations ... ..					510 10 0		
Contingencies ... ..					18 10 8	829 0 8	829 0 8
Totals ... ..					...	...	43,357 13 9

\* £2,458 5s. 10d. charged against Public Works Account, Lighthouses.

STATEMENT showing the Expenditure on New Lighthouses out of Immigration and Public Works Loan during the Financial Year 1877-78.

Nature of Expenditure.				Amount.		
				£	s.	d.
Brothers Lighthouse	...	...	...	340	6	0
Portland Island	...	...	...	1,704	10	9
Puysegur Point	...	...	...	3,418	12	1
Mokohinau	...	...	...	43	10	0
Cape Maria Van Diemen	...	...	...	1,863	12	11
Centre Island	...	...	...	1,905	19	7
Moeraki	...	...	...	2,804	2	3
Akaroa	...	...	...	2,510	15	2
Cape Saunders	...	...	...	545	4	1
Timaru	...	...	...	708	8	3
"Hinemoa," s.s.	...	...	...	7	9	3
"Stella," s.s.	...	...	...	2,458	5	10
Total	...	...	...	£18,310	16	2

STATEMENT showing the amount of Pilotage, Port Charges, &c., collected in New Zealand during the Financial Year ended 30th June, 1878.

Port at which Collected.				Pilotage.			Port Charges, &c.			Total.		
				£	s.	d.	£	s.	d.	£	s.	d.
Auckland	...	...	...	1,109	15	7	115	6	1	1,225	1	8
Onehunga	...	...	...	169	9	6	128	2	3	297	11	9
Kaipara	...	...	...	663	3	6	287	13	10	950	17	4
Tauranga	...	...	...	60	18	3	...	...	...	60	18	3
Thames	...	...	...	56	7	0	64	17	11	121	4	11
Russell	...	...	...	91	18	0	...	...	...	91	18	0
Mongonui	...	...	...	...	...	...	11	10	9	11	10	9
Hokianga	...	...	...	149	10	10	...	...	...	149	10	10
New Plymouth	...	...	...	76	12	6	46	12	5	123	4	11
Wanganui	...	...	...	258	13	2	...	...	...	258	13	2
Patea	...	...	...	2	5	11	2	12	1	4	18	0
Rangitikei	...	...	...	13	14	10	...	...	...	13	14	10
Foxton	...	...	...	84	14	4	...	...	...	84	14	4
Wellington	...	...	...	2,277	4	8	1,418	1	11	3,695	6	7
Napier	...	...	...	1,065	10	2	273	4	6	1,338	14	8
Wairoa	...	...	...	55	10	9	...	...	...	55	10	9
Poverty Bay	...	...	...	45	18	5	...	...	...	45	18	5
Nelson	...	...	...	840	10	11	7	11	2	848	2	1
Hokitika	...	...	...	34	18	8	...	...	...	34	18	8
Lyttelton	...	...	...	2,872	4	11	1,805	17	4	4,678	2	3
Timaru	...	...	...	...	...	...	9	19	5	9	19	5
Oamaru	...	...	...	...	...	...	250	5	7	250	5	7
Kakanui	...	...	...	...	...	...	9	19	8	9	19	8
Dunedin	...	...	...	1,973	4	2	1,289	10	1	3,262	14	3
Invercargill (New River)	...	...	...	...	...	...	66	5	7	66	5	7
Bluff	...	...	...	487	10	8	341	19	0	829	9	8
Riverton	...	...	...	22	14	4	11	15	0	34	9	4
Moeraki	...	...	...	...	...	...	19	19	0	19	19	0
Port Molyneux	...	...	...	...	...	...	3	8	0	3	8	0
Waikouaiti	...	...	...	...	...	...	9	11	8	9	11	8
Totals for 1877-78	...	...	...	£12,412	10	1	6,174	4	3	18,586	14	4
Totals for 1876-77	...	...	...	£13,078	11	9	5,873	4	5	18,951	16	2

RETURN showing the Quantity of Oil Consumed at the New Zealand Lighthouses during the Year ended 30th June, 1878.

Name of Lighthouse.				Gallons Consumed.		
Tiritiri	...	...	...	466		
Portland Island	...	...	...	212		
Pencarrow Head	...	...	...	510		
Mana Island	...	...	...	134		
Manukau Heads	...	...	...	475		
Brothers	...	...	...	483		
Cape Campbell	...	...	...	431		
Godley Head	...	...	...	399		
Moeraki	...	...	...	116		
Taiaroa Head	...	...	...	405		
Nugget Head	...	...	...	504		
Dog Island	...	...	...	655		
Cape Foulwind	...	...	...	526		
Farewell Spit	...	...	...	416		
Nelson	...	...	...	184		
Soames Island	...	...	...	166		
Napier Bluff	...	...	...	220		

STATEMENT showing the amount of Light Dues collected in New Zealand during the Financial Year ended 30th June, 1878.

Name of Port at which Collected.					Amount Collected.		
					£	s.	d.
Auckland	...	...	...	...	1,650	5	0
Onehunga	...	...	...	...	116	15	0
Kaipara	...	...	...	...	46	7	9
Tauranga	...	...	...	...	49	4	6
Thames	...	...	...	...	19	8	3
Whangaroa	...	...	...	...	6	5	1
Russell	...	...	...	...	91	14	11
Mongonui	...	...	...	...	0	4	6
Hokianga	...	...	...	...	9	14	0
Whangarei	...	...	...	...	19	8	0
New Plymouth	...	...	...	...	83	11	2
Wanganui	...	...	...	...	59	1	2
Patea	...	...	...	...	0	2	11
Rangitikei	...	...	...	...	1	8	5
Foxton	...	...	...	...	15	6	2
Wellington	...	...	...	...	2,327	7	5
Napier	...	...	...	...	199	10	0
Poverty Bay	...	...	...	...	32	1	3
Picton	...	...	...	...	115	16	11
Havelock	...	...	...	...	18	5	6
Wairau	...	...	...	...	21	10	6
Kaikoura	...	...	...	...	9	3	4
Nelson	...	...	...	...	719	6	4
Westport	...	...	...	...	218	11	5
Greymouth	...	...	...	...	118	5	11
Hokitika	...	...	...	...	38	16	2
Lyttelton	...	...	...	...	2,407	6	7
Timaru	...	...	...	...	92	1	2
Oamaru	...	...	...	...	140	19	3
Kakanui	...	...	...	...	4	12	9
Dunedin	...	...	...	...	2,240	3	0
Invercargill (New River)	...	...	...	...	21	9	1
Bluff	...	...	...	...	613	13	10
Riverton	...	...	...	...	7	9	7
Moeraki	...	...	...	...	2	12	4
Total for 1877-78					£11,517	19	2
Total for 1876-77					£11,035	4	2

STATEMENT showing the amount collected during the Financial Year 1877-78 as Fees under the Steam Navigation Acts and the Merchant Ships Officers Examination Act, and from the Sale of Charts, &c.

Nature of Receipts.					Amount.		
					£	s.	d.
Fees under Steam Navigation Acts and Merchant Ships Officers Examination Act	...	...	...	...	935	12	0
Sale of Charts	...	...	...	...	68	6	0
Survey of Unseaworthy Ships	...	...	...	...	8	6	8
Pilotage Exemption Certificates	...	...	...	...	189	0	0
Sale of Oil-casks, &c.	...	...	...	...	1	14	6
Total	...	...	...	...	£1,202	19	2

RETURN of Masters, Mates, and Engineers to whom Certificates of Service have been granted under "The Merchant Ships' Officers Examination Act Amendment Act, 1871," during the Financial Year 1877-78.

Name of Person.				Rank for which Granted.	Class of Certificate.	Date of Issue of Certificate.	Number of Certificate.
Edward Perkins	...	...	...	Master...	Foreign Trade	30 July, 1877	2462
Robert Watt	...	...	...	Mate	Home	30 " "	2463
John Urquhart	...	...	...	Master...	Foreign	16 Aug. "	2464
David Mason	...	...	...	"	Harbour	25 Oct. "	2465
Thomas Scott	...	...	...	"	Home	20 Nov. "	2466
George Siddells	...	...	...	"	"	27 Feb., 1878	2468
Charles Smith	...	...	...	"	"	7 Mar. "	2469
John McDougall	...	...	...	Mate	Foreign	12 " "	2470
Lars Petersen	...	...	...	Master...	Home	2 April	2471
Edward Kerns	...	...	...	"	"	2 " "	2472
Charles Forbes Vince	...	...	...	"	"	17 " "	2473
David Mason	...	...	...	Engineer	Second Class	25 Oct., 1877	1030
James Macfarlane	...	...	...	"	"	6 Feb., 1878	1031
Henry Hollingsworth	...	...	...	"	"	1 Mar. "	1032
Alexander Darling	...	...	...	"	"	21 " "	1033

RETURN of Masters, Mates, and Engineers, to whom Certificates of Competency have been granted under "The Merchant Ships' Officers Examination Act, 1870," during the Financial Year 1877-78.

Name of Person.	Rank for which granted.	Class of Certificate.	Date of Issue of Certificate.	Number of Certificate.
John McKenzie ...	Master ...	Foreign Trade ...	9 July, 1877*	67
Matthew Fitzpatrick ...	Only Mate ...	" "	11 " "	126
Charles Thomas Paterson ...	Master ...	" "	11 " "	72
Thomas McGee ...	" "	" "	15 Aug., "	127
George Pickering Carr...	Second Mate ...	" "	7 Sept., "	128
Thomas Richards ...	Only Mate ...	" "	19 " "	129
Frederick Condy ...	Master ...	" "	25 " "	130
John Curran ...	Second Mate ...	" "	26 " "	131
Daniel Reavy...	Master ...	" "	5 Oct., "	100
Milford McArthur ...	Only Mate ...	" "	5 " "	132
John Cartwright ...	Second Mate ...	" "	22 " "	133
James Reardon ...	" "	" "	26 " "	134
Peter Theet ...	Only Mate ...	" "	30 " "	135
Joseph Goodman ...	" "	" "	8 Nov., "	136
William Andrew Smith...	Master ...	" "	12 " "	87
James Earle ...	First Mate ...	" "	12 " "	137
John William Cumming ...	Second Mate ...	" "	12 " "	138
Alexander Thomas Fraser	Master ...	" "	12 " "	139
Frederick Nutt Godden ...	First Mate ...	" "	20 " "	140
David Buik ...	Master ...	" "	3 Dec., "	141
Thomas Blair...	Only Mate ...	" "	11 " "	142
George Jackson Hughes ...	Master ...	" "	11 " "	104
William Ensign Boxall...	" "	" "	12 " "	143
Robert Dann ...	" "	" "	13 " "	144
Charles McFarlane ...	First Mate ...	" "	17 " "	145
John Horne ...	" "	" "	17 " "	146
Patrick Grieve Howdon...	Master ...	" "	20 " "	147
James Johnson ...	Only Mate ...	" "	21 " "	148
Olof Johnson ...	" "	" "	29 " "	149
John McLean Cameron...	" "	" "	31 " "	150
John Philip Syvret ...	" "	" "	31 " "	151
George McKnight ...	First Mate ...	" "	1 Feb., 1878 *	152
Ole Helgeson ...	" "	" "	1 " "	153
Arthur Cornwallis Anthony Bacon	Second Mate ...	" "	1 " "	154
Robert Jenneson ...	Only Mate ...	" "	7 " "	155
William Ross...	" "	" "	18 " "	156
Anton Nannestad ...	" "	" "	2 Mar., "	157
Ritchie Watt ...	" "	" "	5 " "	158
Alan William Stewart ...	Second Mate ...	" "	13 " "	159
Benjamin Pillinger ...	Master ...	" "	19 " "	65
Alfred Moss ...	" "	" "	28 " "	78
Edwin James Carr ...	Second Mate ...	" "	2 April, "	161
George Simpson ...	Only Mate ...	" "	2 " "	162
John Blackwell Booth ...	First Mate ...	" "	11 " "	163
James Butchart Dickson ...	Master ...	" "	17 " "	160
John Christian Möller ...	" "	" "	8 May, "	82
William John McCabe ...	" "	" "	11 " "	164
John Cowper ...	" "	" "	13 " "	116
James Campbell Arthur ...	First Mate ...	" "	29 " "	166
John Adams Bewicke ...	Master ...	" "	10 June, "	165
Edwin Adam Robinson...	First Mate ...	" "	17 " "	167
Peter Christiansen ...	" "	" "	25 " "	168
John Quinlan...	Master ...	Home Trade ...	4 July, "	5106
James Crawford ...	" "	" "	19 " 1877	5067
Edward Aldis Robinson ...	" "	" "	3 Aug., "	5108
George Ossian Anderson ...	" "	" "	16 " "	5109
John Frederick Nelson ...	" "	" "	27 " "	5110
George William Parker...	" "	" "	27 " "	5111
Alexander Macfarlane ...	" "	" "	31 " "	5112
Charles Klein...	" "	" "	1 Sept., "	5113
John Johnson...	Mate ...	" "	1 " "	5114
Thomas Edward William Rutter	Master ...	" "	7 " "	5115
John William Turner ...	" "	" "	10 " "	5116
Michael Welsh ...	" "	" "	9 Oct., "	5117
Henry Waller...	" "	" "	22 " "	5118
Frank Lawton...	" "	" "	12 Nov., "	5119
Frederick Renner ...	" "	" "	15 " "	5120
Robert Kirk ...	" "	" "	23 " "	5121
Thomas Blair ...	" "	" "	3 Dec., "	5122
Augustus Skillen ...	" "	" "	13 " "	5123
William Shilling ...	" "	" "	17 " "	5124
Peter Curran ...	" "	" "	17 " "	5125
Jacob Gidall ...	" "	" "	20 " "	5126
William Miller ...	" "	" "	12 Jan., 1878	5107
Hans Andreas Neilson ...	" "	" "	12 " "	5127
Stephen Ellis ...	" "	" "	17 " "	5005
Mark Furneaux ...	" "	" "	17 " "	5128
Otto Herman Arndt ...	" "	" "	17 " "	5129
Alexander Wynd ...	" "	" "	24 " "	5130
Kenneth McDonald ...	" "	" "	18 Feb., "	5070
George Alfred Marks ...	" "	" "	2 Mar., "	5131

RETURN of Masters, Mates, and Engineers' Certificates of Competency—*continued.*

Name of Person.	Rank for which granted.	Class of Certificate.	Date of Issue of Certificate.	Number of Certificate.
Daniel Higgins ... ..	Mate ...	Home Trade ...	13 March, 1878	5,132
Edwin James Carr ... ..	" ...	" ...	2 April, "	5,133
Charles Frederick Backstrom ... ..	Master ...	" ...	4 " "	5,134
John Picton ... ..	" ...	" ...	11 " "	5,135
James Anderson ... ..	" ...	" ...	2 May, "	5,136
Alfred Johnston ... ..	Mate ...	" ...	8 " "	5,137
John Abram ... ..	Master ...	" ...	9 " "	5,138
John Anthony Stewart ... ..	" ...	" ...	9 " "	5,139
John Cowan ... ..	" ...	" ...	29 " "	5,140
Andrew McGregor ... ..	Mate ...	" ...	14 June, "	5,141
Henry Arthur Day ... ..	Master ...	" ...	17 " "	5,142
John S. Smith ... ..	Mate ...	" ...	17 " "	5,143
John Grubb ... ..	Master ...	" ...	17 " "	5,144
Wesley Johnston ... ..	Engineer ...	Second Class ...	4 July, 1877	39
Harrison Balfour Irwin ... ..	" ...	" ...	4 " "	40
Tom George Johnson ... ..	" ...	" ...	3 Aug., "	41
William Macfarlane ... ..	" ...	" ...	4 Sept., "	42
John Anderson ... ..	" ...	" ...	19 " "	43
David Cuthbert Braid ... ..	" ...	" ...	23 Oct., "	44
William Cable ... ..	" ...	First Class ...	16 Nov., "	34
Peter Glencross ... ..	" ...	Second Class ...	25 Jan., 1878	45
John McKenzie ... ..	" ...	First Class ...	26 " "	27
James Henderson ... ..	" ...	Second Class ...	2 March, "	46
Alexander Cullen ... ..	" ...	" ...	27 " "	47
Thomas Sydney Hamerton ... ..	" ...	" ...	10 April, "	48
Charles Worrall ... ..	" ...	" ...	13 June, "	49
Henry Augustus Levestam ... ..	" ...	" ...	27 " "	50

\* Issued under the provisions of Her Majesty's Order in Council of the 12th February, 1878, and have the same force as similar certificates granted by the Board of Trade.

## RETURN of Certificates of Competency that have been issued to Masters and Engineers of River Steamers during the Financial Year 1877-78.

Name of Person.	Rank for which Issued.	Date of Issue of Certificate.	Number of Certificate.
Simon William Wilson ... ..	Master ...	25 Sept., 1877	3,015
William Bettis ... ..	" ...	19 Oct., "	3,016
Arnold Claudius Schnauer ... ..	" ...	12 Nov., "	3,017
James McNeill ... ..	" ...	1 Feb., 1878	3,018
John Godfrey Carlquist ... ..	" ...	18 " "	3,019
Isaac Fletcher ... ..	" ...	29 May, "	3,020
Samuel Joseph Roe ... ..	" ...	25 June, "	3,021
John Thomas Smith ... ..	Engineer ...	19 July, 1877	1,272
James Alexander Garrett ... ..	" ...	19 " "	1,273
Henry Ballans ... ..	" ...	21 " "	1,274
Allen Christey ... ..	" ...	10 Aug., "	1,275
Edward White ... ..	" ...	10 " "	1,276
Donald Stalker ... ..	" ...	5 Sept., "	1,277
Thomas Boddington ... ..	" ...	7 " "	1,278
Alexander Marshall ... ..	" ...	7 " "	1,279
Robert Hagon ... ..	" ...	5 Oct., "	1,280
David Bruce ... ..	" ...	23 " "	1,281
Peter Peterson ... ..	" ...	5 Nov., "	1,282
Alexander Fleming ... ..	" ...	3 Dec., "	1,283
Michael McConville ... ..	" ...	20 " "	1,284
Hugh Morrison ... ..	" ...	7 Jan., 1878	1,285
Robert Liddle ... ..	" ...	7 " "	1,286
William Smith ... ..	" ...	25 " "	1,287
James Jones ... ..	" ...	16 Feb., "	1,288
John Gilroy ... ..	" ...	5 March, "	1,289
Edward Miall Moss ... ..	" ...	17 April, "	1,290
William Charles Russell ... ..	" ...	17 " "	1,291
James Deery ... ..	" ...	30 " "	1,292
George William Kendall ... ..	" ...	22 May, "	1,293
James Nasmith ... ..	" ...	29 " "	1,294
John Fraser ... ..	" ...	29 " "	1,295
Robert Bain Davidson ... ..	" ...	8 June, "	1,296
Frederick Leake ... ..	" ...	24 " "	1,297

## RETURN of Pilotage Exemption Certificates issued during the Financial Year 1877-78.

No. of Certificate.	Names of Masters to whom Certificates have been issued.	Name of Vessels for which Certificates have been issued.	Port included in Certificate.
395	Robert Burr ... ..	Omaha ... ..	Auckland
396	Thomas Fernandez ... ..	Wave ... ..	Auckland, Lyttelton.
397	James Tozer ... ..	Albion ... ..	Wellington, Lyttelton, Dunedin.
398	John Barnard ... ..	Isabelle ... ..	Wellington, Hokitika, Dunedin, Kaipara (Wairoa River only).
399	John McKenzie ... ..	Kate McGregor ... ..	Wellington.
400	William Hunt ... ..	Excelsior... ..	Wellington and Lyttelton.
401	John McDonald ... ..	Carlotta ... ..	Wellington.
402	Nathaniel Myers ... ..	Annie Hill ... ..	Dunedin, Wellington.
403	Samuel Finlay ... ..	Ceres ... ..	Wellington.
404	Francis Morton Garraway ... ..	Mazeppa ... ..	Auckland.
405	William Hutcheson Manson ... ..	Canny Scot ... ..	Lyttelton.
406	Henry Downing Potter... ..	Bobycito ... ..	Dunedin.
407	John Cowper ... ..	Rosannah Rose ... ..	Dunedin.
408	Alexander Wynd ... ..	Sarah Pile ... ..	Wellington, Lyttelton, Kaipara.
409	Thomas Chandler ... ..	Exonia ... ..	Wellington, Kaipara (Wairoa River only).
410	Charles Thomas Paterson ... ..	Pakeha ... ..	Dunedin, Kaipara River.
411	John Anderson Mann ... ..	Pet ... ..	Lyttelton.
412	John Anderson ... ..	s.s. Taranaki ... ..	Wellington, Dunedin, Manukau, Lyttelton, Picton.
413	Thomas Clark Abrams ... ..	Ellerton ... ..	Auckland, Kaipara.
414	Henry Abbott ... ..	Jane ... ..	Wellington, Lyttelton.
415	Daniel Robert Cooper ... ..	Island Lily ... ..	Lyttelton, Auckland.
416	Thomas McGee ... ..	s.s. Wellington ... ..	Dunedin, Lyttelton, Wellington, Manukau, New Plymouth, Picton, Nelson.
417	George Henry Crone ... ..	Hally Bayley ... ..	Dunedin.
418	James Carey ... ..	Glencoe ... ..	Auckland.
419	David Buike ... ..	Minnehaha ... ..	Auckland, Kaipara, Wellington, Lyttelton.
420	John McLeod ... ..	Ethel ... ..	Dunedin, Kaipara.
421	John Urquhart ... ..	Gael ... ..	Auckland, Dunedin.
422	Cornelius Fred Tucker ... ..	F. W. Tucker ... ..	Wellington.
423	Harold Dillner ... ..	Flora ... ..	Lyttelton, Kaipara (Wairoa River only).
424	Kenneth McKinnon ... ..	Pakeha ... ..	Dunedin, Kaipara.
425	George Alfred Marks ... ..	Seagull ... ..	Wellington, Dunedin, Lyttelton, Bluff, Russell, Auckland.
426	Edward Finlayson ... ..	Nonpareil ... ..	Dunedin.
427	Thomas Rutter ... ..	Ellerton ... ..	Auckland.
428	Michael Vincent Harley ... ..	Wild Wave ... ..	Wellington.
429	Frederick Highfield ... ..	Sarah Pile ... ..	Wellington.
430	Robert Kirk ... ..	Clio ... ..	Wellington.
431	Frederick Melhuish Dicker ... ..	s.s. Go-Ahead ... ..	Wellington.
432	Jno. Cowan ... ..	Annie Hill ... ..	Dunedin.
433	Christon Anthon ... ..	Anthons ... ..	Wellington.
434	Joseph Hughes ... ..	Star of the South ... ..	Auckland, Wellington, Dunedin, Lyttelton.
435	Robert Evans ... ..	Raymond ... ..	Wellington.
436	David McKenzie ... ..	Samson ... ..	Dunedin.

## RETURN of Steam Vessels to which Passenger Certificates have been issued in New Zealand during the Financial Year 1877-78.

Name of Vessel.	Tons Register.	Horse-power of Engines.	Nature of Propeller.	Class of Certificate.	Nature of Engines.	Remarks.
Akaroa ... ..	43	28	Screw	Sea-going	Compound	New Vessel.
Alert ... ..	12	8	"	River	Non-condensing	
Annie Milbank... ..	44	24	Paddle	Extended River	"	
Antrim ... ..	35	30	"	River	"	
Argyle ... ..	126	40	Screw	Sea-going	Compound	
Balclutha ... ..	84	50	Stern-wheel	River	Non-condensing	
Beautiful Star ... ..	126	30	Screw	Sea-going	Condensing	
Bella ... ..	12	12	"	Extended River	Non-condensing	
Black Diamond ... ..	9	20	"	River	"	
Charles Edward ... ..	89	60	"	Sea-going	Condensing	
City of Cork ... ..	29	40	Paddle	River	...	
Clyde ... ..	27	32	Twin-screw	Extended River	Non-condensing	
Delta ... ..	60	30	Paddle	River	"	
Devonport ... ..	23	12	"	"	"	
Dispatch ... ..	38	40	"	Sea-going	Condensing	
Dunoon ... ..	7	10	Twin-screw	River	Non-condensing	
Durham ... ..	54	30	Screw	Extended River	Compound	
Easby ... ..	969	140	"	Sea-going	"	
Eclipse ... ..	8	8	"	River	Non-condensing	
Enterprise ... ..	61	32	Paddle	Extended River	"	
Fairy ... ..	4	4	Screw	River	"	
Fairy ... ..	33	15	"	Extended River	"	
Geelong ... ..	108	70	Paddle	"	Condensing	
Gemini ... ..	11	7	Twin-screw	River	Non-condensing	
Go-Ahead ... ..	82	30	"	Sea-going	Condensing	
Hauraki ... ..	73	45	Paddle	"	"	

RETURN of Steam Vessels to which Passenger Certificates have been issued, &c.—*continued.*

Name of Vessel.	Tons Register.	Horse-power of Engines.	Nature of Propeller.	Class of Certificate.	Nature of Engines.	Remarks.
Hawea ...	461	160	Screw	Sea-going	Compound	
Ino ...	24	12	Twin-screw	Extended River	Non-condensing	
Iona ...	159	65	Screw	Sea-going	Compound	
Iona ...	97	45	Stern-wheel	River	Non-condensing	New Vessel.
Jane ...	25	8	Screw	Extended River	"	
Jane Douglas ...	75	20	"	Sea-going	Compound	
Jane Williams ...	33	15	"	River	Non-condensing	
Kennedy ...	138	50	"	Sea-going	Compound	
Kina ...	39	15	"	Extended River	Condensing	
Kiwi ...	133	30	"	Sea-going	Compound	
Koputai ...	5	120	Paddle	"	"	New Vessel
La Buona Ventura ...	4	4	Screw	River	Non-condensing	Steam Launch
Lady Barkly ...	30	25	Paddle	Extended River	Condensing	
Lalla Rookh ...	23	14	"	"	Non-condensing	
Lilie ...	10	10	"	River	"	
Lioness ...	26	60	"	Sea-going	Condensing	
Lily ...	4	6	Screw	River	Non-condensing	Steam Launch
Lily ...	20	10	Twin-screw	Extended River	"	
Luna ...	247	45	Paddle	Sea-going	Condensing	
Lyttelton ...	86	25	"	"	"	
Lyttelton ...	6	14	Twin-screw	Extended River	Non-condensing	New S. Launch
Mania ...	62	30	Paddle	"	"	
Manawatu ...	103	45	"	Sea-going	Condensing	
Maori ...	118	60	Screw	"	"	
Minnie Casey ...	43	25	"	Extended River	Compound	
Mohaka ...	20	12	"	"	Non-condensing	New Vessel
Moa ...	49	25	"	River	Condensing	
Murray ...	78	18	"	Sea-going	"	
Napier ...	44	24	"	"	Compound	
Noko ...	15	9	"	Extended River	Non-condensing	New Vessel
Oregon ...	20	16	Paddle	River	"	
Oreti ...	117	43	Screw	Sea-going	Compound	New Vessel
Osprey ...	28	10	Paddle	Extended River	Non-condensing	
Pearl ...	14	5	Screw	River	"	
Peninsula ...	31	18	Paddle	"	"	
Piako ...	8	8	"	"	"	New Vessel
Pioneer ...	18	10	Screw	"	"	
Pioneer ...	10	6	"	"	"	Steam Launch
Portobello ...	11	10	Paddle	"	"	
Pretty Jane ...	101	35	Screw	Sea-going	Condensing	
Rangatira ...	186	50	"	"	"	
Result ...	18	23	"	Extended River	Non-condensing	
Result ...	13	10	Paddle	"	"	
Rangiriri ...	30	30	Stern-wheel	River	"	
Reynolds ...	10	14	Screw	"	"	New Vessel
Riro Riro ...	4	4	"	"	"	Steam Launch
Rosina ...	19	14	"	Extended River	"	
Rotoiti ...	17	15	"	"	"	New Vessel
Rotomahana ...	138	45	"	Sea-going	Condensing	
Rotorua ...	576	172	"	"	Compound	
Rowena ...	74	30	"	"	"	
Ruby ...	20	29	Paddle	River	Non-condensing	
Samson ...	111	70	"	Sea-going	Condensing	
Scotchman ...	20	10	Screw	River	Non-condensing	
Shag ...	31	27	"	Sea-going	"	
Sir Donald ...	29	12	"	Extended River	Condensing	
Southern Cross ...	139	50	"	Sea-going	Compound	
St. Kilda ...	174	45	"	"	Condensing	
Staffa ...	40	25	"	Extended River	"	
Star of the South ...	175	45	"	Sea-going	Compound	
Stormbird ...	67	30	"	"	Condensing	
Tainui ...	47	22	Paddle	Extended River	Non-condensing	
Takapuna ...	58	20	"	River	"	
Tam O'Shanter ...	10	7	Screw	"	"	
Tangihua ...	20	15	"	"	"	New Vessel
Taranaki ...	298	90	"	Sea-going	Compound	
Taupo ...	461	160	"	"	"	
Te Aroha ...	50	14	Paddle	River	Non-condensing	
Titan ...	21	55	"	Extended River	Condensing	
Tongariro ...	39	10	"	"	Non-condensing	
Tongariro ...	62	25	"	"	"	New Vessel
Transit ...	12	10	"	River	Non-condensing	
Tui ...	64	20	Screw	Sea-going	Compound	
Waikato ...	61	14	Paddle	River	Non-condensing	
Waipara ...	70	30	Twin-screw	Sea-going	"	
Waitaki ...	228	90	Screw	"	Compound	
Waitara ...	11	15	"	Extended River	Non-condensing	
Wakatipu ...	1,158	256	"	Sea-going	Compound	
Wallabi ...	101	25	"	"	Condensing	
Wallace ...	64	50	Paddle	"	"	
Wanaka ...	277	120	Screw	"	Compound	
Wanganui ...	165	50	"	"	Condensing	
Wellington ...	261	80	"	"	"	



## DESCRIPTIVE RETURN of New Zealand Coastal Lighthouses.

Name of Lighthouse.	Order of Apparatus.	Revolving or Fixed.	Period of Revolving Light.	Colour of Light.	Tower, built of.	Dwellings, built of.	Date first Lighted.
Tiri Tiri ...	2nd order dioptric	Fixed	...	White ...	Iron	Timber	1st Jan., 1865
Ponui Passage ...	5th "	"	...	Red, white, and green	Timber	"	29th July, 1871
Portland Island ...	2nd "	Revolving	30"	White ...	"	"	10th Feb., 1878
Portland Island ...	...	Fixed	...	Red; to show over Bull Rock	...	...	...
Pencarrow Head ...	2nd "	Fixed	...	White ...	Iron	Timber	1st Jan., 1859
Manukau Heads ...	3rd "	"	...	" ...	Timber	"	1st Sept., 1874
Brothers ...	2nd "	Flashing	10"	" ...	"	...	24th Sept., 1877
Brothers ...	...	Fixed	...	Red, over Cook Rock	...	"	...
Cape Campbell ...	2nd "	Revolving	1'	White ...	"	"	1st Aug., 1870
Godley Head ...	2nd "	Fixed	...	" ...	Stone	Stone	1st April, 1865
Moeraki ...	3rd "	"	...	" ...	Timber	Timber	22nd April, 1878
Taiaroa Head ...	3rd "	"	...	Red ...	Stone	Stone	2nd Jan., 1865
Nugget Point ...	1st "	"	...	White ...	"	"	4th July, 1870
Dog Island ...	1st order catadioptric	Revolving	30"	" ...	"	"	1st Aug., 1865
Cape Foulwind ...	2nd order dioptric	"	30"	" ...	Timber	Timber	1st Sept., 1876
Farewell Spit ...	2nd "	"	1'	White, with red arc, over Spit end	"	"	17th June, 1870
Nelson ...	4th "	Fixed	...	White, with red arc; to mark limit of anchorage	Iron	"	4th Aug., 1862
Cape Maria van Diemen	1st "	Revolving	1'	White ...	Timber	"	In course of erection
Cape Maria Van Diemen	...	Fixed	...	Red; to show over Columbia Reef	...	...	"
Akaroa ...	2nd "	Flashing	10"	White ...	"	"	"
Centre Island ...	1st "	Fixed	...	White, with red over inshore; dangerous	"	"	"
Puysegur Point ...	1st "	Flashing	10"	White ...	"	"	"

RETURN showing the Number of Masters and Mates examined during the year ended the 30th June 1878, distinguishing the Number of Successful and Unsuccessful Candidates.

CLASS OF CERTIFICATE.	AUCKLAND.			WELLINGTON.			DUNEDIN.			TOTALS.		
	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign-going Certificates ...	23	15	38	11	10	21	20	3	23	54	28	82
Home-Trade Certificates ...	6	1	7	30	8	38	4	1	5	40	10	50
River Steamer Certificates ...	5	...	5	...	...	...	3	1	4	8	1	9
Totals ...	34	16	50	41	18	59	27	5	32	102	39	141

Return of Wrecks on which Inquiries have been held under the Enquiry into Wrecks Act, or for which Casualty Returns have been received, between the 1st July, 1877, and the 30th June, 1878.

Date of Casualty.	Name of Vessel; also, Age and Class when known.	Rig.	Tonnage Registered.	Number of		Nature of Cargo.	Nature of Casualty.	Number of Lives Lost.	Place where Casualty happened.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.					Direction.	Force.		
1877. July 8	Stormbird, s.s., 23 years; Isabelle, 7½ years	Schooner	69	...	...	Ballast	Collision; partial loss	...	Wellington Harbour	S.S.E.	Strong breeze	Collision caused by the light on board the "Isabelle," which vessel was at anchor, being obscured as the "Stormbird" approached	Peter Doile.
" 10	Southern Cross, s.s., 3½ years; Adah, 1½ years	Ketch	29	3	1	General	Collision; partial loss	...	½ mile to westward of Ponui Passage light	W.S.W.	Light	Casualty caused by carelessness of those on board the "Adah," and the "Southern Cross" not slowing her engines when she lost sight of the "Adah's" light	John Barnard. Francis Holmes.
" 14	Jessie Henderson, 3 years	Schooner	92	9	1	Copra	Stranded; total loss	...	Rabi Island, Fiji Group	S.	Fresh breeze	...	William Jones. John Urquhart.
" 14	Meru, 8 years	"	237	10	...	Timber	Stranded; total loss	...	½ of a mile outside outer North Head of Hokianga Harbour	Calm	...	Casualty caused by the wind suddenly falling, and the heavy swell rolling in causing the chain to part	George Loverock.
" 17	Canterbury	"	34	3	...	Timber	Stranded; no damage	...	Cullen Point, Port of Havelock	...	...	Vessel at anchor; during night the tide swung her round on to the shore	Louis Pike.
" 17	Fairlie, 11½ years	"	177	7	...	N.Z. produce	Stranded; partial loss	...	On a patch of rocks off Rotaro Islands, Waiheke Passage, Auckland	E.	Moderate	Casualty occurred through an accident	Gregory Seymour Norris.
Aug. 3	Taranaki, s.s., 12 years	"	327	25	21	General	Collision; total loss of sailing vessel	...	West of Pigeon Bay Entrance, nearer to Port Levy	E.N.E.	Light breeze	"Quiver" considered to blame for not attempting to get out of the way of the "Taranaki" when she was seen approaching. "Quiver" was not seen by "Taranaki" until collision, and it is doubtful if she had any light burning	John Griffiths.
" 6	Quiver, 7 years Beuleuch, 6 years	Ketch Schooner	20 66	2 13	...	Ballast Stores (sailing) Coal	Stranded; total loss	1	N.E. extreme end of Macquarie Island	E.	Hurricane	Wreck caused by a very heavy gale causing cables to part during the night	Charles Smith. Henry Douglas Bezer.
" 7	Luna, p.s., 13 years Herald, 10 years	" "	247 53	20 5	...	Coal Ballast	Collision; partial loss	...	In Wellington Harbour, about 800 yards from wharf	N.W.	Strong breeze	Collision caused by the "Luna" not keeping out of the way of the "Herald," in accordance with section 15 of the Regulations for Preventing Collisions at Sea	Stephen Bascand
" 7	Queen Bee, 18 years, 15 years	Barque	726	24	30	General	Stranded; total loss	1	Forewell Spit	...	Fresh breeze	Master adjudged guilty of grave default in not using lead and other means of ascertaining his position when so near the shore and on a strange coast. Master's certificate suspended for three years. The certificate of John Ernest Going, second mate, was suspended for six months, as he was the officer of the watch at the time of the stranding, and did not use proper precautions to keep the vessel off the shore. The first mate was in as grave an error as the master as to the navigation of the ship; the Court, however, did not suspend his certificate as he was not responsible, being acting under the master's orders*	Donald McKay. John Sayes Davies

\* The Board of Trade have reduced the period of suspension of Captain Davies's certificate from three years to one year, and have granted him a mate's certificate during the period of suspension.

Aug. 13	Robina Dunlop, 34 years	Barque	493	14	...	Ballast	Stranded ; total loss	...	About a mile north of the Turakina River, Cook Strait	N.W.	Fresh breeze	Master adjudged guilty of culpable negli- gence in not paying greater attention to the navigation of his ship, particularly with reference to the course and distance run, and not taking proper soundings. His certificate was suspended for two years. First mate, George Frederic Au- gust Carl von Shoen, was censured for not having paid proper attention to the course made and distance run	John Graham.
"	Colleen Bawn, 14 years	Schooner	29	3	...	Timber	Stranded ; partial loss	...	Sunken rock about $\frac{1}{2}$ of a mile south of Trio Islands, Admi- ralty Bay	S.	Moderate gale	...	Henry George Waller.
"	Echo, 3 years	"	27	5	...	N.Z. pro- duce and live stock	Stranded ; foundered ; total loss	2	Midway between North Spit and Mussel Rock, near Raglan	S.S.E.	...	The loss of the vessel was caused by the tiller-lines giving way	John Corvell.
"	Lionel, s.s., 1 year	Cutter	15	4	1	General stores	Stranded and capsized ; total loss	5	Entrance to Wanga- ape Harbour	Easterly	Light air	Vessel struck and capsized when crossing the bar	William Stuart.
"	St. Kilda, 9 years, Al at Lloyd's	Schooner	189	10	2	General	Stranded ; partial loss	...	North Beach, Port of Grenmouth	E.N.E.	Light	Casualty caused by the current of the river causing the vessel not to answer her helm	Robert Locke Owen.
Sept. 4	Mary Ann Hudson, 8 years	Ketch	Under 15	2	...	Ballast	Stranded ; total loss	...	Mouth of Mohaka River, Hawke's Bay	N.E.	...	Casualty caused by the wind suddenly falling when the vessel was crossing the bar of the Mohaka River	John Rush.
"	Clio, 7 years	"	81	...	...	N.Z. pro- duce	Stranded ; partial loss	...	North Spit of Hoki- tika River	Westerly	Light	Casualty caused by the tug "Lioness," which was towing the "Clio," being washed into the North Spit by the current and ocean set ; and before she could get off the "Clio" was washed ashore also	Alexander Chan- bers.
"	Pelican, 3 years	Schooner	74	6	...	General	Stranded ; partial loss	...	North Spit of Hoki- tika River	S.W.	Gentle breeze	Casualty caused by the "Pelican" touch- ing on the bar while in tow of the tug "Lioness"	Colin Campbell.
"	Merlin, 7 years	"	40	4	...	Coal	Stranded ; partial loss	...	S.W. bank of Wai- tara River, 100 yards inside bar.	W.S.W.	Stiff breeze	Casualty reported to have been caused by the master attempting to cross the bar when signal "Put to sea" was flying. Action of master considered justifiable, as the vessel was in an unseaworthy con- dition, and a gale was rising	John Grubb.
"	Zior, 5 years	"	63	5	1	N.Z. pro- duce	Damage done by sea breaking on board ; partial loss Stranded ; total loss	2	20 miles off Brighton, West Coast	S.W.	Whole gale	The casualty was caused by a heavy sea breaking suddenly on board	Archibald Bell.
"	Miranda, 15 years	Cutter	23	3	...	Ballast	Stranded ; total loss	...	Blind Bay, Great Barrier Island	W.S.W.	Very hard	The loss of the vessel was caused by the force of the wind causing her to drag on to the rocks, where she lost her rudder ; and, becoming unmanageable, became total wreck	Joseph Silva.
"	Argus, 23 years	Ketch	36	3	...	Produce	Stranded ; partial loss	...	North Beach, Grey- mouth	...	Calm	Casualty caused by the tug getting ashore	John Fitzgerald Donovan.

REVIEW of Wrecks on which Inquiries have been held, &c.—*continued.*

Date of Casualty.	Name of Vessel; also, Age and Class when known.	Rig.	Registered Tonnage	Number of		Nature of Cargo.	Nature of Casualty.	Number of Lives Lost.	Place where Casualty happened.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.					Direction.	Force.		
1877.													
Sept. 29	Sarah Fife, 13 years	Brigantine	115	8	1	Hewn Timber	Stranded; partial loss	...	Buller Bar, East Bank, Westport	N.N.W.	Fresh breeze	Casualty caused by master crossing the bar before the signals were put up for him to do so	David Bissett.
Oct. 11	Lizzie Guy, 6 years	Schooner	93	...	...	Timber	Stranded; partial loss	...	North Spit, Hokitika River, Westland	S.W.	Moderate breeze	Casualty caused by tug-ropes becoming slack when rounding North Spit	Henry Priest.
" 14	Jane Elkin, 12 years	Ketch	25	3	...	Timber	Stranded; total loss	...	Patea River bar	S.S.E.	Moderate breeze	Casualty caused by vessel striking on a boulder in the trough of the sea when crossing Patea bar	Peter Grey Leslie.
" 18	Torea, 2½ years	Schooner, F. and A.	70	6	...	Timber	Stranded; partial loss	...	Off Cape Campbell	N.N.W.	Nearly calm	Casualty caused by baffling winds and the current	John Grundy.
Supposed about	Clan Alpine, 1 year	Schooner	40	4	...	N.Z. produce	Total loss; supposed capsized	supposed 4 (all hands)	Supposed about S.E. of Kaikoura Peninsula, some 15 or 20 miles	...	...	Vessel supposed to have capsized in a heavy squall	James Smart.
Oct. 24	Emma, 10 years	Barque	285	11	1	Sugar	Master and one seaman washed overboard	2	Lat. 42° 7' S., long. 128° 4' E.	S.W.	Whole gale	A heavy sea struck the vessel, and washed the Captain and an A.B. overboard	William Mangles Stockley.
" 4	County of Peebles, 2 years	Ship	1614	33	36	General	Collision; partial damage	...	19 miles distant N.E. by N. from Saint Catherine's Point, Isle of Wight	S.W. by S.	...	The County of Peebles came into collision with a French vessel, the "Lucie Marie," in the English Channel, no light being seen on board the "Lucie Marie."	William Fordyce.
" 6	Midge, 23 years	Cutter	17	2	...	General merchandise	Stranded; partial loss	...	Arrow Rock entrance of Nelson Harbour	W.	Light air	Vessel carried on to the rock by a sudden puff of wind when sweeping out of the harbour with the ebb tide	Henry Eurs.
" 10	Waihopai, 10 years	Schooner	44	3	...	Timber	Stranded; total loss	...	Reef near to Pencarrow Head, entrance to Wellington Harbour	N.W.	Half gale	Casualty caused by vessel missing stays when entering harbour	Peter Curron.
" 17	Empress of China, 3 years	Barquentine	255	9	...	Ballast	Stranded; partial loss	...	South Head, Lyttelton Harbour	Baffling	...	The casualty was caused by a sudden lull in the wind when the vessel had no steerage on her, when the swell of the sea carried her on to the rocks.	Alfred Griggs.
" 20	Dido, 5 years	Cutter	36	4	2	Machinery	Stranded; partial loss	...	Totaranui Rock, in Blind Bay	S.E.	Strong breeze	Vessel missed stays, and went on to the rocks	Alexander McFarlane.
" 23	Dolly Varden, 5 years	Cutter	20	2	...	Ballast	Stranded; partial loss	...	Tewai Point, entrance to Bluff Harbour	W.S.W.	Fresh gale	Casualty caused by vessel, when very light, attempting to beat up the harbour in squally weather	George William-son.
Dec. 9	Colleen Bawn, 15 years	Schooner	29	3	...	Timber	Stranded; partial loss	...	South Spit, at entrance of Wanganui River, Cook's Strait, West Coast, N.I., N.Z.	W.N.W.	Fresh	Casualty caused by the wind suddenly dropping, and then veering round to another quarter, while the vessel was entering the river	Henry Waller.
" 22	Craig Ellachie, 15 years	Brig	226	9	1	Coal	Stranded; total loss	...	Timaru, about a cable's length north of Government landing service	E.S.E.	Gale	Casualty caused by cable parting through stress of weather	Magnus S. Meredith.

1878. Jan'y 12	Excelsior, 12 years	Schooner	92	6	...	Ballast	Supposed foundered; total loss	Supposed 6	At sea, supposed be- tween Timaru and Wellington	...	...	Vessel left Timaru for Wellington on 12th January, 1878, and has not since been heard of	William Hunt.
" 13	Nellie, 1 year	"	66	5	...	New Zea- land pro- duce	Stranded; total loss	...	Astrolabe Reef, off Motiti Island, Bay of Plenty, East Coast, New Zealand	W.S.W.	Moderate breeze	Wreck caused by neglect of the Master in not seeing that a proper look-out was kept; his certificate was suspended one month, and he was ordered to pay costs of inquiry	Alexander George Armstrong.
" 16	Huon Belle, 14 years	Ketch	42	3	...	Wool	Stranded; partial loss	...	South side Moeraki Beach	W.N.W.	Strong gale	Casualty caused by negligence on the part of the Master, whose New Zealand Cer- tificate of Service, No. 2062, was sus- pended for six months	Robert Hughes.
" 24	Oriental, 14 years	Barque	281	11	...	Guano	Stranded; total loss	...	West side of Malden Island	S.W.	Strong	The anchor came home when the vessel was anchored close to the beach	John Brown.
Feb. 14	Excelsior, 13 years	Barge	35	3	...	Ballast	Stranded; total loss	...	Amuri Bluff anchorage	N.E.	Gentle breeze	Casualty caused by force of wind causing anchors to drag	William Atkins Payne.
" 19	Gainsborough, 11 years	Ship	974	40	231	General	Loss of bob- stay, bow- sprit, &c.	...	At sea, 156° East long., 44° South lat.	N.E.	Strong breeze	Casualty caused by stress of weather	John Carter.
" 21	Ness, 2 years	Cutter	31	3	...	Timber	Stranded; damage slight	...	South Beach, Waipara River, Poverty Bay	N.W.	Moderate	Stranding caused by insufficient depth of water	James Stephens.
Mar. 2	Glencoe, 30 years	Barque	159	8	...	Timber	Stranded; total loss	...	Rocks at Gore Bay	N.E.	Moderate gale	Casualty caused by force of wind causing the moorings to which the vessel was fastened to drag	James Carey.
" 4	Canterbury, 23 years	Schooner	34	3	1	Ballast and few phgs. sundries	Stranded; total loss	...	Okakuri Bay, Tory Channel	S.E.	Strong gale	Casualty caused by a gale rising and causing anchors to drag while the vessel was at anchor in Okakuri Bay	Louis Pike.
" 22	Omaha, 4 years	Brigantine	133	7	...	General ballast	Stranded; partial loss	...	On a reef of rocks about one-third mile from shore, opposite Cus- tomhouse, Waitangi Bay, Chatham Islds.	N.W.	Moderate gale	Casualty caused by vessel missing stays and getting among kelp while beating out of Waitangi Bay, Chatham Islands	George Jackson Hughes.
" 24	Palmerston, 3 years	Ketch	25	3	...	Sawn timber	Stranded; partial loss	...	Rocks near Maori kail, in New River	Westerly	Gentle breeze	Casualty caused by delay in letting go the anchor when it was found that the vessel was making no headway owing to the current	Robert Brebner.
April 1	Kedar, 14 years	Barque	532	13	...	Timber	Abandoned, water logged	1	South Pacific Ocean, about 17° 20' S., 161° 9' W.	N.E.	Hurricane	Casualty caused by hurricane	Peter Johnson.
May 11	Lily of the Wave	Ketch	10	1	...	...	Stranded; total loss	...	Beach near Arrow Rock, at entrance to Nelson Harbour	N.W.	Whole gale	Casualty caused by vessel being left at anchor without any one on board	Hone Raniera, alias John Daniel.
" 31	Kentish Tar, 1½ years	Barque	569	15	...	General	Loss of wheel and mizzen-top- mast	1	Lat. 44° 40' S., long. 74° E.	W.N.W.	Whole gale	Loss of wheel, &c., caused by shipping heavy sea	Walter Pottinger.
" 11	Mermaid, 23 years	Ketch	9	2	...	Limestone	Stranded; total loss	...	North Tata Island, Massacre Bay	N.E.	Moderate gale	Casualty caused by cable parting through heavy swell	William Smith.
" 15	Aurora, 10 years	Schooner	52	5	...	Ballast	Collision; partial loss	...	Queen Charlotte's Sound, New Zealand, off Boot Cove	W.N.W.	Light	Casualty caused by error in judgment of George Saunders, second mate of the "Wellington," who held no certificate, in starboarding his helm and endeavour- ing to pass ahead of the "Aurora." Second mate of "Wellington" ordered to pay costs of inquiry	George Romeril.
" 15	Wellington, s.s.	Steamship	279	19	15	General	Collision; slightly damaged	...					Thomas McGee.

## RETURN of Wrecks on which Inquiries have been held, &amp;c.—continued.

Date of Casualty.	Name of Vessel; also Age and Class when known.	Rig.	Tonnage	Number of		Nature of Cargo.	Nature of Casualty.	Number of Lives Lost.	Place where Casualty happened.	Wind.		Finding of Court of Inquiry.	Name of Master.
				Crew.	Passengers.					Direction.	Force.		
1877. May 16	Enterprise, 12 years	Brigantine	85	7	...	Timber		...	Breastwork, Lyttelton Inner Harbour	S.W.	Hurricane	Collision caused by heavy gale.	George Mandle.
	Omaha, 4 years	"	133	7	...	General	Collision; partial damage	...	Breastwork, Lyttelton Inner Harbour	S.W.	Hurricane	Collision caused by heavy gale	George Jackson Hughes.
	W. C. Wentworth, 23 years	Barque	315	9	...	Ballast		...	Breastwork, Lyttelton Inner Harbour	S.W.	Hurricane	Collision caused by heavy gale	David Cochran Law.
" 16	Ann Ganbles, 16 years Liverpool, 1st Class	Barque	424	14	...	General	Stranded; total loss	...	Te Wais Point, Bluff Harbour	S.W. by S.	Strong gale	Casualty caused by default of master in ordering the helm to be put up when the squall struck the vessel and the port-anchor was let go. Master's certificate was suspended for six months.*	John Morgans.
" 28	Ocean Bird, 7 years	Ketch	33	3	...	Timber	Grounded; partial loss	...	250 yards from extreme point of North Spit, Waimakariri River, at the bar	S. to S.W. veering	Gentle breeze	Casualty caused by the wind veering ahead and the sea catching the vessel on her quarter and heaving her on to the spit	John Moore.
June 16	Helen, 16 years	Schooner	23	1	...	Ballast	Foundered; total loss	...	Near the Needles, N.E. coast of N.Z.	S.W.	Stiff breeze	Casualty caused by stress of weather	Frank Gomez.
" 24	Hydrabad, 13 years	Ship	1350	32	2	Railway Plant	Stranded; total loss	...	On beach, about 1½ miles N. of Horowhenua River, Cook Strait	W.	Storm	Inquiry still pending	Charles Holmwood, jun.
" 26	Lady Don, 11½ years	Brigantine	68	6	...	Grain	Stranded; total loss	...	Just inside South Head of Waikato River	W.S.W.	Gale	Casualty caused by stress of weather and wheel being carried away	Edwin Gill.
...	Hinemoa	Schooner	75	6	1	Cattle, sheep, and general cargo	...	Supposed all hands	Supposed between Auckland and Samoa	Unknown		Vessel left Auckland for Samoa on 10th May, 1878; not since been heard of	Hugh Ross.

\* Since the inquiry His Excellency the Governor has ordered a New Zealand Certificate as Master to be issued to Captain Morgans, and has recommended the Board of Trade to re-issue his suspended certificate at once.

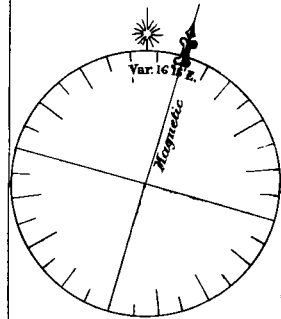
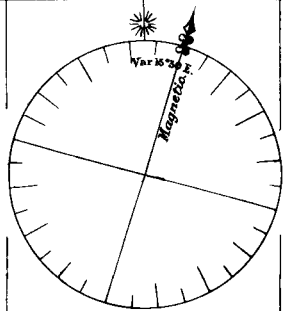
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# NEW ZEALAND WRECK CHART

1<sup>st</sup> July 1877 to 30<sup>th</sup> June 1878

COMPILED FROM  
OFFICIAL RECORDS  
IN THE  
MARINE DEPARTMENT.



## SYMBOLS

### CASUALTIES BY STRANDING

X Signifies a Total Loss  
X " " Partial Loss

### CASUALTIES BY COLLISION

00 Collision between two Sailing-vessels with partial loss  
0+ " " a Steamer & Sailing-vessel with partial loss  
●+ " " " " " " total loss of sailing-vessel

### CASUALTIES OTHER THAN COLLISION OR STRANDING.

● — " Total loss of a Sailing vessel.  
○ — " Partial " " "  
+ — " Missing vessel " "

