1881. NEW ZEALAND.

DEPARTMENT MARINE

(ANNUAL REPORT OF THE).

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

Marine Department, Wellington, 18th August, 1881.

I do myself the honor to submit the following report on the operations of this department SIR.

during the past financial year ended the 31st March last.

Some important changes in the administration of the department have been made during the period referred to. After having been combined with the Customs since the early part of 1870, the Marine Office was in April, 1878, severed from that department, and placed under the management of a Nautical Officer. In October last the Government determined to place the Marine and Customs Departments again under one permanent head, and was pleased to restore me to the position I had formerly occupied, that of having charge of both departments; the services of the officer recently in charge of the Marine Department being retained as Nautical Adviser to the department. The Government at the same time transferred the administration of the Inspection of Machinery Act from the Public Works Department to the Marine Department, in order that the Inspectors under that Act, who are also Inspectors of Steamers, might be placed under the supervision of one department. Shortly before these changes were made, the nominal connection between the Weather-reporting Office and the Marine Department ceased, through the amalgamation of the former with the Meterological Department; and in July, 1880, the management of the Kohimarama Naval Training School was handed over to the Education Department.

Lighthouses.—The several coastal lighthouses, 21 in number, have been visited and inspected by an officer of the department during the past year; the lights were found to be thoroughly efficient in

every case, and the buildings and their surroundings generally in good order.

Reference has been made in previous reports to the necessity for a light at Cape Egmont. A site was selected for this light as far back as 1874; but, owing to the disaffection of the Natives living near that part of the coast, it was found impracticable to proceed with its erection. On the establishment of military posts, and the occupation of the country in the vicinity of Cape Egmont, all chance of serious opposition by the Natives to the establishment of the light was removed, and the Government at once gave directions for its erection to be proceeded with. As the Mana Light, which had ceased to be used after the light on the Brothers was lighted, was in every way suited for Cape Egmont, instructions were given for its removal to that place. The tower is of iron, 53 feet high, and weighs 90 tons. It was taken down, removed, and re-erected on its new site, without accident or mishap of any kind. The light was exhibited at Cape Egmont on the night of the 1st instant.

Although the light on the Brothers, in conjunction with the lights at Pencarrow Head and Cape Campbell, have lighted the southern entrance and narrowest part of Cook Strait, it cannot be said that the strait is well lighted until a light is placed on Stephen's Island. Strangers, it is alleged, on entering the strait from the westward at night, are inclined, in their anxiety to keep clear of Stephen's Island, to give it so wide a berth that they run the risk of being embayed in Wanganui bight. A suitable site for a light has been selected on Stephen's Island, and a track from the beach cut to it through the bush; but, in the absence of appropriations, the work of constructing the light cannot be

gone on with. The cost is estimated at £7,000.

The apparatus and lantern for the light at Mokohinau are still in store at Auckland, no instructions having as yet been given to proceed with the erection of this light. The Tory Channel leading lights

will be proceeded with very shortly

Paraffin-burners have been fitted at the lights at Pencarrow Head and Tiritiri. Mineral oil is now used at all the New Zealand lights. At the small lights at Poniu Passage and Bean Rock (Auckland Harbour) the ordinary kerosene of commerce is used; all others are supplied with paraffin oil, which is specially imported. Whilst referring to this subject I think it is right that I should call attention to a passage which appears in the printed report of the Controller and Auditor-General, attention to a passage which appears in the printed report of the Controller and Auditor-General, recently presented to Parliament, which has evidently been made under a misapprehension of the conditions under which the lighthouse oil is supplied, and which, if not corrected, might create an

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impression that due care is not exercised by the department on this important point. In referring to marine stores Mr. FitzGerald states, "That the articles, such as oil, on which the efficient maintenance of the lights depend, should be supplied without a previous inspection as to quality as well as quantity, especially when no error can be rectified in some cases for several weeks after their delivery, appears to involve some risk as to the proper maintenance of the lights." The quality of the oil referred to is guaranteed by the fact that it is purchased from the Trinity Board in London; it is tested by the Board's inspector before it is shipped, and is the same as that which is used in the English lighthouses. On reaching the lighthouses here the oil is removed from the tins in which it is imported into storage tanks, and the contents of each tank tested before being used. If the oil were to be thoroughly tested in Wellington before it is sent to the lighthouses, each tin would have to be opened, which would involve a large amount of labour and risk of loss of oil. The quantity is attested by the packages it is imported in, which are 5-gallon tins enclosed in cases, similar to those in which kerosene is packed.

A report by the Marine Engineer on the works carried out under his directions for this depart-

ment is appended hereto.

Light Dues.—The light dues collected during the past year amounted to £6,734 0s. 7d. This is a considerable reduction on the amounts collected during previous years, and has been caused by the abolition of all light dues on coasting vessels.

Government Steamers.—These vessels are both in good order. The "Stella" has been constantly employed in work connected with this department, but has also been able to accomplish a large amount of work for other departments, notably the mail service to the bays and sounds of the west coast of the Middle Island, at which places she now calls every three months. The "Hinemoa" has also, in the absence of the "Stella" on her regular trips, been occasionally employed on services connected with this department. The iron lighthouse tower was conveyed by her from Mana Island to New Plymouth, and safely landed there without any mishap.

Inspection of Machinery.—A report from the Chief Inspector is appended hereto.

Examination of Masters and Mates.—Certificates of competency have been issued during the year to 87 candidates, 56 being for masters, mates, and engineers of sea-going vessels, and 31 for masters and engineers of river steamers.

Surveys, &c.—Several small surveys of reported dangers have been from time to time made by the masters of the Government steamers, but no marine surveys of importance have been made during the past year.

Sir John Coode's reports on Waitara, Westport, and Gisborne (Poverty Bay) Harbours have been received, and have been printed for presentation to both Houses of the General Assembly.

Steam Navigation.—Passenger certificates have been issued to 138 steamers, of 13,897 aggregate tonnage and 5,757 horse-power.

Wrecks and Casualties.—During the past year reports have been received of 64 casualties; of these, 58 were on or near the coasts of the colony: 17 vessels, of 1,351 tons register, being total wrecks; 44, of 7,390 tons, being partial losses; and 4 cases of loss of life only The total number of lives lost was 44—namely, 8 in the "Acadia," 7 each in the "Colleen Bawn" and "James A. Stewart," 6 in the "Poneke," 4 in the "Jane Hannah," 3 each in the "Anna" and "Three Brothers," 2 in the "Southern Queen" (all these vessels were lost with all hands), and 1 each from the "Lizzie Guy," "Beautiful Star," "Annie Hill," and "Alert." Of the 6 casualties reported as having occurred beyond the colony, 2, of 163 tons, were total losses; 1, of 334 tons, a partial loss; and 3 cases of loss of life only, 3 lives having been lost from the "Loch Dee," and 1 each from the "Pareora" and "Anne Melhuish."

Returns.—The usual returns and wreck chart are appended hereto.

I have, &c.,
WILLIAM SEED,
. Secretary.

The Hon, the Minister having charge of the Marine Department.

RETURN showing the Amount of Light Dues collected during the Year ended the 31st March, 1881.

The state of the s								****
				ĺ	£	s.	d.	
Auckland					959	14	0	
Onehunga	***				2	2	9	
Whangaroa			***		0 1	12	1	
Kaipara		• • •			0	1	10	
Russell	***					6	0	
Mongonui		***	***	•••	1 1		3	
New Plymot	ath				2 1		2	
Wanganui	.,	•••				19		
Patea	***		• • •		0	8	4	
\mathbf{W} ellington	***		• •		1,313	6	5	
Napier	***			••	61	4	6	
Nelson	• • • *		•••	•••	154		10	
${f Westport}$	***	***		•••	8	9	4	
Hokitika		• •			0		10	
Lyttelton		•••	• •		1,737	5	9	
Timaru	***	***	•••		112		3	
Oamaru	***		•••		47	4	0	
Dunedin			•••	•••	1,471	4	8	
Bluff		***	•••		578	2	8	
	Total	141	***	•••	£6,734	0	7	
								<u> </u>

RETURN of Steamers to which Passenger Certificates were issued in New Zealand during the Year ended the 31st March, 1881.

				6116	m ded the $ m 31st$ $ m M$	arcu, 1001.		
Name o	f Vessel.		Tons Register.	Horse- power of Engines.	Nature of Propeller.	Class of Certificate.	Nature of Engines.	Remarks.
Akaroa Albion	***		43 591	28 180	Screw	Sea-going	Compound Condensing	
Alert Anne Milban	•••	•••	6 44	8 24	naddle	River Extended river	Non-condensing	Launch,
Antrim Arawata	•••	•••	35 623	30 300	Screw	River Sea-going	Compound	
Argyle		***	126	40	,,	,,	,,	
Beautiful Star Bella		•••	126 12	30 12	"	Extended river	Condensing Non-condensing	
Black Diamor Blanche	1d	•••	9 8	20 9	"	River	33	
Boojum	•••	•••	14	12	"	Extended river	Compound	New vessel.
Bridgewater Charles Edwa	\mathbf{rd}	•••	89	5 60	Paddle	River Sea-going	Non-condensing Condensing	Launch.
City of Cork	•••		29 27	40 32	Threin garage	River Extended river	Non-condensing	
Clyde Clyde	•••	•••	34	12	Twin-screw Screw	River		
Comarang Colleen	•••	•••	152 33	70 18	Paddle	"	Condénsing	Left the colony. New vessel.
Coromandel	•••	• • • •	68	25	Screw	Sea-going	Compound	I(U) VOSSOZI
Delta De v onport	•••	•••	60 23	30 12	Paddle	River	Non-condensing	
Dispatch	•••	•••	38	40	,,	Sea-going	Condensing .	
Durham Enterprise No	o. 2	•••	54 61	30 32	Screw Paddle	Extended river	Compound Non-condensing	
Effort Esk	•••	***	13 3	12 3	,,	River	"	New launch.
Fairy	•••	•••	33	15	Screw	Extended river	"	100 launon.
Fingal Gemini	•••	•••	$\begin{array}{c c} 23 \\ 11 \end{array}$	13 7	Twin-screw	,, River	"	
Glenelg	•••	***	156	75	Screw	Sea-going	Compound	
Go-Ahead Grafton	•••	•••	82 242	30 100	Twin-screw	"	"	
Hannah Mok Hauraki	a.u	•••	35	15	Screw	River	Non-condensing	
Hawea	•••	•••	73 461	45 160	Paddle Screw	Sea-going	Condensing Compound	
Huia Ida	•••	••	107 12	25 10	"	River	Non-condensing	
Ino	•••	•••	24	12	Twin-screw	Extended river	,,,	
Iona Jane	•••	••	159 25	65 8	Screw ,,	Sea-going Extended river	Compound Non-condensing	
Jane Douglas Jane William		***	75	20 15	,,	Sea-going	Compound	
Kakanui	S	4,44	33 57	22	"	River Sea-going	Non-condensing Compound	
Katikati Kenned y	•••	•••	15 138	9 50	Twin-screw	River Sea-going	Non-condensing Compound	
Kina		•••	39	15	Screw	Extended river	Condensing	
Kiwi Koputai	•••	•••	133 5	30 120	Paddle	Sea-going	Compound	
Kopuru La Buona Ve	ntuno	••	28 4	20 4	Screw	River	Non-condensing	Launch.
Lady Barkley	•••	•••	30	25	Paddle	Extended river	Condensing	Launen.
Lallah Rookh Lara	•••	•••	23 4	14 7	Screw	River	Compound Non-condensing	New launch.
Lilie	•••	••	10	10	Paddle	٠,,	,,	
Lioness Lily	•••	•••	26 4	60 6	Screw	Sea-going River	Condensing Non-condensing	Launch.
Lily Little Irishm		• • • •	20 6	10 8	Twin-screw Screw	Extended river River	,,	Launch.
Lyttelton	•••		86	25	Paddle	Sea-going	Condensing	
Lyttelton Manawatu	***	•••	103	14 45	Twin-screw Paddle	Extended river Sea-going	Non-condensing Condensing	Launch.
Manukau Maori	•••	•••	45	15 60	Screw	River	"	New vessel.
Maori		•••	118 17	8	"	Sea-going Extended river	Non-condensing	
Mensahib Minnie Casey	•••		$\begin{array}{c c} & 6 \\ & 43 \end{array}$	4 25	,,	River Extended river	Compound	Launch.
Mohaka	•••		20	12	27	,,	Non-condensing	
Moa Mountaineer	•••	•••	49 66	25 25	Paddle	River	Condensing Compound	
Murray Napier	•••	•••	78 48	$\frac{18}{24}$	Screw	Sea-going	Condensing	
Noko	•••		15	9	"	Extended river	Compound Non-condensing	
Oregon Oreti	•••		20 117	16 43	Paddle Screw	River Sea-going	Compound	
Osprey	***		28	10	Pa ddle	Extended river	Non-condensing	
Patea Pearl	•••		51 14	22 5	Twin-screw Screw	Sea-going River	Compound Non-condensing	
Penguin Peninsula		,	$\frac{442}{31}$	180 18	Paddle	Sea-going River	Condensing	
Piako	•••		8	8	raddie "	niver ,,	Non-condensing	

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

Name of	Vessel.		Tons Register.	Horse- power of Engines.	Nature of Propeller.	Class of Certificate.	Nature of Engines.	Remarks.
n:			_		Gauarr.	River	Non-condensing	
Pioneer	• •	•••	5 13	5 8	Screw	Extended river	Tron-condensing	New vessel.
Planet	•••	**	29	40	,,	Sea-going	Compound	1
Plucky Postobollo	***	•••	11	10	Paddle	River	Non-condensing	,,
Portobello	•••	•••	186	50	Screw	Sea-going	Compound	Since wrecked
Rangatira	•••	***	180	23	i i	Extended river	Non-condensing	DIFFICE WICCAGO
Result Result	•••	***	13	10	Paddle			
	•••	• • •	30	30	Stern-wheel	River	"	
Rangiriri	•••	+++	623	300	Screw	Sea-going	Compound	į
Ringarooma		***	4	4		River	Non-condensing	Launch.
Riro Riro	•••	***	99	40	,,	Extended river	Compound	Launen.
Rose Casey	***	•••			"	· -	Non-condensing	
Rosina Rotomohomo	***	***	19 864	14 450	"	Sea-going	Compound	ļ.
Rotomahana	***	•••	864 138	450 45	"		Condensing	
Rotomahana	1	***	138 576	$\begin{array}{c} 45 \\ 172 \end{array}$	"	,,	Compound	1
Rotorua	***	•••	17	$\begin{array}{c} 172 \\ 15 \end{array}$	Double-screw	Extended river	Non-condensing	-
Rotoiti Rowena	•••	•••	74	30	Screw	Sea-going	Compound	
	***	•••	$\begin{array}{c} 74 \\ 174 \end{array}$	45			Condensing	
t. Kilda	**	4.4	$\begin{array}{c} 174 \\ 124 \end{array}$	40 70	,,	13	•	ļ
Samson	••	• • • •	124 20	70 10	,,	River	Non-condensing	
Scotchman	***	•••	31	27	"	Sea-going	14 OH-COHOURING	
Shag	•••	***	29	12	,,	Extended river	Condensing	ĺ
ir Donald	•••	•••	139	50	,,	Sea-going	Compound	
Southern Cros		•••	159	2	,,	River	Non-condensing	New launch.
pray	•••	•••	40	25	,,	Extended river	Compound	Mew launch.
Staffa	***	•••	40	25 5	,,	River	Non-condensing	New launch.
star		•••		$\frac{5}{45}$	"			INEW launch.
Star of the So		•••	175		,,	Sea-going	Compound	
Storm Bird	***	•••	67	$\frac{30}{22}$	Paddle	Extended river	Condensing	
<u> Fainui</u>	***	•••	47		Screw	River	Non-condensing	New launch.
Lainui L	***	•••	7	7	Screw		Company	New launch.
Faiaroa	***	844	228	110	Paddle	Sea-going River	Compound Non-condensing	
Fakapuna	***	***	58	20	Screw	- '		
Tam o' Shante		•••	10	7	,	**	"	
Fangihua	***	***	20	15	"	San main m	Compound	Since wrecked
Fararua		***	563	140	,,	Sea-going	Compound	New vessel.
Te Anau	•••	***	1,028	250	"	River	Non and and	New launch.
re Aro	***	***	5	4	Paddle		Non-condensing	mew munch.
Fe Aroha	•••	•••	50	14		Extended river	Condensing	
litan D	***	•••	21	55	,,		Non condensing	
[ongariro	•••	•••	39	10	2)	11	Non-condensing	
[ongariro	••	•••	62	25	y, Sanam	"	() ()	
Corea	***	***	9	10	Screw	goo going	Compound	
Րաi	***	•••	64	20	33	Sea-going	Non oor J	Tannal.
Vesta	***	••	3	5	,,	River	Non-condensing	Launch.
Vivid	***	• • •	13	13	Paddle	"	"	
Waikato	•••	•••	61	14		Saa maina	, >>	
Waipara	•••		70	30	Twin-screw	Sea-going	,,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	
Waitaki	•••	•••	228	90	Screw	Extended river	Compound	
Waitara	•••	•••	11	15	,,		Non-condensing	N 1 2
Waiwera	•••	•••	6	10	,,	River	Compound	New launch.
Wakatu	• • •.	•••	75	30	,,	Sea-going	,,	
Wakatipu	***	•••	1,158	256	,,	"	Ga" ·	
Wallabi	***	***	101	25	"	River	Condensing	T
Waiau	***	• • •	3	3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Non-condensing	Launch.
Wallace	***	• •	64	50	Paddle	Sea-going	Condensing	
			277	120	Screw	,,	Compound	
Wanaka Wellington			261	80			Condensing	

Return showing the Certificates of Service issued to Masters and Engineers during the Year ended the 31st March, 1881.

Name of	Name of Person.						Class of Certific	Date	Number.			
Robert Day		•••		Master		•••	Home trade	•••	11 May,	1880	•••	2485
William Waters		1.1		,,			"		13 ,,	,,	•••	2486
Richard McKay				,,			,,		26 July	,,		2487
Henry Lane				,,			39		27 Aug.	,,		2488
Neil Hendry	•••			,,	•••		19		22 Sept.			2489
Allen Christey		•••	,	,,			Foreign trade		26 Nov.	11		2490
George Henry Rolton				,,			Home trade		6 Dec.	,,	•••	2491
James Black				"	• • •		,,		15 Jan.,	1881		2492
Angus McLean		•••		,,			,,		25 ,,	,,	•••	2493
John Purdie	***	•••	***	Engineer		•••	2nd class	•••	21 "	"		1036

Return of Masters, Mates, and Engineers, to whom Certificates of Competency were issued, between the 1st April, 1880, and the 31st March, 1881.

Name of Person.			Rank.	:	Class of Certific	ate.	Date of Issue.		Number.
Hugh Legg	,		Master Ordinary		Foreign trade		28 April, 1880		231
Walter William Fyson	•••	***	,,		1)		28 ,, ,,		232
John Macaulay	•••	•••	,,	•••	"		*28 ,, ,,		233
Jacob Eckhoff			,,		"		*11 May ,,		234
James Horne	••	***	0.1.35.4	***	**	•••	18 ,, ,,		235
Walter Francis Norbury	•••	•••	Only Mate		**	***	22 June "		236
James Malcolm	***	***	Master Ordinary Only Mate	•••	"	••	*19 July ,,	***	$\begin{array}{c} 237 \\ 238 \end{array}$
William George North Israel Quick Gregory	***	***	Only Male	•••	"	••	# 9 Ann	***	239
Hillel Fredrik Liljeblad	•••	•••	Master Ordinary		"	•••	9		240
John Morgan			,,	***	" "		*16 Sept. ",		241
John Henry Percival	***	•••	Only Mate		"		16 ,, ,,		242
James Earle			Master Ordinary	•••	"	•••	*16 ,, ,,		137
James Wilson	•••	•••	Second Mate	•••	"		30 ,, ,,	•••	243
Robert Heddleston Neville	•••	***	Master Ordinary		"	•••	*30 ,, ,,	***	$244 \\ 245$
William Alexander Macaliste Frederick William Highfield		••	Second Mate Master Ordinary	•••	,,	•••	* 4 Oct. ,,	•••	246
Charles Heilemeyer		••	Only Mate	•••	30	•••	1 Non	•••	247
William Henry Anwyl	•••	***	•	•••	"	•••	99 "		248
James Campbell Arthur		•••	First Mate		"	•••	* 3 Dec. ",		249
Edward Harvey		***	Only Mate		,,		15 ,, ,,		250
John William Cumming		•••	Master Ordinary	• • • •	,,,		*17 ,, ,,	• • • •	138
Richard Edward Smith	•••	•••	,,		,,	***	*17,		181
James Deuchrass	•••	•••	0.1-3"	•••))	•••	*17 ,, ,,	••	251
Alfred Johnston	•••	***	Only Mate	•••	,,	i	*18 Jan., 1881	•••	$\begin{array}{c} 252 \\ 135 \end{array}$
Peter Theet	• •	•••	Master Ordinary		"	•••	* 9 1/0"	•••	216
Thomas Angel Fry	***	***	,,	•••	,,	•••	* 9	•••	156
William Ross William George Dart		•••	Second Mate		>>	•••	*11 " "	• • ‹	253
Murdoch McDonald	•••	•••	Only Mate	•••	"		*15 ,, ,,	•••	254
Albert Ring Ringstad		•••	"		"		22 ,, ,,		255
Thomas Willoughby Shortlan		•••	,,	•••	,,	•••	30 ,, ,,		256
Stephen Ellis	•••		Master	•••	Home trade	***	16 April, 1880		5195
James Garrick	•••	•••	,,,	• • •	,,	•••	28 ,, ,,	•••	5196
George Samuel Emtage	•••	••	Mate	•••	**	•••	17 May ,,	***	5197
John Carrick Hewson	•••	***	Master	•••	**	•••	22 June "	•••	5198
Samuel Stephenson	•••	***	Mate Master	•••	"	•••	11 July ,, 22 ,, ,,	••••	5199 517 4
Samuel Benney Charles Maacs	•••	***	Mate	•••	22	•••	9 4 2 2 2	•••	5200
Lawrence Calder	•••	•••	,,	•••	"	•••	2 Aug. "	•••	5201
James William Branford			Master	•••	" "	***	25 ,, ,,		5202
John Booth	***	••	,,		"	•••	31 ,, ,,	•••	5203
Meredith Rountree		***	,,		,,	•••	31 ,, ,,		5204
Edward McLeod	•••		,,	•••		•••	16 Sept. "	•••	5205
Maitland Wood Grant	••	•••	,,	•••	**	•••	21 ,, ,,		5206
Edward Bristow	•••	***	,,	•••	**	•••	24 ,, ,,	•••	5207
John Steel Elgie	***	***	**	•••	"	•••	21 Oct. ,, 10 Nov. ,,	•••	5165
Edmund Fraser	•••	***	,,	•••	"	•••	g Dan "	•••	$\frac{5208}{5209}$
John Metcalfe Edward Harvey	•••		"		27	•••	15 " "	***	5210
Edward Harvey Thomas Eckford	•••	•••	Mate		"		10 Jan., 1881		5211
Caroline Frederick Maundrel	l	•••	Master		"		2 Feb. "		5212
Tasman Arthur Gibbons	•••		Mate		"	•••	15 Mar. "		5213
Edward Pearce	•••	***	Master	•••	"	•••	30 ,, ,,		5214
James Martin Logan	••		2nd Class Engine	er	Foreign trade	•••	*20 April, 1880		66
George Kirkwood	•••	•••	,,	•••	1)	•••	10 May ,,	•••	67 68
Robert Rutherford Douglas	•••	••••	33	•••	,,	•••	11 " " *11 " "	•••	68 69
Benjamin Walter Glass	•••	•••	"	••••	"	•••	*96 Nor	•••	70
William George Lodder Giles William Johnson	***		"	***	"	•••	* C Dog		71
William Leslie		• • • • • • • • • • • • • • • • • • • •	,,		,,		6 ,, ,,		$7\overline{2}$
William Reid Douglas			"		"		31 ,, ,,		73
Alexander Munro		•••	1st Class Engineer		,,		* 9 Mar., 1881		74
Allan Marshall	•••		Master	•••	River trade		10 July, 1880		3036
Meredith Rountree	• • •		**		,,		16 Aug. "		3037
John Wade		•••	,,		,,	•••	18 Jan., 1881	•••	3038
William Henry Charles Gree		•••	"	•••	"		10 Feb. ,,	••••	3039
John Cox	•••	•••	Engineer	••••	"	•••	3 Mar. ,,	••• }	$3040 \\ 1328$
Carl Gustav Bormann Daniel Bernard Bate	•••	•••	Engineer		,,	•••	14 April, 1880	•••	1328 1329
John Felton Heighway		•••	"		,,	•••	20 " "	•••	1330
Diedrich Lindemann		•••	"		"		3 May ,,		1331
William McKeegan	•••		"		"		11 ,, ,,		1332
Carl Leonard Olson		•••	"		"		11 ", ",		1333
James Cassidy	• • •		**		"		11 " "	•••	1334
William John McCullough	•••		"		"	•••	14 ,, ,,		1335
Percy Reynolds	•••	•••	,,	,	**	**	4 June "	•••	1336
David Hood	•••		,,	***	"	•••	8 ,, ,, 17 July ,,	•••	133 7 1338
John Napier	• • •	•••	,,		"	***	10 4 200	•••	1339
Samuel R. Murray	•••	""	27	***]	"	•••	10 Aug. "	""	2000
				<u>_</u>					

^{*} Issued under the provisions of Her Majesty's Order in Council of the 12th February, 1876, and have the same force as similar certificates issued by the Board of Trade.

RETURN of Masters, Mates, and Engineers, to whom Certificates of Competency were issued—contd.

Name of Person.			Rank.		Class of Certific	cate.	Date of Issue,	Number.	
James Foote Wallace John Massey William Johnson Gibbs Arthur James Michael Clark James Cowley Cecil Foster Keyworth John Murray John May Thomas Major Lane William Walter Lomer Philip Alfred Weston			Engineer	::	River trade	::	2 Sept., 1880 21 Oct. ", 15 Nov. ", 6 Dec. ", 10 " ", 17 " ", 23 ", ", 29 ", ", 17 Feb., 1881 3 Mar. ",		1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350

RETURN showing the Number of Masters, Mates, and Engineers Examined during the Year ended the 31st March, 1881, distinguishing the Number of Successful and Unsuccessful Candidates.

	Ατ	JCKLAI	ND.	WE	LLING	TON.	D	UNEDI	N.	L	TTELT	on,	r	HAME	s.	'	TOTAL	3.
CLASS OF CERTIFICATE.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.	Passed.	Failed.	Total.
Foreign going Masters and Mates	11	11	22	4	1	5	12	1	13							27	13	40
Home - trade Masters and Mates	10	1	11	8	, .	8	2		2		•••		•••			20	1	21
River-steamer Masters	3	1	4	1		1				1		1	1		1	6	1	7
Sea-going Engineers	3		3	2	1	3	4	,	4			٠.				9	1	10
River-steamer Engineers	14		14	8		8				3		. 3				25		25
Totals	41	13	54	23	2	25	18	1	19	4		4	1		1	87	16	103

RETURN showing the Cost of Maintenance of the New Zealand Lighthouses, and the Quantity of Oil consumed at each, during the Year ended the 31st March, 1881.

No	me of L	ighthe	NISA.		Sala	ries			Oil.				eres		To	tals.	
210			, use,			Gallons Consumed.			V	alue.	•	Conti		ies.			
Cana Maria van	Diama				£ 331	s. 2	d. 9	824	£	s. 10	d. 8	£ 73	s. 4	d. 7	£	s. 18	d. 0
Cape Maria van I			•••	••	236	6	8	481	44	10	10	90	7	10	370	16	4
Ponui Passage		•••	***	•••		13	4	67	7	1	8	37	12	2	179	7	2
m n 1		•••	•••	••••	140	19	0	67	8	16	8	8	5	6	157	2	2
Bean Rock Portland Island		•••	***	•••	323	6	8	635	58	6	0	93	-	5	475	3	ĩ
		•••	•••	•••		11	4	224	20	•	8	34	9	5 5	1	11	5
Napier Bluff Pencarrow Head		•••	•••	••••	196	7	10	734	67	3	10	147	19	7	411	11	3
		***	•••	•••	260		4	184	16	_	4	13	19	2	290	5	10
Somes Island		•••	•••	•••	236	8 5	0	527	48	6	2	57	12	4	342	3	6
Manukau Heads		•••	••	•••		_	2	661	60 60	-	8	92		10	605	11	8
Brothers		•••	***	•••		11	-	507	60 46		_		6		324	8	5
Cape Campbell		***	***	•••		10	10	1 1		9	6	54	8	1	448	_	11
Godley Head		•••	***	•••		10	8	448	41	1	4	103		11		7	
Akaroa Head		•••	•••	•••		10	0	457	41	19	8	45	13	0	329	2	8
Moeraki		•••	***		263	0	7	495	45	7	6	39	0	4	347	8	5
Taiaroa Head		•••	•••			13	4	424	38	19	2	36	14	6	318	7	0
Cape Saunders			•••	•••		13	4	473	43	7	2	39	1	3	342	1	9
Nugget Point		•••	***	•••		13	4	734	67	5	8	66	5	6	404	4	6
Dog Island		•••	***	*,* *		11	8	750	68	16	10	156	16	6	610	5	0
Centre Island		•••	***		361	8	10	838	76	16	4	98	14	8	536		10
Puysegur Point		•••	•••			10	0	909	83	6	6	125	14	8	543	11	2
Cape Foulwind		***	***		252	0	0	546	50	1	0	75	16	0	377	17	0
Farewell Spit		•••	***			19	2	483	44	5	6	92	6	0	503	10	8
Nelson		•••	***		268	0	0'	244	22	7	4	1.8	6	5	308	13	9
	rotals		***	•••	6,323	14	10	11,712	1,077	12	0	1,601	1	8	9,002	8	6

RETURN showing the Total Ordinary Expenditure of the Marine Department during the Financial Year ended the 31st March, 1881.

Ň	ature of Ex	penditu	re.			Details.	Totals.	Grand Total.
AD OFFICE:-				70		£ s. d.	£ s. d	£ 8.
Secretary						279 3 4		2
Chief Clerk		•••	••	•••		326 13 4		
Clerk	•••	•••	• • •	•••	•••	186 13 4		
Clerk	•••	•••	•••	•••	•••	119 18 1		ļ
Marine Engineer	•••	• • • •	•••	•••	•••	280 0 0 239 3 4		
Draughtsmen Engineer Surveyor	•••	•••	•••			280 0 0		
Local Engineer Surv	evors	••	•••			93 6 8		
Examiner of Master			•••	•••		93 6 8		l
Local Examiners of			ates	***	•••	203 10 10		
Inquiries into wreck			•••	•••		102 13 11		
Survey of unseawort	hy ships	•••	•••	•••	•••]_	62 6 2	2,266 15	2,266 15
BOURS:-					1		_,	2,200 10
Manukau,— Salaries			•••	***		719 16 0		
Contingencies	•••	•••	•••			49 16 9		
Russell,—	•••	••	•••	•••	-		769 12	9
Salaries	***	•••	•••	•••		284 0 0		
Contingencies	•••	•••	•••	•••	•••	37 2 3	801 -	
Whangaroa,— Salaries					-			3
Whangarei,—	•••	***	•••	•••		•••	ग्रुक्त क	'
Subsidy to ferry	man		•••	•••		50 0 0		
Contingencies	***		•••	***		2 7 6		
Hokianga,—					-		52 7	6
Salaries	***	***	***	•••		396 10 8		
Contingencies	•••	•••	***	•••	•••	8 7 7	404 10 4	
Kaipara,— Salaries					j	779 16 2	404 18	9
Repairs to stear	n launch	•••	•••	***		55 19 0		
Contingencies		•••	•••	•••		118 11 10		
Waitara,-	•••	•••			-		954 7	o
Salaries	•••	•••	***	•••		105 0 0		
Contingencies	•••	•••	•••	•••		14 2 8	110 0	
Foxton,—]-	305 9 0	119 2 8	5 .
Salaries Contingencies	•••	***	•••	•••	***	40 10 8		
Contingencies Rangitikei,—	•••	***	•••	***	-		345 19	3
Salaries	***	•••	***			140 0 0		-
Contingencies	••		***	***		10 3 10		
Wellington (6 mont)	hs),—				-	1055 0 10	1 50 3 1 6	0
Salaries	•••	•••	•••	•••	•••]	1,055 0 10		
Contingencies Wairoa,—	•••	***	***	•••	···	16 14 8	1,071 15	R
VV atroa,— Salaries		***	•••	•••	.,. [99 4 11	±,011 10 (
Contingencies	***	•••	•••	•••	- :::]	15 11 9		
Wangawehi Light,-	-].			8
Salaries and con		98	• • •	•••			50 0	
Tauranga,-					1	906 16 0		
Salaries	***	***	•••	•••		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Contingencies	•••	***	•••	•••	***	04 O U	389 4 (3
Gisborne,— Salaries	•••	•••				331 6 8	500 mg (1
Contingencies	•••	•••	•••	•••		19 12 1		
Wairau,—	• •				-		350 18)
Salaries	***	•••	***	•••	•••	123 4 0		
Contingencies	***	***	•••	***	•••	35 5 6	150 0 4	,
Picton,—					-	120 8 0	158 9 (P
Salaries Contingencies	•••	.,,,	***	•••	•••	38 10 3		
Havelock,—	•••	•••	••	•••	••• -		158 18	3
Salaries			•••	•••		***	8 4 (. 1
Nelson,—					}		_ `	
Salaries	***	•••	***	•••	•••	1,209 16 8		
Contingencies	 Doole	•••	••	•••		96 18 10 76 17 0		
Removal of Buc	y Rock	•••	•••	•••		76 17 0	1,383 12	
Motueka,— Contingencies			***	•••		•••	8 8 6	
Waitapu,-		•••	•••	•••			J 0 (
Salaries	• •	•••	•••			29 11 8		
Contingencies	1+1	***	***	***		4-10 0		
Riwaka,—					-		34 1 8	
Salaries and cor	tingencie	8	***	•••	•••	•••	16 12 ('
Collingwood,—						29 11 8		
Salaries Contingencies	•••	***	***	•••	:::	7 6 0		
Karamea,—	***	•••	•••	***	``` -		36 17 8	3
Contingencies			•••	• • •		•••	23 0	
Westport,—					í	000 10 4		
Salaries Repairs to Beac	***			1 4 7	••• }	382 13 4 223 12 2		1

8 H.—27.

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

Natu	re of Expenditu	ire.		4	Details.	Totals.	Grand Total.
HARBOURS—continued.							
Greymouth,— Salaries		***	***		£ s. d. 406 0 0	£ s. d.	£ s. d.
Contingencies Hokitika,—	• •••	***	***		233 4 9	639 4 9	
Salaries		•••	•••		673 17 4 84 2 2		
Contingencies Okarito,—	• •••	***	***			757 19 6	
Salaries Contingencies		•••	•••		46 13 4 91 2 11		
Catlin's River,— Salaries		***		-	116 13 4	137 16 3	
Contingencies Waikawa,—		•••	***		47 10 11	164 4 3	
Salaries		***	•••			46 13 4	
Otago Graving Dock,— Wages			•••		629 9 7		
Coal		•••	***	•••	384 17 9 235 12 0		
Stores, repairs, &c. Riverton,—	• •••	••	***			1,249 19 4	
Salaries Liabilities of Harb		•••	***		90 0 0 84 5 3		
Kakanui,— Salaries				-		$174 5 3 \\ 140 0 0$	
Kaiapoi,—		***	***	***	İ	110 0 0	
Salaries Contingencies		•••	***		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Sumner,— Salaries		•••			112 0 0	12 2 13 9	
Contingencies Akaroa,—		***	•••		10 11 11	122 11 11	
Salaries		***	•••		23 6 8	122 11 11	
Contingencies Grant for wharf re	epairs	•••	•••		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Kaikoura,— Salaries		•••	•••		70 0 0	460 6 6	
Contingencies		•••	***	•••	22 16 3	00.16.0	
Martin's Bay,— Salaries		•••	•••		86 6 4	92 16 3	
Contingencies Stewart Island (Half-M	Ioon Bay),—	•••	• • •	•••	8 0 10	94 7 2	
Salary Opunake,—		***	***		***	4 10 0	
Contingencies		***	•••	•••		17 13 8	
Sir John Coode's fees f Port lights		ports.	•••		•••	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
General harbour contin	gencies	***	4			86 6 11	13,997 17 1
IGHTHOUSES:-							
Salaries Lightkeepers' travelling	expenses	***	•••		6,323 14 10 35 9 4		
Oil	g caponsos	•••	•••		1,543 14 11		
Stores and contingencie Lighthouse artificer (5		***	•••		1,601 1 8 81 13 4		
epartmental travelling exp				-		292 13 0	9,585 14 1
pastal buoys and beacons	,,,	•••	•••		•••	44 13 7	
harts ension of widow of lightke	ener Deck	•••	•••	:	***	76 12 3 23 19 10	
indries	-	***	•••			243 14 2	681 19 10
Stella," s.s		***	***			111	681 12 10 4,707 14 0
Hinemoa," s.s. aval Training School at K		4 months), †	•••		***	4,534 6 1
Salaries and wages	• •••	•••		•••	246 12 3		
Rent of station Stores, provisions, &c.	• •••	***	•••		$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Veather-reporting expenses	6 months)			-		***	809 4 1 448 1 9
							£37,031 5 7
				ţ			

^{*} The balance of the cost of the "Hinemos," £2,385 6s. 5d., was charged against Defence vote. † Transferred to Education Department. ‡ Transferred to Colonial Secretary's Office.

DESCRIPTIVE RETURN of New Zealand Coastal Lighthouses.

Name of Lighthouse.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower, Built of	Dwellings, Built of	Date first Lighted.
Cape Maria Van { Diemen Tiri Tiri	1st order dioptrie 2nd order dioptric	Revolving Fixed	1' 	White Red, to show over Columbia Reef White	Timber	Timber	24 Mar., 1879 1 Jan., 1865
Ponui Passage	5th ,, 2nd ,,	"," Revolving	30"	2, 1.1	Timber	,, ,,	29 July, 1871 10 Feb., 1878
Portland Island	••	Fixed	,	Red, to show over Bull Rock	,,	**	
Pencarrow Head Manukau Heads	2nd order dioptric 2rd ,, 2nd	,, Flashing	 10"	White	Iron Timber	"	1 Jan., 1859 1 Sept., 1874 24 ,, 1877
Brothers { Cape Campbell	2nd 2nd order dioptric	Fixed Revolving	i'	Red, over Cook Rock White	" Timber	" Timber	1 Aug., 1870
Godley Head Akaroa	2nd ,, 2nd ,,	Fixed Flashing	10"	,, ··· ···	Stone Timber	Stone Timber	1 April, 1865 1 Jan., 1880
Moeraki Taiaroa Head Cape Saunders	3rd ,, 3rd ,, 2nd	Fixed ,,, Revolving	1	Red White	Stone Timber	Stone Timber	22 April, 1878 2 Jan., 1865 1 ,, 1880
Nugget Point Dog Island	1st ,, 1st order catadi-	Fixed Revolving	30"	,,	Stone	Stone	4 July, 1870 1 Aug., 1865
Centre Island	optrie 1st order dioptric	Fixed		White, with red arcs	Timber	Timber	16 Sept., 1878
Puysegur Point Cape Foulwind	1st ,, 2nd	Flashing Revolving	10" 30"	over inshore dangers White	,,	,,	1 Mar., 1879 1 Sept., 1876
Farewell Spit	2nd ,,	,,	1′	White, with red are over Spit end	"	"	17 June, 1870
Nelson	4th "	Fixed		White, with red are to mark limit of	Iron	"	4 Aug., 1862
Cape Egmont	2nd "	,,		anchorage White	,,	,,	1 Aug., 1881

RETURN showing the Fees, &c., received under the Shipping and Seamen's Act, the Merchant Shipping Act, the Fish Protection Act, the Inspection of Machinery Acts, for Pilotage and Port Charges, for the use of the Otago Graving Dock, and from Sale of Charts, &c.

Nature of Receipt.	Amount.
Shipping and Seamen's Act, 1877	(including £ s. d.
light dues)	
Merchant Shipping Act	. 99 7 5
Fish Protection Act	106 0 0
Pilotage and port charges	2,723 19 3
Otago graving-dock dues	2,178 19 11
Sale of charts and "New Zealand F	
Ration money and services ren	
"Hinemoa"	287 7 5
Ditto by "Stella"	E1 0 C
Sale of port lights to Harbour Boar	
	rus 155 0 0 4 13 8
Sundries	415 0
Total	14,102 0 6

RETURN showing the Expenditure on new Lighthouses, &c., out of Immigration and Public Works Loan, during the Year ended the 31st March, 1881.

Nature of Expenditur	e.		Am	ount	
Character The Control of the Control			£	8.	d.
Cape Saunders Lighthouse			40	18	6
Store for Marine Department			73	16	3
Tory Channel lights	••		50	0	0
Hokitika Lighthouse			51	19	6
Cape Egmont Lighthouse	•••	•11	2,418		7
Total	**1		2,635	6	10
			1		

RETURN showing the Amount of Pilotage, Port Charges, &c., collected during the Year ended the 30th June, 1881.

Name of Po	rt.	Pilot	age.		Port C &	harg c.	es,	Tot	al.	
		£	8.	d.	£	8.	d.	£	в.	d.
\mathbf{A} uckland*		1,229	16	11	1,248	8	9	2,478	5	8
Onehunga		3	10	8	141	17	9	145	8	5
Kaipara		228	5	10	264		4	492	17	2
${f Thames}^*$		29	16	6	50	14	7	80	11	1
Russell		3	19	8		••		3	19	8
Mongonui					16	4	6	16	4	6
Hokianga		47	15	6				47	15	6
Tauranga		11	17	0				11	17	0
Gisborne	٠.	47	5	7				47	5	7
New Plymou	th*	25	16	6	25	15	4	51	11	10
Waitara		48	5	0	54	8	3	102	13	3
Wanganui*		405	10	0				405	10	0
Rangitikei		9	6	8				9	6	8
Foxton		97	6	4				97	6	4
Patea*	,	28	6	10	9	7	3	37	14	1
Wellington+		764	6	7	1,317	19	9	2,082	6	4
Wairoa		89	19	6	١ .			89	19	6
Napier*		855	4	9	468	17	7	1,324	2	4
Nelson		677	13	5			1	677	$1\overline{3}$	5
Hokitika		19	7	6			- 1	19	7	6
Lyttelton*	•••	4,523	6	3	2,303	¨3	5	6,826	9	8
Timaru*		_,			60	8	9	60	8	9
Riverton*		4	15	6	5	ō	0	9	15	6
Oamaru*				-	505	2	1	505	2	ĭ
Kakanui					3	ō	ō	3	ō	ō
Dunedin*		1,969	7	5	1,212	7	10	3,181	15	3
Invercargill (-	-,	•	- 1	.,	•		0,102		•
River)*	•••				50	7	4	50	7	4
Bluff *	• • • •	536	15	5	359	7	4	896	2	9
Totals	•••	11,657	15	4	8,097	1	10	19,754	17	

^{*} Harbour Board revenue. † Harbour Board revenue since the 1st October, 1880.

RETURN of Wrecks and Casualties to Shipping reported to the Marine Department, from the 1st April, 1880, to the 31st March, 1881.

	Name of Master.	Charles Frederick Sundstrom.	Peter Doile.	James Innes.	Robert Power.	Duncan McDon-	Norman McKen- zie.	Louis Pike.	John Botham.	George William	Conway. Philip James	John Black.	Henry Johnson.	Edward Keane.	James Tozer.	Peter Johnson.	Stephen Tall.	James Matthews
	Decision of Court of Inquiry.	Casualty caused by blind rollers, which came in as vessel was crossing the bar	Boiler salted up through negligence or careless- ness of engineer, John Symons. His certifi-	cate suspended for three months Heary sea struck the vessel and carried away the bulwarks, &c.	Apprentice fell overboard and was drowned	Vessel left Hawke's Bay for Auckland on the 9th Warrin 1880 and has not been beard of since	Three heavy seas struck the vessel while she was on the bar and drove her on to the beach	Vessel left Wellington for Havelock on the 1st May, 1880, and has not been heard of since. She is supposed to have foundered in a gale	on the 6th May Vessel struck on rock as she had not sufficient sail to stay her in the baffing wind	Strong gale The "John Bull" did not let go a second	anchor in time	:	Insufficient water on the bar	Tow-line parted	"Rotorua" overtook the "Clematis" and ran	into ner	:	Command of vessel lost on account of wind falling as she was going through channel between West Head and foul ground
Wind.	Force.	Gentle breeze	:	Whole gale	Moderate	:	Strong breeze	wn	Strong gale	Strong gal	:	:	Light	Moderate	Gentle	ezaaro.	;	Light air
	Direction.	N.W	፥	S.W	፥	:	N.E.	Unkno wn	S. to S.E.	N.E.	:	:	NW	Westerly	闰	•	፥	ထံ
	Flace whose Casually occurred,	At entrance to Mataura River, Middle Island of New Zealand	Near Kapiti Island, Cook Strait	Lat. 48° 10′ S.; long. 175° 35′ E.	Lat. 11° 10'S.; long. 26° 50' W	1	0	rrom Whangarei Supposed in Cook Strait	On inner rock in inner passage at Jackson Head	In Auckland Harbour	ť	On voyage from London	to Auckland On bar of the Buller River	Spit of Waitara	4 miles north-east of	nga Hegan	Vessel picked up bottom upwards at entrance	to Bluff Harbour West Head, Port Wil- liam, Stewart Island
Number	of Lives Lost.	:	ŧ	i	H	Supposed 8: all hands	:	Supposed 7; all hands	:	:	:	က	:	:	÷	:	Supposed 3; all	hands
Nature of	Casualty.	Stranded;	Crown of furnace	fell in Loss of bulwarks,	H	Unknown	Stranded;	damage Supposed foundered; total loss	Stranded; partial loss	Collision;	partial loss Collision;	Loss of life	Stranded;	Stranded;	Collision;	Collision;	Supposed Supposed capsized;	total loss Stranded; partial loss
Nato	Cargo.	Grain	General	Copra, tallow, kero-	General	Ballast	Wool, kauri	gum, &c. Ballast	Railway carriages, telegraph	material Drain	pipes Ballast	General	Coal	Drain-	pipes General	Potatoes	General	Timber
Number of	Crew Passen-	1	:	:	:	က	61	(sup- posed)	:	:	:	21	∞	:	42	:	:	:
			:	11	:	70	יט	41	4	ಣ	11	17	22	4	33	73	က	10
191 .03a	eigeH sanoT	22	103	334	648		- 33	23	. 21	46	484	700	242	- 33 	576	. 67	27	307
	Rig.	Schooner	<u> </u>	Barque	Ship	Schooner	Ketch	Schooner	Ketch	Schooner	Barque	<u> </u>	Schooner		"	Ketch	£	Brig
Name of Vessel;		Kakanui, s.s., 1 year	Manawatu, p.s., 7 years	Anna Bella, 11 years	Pareora, 25 years	Unkn'wn Acadia, 5½ years	Kina, s.s., 3½ years	Colleen Bawn, 18 years	Forest Queen, 10 years	(Columbia, 8	~~~	۲۲	A1 Grafton, s.s., 26 years	Ĕ	(Rotorua, s.s., 4		Anna, 5 years	Transport, 15
	Oasualty.	1880. April 18	. 22	,, 24	., 29	Unkn'wr	May 4	Unkn'wn	. 1		,, 10	Feb.9,14,	May 11 May 12	" 14		,, 18	. 20	., 21

										1	. . L								11.	21.
George Loverock.	Charles McBur- ney.	James Lee.	Thomas Blair.	Samuel Phipps.	D. Currie.	James Dillon.		John Blaney.	James Stevens.	George McKay.	•	Ferdinand Holm.		Frederick Jones.	George Campbell.	John Jeffery Cullen.	Henry Wulff.	William Penny Forman.		
Wind suddenly fell, and current drove vessel George Loverock.	Vessel refused to stay owing to sudden falling of the wind, and, there being no room to wear,	<u> </u>	and has not since been heard of Vessel left Great Barrier Island for Auckland on the 2nd July, and has not since been heard		a total wreck, as gale was driving her ashore Vessel supposed to have been driven ashore by	a storm on the 3rd or 4th July Casualty caused by the action of the signalman	in recalling the vessel, and directing her to go northward to entrance to channel, and then	A following sea so slackened the tow-rope that the vessel went ashore before the steamer	could tighten the rope A heavy sea swept over the vessel, and washed	▼		Although the accident occurred directly through a sudden change of wind, still blame must	in such a cripical position as to render her at the mercy of any flaw in a light breeze		124	The master was justified in entering the river in face of the signal, "Bar dangerous," on	<u> </u>	vessel ashore Cable parted while vessel was at anchor. It was of more than usual strength, and should	not have parted had it been properly secured, as the night was fine and calm, occasionally being squally. The master, who had undertaken to keen the anchor watch, went to elect	in his cabin. Evidence of master and mate unfrustworthy and unreliable. Master ordered to pay costs of inquiry, £35 19s.
:	Light breeze	<u>n</u>	<u> </u>	Hurricane	:	:		:	Strong	gale Storm		Fresh breeze		:	Light air	Strong breeze	Gale	Fresh breeze		
S.S.W	W.N.W.	Unknow	Unknow n	S.E.	:	Calm		2	N.E.	*		N.W		E	:	E.N.E.	N.E.			
Between North and South Spits, Waima- kariri River	Just outside of South Head, Hokianga Har-	bour Unknown		Guard's Bay	Inside Heads of Akaroa	Harbour Entrance to the Grey	River	At the entrance to the Hokitika River	80 miles east of Hoki-	tika 160 miles north-west of	South West Cape, Middle Island, N.Z.	On rock at outer end of Barrett's Reef, Wel-		Two miles from Oamaru	Mouth of the Clutha	North spit of the Waitara River	Tutukaka, north east	On west side of Motuara Island, Queen Char-	lotte Sound	
:	:	Supposed 6; all	Supposed 3; all		ž	4; allhands		:	1	F		:		н	:	:	:	:		
Stranded;	Stranded; total loss	Unknown	*		Stranded;		partial loss	Stranded;	damage Loss of life			Stranded; partial loss		Loss of life	Stranded;	Stranded; partial loss	Stranded;	partial loss Stranded; total loss		
Timber	:	Ballast	Firewood	Timber and	cement Timber	General		:	Timber	Coal		: .		:	Grain	Coal	Timber	New Zea- land pro-	ance	
:	:	÷	:	:	:	10		፥	-	:		:		፧	፥	:	:	÷		ļ
χ.	ro	9	က	4	4	17		 မ	70	7		10		:	9	າວ	က	4		
29	80	80	26	43	52	138		70	88	121		328		146	31	26	41	40	2 MAG 1 M	
Schooner	Ketch	Schooner	Cutter	Ketch	Schooner	*		*	Brigantine	Schooner		Barque		Schooner	Ketch	Schooner	â	Ketch		
Advance, 5 years	Fanny Thornton, 3 years	Poneke, 2 years	Three Brothers, 18 years	≥	J	M	years	Wanganui, 6 years	<u> </u>	years Annie Hill, 4	years	Malay, 18 years		Beautiful Star,	ã	Julius Vogel, 7 years	Julia Pryce, 8	years Sarah and Mary, $8\frac{1}{2}$ years		
May 22	.,	Unkn'wn		July 5	Unknw'n	, 16		" 19	., 22	, 23	1	,, 25		,, 26	,, 28	" 31	Aug. 7	6.		

RETURN of Wrecks and Castalties to Shipping reported to the Marine Department, &c .- continued.

	-			VIAT O TETAT	3	THE CHARGE I	or carrier on M		a naradar nurruma				
Date of		į	ster age.	Num	Number of	Natu	Nature of	Number	Place where Casualty	 	Wind.	T do	
Casualty.	also, Age and Class.	Kig.	Hegi Tonn	Crew	Passen- gers.	Cargo.	Casualty.	Lives Lost.	occurred.	Direction.	Force.	Decision of Court of Industy.	name of Master.
Aug. 14	24	Schooner	74	77	10	Sheep	Stranded;	:	North Spit of Waitara	S.W	Light air	Heavy sea caused the vessel to strike on the	Frank Amodeo.
" 14	years Forest Queen, 8 years	Ketch	51	4	:	Grass-seed	Stranded; partial loss	:	North Spit of Waitara River	:	:	"Rowena," s.s., having struck on the bar, she cut the tow-line, which caused the "Forest	Frederick Renner.
,, 26		Barque	344	:	:	Coal	Loss of life	Н	Lat. 38° 5′ S., long.	÷	:	Queen" to go ashore Man lost overboard	Thomas Kay.
" 26	Southern Queen, 19 years	Schooner	13	61	÷	Limestone	Stranded; total loss	2 all hands	On reef near the anchorage on northern side	N.W	Storm	Cable parted and storm drove the vessel on to	William Shep- heard.
	(Hinemoa, s.s.,		282	:	:	:	Collision; slight damage	:	side of Amuri Bluit Off Cape Horn, Manu- kau Harbour	:	:	The conduct of the captains of both vessels contributed to the collision. It would have been more advisable for the captain of the "Hine-	John Fairchild.
;							C					moa" not to have attempted to pass the "Taiaroa" while rounding the point. The captain of the "Taiaroa," although technically on his right course, might have avoided the collision by steadying his helm sooner.	
8I	V											It is probable that an eddy caught the "Taiaro's" port bow and caused her to come round more quickly than she should have done. The case does not call for the cancellation or suspension of either of the masters' certifi-	
	Taiaroa, s.s., 5	6	228	:	:	General	Collision;	:	i	:	:	cates, there being no evidence of carelessness, negligence, or recklessness	James Malcolm.
	Staffa, 6 years	Cutter	11	:	:	:	Stranded;	:	On outer reef, Tonga	:	:	:	
Sept. 1	Kauri, 9 months	Schooner	47	က	:	Timber	Stranded; total loss	:	Aha Aha Rock, north- west side of island of	뗨	:	Vessel having sprung a leak, master pushed on in order to beach her, but, owing to the thick-	George Tupp.
ť.	Clara Hargrave, 24 years	Barque	338	10	:	:	Stranded;	:	Middle bank, Kaipara Harbour	:	:	mess of the weather, he accluentally rail ashore	John James.
	Rangatira, s.s., 17 years	Schooner	196	22	oo .	General	Stranded; total loss	:	On a rock about midway between Waitara and New Plymouth	:	Light	Master reprimanded for not having a better look-out kept. Chief officer, Thomas Swede, guilty of gross carelesenes, amounting almost to incompetency; his certificate suspended for	Edward Harvey.
بر 80	Alma, 26 years	*	163	ø	:	Coal	Stranded;	:	On the bar of the Grey	S.W	Moderate	tow-line slipping while	James Walters.
" 28	Annie Wilson, 1	6	150	7	:	Ballast	Stranded; slight damage	:	On the bar of the Hoki- tika River	σż	Light	Vessel being towed out Vessel washed on beach through tug not being powerful enough to tow her through the breakers, owing to the sudden rising of the sea	Ole Helgeson.

									10					J	LI.—21.
Frederick William Highfield.	John McClellin.	William Harris.	George Perriam.	Jacob Eckhoff.	Robert Morton.		Frank Hedges.	Henry Edward	Charles Stephen Bascand.	Chas. E. Browne.	Peter Webb Pull- man.	George Williams.	Charles Balle.	F. ₽	Edward Thomas Wing.
No blame attached to master. From previous experience of the vessel he had a right to expect that she would answer her helm	Wind dropped, and vessel drifted into breakers.	Vessel swept down the river by a heavy fresh, and is supposed to have foundered	Vessel was rid a storm spri there was to	– Ĥ	Collision caused through steamer not keeping a good look-out, and in not porting her helm when the outton was soon so close Contificate	of the master of the "Kina" suspended for six months, and he was ordered to pay the costs of the inquire	:	Vessel drifted on to the rocks through there	Force of the current drove vessel on to the spit	Vessel struck on a rock and foundered in shal-	Jow water. Vessel sprung a leak and was beached to save life	Vessel went on to reef when going to anchorage, it being dark at the time	Stranding was an unavoidable accident which could not be foreseen or provided against, and was caused by a sudden rush of the current round the corner of the breakwater. The pilot exercised a sound discretion in attempting to enter the inner harbour when he did, and he and Captain Balle did all they could	to retrieve the misfortune Collision caused through the "Planet" attempting to cross the "Edith's" bow	te Vessel went on to rocks through propeller breaking
:	:	Gale	Storm	Moderate	Fresh		:	:	Moderate breeze	:	Strong	Heavy	:	Moderate	Strong gale
W.W	Calm	S.E.		N.W	S.W		፧	Calm	Ä.	Calm	N.W	S.E.	Calm	N.E.	zi.
Pencarrow Head, Wellington Harbour	North Spit, Kaipara	n eads In Poverty Bay	On the beach at Gisborne, Poverty Bay	On bar of Patea River	Off the Watchman, Auckland Harbour		Ė	On Faluelu Reef, off	Apia, Samoa At the entrance of the Hokitika River	In Morgan's Bay, inside	Whangaret Heads Northward of Waipu River, about 12 miles south of Hokianga	Heads On a reef just inside Whangaruru Heads	On boulder bank at western side of en- trance to Napier Har- bour	In Auckland Earbour 	On rocks off Shag Point, east coast of Middle Island
:	7; all	nands 	:	:	:		:	:	፧	:	÷	:	Ē	: :	:
Stranded; total loss	Stranded;	Supposed foundered;	Stranded;	Stranded;	partial loss Collision; partial loss		Collision;	partial loss Stranded;	Stranded;	damage Stranded;	partial loss Stranded; total loss	Stranded;	damage Stranded; partial loss	Collision; partial loss	Stranded; partial loss
Timber and fruit	Timber	Firewood	Wool and manganese	Timber	:		:	General	:	Coal	Timber	::	Coal	Ballast	:
:	:	:	H	:	:		25	9	12	6.1	:	:	:	en :	:
8	2	:	14	9	61		က	œ	12	4	9	4	6	ಣ :	မ
120	179	15	464	96	15		39	152	175	∞	89	35	292	13	31
Brigantine		Cutter	Barque	Schooner	Cutter		Ketch	Brigantine	Schooner	Lug-sail	Schooner	Ketch	Schooner		Ketch
Hannah Broom- field, 15 years	James A. Stewart,	4 years Wahapu, 16 years	Lochnagar, 18 years	Ja	12 years (Ellen Curran		Kina, s.s., 4 yrs.	Active, 3½ years	Star of the South, s.s., 17 years	Piako, s.s., 3	years Lady Don, 15 years	Fanny Kelly, 7 years	Silver Cloud, 6 years	(Planet, s.s., 6 months (Edith, 18 years	Shag, s.s., 6 years
4,	4	., 27	27	Nov. 27				es	,, 18	31	n. 2	, 26	26	, 29	b. 4
Oct.		-		Ř		Dec.		-1	•	-	Jan.	**		•	Feb.

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Name of Vessel; Rig. Est Number of Nature of of of of occurred. Rig. Est Number of Sassen- Cargo. Cargo. Casualty. Inves Lost.	Line Number of Nature of Number of Number of Number of Number of Of Ocean Passen Cargo, Cargo,	Number of Orew Passen- gers. Nature of Orew Passen- Gargo. Number of Orew Passen- Gargo. Number of Direction D	Number of Orew Passen- Gargo. Nature of Orew Passen- Gargo. Number of Orew Passen- Gargo. Number of Orew Orew Passen- Occurred. Direction Direction	Nature of Number Place where Casualty Lives Lost. Direction	ature of Number Place where Casualty Direction	Number Place where Casualty Lives Lost. Direction	Place where Casualty occurred.	Direction	Direction	B	Wind.	Decision of Court of Inquiry.	Name of Master.
13 Charles Edward, Schooner 126 p.s., 17 years	Schooner	126	1	18	10	- :	Stranded;	:	Two miles south of the Steeples, off Cape	Calm		Error in judgment on the part of the master in ont keeping farther out	Thomas Whit-
s. Brig 249 10	Brig 249 10	249 10		•	:	Timber	Stranded; total loss	:	off Point,	S.W	Moderate breeze	rt of master in keeping er ordered to pay costs	Henry Bowden
Abion, s.s., 18 Schooner 591 39 11	Schooner 591 39	68		A	100	General	Collision; slight damage	:	Peninsula Off Port Charles, north- east coast of North Island, N.Z.	S.E.	Fresh		Francis George Garrard.
Gabella Pratt, Schooner 71 6	Schooner 71 6	9		:		Ballast	Collision;	:	:	:	:	steamer's light being seen, the collision would not have been so scrious	William Cross.
Alert, 7 years Schooner 45 13	Schooner 45 13	13	13	:		Ballast	Loss of life	1	Lat. 50° 45' S., long.	W.W	:	Man knocked overboard by mainsail	Charles Rattray.
Lyttelton, p.s., Cutter 39 7 2 3 years	Cutter 39 7	39 7		61		Ballast	only Collision; slight damage	:	100-20 In Lyttelton Harbour	S.W	Gentle breeze	coulision caused through negligence or want of John William caution on the part of both vessels. The lookout on board the "Lyttelton" was insufficient; and the schooner's light was not hoisted where it could best be seen. Costs of inquiry to be	ohn William Clark.
Aspasia, 15 yrs. Schooner 45 5 1	Schooner 45 5	ಸಾ		7		Produce	:	:	:	:	:	:	Michael Moore.
Mohaka, s.s., 3 Ketch 20 6	Ketch 20 6	50 6		:		Iron-wire and sulphur	Stranded; partial loss	:	300 yards south of the Wairau River-mouth	:	:	la breach charge of ser. His	John Symons.
Waitara, 18 yrs., Ship 833 26 16 AA 1	Ship 833 26	833 26	56	16		Wool and general	Stranded; slight damage	:	On the Triangle Rocks, at entrance to Bluff Harbour	W.N.W.	i	certulitate suspendent for six months Casualty caused through pilot starting with a strong ebb tide, and the wind falling light and baffling. Pilot does not appear to have committed errors of indement, but to have weakly	Thomas Edward Cowell.
Penguin, s.s., 16 Schooner 442	Schooner 442	:	:	i		General	Stranded; slight damage	:	Near entrance to Boat Cove, Queen Charlotte Sound	:	:		James Malcolm.
		-	-		-1		1			1		The second contract of the second sec	

H.—27.

APPENDIX.

15

REPORT BY CHIEF INSPECTOR OF MACHINERY

Inspection of Machinery Office,

Sir,—

Wellington, 1st August, 1881.

I have the honor to submit my seventh report as Chief Inspector of Machinery, being that for the year ended the 31st March, 1881.

I have much pleasure in being able to state that, although the number of boilers has considerably

increased, no explosion has occurred during the year.

There has been an increase of 100 boilers inspected, the number now being 1,250; of these, 82 were found defective in various parts, viz.: Furnaces out of shape, fractured and laminated plates, internal and external corrosion, groving and pitting, also feed apparatus, water-gauges, safety-valves, and blow-off cocks out of order; all these defects have been repaired to the satisfaction of the inspectors.

In addition to the boilers, there have also been inspected 1,048 establishments of various kinds, in which either steam, water, wind, or gas is used as a motive-power, making the total number of inspec-

tions during the year 2,298.

The number of accidents reported was ten, two of which proved fatal; the machinery in each case was securely fenced. These accidents were all of the class which is not preventable by inspection.

The test steam-gauges imported, and the testers made in the colony, are of great service in ascertaining the condition and errors of steam-gauges in general. In many cases gauges have been condemned, and when possible tables have been supplied showing the correction to be supplied to each reading. All this is done free of charge.

I attach tables showing the number of boilers inspected, also tables showing the amount of revenue

and expenditure, during the past year.

The Secretary, Marine Department,

J NANCARROW,

The Secretary, Marine Department, Wellington.

chief Ínspector.

STATEMENT showing the Number of Land Boilers Inspected during the Financial Year ended 31st March, 1881.

Now	te of Distric	, +		Num	ber of Po Boilers.	rtable	Numb	er of Stat Boilers.	ionary	Total.
Nan	o or Diseric	; u.		Under 5 h. p.	5 to 10 h. p.	Over 10 h. p.	Under 5 h. p.	5 to 10 h. p.	Over 10 h. p.	TOTAL.
)tago	•••			14	95	21	82	47	77	336
anterbury		••		8	103	10	70	15	32	238
Luckland				12	33	24	67	42	99	277
Wellington				6	37	13	27	33	49	165
Aarlborough	••			2	15 9	2 5	3	9	23	54
laranaki Nelson North			••	1	19	6	$egin{array}{c} 4 \ 12 \end{array}$	3 11	$egin{array}{c} 2 \ 2 \end{array}$	$\frac{24}{51}$
				1	2	5	7	11	5	19
Nelson South Westland		•••		••	3	$\frac{3}{2}$	12	7	9	33
Vestland Iawke's Bay	••	•••	••		26	5	9	10	3	53
Tanke s Day	•••		••							
Tota	10			44	342	93	293	177	301	1,250

RETURN showing the AMOUNT of FEES COLLECTED under the Inspection of Machinery Acts during the Year ended 31st March, 1881.

		 	 	 	·,		
Name of Distri	ict.					Am	ount collected.
Otago			••			••	665
Canterbury	••			••	**	••	473
Auckland			• •			••	526
Wellington Marlborough	••			•••	••	**1	325 108
Taranaki		•••		•••	••	••	49
Nelson North		••	••	••	•••	•••	99
Nelson South		••	••			••	62
Westland		••	••	•••		••	55
Hawke's Bay	•••		••		••	•••	105

£2,467

STATEMENT showing the Cost of the Inspection of Land Machinery during the Financial Year ended 31st March, 1881.

Nature of Expenditure.		$\mathbf{A}\mathbf{m}$	ount.	
Salaries Travelling expenses	 	$\begin{array}{c} \mathfrak{L} \\ 1,246 \\ 511 \end{array}$	16	d. 8 3
Sundries		71	16	8
		£1.830	5	$\frac{-}{7}$

ANNUAL REPORT ON LIGHTHOUSE WORKS BY THE MARINE ENGINEER. The MARINE ENGINEER to the SECRETARY, Marine Department.

Marine Office, Wellington, 31st March, 1881. SIR,-I have the honor to forward, for the information of the Minister having charge of the Marine

Department, the annual report on works executed for new lighthouses, &c., during the year, viz.:-Cape Egmont.—Instructions were received on the 27th August as to the removal of the disused Mana Island light, and its re-erection at Cape Egmont. An excellent site at the latter place had already been selected, consisting of a raised knoll, about 50 feet high, and about 12 chains back from the coast-line. Steps were at once taken to pull down the tower, remove it to the beach, and there ship it to New Plymouth, from whence it was carted to the proposed site. It is of cast iron, about 16 feet diameter at the base, and about 50 feet high. Materials for the dwelling-houses (two) and stores (two) were also sent at the same time. The overseer, with a party of men, arrived at Cape Egmont on the 11th November, 1880, and immediately began the work of getting in the foundations to receive the tower, the erection of which, as well as that of the houses and stores, is so well advanced, that it is expected the whole will be completed by the end of June, and that the light will be ready for exhibition by the 1st August. A reserve has been made for the lighthouse of about 50 acres, around which the Armed Constabulary are constructing a ditch and bank fence, and a road is being made from the main road, near Pungarehu, to the lighthouse. It will be about three miles long.

Removal of Rocks, Catlin's River.—A tender was accepted for this work on the 14th December, 1880, and the time for completion is the 14th May, 1881. The contractor, so far, has made very fair progress, and it is expected that the work will be completed within contract time.

Removal of Buoy Rock, Nelson Harbour.—This work was the subject of a previous contract, but contractors failed to carry it out. It was advertised for public tender again, and a second tender was accepted on the 30th December, 1880, the work to be completed by the 30th June, 1881. The contractor, up to date, has not made much progress, but has ordered the diving and other apparatus necessary for the proper carrying out of the work, which he hopes to finish in contract time.

I have, &c., JOHN BLACKETT, Marine Engineer.

The Secretary, Marine Department.

By Authority: George Didsbury, Government Printer, Wellington.-1881.

