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# SESSIONAL PAPERS.

ga - 10 a

VOLUME 8.

## SECOND SESSION OF THE SEVENTH PARLIAMENT

OF THE

## DOMINION OF CANADA.

SESSION 1892.



#### OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY

1892

see also Numerical List, page 4.

#### ALPHABETICAL INDEX

TO THE

## SESSIONAL PAPERS

OF THE

## PARLIAMENT OF CANADA.

#### SECOND SESSION, SEVENTH PARLIAMENT, 1892.

Note.—In order to find quickly whether a paper has been printed or not, the mark (n.p.) has been inserted when not printed; papers not so marked, it may be understood, are printed. Further information concerning each paper is to be found in the List, commencing on page 4

A	${f c}$
Abrogation in Treaties of Commerce       24, 24a         Adulteration of Food       6b         Agriculture, Annual Report and Appendices       7         Albert Southern Railway       (n.p.) 100         Annapolis and Atlantic Railway       (n.p.) 62         Archibald, H. D       (n.p.) 61a         Archives, Canadian       7a         Auditor General, Annual Report       1	Canadian Coloured Cotton Mills Co.       (n.p.)       74         Canadian Pacific Railway.       34         Canadian Pacific Railway.       (n.p.)       34a         Canals, Revenue Branch       9c         Canal Statistics.       9a         Canal Tolls.       99         Carling, Hon. John.       (n.p.)       39         Census of Canada       (n.p.)       96         Charlebois, F       (n.p.)       23c
В	Chartered Banks
Baie des Chaleurs Railway       (n.p.)       88         Banks, Chartered       3         Banks, Unclaimed Balances in       3a         Beet Sugar       7c         Binding Twine       (n.p.)       105         Board of Examiners, Civil Service       16b         Bonds and Securities       (n.p.)       32         Boucherville Wharf       (n.p.)       48a         Boundaries of Quebec       71         Bounty on Pig Iron       38         Bridge at Sorel       (n.p.)       63a         Bridge over Lachine Canal       (n.p.)       63         British Canadian Loan Investment Co. (n.p.)       28	Chinese Immigrants       (n.p.)       33         Civil Service Board of Examiners       160         Civil Service Irregularities       49         Civil Service List       16a         Civil Service, Royal Commission Report       16c, 79         Civil Service Superannuations       27         Commissioner, Dominion Police       (n.p.)       21         Commission of Lieutenant Governors       (n.p.)       72         Commissions to Public Officers       31         Conference at Washington       37         Copyright Laws       81 (1891)         Cotton Seed Oil       (n.p.)       89         Cows at Experimental Farm       (n.p.)       50         Criminal Statistics       7e
British Columbia Dominion Lands	D
British Columbia Voters	Dairy Commissioner

D	J
Dividends unpaid in Banks 3a	Today of Supplied Cloud Onebus ( ) on
Dominion Buildings, Lighting(n.p.) 81	Judges of Superior Court, Quebec(n.p.) 87
Dominion Cotton Mills Co	Justice, Annual Report 18
Dominion Lands	K
	Keewatin Territory (n.p.) 30
Dominion Police Commissioner(n.p.) 21	Kingston Graving Dock(n.p.) 77
<b>IE</b>	L
Election of Members	Tashina Canal Buidan
Election Petitions in N. S (n.p.) 86	Lachine Canal Bridge (n.p.) 63
Electric Lighting	La Have River(n.p.) 35
Engraving and Printing(n.p.) 69	Land Grants to Railways(n.p.) 101
Estimates, 1893 2	Lands sold by C.P.R. Co (n.p.) 34a
Eugenia, Postmaster of (n.p.) 82	Lennox Voters' List(n.p.) 41, 41b
Expenditure on Public Works	Library of Parliament, Annual Report 17
Expenses, Unforeseen	Lieutenant Governors, Commission of (n.p.) 72
Experimental Farms(n.p.) 50a	"Lily," H.M.S
	Live Cattle from U.S 68
Experimental Farms, Annual Report 7f	Live Stock, Tariff on(n.p.) 61d
Exports and Imports	Lobster Fishery 236
Exports, General (n.p.) 54	Location Tickets
Exports to Newfoundland(n.p.) 44	London Voters' List(n.p.) 41a
<b>F</b>	Longueuil Wharf (n.p.) 48a
	(
Fisheries, Annual Report	M
Fisheries on Atlantic coast 23e, 23f, 23h	
Fisheries Statements and Inspectors' Reports 11a	
Fish, etc., from Newfoundland 23d	
Fishing Bounties	Mails, Canada and United Kingdom(n.p.) 40
Fishing Industry, Newfoundland 23i	Manitoba Legislation, Disallowance of (n.p.) 51, 52
Fishing Licenses	Manitoba School Case
Fishing on Restigouche River(n.p.) 23a	Map of Dominion(n.p.) 67
Flour, Canadian (n.p.) 44	Marine, Annual Report 10
	Militia and Defence, Annual Report 19
G	Militia of Canada(n.p.) 59
Galops Rapids	Miscellaneous Unforeseen Expenses 22
Gas Lighting (n.p.) 81	Mortuary Statistics 7d
Geological Survey Report	353 000
Government Railways, Property near (n.p.) 616	
Governor General's Warrants	Mc.
Governor General's Warrants (n.p.) 20a	McLellan, John Alexander and Peter. (n.p.) 97
H	N
Halifax Board of Trade(n.p.) 60a	į
	New Carliela Wharf (n n ) 48
High Commissioner, Reports of 78	Newfoundland, Admission of, into Canada. 70
I	Newfoundland and Canadian Trade(n,p.) 600
	Newfoundland Bait Act 23e, 23f, 23h, 23j
Imports from United States(n.p.) 55	Newfoundland, Exports to(n.p.) 44
Ingram, W. H (n.p.) 75	Newfoundland Fishing Industry 23i
Indian Affairs, Annual Report 14	Newfoundland Fishing Licenses 23c
Indian Reserves in British Columbia(n.p.) 98	1 · · · · ·
Inland Revenue, Annual Report 6	Newfoundland, Imports from
Insurance, Annual Report 4	
Insurance Companies 4a, 4b	1 1
Intercolonial Railway:	Nova Scotia Election Petitions(n.p.) 86
Accident on the	
	_
Expenditure 61	, <u> </u>
Expenditure	P.E.I. Tunnel (n.p.) 66
Expenditure 61	P.E.I. Tunnel (n.p.) 66

P	s
Pontiac County	Sick Mariners' Dues (n.p.) 78
	Sorel Bridge(n.p.) 63a
	Soulanges Canal
	Speaker's Warrants
- 1014K and Engressing (n n ) 69	Spruce and White Pine (n.p.) 102
Prohibition Petitions. 58	Standard of Time
Property near Government Railways(n.p.) 61b	1
Public Accounts, Annual Report 2	
Public Officers' Commissions	Steamboat Inspection
Public Printing and Stationery 16d	Superannuations, Civil Service
Public Works, Annual Report. 8	
Public Works, Expenditure on 65	Supreme Court 56
Expenditure on 00	T
Q	Temperance Colonization Co(n.p.) 45, 95
Quebec, Boundaries of	Time, Standard of
Quebec Superior Court Judges	Trade and Navigation, Annual Report 5
Quebec Tonnage Dues	Treaties of Commerce24, 24a
Quinn, Michael (n.p.) 61e	Trent Valley Canal 47
y satisfact	Truro, Accident at(n.p.) 61a
R	Tunnel between P.E.I. and Mainland. (n.p.) 66
Railway Committee of Privy Council(n.p.) 80, 80a	Tunnel between P.E.I. and Mainland 66a
Railways and Canals, Annual Report 9	
Railway Statistics 96	<b>U</b>
Receipts and Payments	Unforeseen Expenses
	United States Fishing Vessels 23c
	W
Royal Commission, Civil Service	Waldron Ranche Co(n.p.) 104
Royal Commissions	Warrants, Governor General's 20
205 tal Commissions 64, 84 <i>a</i>	Warrants, Governor General's(n.p.) 200
S	Warrants, Speaker's(n.p.) 25, 25d
Sawdust in Rivers (n.p.) 35	Washington Conference. 37
Secretary of State Annual Bases	Weights, Measures and Gas
Secretary of State, Annual Report	Welland Election
Shareholders in Banks (n.p.) 85	White Pine and Spruce (n.p.) 102
Shipments from Canada	Wood, A. F
(m.p.) 04	1 11 0000 mar = 11 11 11 11 11 11 11 11 11 11 11 11 1

See also Alphabetical Index, page 1.

## LIST OF SESSIONAL PAPERS

Arranged in Numerical Order, with their Titles at full length; the Dates when Ordered and when Presented to both Houses of Parliament; the Name of the Member who moved for each Sessional Paper, and whether it is Ordered to be Printed or Not Printed.

#### CONTENTS OF VOLUME 1.

Report of the Auditor General on Appropriation Accounts for the year ended 30th June, 1891. Presented 15th March, 1892, by Hon. G. E. Foster—

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 2.

#### CONTENTS OF VOLUME 3.

- 8a. Report of dividends remaining unpaid and amounts, or balances, in respect to which no transactions have taken place, or upon which no interest has been paid for five years or upwards, prior to 31st December, 1891, in chartered banks of Canada. Presented 12th May, 1892, by Hon. G. E. Foster. Printed for both distribution and sessional papers.
- 4. Report of the Superintendent of Insurance for the year ending 31st December, 1891.

Printed for both distribution and sessional papers.

4a. Preliminary abstract of the business of Canadian Life Insurance Companies for the year ending 31st December, 1891. Presented 1st March, 1892, by Hon. G. E. Foster.

Printed for both distribution and sessional papers.

4b. Abstract of statements of Insurance Companies in Canada for the year ending 31st December, 1891.

Presented 10th May, 1892, by Hon. G. E. Foster.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 4.

Tables of the Trade and Navigation of Canada for the fiscal year ended 30th June, 1891, compiled from
official returns. Presented 1st March, 1892, by Hon. M. Bowell.

Printed for both distribution and sessional papers.

6. Report, Returns and Statistics of the Inland Revenues of Canada, for the fiscal year ended 30th June, 1891; Part I, Excise, etc. Presented 31st March, 1892, by Hon. J. Costigan.

- 6b. Report on Adulteration of Food, for the fiscal year ended 30th June, 1891.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 5.

7. Report of the Minister of Agriculture of Canada, for the calendar year 1891. Presented 6th April, 1892, by Hon. J. Carling. Appendices to the Report of the Minister of Agriculture of Canada, for the year 1891. Presented 20th June, 1892, by Hon. J. Carling.

Printed for both distribution and sessional papers.

7a. Report on Canadian Archives, 1891. Presented 8th April, 1892, by Hon. J. Carling.

Printed for both distribution and sessional papers.

7b. Report of the High Commissioner of Canada, with Reports from Agents in the United Kingdom, for the year 1891. Presented 6th April, 1892, by Hon. J. Carling.

Printed for both distribution and sessional papers.

- 7c. Report on the production and manufacture of Beet Sugar by William Saunders, Director Dominion Experimental Farms. Presented 4th March, 1892, by Hon. G. E. Foster.
  Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 6.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 7.

- Annual Report of the Minister of Railways and Canals, for the past fiscal year, from the 1st July, 1890. to the 30th June, 1891. Presented 6th April, 1892, by Hon. J. Haggart.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 8.

- 9a. Canal Statistics for Season of Navigation, 1891..... Printed for both distribution and sessional paper
- 9b. Railway Statistics, and Capital, Traffic and Working Expenditure of the Railways of Canada, for 1891. Presented 30th June, 1892, by Hon. J. Haggart.

Printed for both distribution and sessional papers.

9c. Annual Report of the Canals Revenue Branch for 1891.

Printed for both distribution and sessional papers.

Twenty-fourth Annual Report of the Department of Marine, for the fiscal year ended 30th June, 1891. Presented 1st April, 1892, by Hon. C. H. Tupper.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 9.

- 11a. Fisheries Statements and Inspectors' Reports for the year 1891.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 10.

- 14. Annual Report of the Department of Indian Affairs for the year ended 31st December, 1891. Presented 9th March, 1892, by Hon. E. Dewdney... Printed for both distribution and sessional papers.

- 16a. The Civil Service List of Canada, 1891. Presented 9th July, 1892, by Hon. J. C. Patterson.

  Printed for both distribution and sessional papers.
- 16b. Report of the Board of Civil Service Examiners for the year ended 31st December, 1891. Presented 1st June, 1892, by Hon. J. C. Patterson.......Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 11.

- 16d. Annual Report of the Department of Public Printing and Stationery of Canada, for the year ending 30th June, 1891. Presented 15th June, 1892, by Hon. J. C. Patterson.

Printed for both distribution and sessional papers.

17. Report of the Joint Librarians of Parliament for the session of 1892, on the state of the Library of Parliament. Presented 25th February, 1892, by Hon. Mr. Speaker—

Printed for sessional papers only.

#### CONTENTS OF VOLUME 12.

Report of the Minister of Justice as to Penitentiaries in Canada for the year ended 30th June, 1891.
 Presented 23rd March, 1892, by Sir John Thompson.

Printed for both distribution and sessional papers.

- 19. Annual Report of the Department of Militia and Defence of Canada, 31st December, 1891. Presented 7th April, 1892, by Hon. M. Bowell......Printed for both distribution and sessional papers.

- 81. Report of the Commissioner, Dominion Police, for the year 1891, under Revised Statutes of Canada, chapter 184, section 5. Presented 29th February, 1892, by Sir John Thompson.....Not printed.

- 28. Statement in reference to fishing bounty payments for 1890-91, required by chapter 96 of the Revised Statutes of Canada. Presented 1st March, by Hon. C. H. Tupper. Printed for sessional papers only.
- 23a. Return to an order of the House of Commons, dated 3rd August, 1891, for a return of the names of proprietors to whom licenses have been granted for salmon net fishing on the Restigouche River, in the county of Bonaventure, for 1890 and 1891. Presented 3rd March, 1892—Mr. Fauvel.

Not printed.

- **23**c. Copies of papers relating to the mutual recognition by Canada and Newfoundland of licenses issued to United States fishing vessels, under the *modus vivendi*, and the division of the fees collected by the same. Presented 18th March, 1892, by Hon. C. H. Tupper... Printed for sessional papers only.

- 28f. Additional papers respecting the fisheries on the Atlantic coast, including the separate arrangement proposed to be entered into by Newfoundland with the United States, and also the enforcement by the government of Newfoundland against Canadian vessels of the Newfoundland Bait Act. Presented 7th April, 1892, by Hon. C. H. Tupper. Printed for both distribution and sessional papers.

- Return to an address of the House of Commons to his excellency the Governor General, dated 21st April, 1890, for copies of any and all communications that may have passed between the imperial and dominion governments with reference to the abrogation of such articles in the various treaties of commerce between her majesty's government and the government of foreign nations as preclude preferential fiscal treatment of goods of British and colonial production by the government of the dominion. Presented 7th March, 1892.—Mr. Laurie.

Printed for both distribution and sessional papers.

- 25. Return to an order of the House of Commons, dated 3rd March, 1892, showing the date of the Speaker's warrant, the date of the writ, and the date of the appointment of a returning officer, in the case of election of members to the House of Commons, since the close of last session; also a statement of the causes of delay in reference to any of these matters where delays have taken place.
- 25a. Supplementary return to an order of the House of Commons, dated 3rd March, 1892, for a return showing the date of the Speaker's warrant, the date of the writ, and the date of the appointment of a returning officer, in the case of election of members to the House of Commons, since the close of last session; also a statement of the causes of delay in reference to any of these matters where delays have taken place. Presented 3rd June, 1892. -Mr. Mills (Bothwell)......... Not printed.
- 26. Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th February, and from the 21st to the 29th February, 1892, and the corresponding periods of 1891. Presented 7th
- 26a. Ten days' statement of the receipts and payments of Canada, from the 1st to the 10th March instant, and the corresponding period of 1891. Presented 15th March, 1892, by Hon. G. E. Foster.
- 266. Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th of March, instant, and the corresponding period of 1891. Presented 23rd March, 1892, by Hon. G. E. Foster.
- 26c. Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th of April, instant, and the corresponding period of 1891. Presented 22nd April, 1892, by Hon. G. E. Foster. Not printed.
- 26d. Ten days' statement of the receipts and payments of Canada, from the 21st to the 30th of April, ultimo, and the corresponding period of 1891. Presented 4th May, 1892, by Hon. G. E. Foster.
- Not printed. 26c. Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th May, instant, and the corresponding period of 1891. Presented 30th May, 1892, by Hon. G. E. Foster.
- 26f. Ten days' statement of the receipts and payments of Canada, from the 21st to the 31st May last, and the corresponding period of 1891. Presented 3rd June, 1892, by Sir John Thompson.-
- 26g. Ten days' statement of the receipts and payments of Canada, from the 1st to the 10th June, instant, and the corresponding period of 1891. Presented 27th June, 1892, by Hon. G. E. Foster.-
- 26h. Ten days' statement of the receipts and payments of Canada, from the 21st to 31st June last, and the corresponding period of 1891. Presented 9th July, 1892, by Hon. G. E. Foster. Not printed.
- 27. Statement of all superannuations and retiring allowances in the civil service, giving the name and rank of each person superannuated or retired, his salary, age and length of service, his allowance and cause of retirement, whether vacancy has been filled by promotion or new appointment, etc., for year ended 31st December, 1891. Presented 7th March, 1892, by Hon. G. E. Foster.— Printed for both distribution and sessional papers.
- 28. Statement of the affairs of the British Canadian Loan and Investment Company, as on the 31st December, 1891. Presented 9th July, 1892, by Hon. Mr. Speaker. ...... Not printed.
- 29. Return to an address of the Senate to his excellency the Governor General, dated 4th August, 1891, for a statement in detail of the amount of money paid to A. F. Wood, Esq., for services, etc., as commissioner for canals and railways in different places in 1890. Presented 4th March, 1892.—Hon.
- 80. Return to an address of the Senate to his excellency the Governor General, dated 5th June, 1891, for a statement of all receipts in the unorganized territories of Keewatin and the Mackenzie River Basin on account of revenue under the Customs Act or otherwise, for the last three years, and of the expenditure for public purposes during the same period. Presented 4th March, 1892.-Hon. Not printed. Mr. Girard ...... ....

81. List of public officers to whom commissions have issued under chapter 19 of the Revised Statutes of Canada, during the past year, 1891. Presented 10th March, 1892, by Sir John Thompson.—

Printed in No 16

32. Detailed statement of all bonds and securities registered in the department of the secretary of state of Canada, since last return, 1891, submitted to the parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented 10th March, 1892, by Sir John Thompson.

Not printed.

88. Return to an order of the House of Commons, dated 1st July, 1891, for a return giving: 1. The number of Chinese immigrants that have entered Canada since the date of the last return ordered by the House, specifying: (a). The ports at which said Chinese immigrants were entered; (b). The amount of duty or head-money collected; (c). The number that entered by virtue of return certificates; (d). The number of return certificates issued during the same period, and the number of Chinese that during the same period passed through Canada in bond to destinations out of Canada.

2. The number that entered Canada as belonging to the diplomatic or consular service of China.

3. The number of Chinese that entered Canada during the same period, either as tourists, men of science, students or merchants. 4. Copies of all correspondence, if any, between the imperial government and this government, or between this government and the government of China, if any, or between the government of British Columbia and this government, or with any labour organization, or with any company, corporation or person, having reference to the Chinese Restriction Act or suggesting amendments to the same. Presented 10th March, 1892.—Mr. Gordon.

Vot printed

- 85. Return to an order of the House of Commons, dated 13th July, 1891, for a return of all letters, correspondence, petitions and papers, not otherwise brought down, between all persons in the department of marine and fisheries relating to sawdust in the LaHave River, Lunenburg County, N.S., with the object of having the river relieved from the operation of the said act. Also a list of rivers and streams exempted from the operations of the act, and a return of all letters, correspondence, petitions and papers between all persons and the department of marine and fisheries relating to such exemptions. Presented 14th March, 1892.—Mr. Kaulbach and Mr. Flint......Not printed.

- 87. Copies of documents relating to the negotiations at the conference recently held at Washington, between the delegates from the Canadian government and the secretary of state of the United States, respecting the extension and development of trade between the United States and Canada, and other matters. Presented 16th March, 1892, by Sir John Thompson.

Printed for both distribution and sessional papers.

- Return to an address of the Senate to his excellency the Governor General, dated 3rd March, 1892, praying that his excellency will cause to be laid befor this House, a copy of the resignation, by the Honourable John Carling, Minister of Agriculture, of the seat in the Senate occupied by him at close of the last session of parliament. Presented 17th March, 1892.—Hon. Mr. Power.—

Not printed.

- 41c. Return to an order of the House of Commons, dated 9th May, 1892, for a return showing the number of voters in the several electoral districts of the province of British Columbia, and the number of voters in each polling district of the electoral district. Presented 12th May, 1892.—Mr. Mara.
  Not mainted

- 44. Return to an order of the House of Commons, dated the 9th March, 1892, for a return showing the total quantity of Canadian flour exported to Newfoundland in each of the years 1890 and 1891; the law and regulations of the Newfoundland Government relating to the importation into that colony of flour; the total quantities of Canadian cattle, beef, pork, hogs and cheese exported to Newfoundland in each of the years 1890 and 1891. Presented 22nd March, 1892.—Mr. Hughes.

- 47. Report of the Commissioners appointed to consider the advisability of extending the Trent Valley Canal, and to what extent. Presented 24th March, 1892, by Hon. J. Haggart.
  Printed for both distribution and sessional papers.
- 47b. Return to an order of the House of Commons, dated 17th March, 1892, for copies of engineers' reports which led to the building of the Beauharnois Canal; of engineers' reports in favour of the building of the Soulanges Canal, and of reports, letters, etc., from engineers, masters or pilots, objecting to the building of the canal at Soulanges. Presented 9th May, 1892.—Mr. Bergeron...Not printed.

- 50. Return to an order of the House of Commons, dated 23rd March, 1892, for a return showing the number of cows kept at the Central Experimental Farm between the first day of January, 1891, and the first day of January, 1892. The number of cows of each of the different breeds; the quantity of milk given by each cow; the quantity of milk to make a pound of butter; the quantity of milk sold; the quantity of butter sold; where sold, and the prices obtained each month; the kinds of food given and the value of the same. Presented 31st March, 1892—Mr. McMillan (Huron).

Not printed.

- 81. Return to an address of the House of Commons to his excellency the Governor General, dated 27th May, 1891, for copies of all papers, correspondence and documents, together with reports of the minister of justice and order in council relating to the disallowance of an act passed by the local legislature of the province of Manitoba, on the 31st day of March, 1890, intituled: "An Act respecting the Diseases of Animals." Presented 31st March, 1892—Mr. Watson .... Not printed.

- 55. Return to an order of the House of Commons, dated 21st March, 1892, for a return showing the quantities of beef salted in barrels; dried or salted meats and meats preserved in any other way than salted or pickled; other meats fresh or salted, n. e. s.; butter, cheese and horses imported into Canada from the United States in each of the three years 1888-89, 1889-90 and 1890-91; with the values thereof and rates of duty thereon. Presented 31st March, 1892.—Mr. Hughes...... Not printed.
- 57. Return to an order of the House of Commons, dated 17th March, 1892, for a statement showing the amount of money expended by the government of Canada in the years 1890-91 on piers, breakwaters, etc., in Prince County, Prince Edward Island; the amount expended on each of these works, the work let by contract and to whom let; also showing the total amount voted during said years and the amount not expended. Presented 5th April, 1892.—Mr. Perry....Not printed.
- 58. Return to an order of the House of Commons, dated 7th March, 1892, for a statement showing the number of petitions for prohibition presented to the House of Commons during the session of 1891: 1. Total number of petitions presented. 2. Total number of signatures to these petitions. 3. Number of (1) petitions; (2) signatures: (a) presbyterian church; (b) methodist church; (c) baptist church (separate figures for free baptists); (d) episcopal church or church of England; (e.) salvation army. 4. Number of (1) petitions; (2) signatures from each province and each territory; name and figures for each province and each territory separately. 5. Number of separate petitions from churches, courts and temperance societies, or any other bodies signed by officials, giving name of church, court, temperance society, etc., sending such petitions, with number of signatures. Presented 7th April, 1892.—Mr. Frazer. ... Printed for sessional papers only.

- 81. Return to an order of the House of Commons, dated 29th February, 1892, for a detailed statement showing: 1. Traffic at Mulgrave Station for the six months ending 31st December, 1890 and 1891; also for the months of January, 1891 and 1892. The return to include sale of tickets, freight received and freight sent. 2. The number of staff employed during the said month, salaries paid and amount paid for extra labour, with the names of staff and extra labour employed. 3. Return of work done by shunting engine during said periods, and the number of men employed in shunting, and the cost. 4. If there is a yard-master at said station, when he was appointed, whether he has an assistant, and, if so, when such assistant was appointed and what pay each receives. 5. The number of men employed in the scow at the said station, their names, and whether they are paid by the hour or by the day and at what rate. Presented 13th April, 1892.—Mr. Fraser. Not printed.
- 61b. Return to an order of the House of Commons, dated 2nd May, 1892, for a return showing the amount of additional property purchased on or adjacent to government railways for increased accommodation or other purposes; the quantity purchased or paid for within the period from the 1st of July, 1891, to the 1st of April, 1892; the party from whom purchased; the price paid; the purpose for which the property is used or is to be used. Presented 11th May, 1892.—Mr. McMullen.... Not printed.
- Return to an Order of the House of Commons, dated 13th of April, 1892, for a return containing a statement of the expenditure out of income made for permanent improvements, extensions, additions and betterments, exclusive of works of ordinary maintenance and renewals, on account of the Intercolonial Railway from 30th June, 1881, to 1st July, 1891. The return to show such expenditure in summary form for each branch of service as nearly as can be conveniently ascertained from the accounts. Presented 25th May, 1892.—Mr. McDougald (Pictou).

Printed for sessional papers only.

- Return to an order of the House of Commons, dated 30th March, 1892, for copies of all petitions, correspondence, letters, telegrams and memoranda received since 1887, asking for or referring to the subsidizing of the Annapolis and Atlantic Railway Company or a line of railway from Liverpool and Shelburne to Annapolis, passing through Caledonia. Presented 13th April, 1892.—

  Mr. Forbes. Not printed.
- 68. Return to an order of the House of Commons, dated 28th March, 1892, for a return of all petitions of boards of trade, railway companies, and documents generally, concerning the construction of a new bridge across the Lachine Canal at Montreal. Presented 13th April, 1892.—Mr. Curran.

- 67. Return to an order of the House of Commons, dated 9th March, 1892, that a map of the Dominion be laid upon the table showing the boundaries of townships, counties and electoral divisions in each province, and the number of votes polled in each township for each candidate at the general election in March, 1891. Presented 27th April, 1892.—Mr. Mills (Bothwell)......Not printed.
- 68. Return to an address of the House of Commons to his excellency the Governor General, dated 14th March, 1882, for copies of all correspondence between the government of Canada or any member thereof, and the British government, or between the government of Canada and any person or persons, relating to the admission of live cattle from the United States. Also for copies of all orders in council relating to the same. Presented 29th April, 1892.—Mr. Somerville.

Printed for sessional papers only.

- 71. Return to an address of the House of Commons to his excellency the Governor General, dated 10th March, 1892, for copies of all correspondence, memorials, departmental orders, and orders in council respecting the north-western, northern and eastern boundaries of the province of Quebec, received or passed during the last five years and not already laid before this House, together with all the reports of surveys or explorations ordered thereon by the government of Canada during the same period. Presented 5th May, 1892.—Sir H. Langevin.

Printed for sessional papers only.

72. Return to an address of the House of Commons to his excellency the Governor General, dated 9th May, 1892, for a copy of the instructions appended to commission of the lieutenant governors of the provinces of Canada. Presented 9th May, 1892.—Mr. Laurier ............Not printed.

- 80a. Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892: 1. For a statement of all applications or complaints made to the railway committee of the privy council respecting the matters or things referred to in sub-sections (k), (l), (m), (n) and

- 81.—(1891.) Return to an address of the House of Commons to his excellency the Governor General, dated 3rd June, 1891, for copies of all correspondence between the imperial government and the government of Canada, on the subject of the copyright laws of Canada, and all other papers relating thereto, not already brought down. Presented 24th August, 1891.—Mr. Edyar.

Printed for sessional papers only.

- 82. Return to an order of the House of Commons, dated 2nd May, 1892, for a return giving all papers, letters, petitions, applications and every other document relating to the dismissal of the postmaster of Eugenia, and the appointment of his successor. Presented 30th May, 1892.—Mr. Landerkin—Not printed.
- 83. Return to an order of the House of Commons, dated 16th May, 1892, for a return showing the names of the mail conductors superannuated, their number of years of service, the salary given to each of them during the last year of service, and also the names of those who have had several years added to their period of service. Presented 30th May, 1892.—Mr. Brodeur................Not printed.
- 84a. Supplementary return to an order of the House of Commons, dated 1st March, 1892, for a return showing the number of royal commissions that have been issued in each and every year since confederation, and to whom issued, together with the subject inquired into, giving the cost of each and the total cost of all. Presented 9th June, 1892.—Mr. Landerkin.—

Printed for sessional papers only.

- 85. Statement of number of hours of setting upon the daily Senate Hansard, and number of ems set, including corrections, up to 20th May. Presented 2nd June, 1892, by Hon. Sir J. C. Abbott.—
  Not printed.
- April, 1892, for a copy of the petition presented and filed in the supreme court of Nova Scotia, under the Dominion Controverted Elections Act, against the election and return of Joseph A. Gillies, for the county of Richmond, Nova Scotia, at the general election holden on the 5th March, 1891; together with the dates of filing and service of such petition; and also all papers and documents in connection with the following proceedings in the supreme court of Nova Scotia: 1. Application to the honourable the chief justice extending the time for setting the petition down for trial. 2. Application to set the petition down for trial returnable before the Honourable Mr. Justice Weatherbe, and the Honourable Mr. Justice Graham, but heard by the Honourable Judge Weatherbe, sitting alone, on the 19th day of November, 1891. 3. The order made by the said Judge Weatherbe, sitting alone, for the trial of the said petition, fixing the 8th of December, 1891, the date for said trial. 4. The notice of appeal, dated 28th November, 1891, from this decision of the Honourable Judge Weatherbe, to the supreme court of Nova Scotia, the grounds of appeal being as follows: (a) Because there was no jurisdiction to make said order, or the portion

16

thereof extending time; (b) Because six months had elapsed since the presentation of the petition; (c) Because the time and place of trial were not fixed within six months from the presentation of the petition; (d) Because the extension of time granted by said order was not made on application for that purpose, supported by affidavits, and it does not appear from such order, and it was not made to appear when the same was made, that the requirements of justice rendered such enlargement necessary; (e) Because the respondent had no notice of any application to extend the time for the commencement of the trial herein; (f) Because one judge has no jurisdiction to fix the time and place of trial; (q) Because the trial of the petition cannot be commenced during the term of the court at which the judges assigned to try the said petition are bound to sit. 5. The notice of motion on said appeal for the 3rd day of December, 1891. 6. The appointment by the Honourable Judge Weatherbe, then senior judge, for a hearing before the supreme court on the said 3rd day of December, 1891. 7. The postponement of this hearing until a later day. 8. The judgment of the supreme court upon this case. 9. The rule of the supreme court, dated the 19th day of December, 1891, setting aside the order of the Honourable Judge Weatherbe fixing the date of the trial of said petition. 10. The date on which the Honourable Judge Weatherbe and the Honourable Judge Graham received a copy of the order of the supreme court setting aside the said order of Judge Weatherbe for trial. 11. The date on which the said judges reported to the Honourable the Speaker of the House of Commons that the said petition had been heard by them, and that they had declared the election of the said Joseph A. Gillies void, and his seat in parliament vacant. 12. The date upon which application was made to the Honourable Judge Weatherbe to defer the decision in the petition pending the decision of the supreme court of Nova Scotia on the question of jurisdiction, and the refusal of this application. Also copies of the several petitions presented and filed in the supreme court of Nova Scotia under the Dominion Controverted Elections Act, against the election and return of Hon. Sir John Thompson, Hon. C. H. Tupper, Mr. C. E. Kaulbach, Mr. J. B. Mills, Mr. N. W. White and Mr. Hugh Cameron, for six of the several counties of the province of Nova Scotia, at the general election held on the 5th March, 1891. Also all papers and documents in connection with the various proceedings in the said cases in the supreme court of Nova Scotia. Presented 3rd June, 1892.—Mr. Gillies and Mr. Forbes.

Not printed.

March, 1892, for copies of all accounts, claims and certificates presented and transmitted (from 1st July, 1885, to this day) to the dominion government, by each of the judges of the superior court for the province of Quebec, in his capacity as such, for all travelling expenses and hotel expenses, in any place other than that in which such judge had orders to reside, or did in fact reside, either for sitting or for acting therein, or for holding therein (in such capacity) any court in civil, criminal or other matters; together with a detailed statement of the several sums paid in conformity with such accounts, claims and certificates. Presented 3rd June, 1892.—Mr. Flint.

Not printed.

- 89. Return to an order of the House of Commons, dated 25th April, 1892, for a return of the amount of crude cotton-seed oil imported into Canada during the year 1891; also the amount of refined cotton-seed oil imported into Canada during the year 1891. Presented 7th June, 1892.—Mr. McKay.

Not printed

- Return to an order of the House of Commons, dated 15th June, 1892, for a copy of the minutes of the evidence taken at the trial, under the Dominion Controverted Elections Act, of the case of A. Sturton et al, petitioners, vs. P. V. Savard, defendant, in relation to the election for the counties of Chicoutimi and Saguenay, in the year 1891. Presented 15th June, 1892.—Sir John Thompson.

Not printed.

- Return to an order of the House of Commons, dated 18th June, 1891, for copies of all papers and correspondence in the department of marine and fisheries, relating to the saving of the lives of part of the crew of H.M.S. "Lily," wrecked on the coast of Labrador, in September, 1889. Presented
- Return to an address of the House of Commons to his excellency the Governor General, dated 10th August, 1891, for copies of all orders in council, memorials, correspondence and documents respecting the rock-slide from the citadel at Quebec, on the 19th September, 1889. Presented 24th June,
- 95. Return to an order of the House of Commons, dated 4th April, 1892, for: 1. Return of all correspondence, papers, complaints or memoranda of any kind in relation to "The Temperance Colonization Society," received since or not included in a return furnished the House in 1890. 2. List of all stockholders of the company. 1st May, 1885, with amounts paid on calls of the shares, whether in cash, land credits, or otherwise, each year to date, stating what shares were forfeited, when and why. 3. List of stockholders at date of return, showing when they became such, with dates and amount of shares purchased, with price per share. (a) Number of calls on all shares, with details, dates, etc. 4. Amount earned in fees by directors each year to date. 5. Amount of money invested each year, and in what. (a) Total amount received on account of scrip and land sales to date. 6. List of scrip holders, with post office address, who purchased from the company (scrip issued) prior to 1st June, 1882, and since that date, giving date of issue, amount of land purchased by each, price per acre, amount paid thereon to date; showing if cancelled, when and on what conditions. 7. List of all other contracts for purchase of land issued, whether exchanged for scrip, amounts paid to date, whether contract is still in existence, why cancelled, and when. 8. Amount and details of land sales now current and for which land is to be supplied by the company. 9. List of all persons whose scrip was located on even-numbered sections in 1883, showing where located, new location subsequently, if any, with form of contract of even-numbered location. 10. List of homestead settlers in 1885. List at date (actual residents). 11. When contract with the company and government expired, with conditions of extension, if any; conditions of final settlement. 12. List of lands to be conveyed to the company under such settlement. The foregoing information to be furnished, if practicable, under affidavit of the president and accountant. Pre-
- Census of Canada, -- Bulletin No. 11. Nationalities. Birth places of the people. Presented 30th
- 97. Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892, for a copy of location ticket granted to John Alexander McLellan, of Cockburn Island, for lot 15 in the 5th concession, Cockburn Island; copy of all affidavits or declarations, letters and other papers from any person or persons to the department, or any officer of the department, in any way relating to said lot or the cancellation of the said ticket; and copy of any order made for the cancellation of said ticket. Also for a copy of the location ticket granted for lot 16 in the 4th concession, Cockburn Island, and any assignment or transfer thereof to Peter McLellan; copy of affidavits or declarations, letters and other papers from any person or persons to the department in any way relating to said lot or the cancellation of the said ticket, and copy of any order made for
- Return to an order of the House of Commons, dated 28th March, 1892, for a return showing > 1. The number of Indian reserves in British Columbia. 2. The location of each and name of tribe to whom allotted. 3. The area in acreage of each. 4. The area cultivated on each reserve. 5. The population of each tribe when reserves were first established. 6. The present population of each tribe. 7. The area (estimated) of pastoral land on each reserve. 8. The number of horses, cattle and sheep owned by each tribe. 9. The estimated area of timber land on each reserve. Presented
- Copy of a report of a committee of the honourable the privy council, approved by his excellency the Governor General in council, on the 17th June, 1892, on the subject of a despatch dated 4th November, 1891, from Lord Knutsford, inviting an expression of the views of the Canadian government upon the complaint of alleged discrimination on the part of the government of Canada against citizens of the United States in the matter of canal tolls. Presented 6th July, 1892, by Sir John Printed for sessional papers only. Thompson.....

- 101. Return to an order of the House of Commons, dated 9th May, 1892, for a return showing: 1. The total number of acres of public lands granted in Manitoba and the Canadian North-West in aid of railway construction, up to 26th April, 1892. 2. The name of each railway company or line to which a land grant has been made; the length of each line thus aided by land grant, and the number of acres granted to each company or line. 3. The total number of acres of land in Manitoba and the Canadian North-West which have been earned up to 26th April, 1892, under provisions of grants through completion of lines or portions of lines to which land grants have been made. 4. The name of each railway company or line which has earned the whole or a portion of its land grant, with the number of acres earned by each of such lines. Presented 9th July, 1892.—Mr. Charlton.
- 108. Return to an address of the House of Commons to his excellency the Governor General, dated 25th April, 1892, for copies of all resolutions and memorials passed by the North-West Assembly at its last session and addressed to the government. Presented 9th July, 1892.—Mr. Davin.. Not printed.
- 105. Return to an order of the House of Commons, dated 28th March, 1892, for a return showing the quantity of binding twine imported for consumption in the Dominion, from the 1st of July, 1891, up to the first day of January, 1892; the country from which the same was imported, and the amount of duty paid thereon. Presented 9th July, 1892.—Mr. Campbell...........Not printed.

#### SUPPLEMENT

TO THE

# ANNUAL REPORT OF THE DEPARTMENT OF RAILWAYS AND CANALS

For the Year ended 30th June, 1891

# CANAL STATISTICS

FOR

# SEASON OF NAVIGATION 1891



**OTTAWA** 

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY

1892.

[No. 9a—1891.] Price 10 cents.

# CONTENTS.

The state of the s	PAGES.
REPORT of B. H. Teakles for the Season of Navigation ended 31st December, 1891,	
following tables to page 44	1 to 44
	PAGE.
Tonnage of certain articles through all the Canals of New York	
do do do the Welland Canal	
do do cleared at Buffalo and Tonawanda through the Eric Canal	
do do cleared at Oswego through the Erie Canal	
do do cleared downwards on the Welland Canal	52
do do through the Welland Canal in transit between Ports in th	e United
States	
Tonnage of Vegetable Food carried on Welland and New York Canals and the two	
railways competing for the carrying trade to tide-water	
Statement of Freight passed down the Welland Canal in Canadian and United States V	essels 55
do large class of Vessels lightened at Port Colborne	59
do Freight passed Eastward from Lake Erie to Montreal	
do do Westward from Montreal to Lake Erie	67
do do Eastward through Welland Canal, from United States	Ports to
United States Ports	69
do Vessels and their Cargoes of Grain from Ports west of Port Colborne to 1	Montreal,
quantity transhipped at Kingston and quantity taken to Montreal	71
do quantity of Grain passed down Welland Canal to Kingston in Canadian an	d United
States Vessels	
Comparative Statement of quantity of Grain to Kingston for 1890 and 1891	76
Statement of the quantity of Oats arrived at Montreal via Canal and Railways; and shi	pments. 76
do quantity of Coal through the Welland Canal	76
do do in Canadian and United States	Vessels. 77
do do St. Lawrence Canals	77
do quantity of Freight passed down the Welland Canal to Montreal, quantity t	o Ontario
Ports, and quantity to United States Ports.	78
Recapitulation	88
Summary Statement of Freight passed down the Welland Canal on which full Tolls wer	e paid 86
Comparative Statement of Revenue on all the Canals for 1890 and 1891	90
do Vegetable Food and Lumber passed through all the Canals,	for 1890
and 1891	93
Statistics of Cl. 1 m m	PAGES.
Statistics of Canal Traffic	
Tariff	156 to 168
·	
No. or	
Statement.	PAGE.
6 Welland Canal, Details of Traffic, arranged Alphabetically	94
7 do do Through Traffic do	98
8 do do Way do do	
9 St. Lawrence Canals, Details of Traffic arranged Alphabetically	106
10 do do Through Traffic arranged Alphabetically	110
-	

No. o	)F				
Statem	ENT.				PAGE.
12	Ottawa Canals, Detai	ls of Traffic	arranged Alphabetica	lly	,
13	Chambly Canal	do	do	*****	118
14	Rideau Canal	do	do		122
	St. Peter's Canal	do	do	***************************************	125
	Trent Valley Canals	do	do		128
17	Murray Canal	do	do	***************************************	129
	Chatamont of Traffic of			conding to Ol	132
18	Statement of France	of Traction	the above Canala	cording to Classes	136
19	Summary Statement	or reside on	the above Canais		142
20	Statement of the amo	unt of 1011s	accrueu each month o	n all the Canals	148
21	Statement of Number	', Ionnage a	nd Nationality of Ves	sels passed through all the Cana	
911	Comparative Stateme	nt of Grand	Total Freight passed	through all the Canals.	150
	Comparact of		g. F.	antough an the Canals	154
22	Tariff		• • • • • • • • • • • • • • • • • • • •	*******************************	156

#### SUPPLEMENT

TO THE

## ANNUAL REPORT OF THE DEPARTMENT OF RAILWAYS AND CANALS.

# DEPARTMENT OF RAILWAYS AND CANALS, CANALS REVENUE BRANCH, OTTAWA, 3rd March, 1892.

Sir,—I have the honour to submit herewith my report on the traffic and revenue of the various canals for the season of navigation for 1891.

In addition to the usual statistics submitted, I have included certain information relative to the traffic on the great lakes and the comparative advantages of the Canadian and United States routes to the seaboard.

#### REVENUE.

The total revenue, exclusive of hydraulic rents for two years.	ars, is as follows:—
For 1890	<b>\$34</b> 8,059 <b>5</b> 1
1891	350,351 97

By comparing the statistics of 1890 with 1891, it will be seen that the gross revenue has increased \$2,292.46.

#### The several increases and decreases are as follows:-

		Increase.	Decrease.
On the	Weiland Canal	\$5,734 .38	
. "	St. Lawrence Canals		
"	Chambly Canal	1,350 13	
46	Rideau Canals		
"	Ottawa Canals	•••••	7,793 97
"	St. Peter's Canal		138 16
"	Trent Valley Canals		5 21
"	Murray Canal	••••••••••	75 14
	Total	\$10,447 82	\$8,155 36
	Total increase	2,292 46	

These figures are somewhat changed by refunds under Orders in Council, hereafter referred to.

There were refunded on grain in 1890 tolls to the amount of \$41,635.46, and in 1891, \$49,834.98, which makes an actual decrease of revenue for 1891 of \$6,907.06.

In compliance with the renewed request of forwarders and shippers of Montreal for a continuance of the reduction of tolls on certain agricultural products, His Excellency the Governor General, on the 25th of March, 1891, authorized a refund of canal tolls as follows, viz.:—

A refund shall be made on the tolls collected on wheat, Indian corn, pease, barley, rye, and (if for export) oats which may be carried through the Welland Canal and the St. Lawrence Canals to Montreal or any port east of Montreal.

The refund shall be such as to reduce the tolls to two cents per ton of the said products or any of them, and the conditions of such refund shall be the following:—

- 1. The products aforesaid, on which the refund may be claimed, shall be shown to have been originally shipped for Montreal or some port east of Montreal before entering the Welland Canal, and
- 2. Shall be shown to have been actually carried to Montreal or some port east of Montreal.
- 3. Transhipment, if at a Canadian intermediate port, shall not prevent the refund aforesaid being made.

This Order in Council shall remain in force only for the present year, 1891.

This refund was made applicable by Order in Council, 29th of April, 1891, to any portions of such cargoes lightered at Port Colborne and reshipped at Port Dalhousie, and also to the above-named products when shipped from Canadian Lake Ontario ports.

The amount of refunds so claimed were paid at the close of the season of navigation, instead of during the season as formerly.

There were 276,861 tons of grain passed down the Welland Canal, and transhipped at Canadian ports to Montreal, during the season of 1891, upon which a refund was made of 18 cents a ton, to the amount of \$49,834.98.

Of the 220,527 tons of grain passed down the Welland Canal to United States ports during the same period; 17,817 tons were transhipped at Ogdensburg, and passed down the St. Lawrence canals to Montreal. Upon these transhipments no refund has been made.

#### QUANTITY OF GRAIN PASSED DOWN THE WELLAND CANAL.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland Canal, from ports west of Port Colborne for a period of ten years, is as follows:—

Quantity passed down to Mon	TDP AT		H FULL TOLLS WERE
QUANTITI PASSED DOWN TO BLOW		To Ports in Ontario.	Quantity from U. S. Ports to U. S. Ports.
•	Tons.	Tons.	Tons.
882	180,694	<b></b>	63.881
883	186,814	10,650	121,876
.884	142,194	12,153	104,537
1885	96,569	11,909	117,346
.886	203,940	9,881	151,551
887	185,034	11,838	134,868
888	160,358	25,599	169,664
	267,769	19,075	213,766
1889	228,513	16,899	245,932

A refund of 10 cents per ton was allowed on grain passed down the Welland and St. Lawrence Canals to Montreal for 1884 and to June, 1885, and 18 cents per ton from 1st July, 1885, to December, 1891.

During the last decade the quantity of agricultural products, as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 180,694 to 295,509 tons; and the quantity passed down the Welland Canal, from United States to United States ports, has increased from 63,881 to 202,710 tons.

The quantity of barley, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways, for a period of 10 years, is reported as follows:—

	Tons.
For 1882	75,026
1883	98,672
1884	142,231
1885	
1886	165,613
1887	191,760
1888	113,794
1889	94,943
1890	119,208
1891	184,410

The quantity of the same articles passed down the whole length of the St. Lawrence Canals to Montreal, for the same period was:—

<sup>\*</sup> Of this quantity 17,817 tons of corn and wheat were transhipped at Ogdensburg.

For 1882	
For 1882	
1883	
1884       174,496         1885       134,824         1886       272,133         1887       237,881         1888       166,191         1889       275,414         1890       242,571         1891       320,434         Comparative shipments of grain by the St. Lawrence route, and by rai water via the State of New York, are as follows:—         QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.         The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:—         Tons.         For 1890       242,571         1891       320,434         Showing an increase of	
1885       134,824         1886       272,133         1887       237,881         1888       166,191         1889       275,414         1890       242,571         1891       320,434         Comparative shipments of grain by the St. Lawrence route, and by rai water viâ the State of New York, are as follows:—         QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.         The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:—         For 1890       242,571         1891       320,434         Showing an increase of       77,863         The quantity of grain and pease carried to Montreal via Canadian Pacific Grand Trunk Railways, is reported as follows:—       Tons.         For 1890       119,208         1891       184,410         Showing an increase of       65,202         The quantity of grain arrived at tidewater by New York canals, is reported follows:—       Tons.         For 1890       1,131,289	
1886   272,133   1887   237,881   1888   166,191   1889   275,414   1890   242,571   1891   320,434	
1887	
1888       166,191         1889       275,414         1890       242,571         1891       320,434         Comparative shipments of grain by the St. Lawrence route, and by rai vater viā the State of New York, are as follows:—       QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.         The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:—       Tons.         For 1890       242,571         1891       320,434         Showing an increase of       77,863         The quantity of grain and pease carried to Montreal viā Canadian Pacific Grand Trunk Railways, is reported as follows:—       Tons.         For 1890       119,208         1891       184,410         Showing an increase of       65,202         The quantity of grain arrived at tidewater by New York canals, is report follows:—       Tons.         For 1890       1,131,289	
1889	
1890	
Comparative shipments of grain by the St. Lawrence route, and by rai vater viā the State of New York, are as follows:  QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.  The quantity of grain and pease passed down the whole length of the sawrence Canals to Montreal, is as follows:  For 1890	
Comparative shipments of grain by the St. Lawrence route, and by rai vater via the State of New York, are as follows:  QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.  The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:  For 1890	
The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:  For 1890	il and
The quantity of grain and pease passed down the whole length of the Lawrence Canals to Montreal, is as follows:  For 1890	
Tons.  242,571 1891	he St
Showing an increase of	
The quantity of grain and pease carried to Montreal via Canadian Pacific Grand Trunk Railways, is reported as follows:—    Tons.   Tons.   119,208   1891   184,410     Showing an increase of	
The quantity of grain and pease carried to Montreal via Canadian Pacific Grand Trunk Railways, is reported as follows:—  Tons.  For 1890	
Tons.  For 1890	
For 1890	ic and
1891	
The quantity of grain arrived at tidewater by New York canals, is report follows:—  Tons.  For 1890	
For 1890 1,131,289	
Tons.  For 1890 1,131,289	ted a
For 1890 1,131,289	
1891 1,055,278	
Showing a decrease of 76,011	
Quantity of grain carried to tidewater by the New York railways is repas follows:—	porte
Tons.	
For 1890 3,045,302	
1891	
Showing a decrease of	

The increases and decreases for 1891, as compared with 1890, on the several routes competing for the carrying trade to the seaboard, are as follows:—

	Increase.	Decrease:	Increase.	Decrease.
On the St. Lawrence Canals do Canadian Pacific and Grand Trunk Railways do New York canals. do New York railways.	65,202	Tons. 76,011 688,642	Per cent. 32 09 54 69	

#### TRANSHIPMENT OF GRAIN.

The quantity of grain passed down the Welland Canal in Canadian and United States vessels to Kingston for six years, is as follows:—

In Canadian vessels, there were in—

 i Vanaulati voi	Sperb' (Troto Mo	. 0 14		
	,			Tons.
1886, 244 ca	argoes, with ar	aggregate quantity	of	143,330
1887, 284	do	do	•••••	178,233
1888, 182	do	do	******	•
1889, 208	do	do	••••••	•
1890 203	do	do		184 975

In United States vessels there were in-

do

1891, 209

United	Sta	tes vessels, there	e were in—		
1886,	97	cargoes, with a	n aggregate quantity	of	Tons. 62,222
1887,	19	do	do	••••••	12,477
1888,	60	do	do	*********	43,667
1889,	114	do	do	•••••	108,358
1890,	35	do	do	•••••	35,560
1891,	77	do	do	********	90,153

do

..... 190,664

Three Canadian vessels took their cargoes of 1,441 tons of grain through to Montreal intact in 1891, against three in 1890, with 1,281 tons, and one in 1889, with 425 tons.

Forty-four Canadian vessels lightened their cargo at Kingston in 1891, against 63 in 1890 and 54 in 1889.

Two hundred and thirty-nine vessels discharged the whole of their cargoes at Kingston in 1891, against 172 in 1890 and 267 in 1889.

The quantity of grain transhipped at Port Colborne in 1891, and the three previous years is given below. The total number of grain-laden vessels lightened at this port in 1891 was 81, against 83 in the previous year.

	1888.	1889.	1890.	1891.
Wheat. Corn Rye. Oats.	Bushels.	Bushels.	Bushels.	Bushels.
	11,440	37,222	4,310	16,665
	133,014	254,690	773,687	482,802
	Nil.	Nil.	Nil.	1,330
	Nil.	8,218	44,294	130,276

The quantity discharged in this port from vessels which did not enter the canal was as follows:—

	1888.	1889.	1890.	1891.
Wheat		Bushels.  8,608 Nil. Nil. Nil.	Bushels. Nil. Nil. Nil. Nil. Nil.	Bushels. 16,629 Nil. Nil. Nil.

The total quantity of freight moved on the Welland Canal during the season of 1891 was 975,013 tons; of this quantity 945,239 tons were through freight, and 29,774 tons were (way) or local freight.

#### WELLAND CANAL.

#### East and West-bound Freight.

There were 684,801 tons of freight passed eastward, and 290,212 passed westward.

The total quantity of freight passed through the whole length of the Welland Canal during the season of 1891, was 945,239 tons.

Of this quantity 283,552 tons were west bound and 661,687 tons east bound.

Of this east-bound freight, Canadian vessels carried 262,547 tons, and United States vessels carried 399,140 tons; and of the west-bound Canadian vessels carried 36,009 tons, and United vessels carried 247,543 tons.

The total quantity of freight moved on the St. Lawrence Canals during the season of 1891, was 936,794 tons; of this quantity 541,028 tons were through freight, and 395,766 were (way) or local freight.

#### ST. LAWRENCE CANALS.

### East and West-bound Freight.

Of the total quantity of freight passed through the canal during 1891, 688,899 tons passed eastward, and 247,895 tons passed westward.

The total quantity of through freight was 541,028 tons; of this quantity 500,532 tons were east-bound freight, and 40,496 west bound.

Of the total quantity of (way) or local freight 188,367 tons were east bound, and 207,399 west-bound freight.

THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKES ERIE, MICHIGAN, &C.

The total quantity of freight passed eastward and westward through the Welland and St. Lawrence Canals, from Lake Erie to Montreal, during eleven years, is as follows:—

,	Eastward, Tons.	Westward, Tons.
1881		37,190
1882		24,488
1883	205,394	27,488
1884	168,715	9,425
1885	132,968	16,115
1886,	244,514	16,801
1887	213,834	14,075
1888	183,899	19,310
1889	298,197	25,370
1890	231,746	31,951
1891		14,060

FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of freight passed eastward and westward through the Welland Canal, from United States ports to United States ports, for a period of eleven years, is as follows:—

1001	Eastward, Tons.	Westward, Tons.
1881	<b>96,2</b> 66	97,907
1882	110,286	172,520
1883	174,912	257,699
1884		243,081
1885	168,212	216,297
1886	244,916	239,562
1887	189,427	151,074
1888	221,062	213,689
1889	297,353	266,231
1890	318,259	215,698
1891	306,257	247,543

The quantity of freight passed eastward through the Welland Canal, from United States ports to United States ports, shows a decrease as compared with the previous year of 12,002, while the west-bound freight shows an increase of 31,845 over the previous year.

#### Statistical Comparison of various United States Routes.

The statistical comparisons heretofore given in respect to the quantities of the principal articles carried through the Welland Canal, and those carried over routes in the United States, in competition with that work, have been continued to date.

By reference to Statement H, as to the quantity of vegetable food carried to tidewater, it will be observed that the quantity carried by the New York Canals was 1,092,355 tons in 1891, against 1,167,901 in 1890 and 1,296,896 in 1889.

The quantities of vegetable food carried by the New York Central, Erie and New York, West Shore and Buffalo Railways being:—

		Tons.		Tons.
ln	1891	(3,565,381	In 1885	4.105.594
	1890	4,336,199	1884	3,639,805
	1889	3,654,984	1883	4,422,461
	1888*	3,197,634	1882	3,888,557
	1887	3,847,766	1880	4,732,385
	1886	3,802,262	1869	1,087,809

<sup>\*</sup> Flour and grain only.

The following figures are an abstract of the quantities of vegetable food carried to tidewater by the canals and railways of the State of New York, during twenty-one years:—

	Canals.	Railways.	Total.	Proportion by Canals.
	Tons.	Tons.	Tons.	
369	1,302,613	1,087,809	2,390,342	
	1,295,010	1,766,457	3,061,467	545
370	1,850,198	2,205,589	4,055,787	423
871	1,674,320	1.870.614	3,544,934	456
372	1.745.171	2,036,992		472
373	1.767.598	2,791,517	3,782,163	461
374	1,305,550	2,343,241	4,559,115	387
375	1,064,293		3,648,791	357
376	1,498,984	2,875,803	3,940,096	270
377	1,400,004	2,493,683	3,992,667	375
378	1,912,734	3,695,764	5,608,498	341
379	1,833,399	4,353,617	6,187,016	296
380	2,371,090	4,732,385	7,103,475	.333
381	1,116,561	4,983,722	6,100,283	183
382	1,118,776	3,885,557	5,004,333	223
383	1,379,000	4,422,461	5,801,461	237
384.	1,236,986	3,639,805	4,876,791	253
385.	1,063,310	4,105,594	5,168,904	205
886.	1,489,886	3,802,262	5,292,148	
887	1,539,403	3,847,766	5,387,169	281
388	1,166,958	3,197,734	4,364,692	285
389	1,296,896	3,654,984	4 051 000	267
	1,167,901	4,336,199	4,951,880	262
890	1,092,355	9 565 991	5,504,100	212
391	1,092,330	3,565,381	4,657,736	23

The total quantity of freight passed through the several divisions of the canals during the season of 1891 is as follows:—

Canals.	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Merchandise	Agricultural Products.	Total.
Welland St. Lawrence Chambly Ottawa Rideau St. Peter's Murray Trent Valley.	50	Tons. 99,383 126,870 119,799 565,382 79,259 2,827 3,376 20,675	Tons. 19,485 56,765 2,888 323 2,736	Tons. 300,873 334,841 98,449 10,952 23,176 24,205 4,677 132	Tons. 555,204 416,921 7,913 7,011 4,116 7,488 2,935	Tons. 975,013 936,314 229,204 585,041 109,313 34,520 11,742 20,839

The total quantity of freight moved on the Welland Canal was 975,013 tons, of which 555,204 tons were agricultural products.

On the St. Lawrence Canals, the total quantity of freight moved was 936,314 tons, of which 416,921 tons were agricultural products, and 334,841 tons were merchandise.

On the Ottawa Canals, the total quantity of freight moved was 585,041 tons, of this quantity 565,382 tons were produce of the forest.

The total quantity of freight moved on all the canals for the season of 1891 was 2,902,046 tons.

The quantity of grain exported from Chicago to Canada by lake during the season of 1891 is reported to be 4,754,708 bushels, and the quantity in transit, 2,736,892 bushels.

The total value of freight exported from Chicago to Canada by lake for the same period is reported to be \$3,916,452.28, of which amount Canadian vessels carried \$2,030,385.71, the details of which are as follows:—

A Defect Box	United Sta	UNITED STATES VESSELS.	CANADIA	Canadian Vessels.	Ľ	Totál.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		e cts.		S cts.		cts.
Wheat	522,652	510,762 76	606,266	596,905 96	1,128,918	1,107,668 72
Corn "	1,088,816	675,600 39	1,010,923	619,606 51	2,099,739	1,295,206 90
Куе	758,502	699,703 42	767,549	688,850 61	1,526,051	1,388,554 03
FlourBrls.	:		16,632	78,921 00	16,632	78,921 00
PorkLbs.	:		1,450	19,525 00	1,450	19,525 00
CornmealBrls.	:		375	1,500 00	375	. 1,500 00
Oatmeal			135	1,000 00	135	1,000 00
Tallow			100	1,200 00	100	1,200 00
Lard			513	10,280 00	513	10,280 00
Grease			26	1,050 00	88	1,050 00
TeaChesta	:	:	1,059	10,563 02	1,059	10,563 02
General MerchandisePkgs.			93	983 61	93	983 61
Total		1,886,066 57		2.030.385 71		3.916.452.28

	E. Total		Rush		38,000	5,105 4,126,400	25,100	344,469	405,421	1,199,150	985,978	,051 7,491,600
	RYE.	Export.	Rush	<u> </u>	- i	1,425,105	:	<u>:</u>	: :	: :		1,526,051
ke, 1891.	WHEAT.	Export.	Rush	134,635		994,283		:	:			1,128,918
go, by La	ОАТВ.	Total.	Rush	<u>:</u>	:	:		65,701	256,165	193,429	497,252	1,012,547
rom Chica		Export.	Rush			:		:			:	
xport") fi		Transit.	Rush			:		65,701	256,165	193,429	497,252	1,012,547
" and "E		Total.	Rush	131,501	38,000	1,707,012	25,100	278,768	149,256	1,006,721	488,726	3,824,084
In Transit	CORN.	Export.	Rush	131,501	38,000	1,707,012	25,100		:	198,126		2,099,739
Grain ("]		Transit.	Rush		:	:		278,768	149,256	807,595	488,726	1,724,345
SHIPMENTS of Grain ("In Transit" and "Export") from Chicago, by Lake, 1891	Shirmed to	os poddiuc		Montreal	Prescott	Kingston	Toronto	Point Edward	Collingwood.	Midland	Sarnia	Total

The trade out of Chicago from May to November, 1891, is reported as follows:-

"As against the combined work of nine of the leading lines of railway in this country, lake vessels took out of Chicago during the seven months of navigation last season, 63.4 per cent of all east-bound shipments from Chicago within that period.

The total shipments of freight of all kinds, east bound from Chicago, May to November, inclusive, according to the weekly reports of the Chicago board of trade, were 4,265,934 tons, and of this the lakes carried 2,705,084 tons, and the railways 1,560,850 tons.

The lake movement does not include an aggregate of about 5,000,000 bushels or 150,000 tons of grain loaded into vessels during the winter of 1890-91, and taken out by the fleet leaving Chicago with the opening of navigation last spring, which if added, would still further increase the gain in water transportation."

# COMPARATIVE STATEMENT OF TRAFFIC BY RAILWAYS AND CANALS via the STATE OF NEW YORK.

On reference to the returns made by the railways to the State authorities of New York, and to the canal statistics submitted to the State Legislature, I find that of the total tonnage of freight carried by the canals and railways, the State canals carried:—

	Per cent.		Per cent.
In 1859	68.9	In 1880	25·1
1869	47.0	1881	18.5
1870	38.9	1882	19.0
1871		1883	18.7
1872		1884	19.0
1873		1885	17.1
1874		1886	16.9
1875	28.4	1887	16.3
1876		1888	18.8
1877		1889	15 · 1
1878		1890	13.9
1879			13.4

The quantity of freight carried by the canals and railways was greater in 1891 by 899,980 tons than the quantity carried in 1890, and an increase of 26,071,005 tons over 1869.

The quantities carried were as follows:-

	<b>1</b>	Total Tonnage.	Proportion by Canals.
In	1859	5,485,076	.6890
	1869	12,453,174	4705
	1870	15,148,274	·3895
	1871	15,844,152	·3896
	1872	16,631,609	·4012
	1873	18,200,208	·3497
1.	1874	18,283,547	·3174
	1875	17,101,758	·2841
	1876	16,948,627	·2462

	Total Tonnage.	Proportion by Canals.
1877	17,489,770	·2833
1878	19,017,301	.2719
1879	22,590,766	·2373
1880	25,706,586	· <b>2</b> 512
1881	27,857,394	·1859
1882	28,693,054	·1905
1883	30,167,119	·1877
1884	26,293,844	· 1905
1885	27,543,948	·1718
1886	31,168,744	·1698
1887	34,029,791	·1632
1888	26,244,610	·1883
1889	35,466,042	·1514
1890	37,624,199	· 1394
1891	38,524,179	·1343

Mr. P. Bird Price, chief inspector of grain for the city of Chicago, reports the average contents of each car of grain was as follows:—

The average contents of each car was:-

	9				
	Year.	Bushels.		_ 00011	Bushels.
In	1877	. 416	In	1884	601
	1878	. 451		1885	608
	1879	460		1886	641
	1880	491		1887	673
	1881	520		1888	
	1882	559		1889	684
	1883	572		1890	727

#### FREIGHT RATES.

The average rate paid for carrying grain from Buffalo to New York city via Erie Canal, is reported as follows:—

For	1887	46 cents	per bushel.
•	1888	34	do
	1889	4 8 1 0	do
	1890	$3\frac{87}{100}$	do
	1891		do

Grain freights from Chicago to Montreal in 1891 ranged from 5 to 8 cents per bushel on wheat, and to Buffalo, 1 cent to  $5\frac{1}{4}$  cents, with an average of  $2\frac{1}{2}$  cents; in 1890 the average was  $1\frac{7}{6}$  cents. The wheat rate from Duluth to Buffalo covered a much wider range, from  $1\frac{1}{4}$  cents to  $9\frac{1}{2}$  cents, the average being  $4\frac{1}{4}$  cents; in 1890 the average was 3 cents.

From Toledo to Buffalo the wheat figures ran from 1 cent to 3 cents, averaging 2 cents; the average for 1890 was 13 cents.

### ELEVATING AND STORAGE RATES AT BUFFALO.

All the elevators, receiving grain from vessels, belonging to the Western Elevating Company, whose charges for elevating and storage are reported as follows for 1891:—

A. 1892

Elevating, receiving, weighing and delivering, are cent per bushel; storage each to days or part thereof, a cent; no grain received for direct transfer, the vessel paying only the actual cost of shovelling. The charge for loading cars was a cent per bushel, including trimming.

The Cyclone and Hefford's elevators charged \$\frac{3}{2}\$ cent per bushel for direct transfer from vessel to canal boat.

# STATEMENTS OF TRAFFIC FROM LAKE SUPERIOR via United States Routes.

"St. Mary's Canal.—The canal opened for navigation 27th April, 1891, and closed 7th December. The season was, therefore, 225 days long, or 3 days shorter than in 1890. The average number of vessels passing per day for the whole season was 45.3, and for the months of June, July, August and September, the average was 54.6. The size of the vessels continues to increase as is shown in the following statistics:—

In 1887	the average	registered	tonnage per	vessel	was	$626 \cdot 3$	tons.
1888	do		do			701.5	do
1889	do		do		•••••	790.5	do
1890	do		do		•••••	833 · 8	do
1891	do		do		•••••	$862 \cdot 1$	do

The total registered tonnage for the season falls 53,750 tons short of that for 1890, and the freight tonnage was 152,454 tons less. The following discussion of the appended statistics may not be inappropriate:—

For the whole period, since 1881, the iron ore carried through the canal has been 47 per cent of the total freight, and in 1889 and 1890 it was more than 50 per cent; therefore, the freight may be divided into two nearly equal parts, one of which was the iron ore, the remainder being the aggregate of all other freights. The percentage of increase since 1881 falls between 12 and 39 each year, the average being 22. During 1890 the freight, other than iron ore, amounted to 4,266,445 tons, and for 1891, 5,328,548 tons. This shows an increase of 25 per cent in the freight of 1891—other than iron ore—over 1890, or a little more than the average increase for the preceding ten years. Hence the decrease in iron ore freight alone is sufficient to explain why the business of 1891 did not show the usual increase. There were other causes, however, which materially affected the volume of the season's business, and they will be referred to later. The falling off in iron ore freight was predicted with certainty a year ago. It was due to causes so widespread and long continued that a discussion here could hardly be made complete and satisfactory.

The freight of wheat and wheat products was abnormally large. Excluding iron ore and wheat in 1890, the remaining tonnage was 3,725,866 tons. The corresponding freight for 1891 was 4,340,660 tons. Hence the increase in freight, exclusive of iron ore, was 8 per cent, which indicates quite a falling off from the average rate of 22 per cent for the last ten years, and shows that if the wheat crop of the North-West had not been unusually good this season, there would have been a slight decrease in the volume of freight, other than iron ore."

	1888.	œ	1889.	.6	Increase	Пестовае	Increase	Decrease
Material.	Quantity.	Value.	Quantity.	Value.	in Quantity for 1889.	in in Quantity for Quantity for 1889.	in Value for 1889.	in Value for 1889.
Coal Flour Wheat Wheat Grain Grain Manufactured iron Pig iron Pig iron Copper. Iron ore and bullion Building stone Unclassified freight.	2,105,041 219,072 557,890 557,890 14,844 21,648 2,570,517 420,651 420,651 3,3,385 3,3,541 345,844	7, 367, 643 10, 953, 625 18, 224, 423 18, 224, 423 24, 423, 946 262, 346 27, 346 5, 739, 000 8, 996, 809 4, 355, 696 6, 356, 696 8, 356 8, 356 8	1,639,197 222,870 486,966 53,381 31,885 31,885 4,096,886 4,096,886 552,219 552,219 553,219 573,538	\$ 5,702,189 11,148,538 15,907,216 2,060,580 1,577,320 442,372 16,8320 6,891,320 14,386,492 5,673,972 9,44,680 385,380	\$ 3,798 2,774 11,172 1,525,338 131,568 2,563 2,563	\$ 475,844 70,935 17,314 4,218 33,434	\$ 189,910 108,718 189,924 189,920 5,338,683 1,383,276 394,009	\$ 1,665,454 2,317,207 865,700 42,183 2,006,640
Total Decrease.	6,420,204	82,156,017	7,500,164	83,732,525	1,681,708 601,748	601,748	8,473,720 6,897,214	6,897,214
Net increase of Quantity Net increase of Value.					1,079,960	:	1,576,506	

•	QUANTITY.	TITY.	· Increase.	rj.	DECREASE.	aj.		TOTAL VALUATION.	ion.
TOTAL .	1890.	1891.	Amount.	Per Cent.	Amount.	Per Cent.	Price per Unit.	1890,	1891.
*Vessels.	10.557	10.191	•		998	ေ	e cts.	s cts.	* cts
Net	4,970 8,454,435 9,041,213				53,750 152,454				
Passengers No. Coal (hard and soft) Not tons. Flour Bris. Wheat	24,856 2,176,925 3,239,104		1,334 330,607 541,039	2878				7,619,237 16,196,520 15,893,022	8,776,362 18,900,715 33,040,238
wheat)Net	2,04,384 93,615 217,33		Î : :	13	1,012,280 51,055	28	17 50 0 8	2,003,496 4,680,750 386,104	1,011,461 2,128,000 462,077
Salt Copper Copper Lunber  M ft. B. M	179,431 43,729 4,774,768	234,528 69,190 3,560,213 366,305	25,461	88 T	1,214,555	ង	- 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8	179,431 00 8,745,800 00 16,711,688 00 6.514,722 00	234,528 00 13,838,000 00 12,460,745 50 6,593,490 00
d bullion. Net ne I freight.	3,432 47,973 871,294			· : :21	1,701 3,893	జ్ఞ	153 10 10 10 10 10 10 10 10 10 10 10 10 10	527,807 476,730 22,277,640	25,025,580
Totals.				:				102,214,948 70	128,178,208 51
*Steamers.  Sails.  Unregistered crafts.  Total  Canal was onen to navication during season of 1890, 238 days.	+Included in Wool Hides	Fincluded in unclassified freight for 1891 Wool. Hides.	freight for 18	91 : 2,602 tons, 460	Valus	Action for do	Valuation base for 1886	Valuation based on Estimates of 1885. \$ 63,413,472 13 10 1885. \$ 63,413,472 13 1885. \$ 69,080,071 35 1887. \$ 1888. \$ 82,166,019 97 1888. \$ 1889. \$ 188	1885. \$ 53,413,472 13 69,080,071 95 79,031,767 78 82,156,019 97 83,723,527 15

#### ERIE CANAL.

Mr. Hannan, Superintendent of Public Works, Albany, reports on the traffic through the Erie Canal for 1891, as follows:—

"Comparing the tonnage of 1891 with that of 1890, there is shown to be a loss of 682,630 tons, but, during the year 1890, there were transported upon the canal 467,537 tons of ice which is an unusual commodity, so that the loss this year, as compared with the tonnage of last year (exclusive of the ice), is 215,093 tons. \* \*

\* \* But while there has been a decrease in the total tonnage of the canals this year, as compared with any one of the past seven years, or since the abolition of tolls, the canal has maintained its usefulness to a greater degree than at any period in its recent history.

Never before has such a violent and persistent war of rates existed between trunk railway lines combined on the one side and the Erie Canal on the other. This competition was commenced upon the opening of the canal this year, and was continued during the entire season until its close, when the rates were immediately advanced to more than double what they had been during the season. \* \* \* \*

Such was the activity displayed that freight was frequently carried by rail at a far less rate than it could be transported by canal. Being apprised of these facts, I have investigated this matter, but as contracts are made with the shipper in private; the shipper, who is benefited by such contract, will not disclose the price he is paying for such service, for fear that in the future he may be discriminated against and he will be unable to procure any additional contracts that will be advantageous to himself. Enough information, however, has been ascertained to convince me that the price for carrying grain by rail from Buffalo to New York has rarely been more than the price charged for carrying it by canal. Sometimes it has been less.

Formerly a vessel on the lake capable of carrying 30,000 bushels of grain was all that was required, and very few exceeded that tonnage. Now a 30,000 bushel vessel would be unable to compete for this traffic. They have been suspenseded by vessels capable of carrying 70,000, 80,000 and 100,000 bushels, and from the reports published on that subject I learn that boats are being built capable of carrying 140,000 bushels. As an evidence of how the capacity of vessels plying on the lakes has increased, I desire to state that from 31 grain laden boats arriving in the port of

Buffalo on 27th November last, 1 carried 140,000 bushels of oats, 1 carried 90,000 bushels of wheat, 3 carried 80,000 bushels of grain each, 2 carried 75,000 bushels each, 3 carried 70,000 bushels each, 2 carried 68,000 bushels each, 2 carried 65,000 bushels each, 3 carried 60,000 bushels each, 1 carried 55,000 bushels, and 4 carried 50,000 bushels each; and from 21 grain laden boats arriving in the same port on the day following, 1 carried 120,000 bushels of oats, 2 carried 80,000 bushels each of wheat, 1 carried 73,000 bushels of wheat, 3 carried 70,000 bushels each, 1 carried 66,000 bushels, 1 65,000 bushels, 1 55,000 bushels, and 4 45,000 bushels each. This is a fair illustration of the increase in the capacity of the lake craft, and was taken without any especial regard to date or number of cargoes arriving in port."

Aggregate shipments of grain and flour via Erie Canal, for the years noted :-

	Grain, Bushels.	Flour, Barrels.
1891	34,499,140	9,920
1890	38,218,960	1,805
1889	41,742,000	8,454
1888	38,070,930	4,945
1887	48,972,550	3,096
1886	45,017,163	4,518
1885	31,467,738	2,692
1884	37,846,067	4,849
1883	42,352,225	5,349
1882	29,439,688	6,918
1881	30,758,912	•••••
1880	71,699,265	19,716
1879	53,822,546	4,652
1878	59,514,779	2,421
1877	48,425,968	4,160
1876	27,558,744	2,137
1875	35,318,120	54,251
1874	40,986,834	49,182
1873	50,930,447	13,570
1872	48,246,960	5,142
1871,	47,954,240	43,068
1870	28,966,780	74,384
1869	28,361,361	51,446
1868	36,458,150	5,638
1867	26,387,161	16,560
1866	33,750,090	• • • • • •
1865	37,428,889	440,867
1864	38,078,575	146,745
1863	45,236,283	486,856
186218	52,376,500	<b>42</b> 8, <b>26</b> 8

United States' view of the Comparative Importance of United States and Canadian Waterways.

(Extract from proceedings of the Deep Waterway Convention.)

- "Lake Superior was opened by the completion of the Canal and first lock in 1855 at Sault Ste. Marie.
- "The increase of business soon demonstrated the necessity of another and larger lock. This was completed in September, 1881, and was five hundred and fifteen feet long, eighty feet wide, and with seventeen feet of water on the mitre sill. From that date to this, with wonderfully efficiency, this lock has met the demands of a rapidly increasing tonnage. It passed, in 1882, 2,029,000 tons; in 1883, 2,267,000; in 1884, 2,874,000; in 1885, 3,256,000; in 1886, 4,527,000; in 1887, 5,494,000; in 1888, 6,932,000; in 1889, 7,516,000; in 1890, 9,041,213; in 1891, 8,888,759. The freight tonnage was 152,454 tons less this year than in 1890. This is due to obstruction in the channel on the St. Mary's River, caused by collisions and sinking of vessels. General Poe states in regard to this:—
- "'But for the delay due to the sinking of the "Susan E. Peck," we would have exceeded the traffic of 1890, notwithstanding the extraordinarily low stage of water and the delay in putting vessels in commission in the spring.'
- "The increase in valuation (of products) for the season of 1891 over 1890 is nearly \$26,000,000. The value of the cargoes passing the lock this year was \$128,178,208.51. The most notable points in this season's business are the decrease in iron ore and the large increase in wheat products.

\* \* \* \* \* \* \* \* \* \*

- "During the season of 1890 over 9,000,000 tons of freight passed through St. Mary's River, and more than 22,000,000 tons through the waterway between Lakes Huron and Erie. The increase in the available depth of channels on the lakes from nine and one-half feet in 1852 to sixteen feet in 1882 developed this commerce, and it is only reasonable to expect that a further increase of four feet will be followed by corresponding increase in the shipping. The results are most notable, perhaps, in the character of the vessels employed in the carrying trade.
- "These have increased in size and seaworthiness until they form a fleet which has not its equal upon any inland waters on the face of the globe.
- "Of large capacity and great power, regardless of wind or weather, the steamers of the prevailing type bear their cargoes to and from ports a thousand miles apart with the precision of railroad trains, each of them transporting at once more than ten ordinary freight trains.

# " Canadian Competition.

- "But the day is near at hand when American farmers must meet such competition as they never met before, and such as few of them have ever dreamed of.
- "James W. Taylor, who, through all the changes of parties and of administrations, has for twenty-one years past been the Consul of the United States at Winnipeg, has made a special study of the Canadian North-West, and he declares that the parallelogram included between longitudes 100 and 170 west of Greenwich,

and latitude 50 degrees to 70 degrees is identical in climate and as rich in resources as an equal area in Europe, included between the same meridians of latitude and extending 60 degrees east and 10 degrees west of Greenwich. The European parallelogram includes England, Ireland, Scotland, Denmark, Norway, Sweden, Belgium, Holland and most of Germany and Russia in Europe, and is represented by the cities of London, Liverpool, Dublin, Glasgow, Edinburgh, Copenhagen, Stockholm, Berlin, St. Petersburg, Moscow, Nijnei-Novgorod and Archangel. Over all the territory included in the North American parallelogram, the opening of spring occurs at the same time almost to a day. It is known by the test of experiment that wheat can be grown as far north as latitude 69, and by far the finest wheat which I have ever seen came from Fort Vermillion on Peace River in latitude 59, longitude 116. Wheat, barley, oats, peas, all the grains and vegetables, are successfully raised at the Mission Stations throughout this region, and the farmers of Manitoba have had greater average crops per acre for many years past than the American farmers in Minnesota and Dakota.

"The causes for this remarkable extension north-west of cereal production are first, the continually decreasing altitude, the influence of the warm wind of the Pacific blowing through the low mountain passes of the north, and the fact that the long summer days of higher latitudes give a vast deal more of sunshine during the growing season than is in the case further south, while the cold winters prevent the development of insect pests which are so injurious in milder climates. The causes are certainly sufficient to explain the fact so well demonstrated by experience, that all grains are produced in the highest quality and the greatest quantity per acre near the northernmost limit at which they will grow.

# " Canadian Water ways.

"Within five years from the present time at the present rate of progress, and within three years if the work is hastened a little, there will be a clear channel for vessels drawing 14 feet of water through Canadian territory, all the way from Lake Superior to the sea. Six feet of water in the Erie Canal and two transfers of freight can no more compete with 14 feet of water through the Canadian canals and no transfer, than a wheelbarrow can compete with an express train. The canal boat carrying two hundred tons, drawn by mules at the rate of four miles per hour, can by no possibility compete with the steamships carrying two thousand tons, propelled by steam at the rate of fourteen miles per hour. And while the United States farmer has held his own fairly well against the semi-civilized wheat growers of India, I do not see how he can hope to win in competition with men of the same race, men just as intelligent, with a climate no more rigorous, with a soil at least as fertile and with transportation facilities immeasurably superior. The great plains of the Canadian North-West are unsettled now, but when once the conditions of soil and climate which there exist are supplemented by facilities for transportation not surpassed, if equalled by those of any other region, I believe the Canadian North-West will settle up with a race of hardy, intelligent and prosperous people and will become the granary of the world. He who can most cheaply reach the markets of the world can control the markets of the world."

# Exports of Grain from Atlantic Sea Ports.

The quantity of grain for foreign exports during the season, from 1st May to 30th November, 1891, is reported as follows:—

	· ·	Busheis.
From	Montreal	14,294,083
66	New York	51,557,391
**	Boston	4,965,261
"	Philadelphia	6,931,429
"	Baltimore	14,752,500

For details, see following statement:-

Exports of Cereals, &c., from undermentioned Atlantic Ports, from 1st May to 30th November, 1891.

	From New York.	From Boston.	From Philadel- phia.	From Baltimore.	From Montreal.
Flour Brls.		966,998	561,416	1,423,363	734,027
Commeal "	87,165 36,185,254	40,652	457	12,070	Not given.
Wheat Bush		1,824,032	5,984,417	13,118,872	6,090,11
Jorn	9,308,260	2,677,130	947,012	949,157	2,173,07
Jats	1,302,080	222,606		100	775,40
Dariey	744,258	11,626			796,62
Rye "	3,651,133	105,383	• • • • • • • • • • • • • • •		2,399,80
Peas"	366,406	114,484		2,521	2,059,06
Total grain"	51,557,391	4,955,261	6,931,429	14,752,500	14,294,08
Flour	8,947,395	4,351,491	2,526,372	6,405,133	3,303,12
Meal "	348,660	162,608	1,828	48,280	Not given
Grand Total "	60,853,446	9,469,360	9,459,629	21,205,913	17,597,20

The usual detailed statements in explanation of the various points referred to and of intransit trade are hereto appended.

I have the honour to be, Sir,

Your obedient servant,

B. H. TEAKLES, Chief Clerk, Canals Revenue.

T. TRUDEAU, Esq., Acting Secretary,
Department of Railways and Canals.

# GRAIN FREIGHTS BY LAKE AND ERIE CANAL.

THE following were the Current Rates of Freight on Wheat and Corn from Chicago to Buffalo, Ogdensburg, or Kingston, and to Montreal (steam); also to New York by Lake and Erie Canal; for each week during the season of navigation in 1891.

Week ending	To B	uffalo.	*To Ki	ngston.		ontreal am).	Bu	Canal, ffalo v York.	inclu	New York d Canal, ding charges.
onumg	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	per	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
April 4 do 11 do 18	2 2 2	13 13 13								
do 25 May 2 do 9 do 16 do 23 do 30 June 6 do 13 do 27 July 4 do 11 do 18	22 2 3 4 5 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13 13 13 13 13 13 13 13 13 13 13 13 13 1	4 31 31 21 21 21 21 21 21 21 21 21 21 21 21 21	31 31 3 21 21 21 21 21 21 21 21 21 21 21 21 21	64 55 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	51 55 5 41 41 41 41 41 41 41 41 41 41 41 41 41 4	275 224 234 3 3 2 2 2 4 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25 24 2 2 2 5 2 2 2 2 2 2 2 2 2 2 2 2 2	5 5 4 4 5 5 5 4 5 4 5 5 5 4 5 4 5 6 6 6 6	43 44 44 44 44 44 44 44 44 44 44 44 44 4
do 25 Aug. 1 do 8 do 15 do 22 do 29 Sept. 5 do 12 do 19	2 21 to 21 3 to 21 21 to 22 3 to 31 31 to 31 31 to 32	2 to 2½ 2½ to 3 2½ to 3 2½ to 2½ 2½ to 2½ 2½ to 3 3 3½	42 42 43 43 43 43 43 52	13 43 44 43 44 43 43 54	71 71 72 72 73 73 73 73	7 7 63 7 7 7 7	31 32 32 32 32 32 32 4 4 4 4 4 4 4	388-38-38-88-88-88-88-88-88-88-88-88-88-	68 to 677 7 1 to 777 7 to 88 1 to 88 1 88 1 to 88 1	6 to 64 7 to 73 6 65 to 64 62 to 64 7 to 74
do 26 Oct. 3 do 10 do 17 do 24 do 31 Nov. 7 do 14 do 21	3½ to 3½ 2½ to 3 2 2 2 2½ to 2½ 3 to 4 4 to 4½	3 to	41	34	7	61/2	41 41 41 41 41 41 4 37 4	37 41 4 4 4 37 34 34 34 34 34	8 to	7½ to 8 7 6 6 6 7 7 to 7 7½ to 8 8

<sup>\*</sup> Ogdensburg rates ½ cent above Kingston.

The following shows the weekly range of Freights on Flour, Wheat and Corn by Steam, Chicago to Buffalo or Erie, and LAKE (STEAM) AND RAIL FREIGHTS, SEASON OF 1891.

	:		To Buffalo.		To	To New York.	ند	<u>.</u>	To Boston.	•	To ]	To Philadelphia.	hia.	Ĭ	To Baltimore.	<b>.</b>
•	Week ending	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel
April do 1 do 2	ni 4. 11. 18. 18. 19. 9.	**********	हुं <sup>कु</sup> ल ल ल ल ल	. SHEREFEE	33333333	ජූ කිනිකිකිකිකි ව		3222222 3	<u> </u>		<del>?</del> %%%%%%	toN detoup∞∞	o to N sbetoup & &	£******		<b>इं</b> इं
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## FREIGHT RATES.

GRAIN	CHICAGO	TO	BUFFALO.

Year. 1877	Wheat.	Year. 1886	Wheat.
• • • • • • • • • • • • • • • • •	3·1 "	1887	
1879	4.7 "	1888	2.7 "
1880	5.7 "	1889	2.5 "
1881	3.2 "	1890	1.9 "
1882	2.5 "	1891	2.5 "
1883	3.5 "		<del></del> ·
1884	2·1 "	Average, 15	years 3·2 "
1885	2.0 "		

The handling charge on grain borne by the vessel is \$3.50 to \$4 per 1,000 bushels.

RATE of Freight per bushel on Corn from Chicago to Buffalo, 1890.

Date.	Rate.	Date.	Rate.
March 7 do 14 do 25. April 3. do 5 do 11. do 14. do 15. do 25. do 26. do 28. do 30.  May 2. do 3. do 20. do 27. June 5. do 10.	Cents.  27 37 37 27 27 27 27 27 11 11 11 11 12 21	July 24 do 25. do 30. do 31. August 1. do 9. do 16. September 5. do 12. do 29. October 14. do 16. do 16. Solution 14. do 16. do 16. do 22. do 25. November 6. do 18. do 19. do 20. do 20.	Cents.  114 12 12 12 12 12 12 12 12 12 12 12 12 12
do 27	2½ 2½ 2 1%	do 28. December 3.	3 3

# 1891.

oril 10	2 September 12
o 17	1 <del>2</del> do 15
	11 do 25
ay 2	11 do 28
0 8	1 do 30
o 9	
lo 13	1 October 3
me 29	1 12   GO 9
aly 7	1 do 23
lo 13	11 do 26
lo 14	1 AT 11 UU 00
lo 28	21 do 31
lo 30	24 November 4
o 31	<u> </u>
	98   40 €
ngust 7	1 10 10 10 10 10 10 10 10 10 10 10 10 10
do 10	
do 11	
do 14	21 do 21
eptember 2	22 do 28
do 4	3   December 2.
do 10	81
do 10	91

# Averages of daily Rates for the past six Years.

1886	3.4	cents r	er bushel.	1889	$2 \cdot 25$	cents p	er bushel.
1887	$3 \cdot 9$	do	do .	1890	1.88	do	do
1888	$2 \cdot 5$	do	do	1891	<b>2</b> ·13	do	do

# RATE of Freight per bushel on Wheat from Duluth to Buffalo, 1890.

Date.	Rate.	Date.	Rate.
March 28. April 11. do 23. May 7. do 10. do 13. June 3. do 5. do 13. do 14. do 21. do 24.	Cents. 34 34 35 36 37 37 38 27 38 224 224 224 224	June 27. July 8. do 10. do 30. September 15. do 22. November 15 do 22. do 24. do 26. do 28.	Cents.  21 22 21 21 21 21 21 21 21 21 21 21 21

# 1891.

March 16	27 October 6	3
do 18	2½ do 8	3
do 24	2½ do 10	2
April 22	2½ do 19	2
May 9	2 do 20	. 3
do 16	12 do 21	3
do 18	11 do 26.	4
do 20	1 November 2	4
June 9.	1 <sup>8</sup> / <sub>4</sub> do 3	5
do 12	1½ do 5	5
do 13	2 do 6	. 6
July 7	2½ do 7	7
do 13	2½ do 9	7
August 1.	3 do 19	Ŕ
do 5	3½ do 20	Ř
do 6	3½ do 21	ğ
September 8	31 do 23	ă
	98   3- 0*	á
72	4   1   3   60	0
	34 do 28	87
do 28	<b>∞</b>	

## COAL FREIGHT RATES.

### SOFT COAL, OHIO PORTS TO PORTS NAMED.

	Year.	Chicago.	Milwaukee.	Escanaba.	Duluth.
1885	••••		<b>\$</b> 0 63	<b>\$</b> 0 51	<b>\$</b> 0 49
1886		0 89	0 83	0 60	0 78
1887	•••••••	1 11	1 06	0 72	0 89
		0 92	0 84	0 61	0 66
	••••••		0 54	0 49	0 52
1890		0 66	0 <b>64</b>	0 45	0 49
1891		0 58	0 61	0 52	0 49
Avera	ige, seven ye	ears 0 77	0 74	0 56	0 62
	•				

# HARD COAL, BUFFALO TO PORTS NAMED.

Year.		ago.	Duluth.
1885	. \$0	71	<b>\$</b> 0 52
1886	. 0	87	0 62
1887			0 70
1888			0 65
1889	. 0	52	0 41
1890			0 43
1891			0 29
	-		
Average, seven years	. 0	74	0 52

Coal is shipped net tons and handled in all cases without charge to the vessel.

Annual average canal freight rates on Wheat and the tolls on Wheat from Buffalo to New York, and the elevating and storage rates at Buffalo for each year from 1870 to 1891, inclusive.

[Prepared by Mr. William Thurstone, Secretary of the Buffalo Merchants' Exchange.]

Year.	Average Canal Freight Rates.	Tolls.	Elevating, including Storage.	Year.	Average Canal Freight Rates.	Tolls.	Elevating, including Storage. a.
1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880	Cents.  11 · 2 12 · 6 13 · 11 · 4 10 · 7 · 9 6 · 6 7 · 4 6 · 8 6 · 5	Cents.  3:1 3:1 3:1 2: 1: 1:	Cents.  1 · 25 1 · 25 1 · 25 1 · 25 1 · 25 1 · 25 1 · 26 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·	1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890. 1891.	Cents.  4.7 5.4 4.9 4.2 3.8 5. 4.5 4.5 3.4 4.8 3.8	Cents.	Cents.  8.75 8.75 8.75 8.75 8.75 8.75 8.75 8.

a. Storage varied; 5 to 10 days limit.

Annual average freight rates per bushel of Wheat for transportation from Chicago to New York for each year from 1857 to 1891, inclusive.

[Prepared by Mr. J. C. Brown, Statistician, New York Produce Exchange.]

	′		age Rati Bushel	e per		Aver	AGE RATI BUSHEL	E PER
CALENDAR	YEAR.	By Lake and Canal a.	By Lake and Rail.	By all Rail.	CALENDAR YEAR.	By Lake and Canal a.	By Lake and Rail.	By all Rail.
		Cents.	Cents.	Cents.		Cents.	Cents.	Cents.
1862 1863 1864 1865 1866 1867 1868 1869 1870 1871		26·55 26·33 22·91 28·36 26·62 29·61 22.36 22·79 25·12 17·10 20·24			1875 1876 1877 1878 1879 1880 1881 1882 1883 1984 1885 1886 1886 1887 1888 1889 1890 1891	8·19 7·89 8·37 6·31 5·87 8·71 8·51 5·93 6·89 5·85	14·6 11·8 15·8 11·4 13·3 15·7 10·4 10·9 11·5 9·02 12·00 11·00 08·70 8·50	24 1 16 5 20 3 17 7 17 3 19 9 14 4 14 6 16 5 13 120 14 50 16 50 516 33 514 50 15 50

a. Including canal tolls until 1882, but not Buffalo transfer charges. b. Averages of officially published tariffs.

ANNUAL average through Freight Rates on Grain, Flour and Provisions (per 100 lbs.), from Chicago to European Ports, by all Rail to Sea-board and thence by Steamers, from 1880 to 1891.

(Prepared by Secretary of the Board of Trade, Chicago.)

Shipped to	Articles.	1891.	1890.	1880.	1888.	1887.	1886.	1885.	1884.	1883.	1881.	1880.
		•	•	•	•	•	•	•	69	••	•	•
Livernool	Grain	.4075	.3187	8008	.3490	.3487	.3672	.2943	.4428	.3647	.3718	.4922
op	Sacked flour.	.4187	.3625	.4162	.3371	.3491	3420	.2887	.2982	.4030	.3499	.5433
op op	Provisions.	.5531	. 2109	97.19	. 3747	.4073	.4415	3208	4674	.5183	.4670	.6871
Glagonw	Grain	.438	.3650	.4075	3098	3706	.3910	3228	.2641		3932	:
do Sacked flour	Sacked flour	.4469	.4188	4426	.3679	8968	.3961	3443	.2811	:	.4400	.2651
op	Provisions	5963	2833	.6142	4658	.4865	6283	.4086	.4789		.5361	.6732
London	Grain	.4250	.3220		3803	3.45	.4086	1262	.2783	:	3620	:
<b>o</b> p	Sacked flour.	.4328	.4047	.4510	.3776	3784	1704	.3171	3852	:	4276	:
P	ovisic	.5953	.5813	9619.	.4570	.4781	.6471	.4046	.4891	:::::::::::::::::::::::::::::::::::::::	0000	
Antwerp.	op-	. 5250	.4688	600	.4472	.4961	.5219	.4327	5373	9539	. 5708	7386
Hamburg		. 2500	5250	200	5426	6223	.5154	3842	5434	6229	. 5471	:
Amsterdam		0009	2000	9	5426	5525	. 2262	4383	25.	8899.	-	
De Rotterdam		9009	0005	0099	5426	.5508	. 2993	.4383	4354	£899.	:	:
Copenhagen		9/83.	.5813	. 6492	.5483	.5508	.5169	.4951	25.2	.7158		:
Stockholm		8869	<b>7</b> 609	.7500	.6671	2989	. 5543	.5468	.5908	.8222	:	:
Stettin.		6375	.6813	.6492	.5483	9000	.5833	.5210	. 5422	.7420		-
Bordeaux		.7500	0999	.7491	.5821	.6021	.5708	9909	.5603	.6432		:
									-			

#### THE UNITED STATES IN-TRANSIT TRADE.

The in-transit and transhipment transactions of 1891 were distributed as to

countries and ports as follows:-

Of the value of merchandise received from British North America, amounting to \$19,780,470, \$15,310,945 came from the Provinces of Quebec, Ontario, Manitoba and the North-West Territory, and \$4,469,525 from other British Possessions. The receipts from Europe and the United Kingdom amounted to \$26,413,597, of which \$20,879,851 came from the United Kingdom, and \$5,533,746 from Europe. The receipts from the West Indies were valued at \$7,964,459, of which those from Cuba amounted to \$6,977,901. Merchandise valued at \$1,060,449 was received from Asia and Oceanica.

Of the shipments from the United States, \$27,883,023 were destined for British North America, of which \$21,695,992 was shipped to the Provinces of Quebec, Ontario, Manitoba and the North-West Territory. The shipments to Europe amounted to \$16,863,334, of which \$11,968,808 were destined for the United Kingdom. The shipments to Mexico amounted to \$5,052,318, and to the West Indies to \$4,788,720.

The value of receipts of in-transit merchandise at leading ports of entry were as follows:—At New York, \$27,049,802; Portland, Me., \$9,173,932; Boston, \$3,338,-852; New Orleans, \$2,585,589; San Francisco, \$1,092,518; Galveston, \$552,063;

and at Northern Border and Lake ports, \$10,366,810.

### THE CARRYING TRADE IN UNITED STATES VESSELS.

The value of merchandise transported in the carrying trade of the United States during the year ending June 30, 1891, is shown as follows:—

Constitution and	T		Exports.		In Transit	Total	Per
CARRIED IN.	Imports.	Domestic.	Foreign.	Total.	Tranship- ment Trade $a$ .	Foreign Commerce.	Cent.
Cars and other land vehicles	<b>\$</b> 40,932,755	\$ 30,116,869	\$ 1,806,570	\$ 31,923,439	<b>\$</b> 46,852,199	\$ 119,708,393	6.49
American Vessels.							
Steam	74,211,783 53,259,895	42,967,198 33,938,428	1,411,341 651,080	44,378,539 34,589,508	13,712,753 350,269		7·17 4·79
Total	127,471,678	76,905,626	2,062,421	78,968,047	14,063,022	220,502,747	11 · 96
Foreign Vessels.							
SteamSail	620,656,640 55,855,123	675,537,455 89,710,333	7,947,369 394,167	683,484,824 90,104,500	44,376,077 786,480	1,348,517,541 146,746,103	73·11 7·96
Total	676,511,763	765,247,788	8,341,536	773,589,324	45,162,557	1,495,263,644	81 · 07
Nationality and mo- tive power of ves- sels not known					8,918,056	8,918,056	•48
Grand Total.	844,916,196	872,270,283	12,210,527	884,480,810	114,995,834	1,844,392,840	100.00

a. Received and shipped.

Of the entire value of our foreign commerce, including that of the in-transit trade during the last fiscal year, amounting to \$1,844,392,840, 6.49 per cent was carried in cars and other land vehicles; 7.17 per cent in American steam vessels; 4.79 per cent in American sailing vessels; 73.11 per cent in foreign steam vessels; 7.96 per cent in foreign sailing vessels, and .48 per cent in vessels of which the nationality and motive power were unknown.

Our foreign commerce carried in home vessels, measured by its value, has declined from its highest point, 75 per cent in 1856, to 11.96 per cent during the

last fiscal year, while 81.07 per cent was carried in foreign vessels.

Only 7·17 per cent of our foreign trade was conducted in steamers bearing our national flag, while 73·11 per cent of that trade with all its profits from employment of capital and labour was conducted in alien steam vessels. The constant and rapid decline of our share of the transportation of the commodities exchanged between this and foreign countries will be seen by reference to Appendix No. 5.

# TONNAGE ENTERED AND CLEARED IN THE FOREIGN TRADE OF THE UNITED STATES.

The tonnage entered at ports of the United States in the foreign trade during the year ended June 30, 1891, as compared with 1890 was as follows:—

	18	390.	1	891.	Increase+I	DECREASE
<del>-</del>	Number.	Tons.	Number.	Tons.	Tons.	Per Cent
Entered at Sea Ports.						
American— Sailing Steam	3,338 2,096	1,394,665 2,009,919	3,152 2,626	1,336,468 2,333,904	-58,197 +323,985	-4·17 +16·10
Total	5,434	3,404,584	5,778	3,670,372	+ 265,788	+7.81
Foreign— Sailing Steam	6,959 5,814	3,071,111 8,889,909	6,812 5,607	2,942,115 8,782,124	-128,996 -107,785	-4·20 -1·21
Total	12,773	11,961,080	12,419	11,724,239	-236,781	-1.98
Total entered at Sea Ports	18,207	15,365,604	18,197	15,394,611	+29,007	+0:19
Entered at Lake Ports.						
American	5,783 9,458	678,537 <b>2,063,12</b> 0	5,268 9,113	710,432 2,099,252	+31,895 +36,132	+4·70 +1·75
Total entered at Lake Ports.	15,241	2,741,657	14,381	2,809,684	+68,027	+2.48

### ELEVATOR CAPACITY, RECEIPTS AND RATES AT BUFFALO.

The following statement gives the names and storage capacity in bushels of the 33 available grain elevators at the Port of Buffalo, and also the names of 12 transfer and floating elevators, which practically have no storage room:—

Elevators.	Capacity.	Elevators.	Capacity.
Bennett. Brown C. J. Wells City, A. City, B. Coatsworth Con'g Terminal. Dakota. Erie Evans. Exchange International Flaxeed Lake Shore Lyon Marine National Niagara, A.	Bushels.  800,000 250,000 550,000 640,000 800,000 1,200,000 720,000 400,000 650,000 650,000 650,000 100,000 125,000 125,000 100,000	Niagara, B. Niagara, C. Niagara, C. Ontario. Queen City, A, B and C. Richmond. Schreck Sturges Swiftsure Watson. Wheeler Wilkeson. William Wells.  Total bushels. Less about 15 per cent needed as working room  Total available storage capacity	Bushels. 1,200,000 200,000 440,000 450,000 50,000 50,000 600,000 350,000 400,000 200,000 15,000,000 2,250,000 12,750,000

The 33 elevators named above have capacity for elevating about 250,000 bushels per hour, or 6,000,000 bushels per day of 24 hours.

Transfer Elevators—Hefford's, Chicago, Fulton, Horton, Merchants, North-west,

Western Transit.

Floating Elevators—Cyclone, Buffalo, Free Canal, Free Trade, Ira Y. Munn, Marquette.

## GRAIN AND FLAXSEED RECEIPTS.

The following statement shows the actual amount of lake grain and flaxseed handled during the past season at Buffalo:—

	Bushels.
Western Elevating Company Cyclone Floating Elevator Hefford Elevator National Elevator Flaxseed Elevator Cargoes afloat, 30th December, 1891	130,253,130 2,500,000 1,200,000
Total grain and flaxseed	135,204,548 135,315,510

#### ELEVATING AND STORAGE RATES.

All of the elevators named above, receiving grain from vessels, belong to the Western Elevating Company, whose charges for elevating and storage were as follows, for the year 1891:—

Elevating, receiving, weighing and delivering, § cent per bushel; storage each 10 days or part thereof, ½ cent; no grain received for direct transfer, the vessel paying only the actual cost of shovelling. The charge for loading cars was ½ cent per bushel, including trimming.

31

The Cyclone and Hefford's elevators charged § cent per bushel for direct transfer from vessel to canal boat,

#### WINTER STORAGE.

After 10th November, 1891, for each ten days or part thereof, ½ cent per bushel until such charge, accumulated after the first ten days, shall amount to 2 cents per bushel; then free until five days after the opening of canal navigation in 1892. On all grain in store before 10th November, ½ cent per bushel for each ten days or part thereof, until such charge, accumulated after 10th November, shall amount to 2 cents per bushel; then free until five days after the opening of canal navigation.

#### RATES ON CAR GRAIN.

The Niagara, International, Lake Shore, Queen City, Exchange, and Ontario

elevators made charges as follows:-

Elevating from cars, including shovelling and storage for five days,  $\frac{1}{2}$  cent per bushel; storage each succeeding ten days or part thereof,  $\frac{1}{4}$  cent; delivering to side bins,  $\frac{1}{4}$  cent; delivering to cars and switching to eastern roads,  $\frac{1}{4}$  cent; blowing and cleaning,  $\frac{1}{4}$  cent; grading and cleaning, 1 cent; separating and cleaning, 2 cents; running over and cooling,  $\frac{1}{4}$  cent; storing hot or damaged grain, commencing three days after same has been posted,  $\frac{1}{8}$  cent per bushel per day.

House of Representatives, 52nd Congress, 1st Session.—Report No. 185.

Water-way from Head of Lake Superior to the Sea.

Mr. Lind, from the Committee on Interstate and Foreign Commerce, submitted the following report (to accompany H. Res. 11):—

8th February, 1892.

The Committee on Interstate and Foreign Commerce, to whom was referred the joint resolution (H. Res. 11) to promote the improvement of the water-way from the head of Lake Superior, by way of the Welland and St. Lawrence Canals and St.

Lawrence River to the sea, respectfully report:-

The value and extent of the commerce of the Great Lakes has been so frequently commented upon in this body of late years, that it is not deemed necessary to quote figures or statistics to demonstrate its importance. Forming, as they do, the boundary line, in part, of eight of the larger States, the Great Lakes furnish a highway for the interchange of the productions of those commonwealths, that has no parallel in any other country. Thus far the traffic upon them has been confined almost wholly to the trade with Canada and the internal commerce between the States. The recent development of the untold resources of the great North-West has, however, made the productions of that region not only a vital part of our internal commerce, but the leading factor of our foreign trade. To facilitate the internal commerce, by affording better facilities in the way of improved harbours, lights, and deepening the canals, Congress has not hesitated to vote appropriations by millions. Its action in this behalf has met the approval of the country.

Your committee believes that it is now equally important to facilitate and take the proper steps to secure a deep-water outlet for the foreign commerce originating

in the States bordering on, and tributary to these waters.

Public interest in this subject is evidenced by the action of conventions and commercial bodies, as well as by the several propositions submitted to Congress, looking to the opening of adequate water-ways between the lakes and the ocean. The impracticability of deepening or improving the Erie Canal so as to admit the passage of ocean-going crafts seems to be admitted on all sides. But it is claimed, however, by persons who are competent to express opinions on the subject, that it is

feasible to construct a canal from Oswego to the Hudson of sufficient size and depth to furnish deep-water passage from the lakes to the sea. That this may be true, and that the work may be undertaken, if practicable, is earnestly hoped for by all who are interested in the development of our means of communication. It stands admitted, however, that this project, in connection with the proposed Niagara Canal, would require decades for its execution and an amount of money variously estimated from \$40,000,000 to \$100,000,000.

Pending the consideration of this plan, and its execution if adopted, it seems to your committee that the great interests under consideration should be served by other available means if such are at hand or within our reach. Nature has provided an outlet by means of the St. Lawrence River, which needs but comparatively little improvement to make the great lakes as available to the commerce of the world as they now are to the internal commerce of the United States and of Canada. On the practicability of the St. Lawrence route for that purpose we quote from a letter to this committee, written by Col. O. E. Poe, in charge of the construction of the new canal at Sault Ste. Marie, in response to a reference of this resolution to the War Department, as follows:-

"The Welland and St. Lawrence Canals undoubtedly occupy the most favourable, and therefore the best line of water communication between the lakes and the ocean. A deep water way can be opened by their route at less cost than by any other, and there can be no question as to its advantages in an engineering point of

"It must be assumed that the Dominion of Canada is fully aware of the great advantage which so favourable a route affords, and will be loath to enter into any arrangement by which this advantage would be divided with another power. However, such questions belong to the domain of diplomacy, and it is probable that I am not expected to discuss them. So far as communication between the lakes and the countries beyond the Atlantic is concerned, every argument favours the proposition of this Bill.'

Our neighbours on the north have already improved this natural outlet by the construction of the Welland Canal between lakes Erie and Ontario, and the series of shorter canals along the St. Lawrence. These canals cover the entire distance where canals are required between Lake Erie and the sea. Their aggregate length

is only 70 miles, while the Eric Canal is 363 miles long.

In pursuance of plans adopted by the Canadian Government for uniformity of depth, the Welland has been deepened to 14 feet, and the work is in progress on the other canals with the prospect of completion within three years if the necessary appropriations are made. The magnitude and importance of the work already done is made evident by the fact that the steamer "Wetmore," carrying some 80 000 bushels of wheat, went through from Duluth to Liverpool last season by lightening her cargo, in passing down that portion of the St. Lawrence River at which the canals have not yet been deepened. This trip, though largely experimental, proved remunerative to the owners of the vessel. The rate paid from Duluth to Liverpool was 91 cents per bushel, exclusive of the charges for transhipment to lighten the vessel, which was 3 cents per bushel.

This demonstrates that, with the completion of the improvements now in progress, steamers of the size and capacity of the "Wetmore" can be dispatched from points on the great lakes to any port in the world, provided we can use the canals in common with the Canadians. If the canals were further deepened so as to correspond with the new "Soo" Canal, Duluth, Milwaukee, Chicago, Cleveland and Buffalo would enjoy all the advantages of seaboard cities with reference to foreign

While we are now enjoying the use of these Canadian canals, as the Canadians are ours, we should not lose sight of the fact that such enjoyment is not based on permanent treaty rights.

Under the provisions of Article XXXIII of the treaty of Washington our right to use the Welland and St. Lawrence canals may be terminated on two years'

notice, and it will be remembered that President Cleveland's administration claimed that the article in question has already been abrogated, so that we are now using those canals by sufferance only. For these reasons it is deemed important by this Committee that appropriate action should be taken by this Government to secure by a fair arrangement with the Canadians the permanent right to use these canals for our commerce, in common with and on the same terms as the citizens of that country.

It also appears to your Committee that the present time is exceedingly opportune for urging such action in behalf of the commerce of the great lakes. It is reported that representatives of the Canadian Government will shortly arrive in this city to negotiate with our Government for closer trade relations between the two

countries.

Your Committee therefore recommend the passage of the joint resolution.

52nd CONGRESS, 1st Session.

## H. RES. 11.

[Report No. 185.]

IN THE HOUSE OF REPRESENTATIVES.

JANUARY 5, 1892.

Read twice, referred to the Committee on Interstate and Foreign Commerce, and ordered to be printed.

FEBRUARY 8, 1892.

Referred to the House Calendar and ordered to be printed.

Mr. Lind introduced the following joint resolution:-

#### JOINT RESOLUTION

To promote the improvement of the water way from the head of Lake Superior by way of the Welland and St. Lamrence Canals and St. Lawrence River to the sea.

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be, and he is hereby, requested to invite negotiations with the Government of the Dominion of Canada to secure the speedy improvement of the Welland and St. Lawrence Canals and the St. Lawrence River so as to make them conform in depth and navigability, so far as practicable, to the standard adopted by the Government of the United States for the improvements now in progress within the United States of the waters connecting the Great Lakes; and to that end the President is hereby authorized, if he deems expedient, to appoint three commissioners to negotiate on behalf of the United States with the representatives of the Government of the Dominion of Canada the terms and conditions of any agreement which may be entered into between the two governments in pursuance of any proposition submitted in that behalf by the Government of the Dominion of Canada."

a—3 <del>1</del>		COUNTRIES	COUNTRIES FROM WHICH RECEIVED.	RECEIVED.			Countrie	COUNTRIES TO WHICH SHIPPED.	SHIPPED.	
		Britis	British North America.	erica.			Britis	British North America.	erica.	
Year Ending June 30th,	Nova Scotia, Q New ta Brunswick, and Prince ti Edward Wilsiand.	Quebec, On- tario, Mani- toba and the North- West Terri- tories.	British Columbia.	Newfound- land and Labrador.	Total.	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, On- tario, Mani- toba and the North- West Terri- tories.	British Columbia.	Newfound- land and Labrador.	Total.
	••	•	**	•	99	66	••	••	••	46-
1873 1874 1876 1877 1879 1880 1880 1886 1886 1886 1887 1887 1887 1889 1889	2555 2555 2555 2555 2555 2555 2555 255	12, 894, 164 13, 616, 344 127, 342, 353 127, 342, 353 12, 692, 619 11, 692, 619 11, 692, 619 11, 692, 619 16, 783, 106 18, 783, 106 12, 74, 963 12, 290, 483 12, 290, 483 12, 290, 483 12, 290, 483 12, 290, 178 12, 493 17, 4	5.240 97,691 1256,074 113,047 1137,271 12,555 1137,271 12,555 118,041 308,691 308,691 313,816 313,816 313,816 323,816 325,836	1,137 55 56 87 87 83 32,079 87,134 88,853 174,584	13,394,693 14,163,690 22,591,902 12,471,695 12,294,068 12,294,068 12,294,068 17,134,717 17,134,717 17,002,046 28,543,178 29,802,820 13,419,227 11,504,721 11,504,721 11,504,721 11,336,123 11,336,123 11,336,123 11,336,123	5,382,390 7,150,036 8,999,396 9,102,600 2,873,422 889,539 1,643,716 2,732,645 2,732,645 2,745,537 1,740,900 1,740,90	21,320,174 29,283,638 14,658,358 11,551,238 11,556,238 11,556,238 11,556,238 11,556,238 11,556,242 34,065,845 35,878,389 19,717,466	181,720 317,534 558,336 658,336 658,336 654,013 476,324 713,436 71,377 1,475,833 1,615,233 1,615,233 1,615,233 1,825,178 635,841 835,841 835,841 835,841 835,841 835,841 835,841 835,841 835,841	2, 247.7 2, 247.7 2, 247.7 2, 247.7 2, 247.7 3, 247.7 3, 27.7 4, 630 4, 27.3	26, 784, 184 27, 310, 738 28, 980, 284 28, 4119, 888 12, 912, 688 117, 042, 103 28, 386, 284 37, 585, 284 38, 312, 588 29, 284, 079 19, 700, 458 29, 284, 079 15, 611, 656 22, 187, 966 27, 888, 924 27, 888, 928

No. 2,—Statement showing the Total Values of Foreign Merchandise transported in the In-transit and Transhipment Trade of the United States with the British North American Possessions during the Year ended 30th June, 1891.

CUSTOMS DISTRICTS Nova Sco- INTO WHICH tis, New- BRUEIVED. Brunswick and Prince Ed- ward Island.		COUNTRIES PROM WHICH RECEIVED.	RECEIVED.				COUNTRIES TO WHICH SHIPPED.	о мнісн с	ніррко.	
	' Quebec, On- tario, Man- kitoba and the North- West Territories.	British Columbia.	New- foundland and Labrador.	British West Indies.	CUSTOMS DISTRICTS IN PROM WHICH SHIPPED.	Nova Sco- tia, New Brunswick and Prince Ed- ward Island.	Quebec, Ontario, Manicoba and the North-West	British Columbia.	New-foundl'd and Labra-dor.	British West Indies.
Received into-	••	49	99	**	Shipped from-	<b>\$</b>	60	<b>6</b> 0	69	<b>6</b> 9
Alaska, Alaska Baltimore, M.d. 1,040 Bangor, Me. 2,916,373	54,461	64,982			Alaska, Alaska. Baltinore, Md Bangor, Me	94	2,916,154	64,982	: : :	220
Boston and Charlestown, 278,482 Buffalo Creek, N. Y.		: :	: :	574	Mass Buffalo Creek, N.Y.	302,597 8,375	2,567,544 2,241		365	24,796 31,863 1,359
Champlain, N. Y Detroit, Mich Duluth, Minn	. 28,151 . 160,799				Detroit, Mich.		22,433 148,798	5,718		
Huron, Mich Minnesota, Minn New York, N.Y 627,619	<del></del>	2,000	187,640	813,882	Huron, Mich. Minnesota, Minn New York, N.Y.	95,003	670,578 416,713 10,000,519	3,578 3,578 87,959	1,963	1,781,289
)akota.	2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1				Niagara, N.Y North and South Dakota. Osweontchie, N.Y	445,947	9,086		12,428	51,032
Passanaquoddy, Me. 31.640 Philadelphia, Pa. 2,605	:				Passamaquoddy, Me. Philadelphia, Pa.	115	4,949			4,501
Portland and Falmouth, 1,320 Mee. Nash San Francisco, Cal	4,587,362	1,852			Me. Me. San Diego, Cal San Francisco, Cal Vernont, Ve. Willamette, Oreg.	3,733,444	4,579,898 204,763 920 18,167	19 47,251	19,517	15,556
Total 3,859,079	15,310,945	422,806	187,640	814,456	:	5,605,614	21,695,992	547,144	34,273	1,918,851

Mexico.  Mexico.  14,967 60,715 103,977 344,179 174,104 226,607 115,527 115,822 116,822 226,315 115,822 114,920 226,316 226,31
\$\begin{align*} \begin{align*} \begin{align*} \text{align*} align*

FOREIGN COMMERCE OF THE UNITED STATES.

No. 4.—Statements showing the Total Value of Imports and Exports of Merchandise and of Gold and Silver Coin and Bullion into and from the United States, by Countries and Customs Districts, during the Year ended 30th June, 1891. IMPORTS AND EXPORTS OF MERCHANDISE BY COUNTRIES.

<i>.</i> . ~	exports.	1		T			1
XPORTS	Per cent of to tack to		37.01		3.57	0.63 0.27 0.09	4.56
TE AND F	Per cent of total of group.		66.75		78 29	13.75 5.88 2.08	100.00
TOTAL IMPORTS AND EXPORTS	Value.	60	640,137,288		61,780,767	10,850,206 4,604,587 1,642,730	78,878,290
RTS.	Per cent of to- tal of foreign exports.		31.38		13.67	2.21 1.21 0.03	17.12
FOREIGN EXPORTS.	Per cent of total of group.		60.83		18.08	12.94 6.11 0.14	100.00
FOREI	Value.	**	3,814,219		3·49 1,697,368	270,258 127,539 3,075	2,098,240
TIS.	Per cent of to- tal of domestic exports.		29.09		3.49	0.43 0.22 0.15	4.29
DOMESTIC EXPORTS.	Per cent of total of group.		08.89		81 : 34	10.09 5.12 3.45	100.00
Domest	Value.	**	441,599,807		30,402,648	3,771,313 1,878,652 1,292,902	37,345,515
	Per cent of tm- total of im- ports.		33.02		3.51	0.81 0.31 0.04	4.67
IMPORTS.	Per cent of total of group.		42.39		75.26	17.26 6.60 0.88	100.00
ď	Value.	*	194,723,262		29,680,751	6,808,635 2,598,396 346,753	39,434,535
	COUNTRIES.	EUROPE.	Great Britain and Ireland	BRITISH NORTH AMERICAN POSSESSIONS.	Quebec, Ontario, Manitoba and the North-West Territories		Total
to ebuti	Order by magn total imports ports.		1		- 6	4 10 <del>4</del> 1	

# FOREIGN CARRYING TRADE.

No. 5.—VALUES of the Imports and Exports of the United States carried respectively in cars and other land vehicles, in American vessels and in foreign vessels during each Fiscal Year, from 1857 to 1891, inclusive, with the percentage carried in American vessels (coin and bullion are included from 1857 to 1879, inclusive, as method of transportation of specie and pierchandise cannot be separately stated).

V		IMPORTS.			Exports.			FOTAL IMPORTS	'S AND EXPORTS	<b>2</b> 2	Percentage
ending June 30.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	Total.	carried in American vessels.
	**	66		66	66	96	••	99	69	<b>6</b> 9	
738	:	259,116,170	101	:	251,214,857	745,	:	510,331,027	213,519,796	723,850,823	
828		203,700,016	<b>%</b>		243, 491, 288	81,153,133		447, 191, 304	160,066,267	607, 257, 571	73.7
		216,123,428	77		249,617,953	1,5		465,741,381	229,816,211		
		228,164,855		:	279,082,902	121,039,334	:	507,247,757	255,040,793		
Two	:	201,344,000	134,100,033		179,972,735	03/5/2/150		381,010,188	203,478,278		
298	: : :	92,2/4,100			120,421,318	104,517,007	: :::::	217,690,418	218,015,290		
	: : :	109,744,380			182,127,891	199,880,091		241,872,471	343,006,031		
	:	81,212,077	248,350,818		102.849,409	237, 442, 730	: ::::	184,061,486	485,733,548		
865		74,385,116	_		93,017,756	262,839,588		167,402,872	437,010,124		
988		112,040,395			213,671,466	351,754,928		325,711,861	685,226,691		
298		117.209.536			180,625,368	280,708,368		297.834.904	581,330,403		
868		199 965 995			175, 106, 348	301 886 491		997 981 573	550 546 074		
098	: :	136,809,094	_	:	153 154 718	985 979 781		980 056 779	596 409 019		
270		159,002,021			100 739 394	200, 21 5, 101	٠	259,000,112	620,000,400	_	
1001	:		262 000 644	7 700 156	100, 276, 469	909, 100, 608		959 661 170	788 000 876		
070				10,00,100	169 044 700	302,001,332		200,001,112 24K 241 101	030,976,960		
07.0	17,000,001			10,010,000	171 566 759	404 015 996		246 206 500	066 709 651		
07.4				2,633,150	154 494 916	522 925 071		250,000,032	020,020,001		
0.11				7 904 986	156 908 000	501,000,001		911 957 600	001,000,100		
070	10,000,003			6 994,000	100,000,000	100,000,043	_	514,251,132	010,00,001		
9/0		_		0,524,407	104,000,404	192,213,467		311,0/0,1/1	513,304,367		
877			_	0/10/1/0	104,620.214	530, 304, 703	_	310,000,281	903,920,036		
878		_		006,116,7	100,001,024	503,583,504		313,050,906	876,991,129		
879		_		7,439,862	128, 420, 339	600,769,633		272,015,692	911,269,232		
	15,142,465	_		5,838,928	109,029,200	720,770,521		258,346,577	1,224,265,434		
881	17,193,213	_		8,259,308	116,955,324	777,162,714		250,586,470	1,269,002,983		
882	22,854,946			12,118,371	96,962,919	641, 460, 967	_	227,229,745	1,212,978,769		
883	23,003,048			25,089,844	104,418,210	694,331,348		240, 420, 500	1.258,506,024		
25	20,140,294	_		26.573.774	98,652,828	615, 287, 007		233, 699, 035	1 127 798 199		
885	21 149 476			94, 183, 299	82,001,691	636,004,765		194 865 743	1 079 518 566		
988	94 555 683		491 937 636	19, 144, 667	78,406,680	581 973 477		197 349 503	1 073 911 113		
887	97 569 059			91 380 666	79 991 953	691, 809, 909		104 356 746	1 165 104 508		
000	29 900 450	192 595 906		99 147 968	67 339 175	606 474 964		100,967,479	1 174 607 291	1,410,011,	9 6
	90, 907, 001	100,000,000		90 496 517	02 000 100	630, 41 4,004		000,000,110	1,114,001,001	1,410,011,	3 6
:		19,1049,010	692 740	20,400,000	77 500 198	747, 276, 644			1,211,000,011	1,401,000	3 5
901	40,021,001	197 471 678		21,053,430	78 968 047	77.3 580 394	79 856 104	906 430 795	1,011,110,71	1,041,105,035	31
160	33,000,00	0.7	770	OF (250, 10		3					7

No. 6.—Statement showing the Total Values of Foreign Merchandise transported in the In Transit and Transhipment Trade of the United States with the British North American Possessions during each year from 1871 to 1890.

Year ending 30th June.		transit and t tish North An Possessions.		Shipped in t for Brit	ransit to or tr ish North An Possessions.	anshipment nerican
	By Land.	By Water.	Total.	By Land.	By Water.	Total.
	\$	\$	*	*	\$	*
871	. 6,035,585	1,918,475	7,954,060	15,624,591	2,781,884	18,406,475
872	8,237,859	1.038,310	9,276,169	19,357,342	4,685,448	24,042,790
8/3		1,693,906	13,394,693	20,178,666	6,605,518	26,784,184
874		1,468,100	14,163,690	20,572,299	6,938,440	27,510,739
875		1,152,555	18,042,577	23,794,129	6,006,166	29,800,29
876		1,290,640	22,591,902	19,369,958	5,049,930	24,419,888
877		1,636,053	12,471,695	17,066,855	1,910,298	18,977,153
878		1,889,524	12,204,058	11,914,321	998,364	12,912,68
879	. 10,098,998	1,982,097	12,081,095	12,030,635	858,952	12,889,58
.880	15,265,177	1,869,570	17,134,747	16,388,673	653,430	17,042,00
.881		1,801,079	17,002,046	22,828,270	527,994	23,356,26
882	24,665,029	3,878,149	28,543,178	36,613,465	982,019	37,595,48
883	26,382,370	3,420,450	29,802,820	38,389,318	923,250	39,312,56
.884	. 13,043,498	375,729	13,419,227	22,120,587	818,798	22,939,38
.885	. 12,755,686	767,927	13,523,613	19,105,476	594,982	19,700,45
886	9,593,344	1,267,676	10,861,020	19,428,867	812,212	20,241,07
887	9,377,041	2,127,680	11,504,721	20,178,365	2,009,590	22,187,95
888	6,309,024	2,033,793	8,342,817	13,347,876	2,063,780	15,611,65
889		3,032,952	11,336,123	19,299,966	2,849,263	22,149,22
1890.	. 13,524,298	2,477,612	16,001,910	24,788,152	2,547,052	27,335,20

Note. - This movement forms no part of the import and export trade.

No. 7.—Statement showing the Kinds and Weights of Commodities, the Produce and Manufacture of the United States, Exported from the United States through British Columbia via the Canadian Pacific Railway to China and Japan during the Year ended 30th June, 1891.

(From Reports furnished by the Canadian Pacific Railroad.)

Articles.	Weight.	Ports from which shipped into Canada.	Weight.
	Lbs.		Lbs.
Apples	3,250	Portland, Oregon	15,400,053
Belting	8,220	Lowell, Mass	6,053,251
Bones	40,180	New York, N.Y	2,411,837
Books	29,517	Manchester, N.H	1,780,669
Carbons	125	Nashua, N.H	1,337,188
Celluloid	2,117	Biddeford, Me	1,174,340
Chairs	180	Tacoma, Wash	687,140
Chemicals—		Chicago, Ill	398,512
Ginseng	39,125	Chicopee, Mass	241,455
Other,	1,683	San Francisco, Cal	200,000
Cigars and cigarettes	443	San Francisco, Cal	199,920
Clocks	120	Schenectady, N.Y	128,530
Cotton, raw	448,100	Boston, Mass.	40.044
Cotton, manufactures of	12,185,489		
	180	Cleveland, Ohio	24,160
Crockery		Lawrence, Mass	14,690
Electric goods	19,136	Syracuse, N.Y	10,000
Flannels	338,388	Erie, Pa	7,910
Flour	16,422,521	Rochester, N.Y	3,480
Hams and bacon	960	Saint Paul, Minn	2,210
Hay	7,310	Providence, R.I	1,030
Hoofs	141,254	Port Townsend, Wash	800
Household effects	3,013	Philadelphia, Pa	713
Ink	1,180		
Iron and steel, manufactures of :			
Castings	56,415		
Firearms	270		
Hardware	126	i i	
Machinery	283,409		
Wire	46,963	il	
Lamps	350		
Lead pencils	627		
Missionary goods	3,470	1	
Musical instruments	350		
Oil, lubricating	950		
Photographic goods.	1,070		
Plumbago	437		
Shoes	800		
Twine	350		
Wax	1,260		
Wood, manufactures of	1,540		
Merchandise, not specified	27,094		
		41	
Total	30,117,972	Total	30,117,972

No. 8.—Statement showing the Kinds and Weights of Commodities Imported into the United States, through British Columbia via the Canadian Pacific Railway, from China and Japan, during the Year ended 30th June, 1891.

(From reports furnished by the Canadian Pacific Railroad.)

Articles.	Weight.	Ports into which Imported.	Weight.
	Lbs.		Lbs.
Bulbs Cigars Curios Fire crackers Furs Hemp do manufactures. Matting Paper Personal effects Printed matter Rice Robes Satins Silk braids do raw Skins Skins Sugar	280 2,141 137,760 721,840 2,640 279,000 221,357 7,356 3,300 5,380 140 3,441,227 2,829 4,560 10,240 700,378 1,060 65,660	New York, N.Y. Chicago, Ill Portland, Oreg. Port Townsend, Wash St. Paul, Minn Seattle, Wash Boston, Mass. Astoria, Oreg. Baltimore, Md. Tacoma, Wash. Minneapolis, Minn. Philadelphia, Pa. \(^1\) Hartford, Conn. Toledo, Ohio. Omaha, Neb Springfield, Mass. Detroit, Mich All other ports.	9,386,239 6,364,444 937,442 329,349 317,512 258,360 116,971 105,875 63,914 46,350 25,917 20,430 17,091 14,150 13,990 13,780 21,584
Fea Poys Toys Toys Toys Toys Toys Total Total	$ \begin{array}{r} 11,728,024 \\ 1,350 \\ 733,247 \\ \hline 18,069,769 \end{array} $	. Total	18,069,769

No. 9.—Statement showing the Kinds and Weights of Commodities, the Produce and Manufacture of the United States, shipped from Neche, N. Dak., and the Total Weight of Commodities received at Ogdensburg, N.Y., for Transportation via the Canadian Pacific Railway to Ports of the United States Pacific Coast, during the year ending 30th June, 1891.

Weight.	Articles.	Weight.
Lbs.	From Neche—Continued,	Lbs.
2.000	Earthen, stone and chinaware	75,640
	Eggs	1,200
	Fancy articles, not specified	54,20
	Flax, hemp and jute, manufactures-	04,200
	Cordage	5,634
,	Twine	26,097
69,180	All other	43,140
	Fruits, preserved—	40,140
28,570	Canned	22,100
3,540	Other	24,532
360,000	Glass and glassware—	27,002
,	Window-glass	2,180
7,545	Other	54,399
76,819	Glucose	133,800
930	riair, manufactures of	5,310
1,172	India-rubber, manufactures of	33,66
660	Ink, printers', and other	870
	Instruments, scientific	31,21
97,324	Iron and steel, and manufactures-	01,210
45,148	Band, hoop and scroll iron	24,370
5,860	Castings	2,280
19,250	Cutlery	12,500
	Lbs. 2,000 2,280 24,500 11,314 17,161 69,180 345,050 28,570 3,540 360,000 7,545 76,819 930 1,172 660 97,324 45,148 5,860	Lbs.

No. 9.—Statement showing the Kinds and Weights of Commodities, the Produce and Manufacture of the United States, &c.—Continued.

Articles.	Weight.	Articles.	Weight.
From Neche—Continued.	Lbs.	From NecheContinued.	Lbs.
Iron and steel, and manufactures—	[	Provisions—	
Firearms	952	Lard	48,550
Locks, hinges and other builders'		All other	84,910
hardware	430,802	Dairy products—	
Machinery, not specified	11,866	Butter	20,753
Nails and spikes	373,957	Milk	344,350
Printing presses	9,780	Soap, fancy and other	82,169
Railroad cars, of steel	1,374,178	Spices, ground	10,550
Saws and tools	54,447	Spirits, whiskey	100,835
Sewing machines	122,790	Starch.	25,910
Steam engines—	-	Sugar and molasses—	•
Locomotive	60,000	Molasses	72,807
Stationary	34,173	Sugar, brown	28,530
Stoves	263,505	Tin, manufactures of	102,970
Wire	425,730	Tobacco—	,
All other manufactures	3,985,275	Cigars and cigarettes	5,146
Jewellery	210	Other manufadtures	199,836
Lamps, chandeliers, &c	300	Toys	4,470
Lead, manufactures of	290	Vegetables—	-,
Leather, and manufactures of—	200	Peas and beans	20,000
Leather, finished, and other	18,800	Canned	20,700
Boots and shoes	48,404	Other	28,31
Harness and saddles	4,015	Wood, and manufactures of—	20,010
	4,576	Boards	312,04
Other manufactures of	680		43,080
Lime and cement	262,900	Staves	49,800
Malt liquors	1,240		35,100
Marble, stone, and manufactures of	4,400	Moldings Household furniture	553,697
Matches	1,100		271,577
Musical instruments—	19,950	Woodenware	95.510
Organs	35,190	Other manufactures of	90,010
Pianofortes		Wool, manufactures of—	1 / 05
Other	270	Carpets	14,250
Oils	0m =00	Blankets and flannels	1,650
Mineral, illuminating	67,500	Wearing apparel	217,43
Whale or fish	4,000	All other	678
Other	240	All other unmanufactured articles not	00.04
Paints and Colours	10,678	specified	62,042
Paper-	00.500	All other manufactured articles not	040.00
Writing	92,700	specified	343,92
Other	470,855		
Provisions		Total	13,201,78
Meat products—		From Ogdensburg, N.Y	4,269,410
Hams	106,580		
Pork	27,530	Total shipped West	17,471,19

Shipped for transportation to—	Lbs.
San Francisco, Cal	11,273,379
Seattle, Wash. Ter	1,675,974
Anacortes, Wash	1,520,373
Port Townsend, Wash	1,029,435
Fair Haven, Wash	952,652
Sehome, Wash	
Whatcome, Wash	208,168
Tacoma, Wash	158,925
Portland, Oreg	24,260
Portland, Oreg	70,503
Total	17,471,194

No. 10.—Statement of the Quantity and Value of Merchandise received at Neche, N. Dak., and Ogdensburg, N.Y., from United States ports on the Pacific Coast, and of Merchandise shipped from San Francisco, Cal., and Port Townsend, Wash., for eastern ports of the United States, over the Canadian Pacific Railway for the Year ending 30th June, 1891.

(The data reported under "Shipped from" are furnished by the Canadian Pacific Railroad, while those under "Received at" were taken from official returns of the respective Collectors of Customs.)

Articles.	Shipped from	Shipped from	Received at Neche, N. Dak.  Received a Ogdensburg,			
Articles.	San Francis- co, Cal.	Port Towns- end, Wash.	Quantity.	ncity. Value. Quantity.		Value.
	Lbs.	Lbs.		8		*
Beans and pease	161,106	<b></b>			i	1
		950		100		
Books		370		100	• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
Borax Lbs.	156,972	310	123,661	6,800		
	150,512		93	0,000		
			50		0.505	
Dry goods Lbs.	328,626	100			2,535	1. 10. 140.
Fruits, canned		100			247,154	16,140
	990			••••	50,400	
Glassware	8,459		4,229	381	1	990
Hair, deers. Lbs. Hoofs	24,500		4,220	361		
Household goods Lbs.	24,000	3,310	2.920	310		
Leather	25,641	5,510	2,320	510		
	43,260					
Leather scraps	1.100					· · · · · · · · · · · · · · · · · · ·
Machinery, not specified	491,560	51.310	306,300		051 170	50
, , , , , , , , , , , , , , , , , , , ,	451,000	01,010	231,000	13,200	251,170 21,200	13,640
Salmon, other Brls.			70	10,200	21,200	1
Spirits, brandy	22,350					1
do Brls.	22,000		51	2.481		
			2	2,401		
		25,000				91 000
Shingles						31,000
do M.		1,202,000	4,468	8,295		
do Bundles.			6,471	3,364		
do			995	0,001		1
Sugar, refined Lbs.	82,870		62,470	4.565		
do	02,0,0		20,400	2,000		
Trees		800	20,400			· · · · · · · · · · · · · · · · · · ·
Wine Doz.	115,635				1,060	17,050
do	1220,000				350	11,000
do Brls.					8	160
Wood, manufacturers—	1		1			100
Barrels		19,140	\		1	
Wool, raw	165,930	10,110				
Total	1,628,999	1,383,030			1	

Note.—There were received at Plattsburg, N.Y., during the year 80 barrels of salmon for which no value was given.

# TABLES

SHOWING THE

# TONNAGE ON THE CANALS.

C.—TABLE showing the Tonnage of the undermentioned Articles, moved,

•	Vegetable Food.								
YEARS.	Flour. Wheat. C		Corn.	Corn. Barley.		Rye.	Other Vegetable Food.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869	71,051	670,534	256,475	99,012	92,309	13,489	99,743		
1870	54,978	658,524	193,129	123,191	117,941	19,520	127,727		
1871	41,211	748,549	672,057	113,992	129,891	34,563	109,935		
1872	20,534	403,903	902,753	120,061	92,959	13,357	120,753		
1873	19,307	803,064	637,296	70,586	70,023	30,160	114,735		
1874	29,134	772,163	519,203	98,654	59,408	8,215	280,821		
1875	17,635	744,293	282,031	104,475	62,717	8,309	86,090		
1876	9,290	416,376	365,254	96,494	52,147	19,949	104,783		
1877	8,923	448,043	723,458	139,453	66,045	35,948	77,114		
1878	5,904	844,555	734,993	89,534	85,029	64,613	88,106		
1879	7,164	949,466	621,180	96,144	23,164	59,210	77,071		
1880	8,266	966,052	1,156,619	106,247	20,893	26,340	86,673		
1881	6,926	444,832	475,823	81,587	30,321	15,484	61,588		
1882	9,372	642,215	251,687	96,650	22,180	43,372	53,300		
1883	9,047	. 573,740	522,978	58,787	51,607	95,246	67,595		
1884	7,251	790,409	198,216	65,008	52,696	71,462	51,944		
1885	6,869	565,922	359,982	64,587	8,234	10,211	47,505		
1886	9,005	993,129	354,765	62,854	7,278	3,073	59,782		
1887	4,089	936,840	446,617	75,458	35,365	6,717	47,678		
1888	3,287	491,419	499,218	41,100	70,315	12,532	49,087		
1889	4,429	484,141	592,550	66,110	63,674	36,329	49,663		
1890	3,489	353,738	616,702	90,754	48,438	21,657	33,123		
1891	3,126	756,101	142,141	71,903	16,362	68,771	33,951		

on all Canals in the State of New York, during a series of Twenty-two Years.

		HEAVY GOODS.							
Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.			
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.			
1,302,613	137,677	79,652	263,333	1,324,408	183,992	1,989,06			
1,295,010	135,930	89,708	266,740	1,558,185	238,802	2,289,36			
1,850,198	178,269	100,310	248,709	1,194,037	289,952	2,011,27			
1,674,320	161,667	96,996	248,558	1,462,590	377,592	2,347,40			
1,745,171	53,363	62,581	216,706	1,625,859	415,968	2,374,47			
1,767,598	24,511	82,955	173,590	1,413,162	232,544	1,926,7			
1,305,550	36,603	95,305	186,785	1,217,091	283,219	1,819,0			
1,064,293	11,691	69,450	114,070	1,036,698	173,530	1,405,4			
1,498,984	10,341	58,828	156,918	1,286,881	250,573	1,763,5			
1,912,734	8,385	65,642	139,927	889,873	210,078	1,313,9			
1,833,399	27,634	99,568	136,021	971,074	314,411	1,548,7			
2,371,090	94,613	139,993	144,487	959,342	370,884	1,709,3			
1,116,561	78,650	205,005	113,756	1,092,003	337,873	1,827,2			
1,118,776	58,921	122,786	108,040	1,228,435	364,361	1,882,5			
1,379,000	46,553	47,412	190,392	1,152,849	293,892	1,731,0			
1,236,986	28,513	54,471	161,788	954,288	201,610	1,400,6			
1,063,310	12,215	38,726	161,272	1,025,941	195,750	1,433,9			
1,489,886	10,878	152,030	112,002	857,884	269,914	1,402,7			
1,552,764	21,368	224,979	124,054	905,424	243,578	1,539,4			
1,166,958	2,596	43,881	106,344	1,219,680	259,269	1,631,7			
1,296,896	3,278	78,135	112,100	1,094,897	234,948	1,523,3			
1,167,901	5,800	26,804	93,181	830,154	202,072	1,157,2			
1,092,355	1,960	36,770	81,232	881,502	215,686	1,217,1			

### D.-TABLE showing the Tonnage of the undermentioned Articles, moved through

			VE	SETABLE FOO	D.		
YEAR.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
869*	45,674	313,825	120,599	20,951		904	1,93
1872	26,651	239,998	254,902	6,035	7,752	64	2,74
.873	30,665	355,847	180,169	8,225	1,194	3	3,77
1874	24,019	413,212	181,151	18,871	5,954	513	8,67
875	13,964	253,835	103,749	35,751	3,383	917	6,33
876	15,778	201,906	144,501	18,455	24,496	1,454	3,19
.877	13,558	253,953	169,196	19,870	2,810	2,439	2,35
878	9,121	191,982	185,931	10,979	3,088	•••••	2,30
879	10,710	274,570	144,506	4,655	1,239	440	2,44
.880	12,679	242,020	163,738	17,772	477	1,016	1,48
881	9,959	127,832	101,075	24,509		1,844	2,08
882	12,261	215,056	54,799	20,126	611	3,226	40
883	13,471	152,794	182,269	10,436	731	1,642	10,98
884	13,683	144,851	118,811	7,155	10,746	1,320	9,16
.885	13,334	124,206	117,536	15,801	1,116		1,91
886	19,474	154,169	219,442	1,595	4,911	564	14,65
.887	23,949	221,927	114,938	9,574	12,050		12,53
888	16,983	160,963	194,886	5,906	26,629	811	13,60
889	7,931	126,664	353,595	4,272	28,356	2,673	18,5
890	14,461	118,002	327,394	10,830	27,728	1,549	20,8
.891	13,517	198,658	185,180	8,113	52,959	65,888	28,0

<sup>\*</sup>Fiscal.

the Welland Canal, during a series of Twenty-one Years ended 31st December, 1891.

	HEAVY GOODS.											
Total.	Railway Iron.	Other Iron.	Salt.	Iron and Salt having paid full Tolls on St. Lawrence Canals.	Coal.	Ores.	Total.					
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.					
503,860	68,064	16,924	91,575	37,153	103,126	58,781	275,6					
538,147	26,217	17,141	50,540	44,243	186,932	98,605	423,6					
579,880	6,923	20,754	40,850	17,157	339,016	118,685	543,3					
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,3					
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,5					
409,788	51	7,997	30,300	20,327	288,211	81.654	378,5					
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,1					
403,403	10	11,518	3,980	12,686	295,318	15,229	338,7					
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,6					
442,182	<b>5,360</b>	4,812	413	22,273	109,986	34,139	176,9					
269,395	4,585	7,013	10	30,682	128,113	18,785	189,1					
306,482	•••	5,348	50	17,327	237,559	23,700	283,9					
373,326	1,237	7,922	66	17,037	307,058	31,785	365,1					
305,734	698	652	461	3,242	274,471	53,205	332,7					
273,905	78	2,055	597	14,243	248,272	26,728	291,9					
414,812	166	6,123	48	12,324	271,356	27,447	317,4					
394,971	1,351	5,636	····	6,715	145,193	13,866	172,7					
419,786	93	3,220	316	13,617	223,871	16,872	257,9					
542,043	47	2,479	1,254	20,269	268,305	2,435	294,7					
519,291		753	1,027	28,047	202,384	8,138	240,3					
367,177	127	1,610	2,567	7,953	224,644	3,415	240,3					

E.—Table showing the Tonnage of the undermentioned Articles cleared at Buffalo and Tonawanda, for transit through the Erie Canal, for a series of twenty-three years.

#### VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats. Rye.		Other Articles	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869	5,609	490,904	219,874	1,978	63,728	2,150	2,193	786,436		
1870	8,258	502,158	165,577	19,944	89,156	10,593	6,906	802,592	2.05	
1871	5,607	570,849	579,709	19,810	106,391	27,622	5,705	1,315,693	67.59	
1872		330,032	866,169	41,515	73,572	5,900	88	1,317,276	67 50	
1873	6	737,167	611,675	8,636	51,615	22,441	634	1,432,174	82·10	
1874		650,161	459,728	3,192	44,079	112	237	1,157,509	47 · 18	· · · · · ·
1875	5,859	695,315	273,006	1,156	36,609	2,242	3,372	1,017,559	29 · 38	
1876	231	377,317	356,064	6,334	24,488	12,205	4,691	783,331		0.39
1877	1,710	398,416	709,723	26,351	52,559	27,365	4,976	1,223,100	55.52	
1878	987	775,953	718,714	21,665	69,256	51,064	6,662	1,644,301	109 · 08	
1879	1,239	892,404	602,171	7,193	14,537	40,471	7,528	1,565,543	99:07	
1880	2,743	897,603	131.857	434	16,154	12,137	4,256	2,065,184	162 · 06	<b></b>
1881	1,491	386,605	458,318	86	24,751	107	7,484	878,842	11 . 75	
1882	1,123	586,019	241,406	1,858	9,046	19,158	6,216	864,826	9.96	<b> </b>
1883	538	535,150	517,219	6,816	47,190	79,010	6,051	1,191,974	51.06	
1884	520	767,784	194,368	4,910	47,060	57,856	4,411	1,078,909	37 · 18	ļ
1885	323	540,533	356,737	3,317	5,610	6,405	5,427	918,352	14:36	
1886	488	955,851	351,272	6,799	5,180		4,001	1,353,591	72.11	 
1887	334	914,152	438,069	15,207	32,907	4,612	44,693	1,449,984	85 · 64	<b></b> .
1888	534	469,965	494,110	6,589	68,922	10,997	1,717	1,052,854	33 · 87	
1889	845	457,922	579,526	16,380	61,175	34,167	5,160	1,155,175	46 88	
1890	195	329,531	498,641	58,563	45,202	16,903	4,362	953,397	21 23	
1891	1,071	733,967	137,679	43,779	14,803	66,278	2,594	1,000,171		

Supplement to Table E, showing the shipments at Oswego during the same period. VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869	7,361	141,360	<b>28,5</b> 85	66,794	1,113	8,569	14,033	267,815		
1870	11,440	115,732	10,120	77,906	3,953	7,402	11,628	238,181		11.06
1871	10,043	123,173	70,218	72,675	1,806	6,250	13,259	297,424	11.05	· • • • •
1872	4,773	57,865	27,148	62,172	684	6,751	10,425	169,818		36.59
1873	4,061	53,361	10,578	46,337	670	6,019	10,739	131,765		50.80
1874		108,288	46,127	77,007	1,103	7,053	3,747	243,325		9 14
1875	1,728	32,690	3,034	75,083	3,308	4,989	5,931	126,763		52 · 67
1876	967	21,890	1,324	63,336	117	5,703	6,638	99,975		62 · 67
1877	855	28,955	3,308	80,306	316	6,603	6,556	126,899		52.61
1878	1,394	24,171	1,383	50,381		10,598	5,222	93,149		65 · 21
1879	734	25,740	9,268	71,693	· • • • • • • • • • • • • • • • • • • •	16,623	3,110	127,168	₃	52.51
1880	951	17,466	15,656	82,743		12,598	5,996	135,410	)	49.43
1881	758	25,352	8,064	62,793	200	14,444	4,027	115,638	3	56.82
1882	813	20,274	4,401	70,862	416	22,265	7,773	126,804	·	52.65
1883	432	22,634	<b>53</b> 5	32,557	• • • • • • • •	14,384	1,967	72,507	d	73.00
1884	404	5,932	413	48,391		12,173	2,819	70,132	2	73 48
1885	519	6,484	22	45,264		4,613	2,945	59,847	7	77 · 62
1886	737	9,579	154	42,261		1,671	4,814	59,210	3	77 . 88
1887	790	675	2	44,580	<b></b>	716	1,370	48,13	3	82.02
1888	384	2,206	168	6,237	<b> </b>	ļ	2,196	11,19	ւ	95 · 82
1889	478	8,002	8,950	40,096	16	1,405	1,003	59,94	5	77 · 61
1890	548	10,378	10,408	26,639	8	4,635	2,356	54,96	9	79 47
1891	292	4,298	1,652	27,418		2,130	3,620	39,41	o	

F-Table showing the Tonnage of the undermentioned Articles cleared downward on the Welland Canal, during a series of Twenty Years, ended 31st December, 1891.

#### VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	44,110	310,090	119,541	3,920		680	1,541	479,882
1872	26,648	231,056	254,534	2,693	7,594	64	2,306	524,889
1873	30,660	345,720	180,042	2,643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953		3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,93
1878	8,854	188,106	185,931	1,217	3,088		2,100	389,29
1879	10,588	271,545	144,276	803	1,196	•••••	2,387	430,79
1880	12,467	240,601	162,891		477		1,418	417,85
1881	9,655	121,393	103,075	252		6	1,371	235,75
1882	12,205	205,876	54,797	537		1,954	225	275,59
1883	13,256	146,741	182,143	975	731	518	10,971	355,33
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,75
1885	13,322	114,090	117,536	618	1,116		1,628	248,31
1886	19,418	146,151	218,897		4,891		14,571	403,92
1887	23,940	210,755	114,938	1,711	12,050		12,149	375,54
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,04
L889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,78
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,96
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,08

<sup>\*</sup> Fiscal.

285, 962 282, 284 286, 286 286, 316 284, 451 188, 723 118 G.-TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in Total. 35,912 36,912 37,000 Ores. Coal. 89,086 40,504 12,888 112,888 8,336 8,336 8,336 6,318 6,318 Tons. Salt. the United States during a series of Twenty Years, ended 31st December, 1891 13,233 23,233 23,233 23,233 23,233 24,233 25 Other Iron. Railway Iron. 234,530 224,336 374,226 374,226 374,226 374,226 37,426 37,426 37,246 37,246 37,246 37,246 37,256 37, Total. Other Articles. 13,201 10,859 11,598 17,225 20,497 26,115 Tons. 222 Tons. Rye. VEGETABLE FOOD. 2,348 2,348 2,348 2,346 2,314 2,314 36 2,314 9,874 882 882 12,050 26,510 27,492 27,492 52,030 Oats. Barley. 2,641 1,603 859 6,519 8,113 91.15 121.25 Com. 121, 88 113, 89 113, 8 Wheat. 30,681 10,482 10,805 8,230 1,881 5,187 3,342 1,316 1,316 Flour. 2,041 1,715 1,715 124 1,759 11,780 8,563 8,563 6,904 6,802 Tons. Year.

H.—Table showing the Tonnage of Vegetable Food carried on each of the Lines of Canals and the two principal Railways, competing for the Carrying Trade between Lake Erie and Tidewater, for a series of Twenty-one Years, ended 31st December, 1891.

Year.	Total on New York Canals.	Total on Welland Canal.	Total on New York Central and Erie Railways.	Quantity cleared at Buffalo and Tonawanda by Erie Canal.	Quantity cleared at Oswego by Canal.	Quantity cleared through the Welland Canal in transit between ports in the United States.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	1,302,613	503,860	1,087,809	786,436	267,815	337,530
1872	1,674,320	538,147	1,870,614	1,317,276	169,818	234,337
1873	1,745,171	579,880	2,036,992	1,432,174	131,765	243,366
1874	1,767,598	647,397	2,791,517	1,157,509	243,325	374,226
1875	1,305,550	417,936	2,343,241	1,017,559	126,763	177,908
1876	1,064,293	409,788	2,875,803	783,331	99,975	162,405
1877	1,408,984	464,181	2,493,683	1,223,100	126,899	180,586
1878	1,912,734	403,403	3,695,764	1,644,301	93,149	128,361
1879	1,833,399	438,564	4,353,617	1,565,543	127,168	87,826
1880	2,371,090	442,182	4,732,385	2,065,184	135,410	48,580
1881	1,116,561	269,395	4,983,722	878,842	115,638	65,285
1882	1,118,776	306,482	3,885,557	864,826	126,804	64,002
1883	1,379,000	372,236	4,422,461	1,191,974	72,507	132,496
1884	1,236,986	305,734	3,639,805	1,078,909	70,132	114,422
1885	1,063,310	273,905	4,105,594	918,352	59,847	118,203
1886	1,489,886	414,812	3,802,262	1,353,591	59,216	172,888
1887	1,552,764	394,971	3,847,766	1,449,984	48,133	157,530
1888	1,166,958	419,786	3,197,734	1,052,834	11,191	189,825
1889	. 1,296,896	542,043	3,654,984	1,155,175	59,945	236,208
1890	1,167,901	519,291	4,336,199	953,397	54,969	275,619
1891	1,092,355	367,177	3,565,381	1,000,171	39,410	253,444

<sup>\*</sup> Fiscal.

55 Victoria.

I.—STATEMENT showing the Quantity of Freight passed down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne during the Seasons of Navigation, in 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889 and 1891.

		CANADIAN	VES	sels.	U	NITED STA	TES V	essels.	7	COTAL,
<b>A</b>		Steam.		Sail.		Steam.		Sail.	Stea	m and Sail
Articles.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	174		432	121,150	41		329 97,257		976 298,55	
	-	Tons.		Tons.		Tons.		Tons.		Tons.
• 1882.										
Wheat Corn Rye Coal Miscellaneous n:erchandise Lumber Ft. B.M. Timber Cub. ft. Staves No.	,	1,673 2,939 1,021,957 125,960 59,600	:	46,201 6,075 51,127 3,744 1,943,568 2,874,066 1,065,233		5,203 3,468 112 1,553 3,969,790	1	87,213 38,360 1,954 27,968 2,605 7,327,483 13,500 104,000	1 :	199,152 55,334 1,954 80,880 10,841 4,262,798 8,013,526 1,228,833
!	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1000	180	68,850	468	130,844	111	68,609	417	127,616	1176	395,929
<b>1883.</b>		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat Corn Barley Rye Oats Coal Miscellaneous merchandise Lumber. Ft. B.M. Timber Cub. ft. Staves. No.		82,761 25,651 8,398 5,238 2,102,292 83,700 32,876	1 :	29,385 21,073 48,329 3,590 3,455,590 3,514,944 1,038,349		5,928 56,146 731 835 13,195 5,287,386		76,715 99,272 735 518 40,388 2,299 5,143,274 70,500 90,000	1 3	144,789 182,142 735 518 731 97,950 24,322 5,988,542 3,669,144 1,161,225
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1884.	173		285	73,057 Tons.	99		364		921	306,738
Wheat		38,859		11,618		Tons. 5,461	-	Tons. 75,474		Tons.
Corn Barley Rye Oats Coal		10,841 90 477 872 497		13,609  28,275		7,963 301		1,911 10,154		118,811 90 477 10,746 39,227
Shingles, firewood and woodenware  Miscellaneous merchandise LumberFt. B.M. TimberCub. ft. StavesNo.		548 2,073 3,393,351 437,356		2,538 3,804 1,68 <b>0</b> ,976 2,107,780 75,000		11,793 8,987,558 33,741	1	30 428 .8,126,215 159,647 301,267	3	3,165 18,103- 2,188,100- 2,704,783- 410,008

# I.—Statement showing the Quantity of Freight passed down the Welland Canal in Canadian and United States Vessels, &c.—Continued.

		Canadian	VES	sels.	U1	NITED STA	tes V	ESSELS.	r	OTAL.
,	8	steam.		Sail.	8	steam.	1	Sail.	Steam	and Sail
Articles.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	199	67,461	347	80,828	81 35,613		350 106,873		977 290,775	
		Tons.		Tons.		Tons.		Tons.		Tons.
1885.										
Wheat		26,025		3,153		6,882		72,478		108,538
Corn		16,046		$\substack{2,462\\228}$		20,589	<i>.</i>	78,439		117,536 228
Dats		11				217		665		882 • 11
Rye		1,005		20,318	] : : : : ·			18,560		39,883
Miscellaneous merchandise		1,941		3,689		1,111		1,086	[	7,827
Shingles, woodenware, &c.' Sawed lumberFt. B.M.	,	223 7,725,105	و	9 3,681,081		53 381,654,	20	58 0,935,270	46	343 723,110,
Square timberCub. ft.	•	601,516	3	2,849,526	`	20,692		113,682	3	3,585,416
Staves No.		104,000		44,000		83,500			1	231,500
FirewoodCords								<del></del>	<del> </del>	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage
:	261	95,928	426	123,297	118	86,937	358	108,344	1163	414,506
1886.		Tons.		Tons.		Tons.		Tons.	<u> </u>	Tons.
Wheat		38,984		30,834		2,937		70,019		142,774
Com		48.547		33,315		36,852	1	99,644	1	218,358
Barley						<b></b> .		572	1	572
Oats		450		41		4,331	}	459	}	4,837 608
Rye		450		158				• • • • • • • • • • • • • • • • • • •	l	000
Coal		4,007		45,018				11,647		60,672
Miscellaneous merchandise		2,926		6,728	[	23,687		281		33,622
Shingles, woodenware, &c. Sawed lumber Ft. B.M.	١.	329 3,915,390	· · · · i	5,719,631	١,	252 8,953,478	1/	215 8,405,961	1 40	1,152 9,994,460
Square timberCub. ft.		564,827		2,335,205	١`			35,500		2,935,532
StavesNo.	ì	221,280	]	697,933	<b>]</b>					919,213
Firewood Cords				390	-				ļ	390
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage
	250	86,344	372	101,745	107	94,029	163	46,152	892	328,270
1887.		Tons.		Tons.		Tons.		Tons.		Tons.
			1	01 010	1	000	]	40.100		
Wheat	}	80,757 12,341	<b>i</b>	81,652 14,775		200 65,981		46,186 20,582	1	208,796 113,679
Barley	1	12,0711	١			9		575	i	584
Oats			``	1,376	1	11,098	1	279	i	12,753
Pease		<b>.</b>		362		· · · · · · · · · · ·		• • • • • • • • • •	.	362
Rye		1,436	····	25,165		• • • • • • • • •		9 109		99 700
Miscellaneous merchandise		2,179	1	4,609		24,395	1	2,108 415		28,709 31,598
Shingles, woodenware, &c.		1,716	1	1.081	1	26	1	410	.]	2,823
<b>Sawed</b> lumber $\mathbf{Ft.}$ B. $\mathbf{M.}$		2,894,767	1	2,329,728	1	4,161,349	1	5,091,355	3	4,477,199
Square timberCub. ft.		498,770	1	1,285,594		• • • • • • • • • • • • • • • • • • • •				1.784.364
Staves	$ \cdots $	299		266,697 466	1	• • • • • • • • • • • • • • • • • • • •	1;	· · · · · · · · · · · · · · · · · · ·	1	266,697
		ZMM		400					1	765

I.—Statement showing the Quantity of Freight passed down the Welland Canal, in Canadian and United States Vessels, &c.—Continued.

		Canadian	VES	SELS.	U	nited Sta	TES T	Vessels.		POTAL.
		Steam.		Sail.		Steam.		Sail.	Stea	m and Sail
Articles.	No.	Tonnage.	No.	Tonnage.	No.	No. Tonnage.		Tonnage.	No.	Tonnage.
	242	86,838	339	93,450	114	104,505	219	60,500	914	345,293
		Tons.		Tons.	_	Tons.		Tons.	-	Tons.
1888.					-					
Wheat		45,481		60,379		1,353	]	40,779		147,992
CornBarley		38,620		14,251		71,988		71,175 · • • • • • • • • • • • • • • • • • • •	ļ. <i>.</i>	196,024
Oats Pease		672		54		24,967 57	l	1,311	1	26,950 111
•			<b> </b>		1	71		632		703
Coal		1,603 2,165	1	20,064				4,208		25,875
Miscellaneous merchandise Shingles, Woodenware, &c.		2,165 66		3,291 84		$22,719 \\ 141$	i	$\substack{3,722\\6}$	l	31,897 297
Sawed Lumber . Ft. B.M.		5,262,700		1,977,905		4,451,360	1	2,539,672		4,230,637
Square TimberCub. Ft. Staves		687,728 106,972		1,555,307 211,436		19,000		34,000	'	2,262,035 352,408
FirewoodCords		179		201						380
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	317	106,048	427	118,071	208	172,873	268	92,442	1220	489,434
1889.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		38,127		28,054		1,679	ĺ	46,767	ĺ	114,627
Corn		60,218	1	43,819		152,858	}	96,700		353,595
Barley		320	· · · · ·	••••••		25,347	• • • •	2,145		27,812
Pease		. <b></b> .		· • • • • • • • • • • • • • • • • • • •				<b>4,13</b> 0	ļ	
Rye		948 3,976	}	$\begin{array}{c} 634 \\ 21,148 \end{array}$		336 712	• • • •	1 664		1,918 27,500
Miscellaneous merchandise		6,339		5,749		25,082		1,664 3,030	•	40,200
Shingles, Woodenware, &c.		E #00.00G	1	1,632,330		1 700 050	,	51		52
Sawed LumberFt. B.M. Square TimberCub. Ft.	,	5,789,226 924,645		2,9 <b>34</b> ,989	1	1,792,850	2	1,026,211	3	0,240,617 3,859,634
StavesNo.		35,700		194,649						220,349
FirewoodCords	. • . • •	• • • • • • • • • • • • • • • • • • • •		46		•••••••	• • • •	• • • • • • • • • • • • • • • • • • • •		46
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	342	110,056	443	117,400	202	204,542	142	50,622	1129	482,620
1890.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat			1		1					118,694
		43 308	l	35 633	1	7 514		20 020		
Corn		43,308 63,095		35,633 51,439		7,514 172,756		32,239 40,104	ļ	327,394
CornBarley		63,095		51,439		172,756 3,304				6,519
Corn						172,756 3,304 27,030		40,104		6,519 27,582
Corn. Barley. Oats. Pease. Rye.	••••	63,095 479 1,121		51,439 73		172,756 3,304		40,104 3,215		6,519 27,582 14 1,121
Corn. Barley. Oats. Pease. Rye. Coal.	••••	63,095 479 1,121 1,049		51,439 73 21,732		172,756 3,304 27,030 14		40,104 3,215		6,519 27,582 14 1,121 23,396
Corn. Barley. Oats. Pease. Rye. Coal. Miscellaneous merchandise Shingles, Woodenware, &c.	••••	63,095 479 1,121		51,439 73 21,732 5,683 1,266		172,756 3,304 27,030		40,104 3,215 615 2,510		6,519 27,582 14 1,121
Corn. Barley. Oats. Pease. Rye. Coal. Miscellaneous merchandise Shingles, Woodenware, &c. Sawed Lumber . Ft. B. M.		479 1,121 1,049 3,146 15 5,921,240		51,439 73 21,732 5,683 1,266 5,167,201		172,756 3,304 27,030 14 32,194 8 0,274,335		40,104 3,215 615 2,510 4,290,800		6,519 27,582 14 1,121 23,396 43,533 1,289 5,653,576
Corn. Barley. Oats. Pease. Rye. Coal. Miscellaneous merchandise Shingles, Woodenware, &c.		479 1,121 1,049 3,146 15		51,439 73 21,732 5,683 1,266		172,756 3,304 27,030 14 		40,104 3,215 615 2,510		6,519 27,582 14 1,121 23,396 43,533 1,289

I.—Statement showing the Quantity of Freight passed down the Welland Canal in Canadian and United States Vessels entering the canal at port Colborne during the Seasons of Navigation in 1891.

	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage
ARTICLES.	256	256 107,575		68,061	241	241,317	130	50,063	800	467,016
		Tons.		Tons.		Tons.	Tons.		Tons.	
1891.										
Wheat		62,859 20,510 390		56,953 9,550		36,425 137,852 5,444 50,212		33,853 17,039 4,061 1,076		190,090 184,951 9,505 51,288 390
Rye. Coal. Miscellaneous merchandise Shingles, woodenware, &c.		29,581 158 8,369		11,296 20,388 6,007		16,361 37,537		7,343 3,851 2,578 4		64,581 24,397 54,491
Sawed lumber. Ft. B.M. Square timber. Cub. ft. Staves. No. Firewood. Cords.		4,268,874 449,406 1,000		4,648,824 566,109		8,067,351		18,745,628		5,730,677 1,015,515 1,000

Dimensions, Depth of in 1891.	5	Date of Name of Vessils.	1891.	Nov. 14 Myles.		April 27 Gov. Smith.  do 29 A. McVittie.  May 6 W. J. Avarill.  do 11 W. A. Haskill.  do 12 F. H. Prince.  do 13 Gov. Smith.  do 29 Predict.  do 29 Predict.  do 29 Predict.  do 29 Predict.  do 29 W. J. Averill.  do 25 W. J. Averill.  June 10 regon.  do 10 W. A. Haskill.  do 19 W. A. Haskill.  do 21 Gov. Smith.  do 21 Gov. Smith.  do 22 H. R. James.  do 25 H. R. Prince.  do 26 H. R. James.  do 27 H. R. Langdon.  do 28 H. R. James.  do 28 H. R. James.  do 28 H. R. James.
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Water		Length over		179		240 240 240 240 240 240 240 240 240 240
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	nons.	Depth of hold.	L. Fft. ii	6 15		
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pass	Depth of Water on Arrival.	Aft.	Ft. Ft. in. Ft. in. Ft. in. Ft. in.	3 14	UNITED	
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l through the E VADIAN STEAM	nal Car			:	STEAM	64, 23 64, 23 65, 21 65, 21 65, 21 65, 23 65, 23
the Enlarged Welland	Original Cargo to Canal	Rye	Bush.	:	1 1	
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god Welland		Rolling freight	Tons. I	<del></del>		28 28 28 28 28 28 28 28 28 28 28 28 28 2
Canal	We	Wheat.	Bush.	4,293		
	Lighterage over Welland Railway	Com.	Bush.	:		9,089 7,748 7,637 7,637 1,638 10,888 11,828 1,1828
	e over ailway.	Rye.	Bush. Tons.	:		
the Season		Oate.	lons. Te	:		1966
	Lighte	Wheat.	Tons. Tons.	123		(
of Navigation	Lighterage in Tons.			<u>:</u> :	-	2212 2212 222 223 223 223 224 224 224 225 225 226 226 227 227 227 227 227 227 227 228 238 238 238 238 238 238 238 238 238
avigation	Tons	Rye.	Tons. Tons	<del>-</del>	-	195

J.—Statement of Large Class Vessels Lightened at Welland Railway Elevator at Port Colborne, &c.—Continued.

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en O Staro S	4
Tons. Rye. E.	297
Lighterage in Tons. Rye. 1389 223 238 232 233 24 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	147
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E	<b>3 5</b>
Bush Rye.	2,742
Lighterage over Welland Ry.  Bush. Bush. Bush. Tons.  1,628 3,290 1,288 1,1645 1,445 1,1645 1,238 1,238 1,379 1,379 1,349 1,370 1,347 1,445 1,1645 1,238 1,319	5,221
Bush Wheat.	
Continued.  1. Contin	319
38 1, 1046 1, 1499 1, 210 3, 228 3, 238 1, 210 3, 2	1,156 444 32i
Bush. T T	39,473
Original Corn, 1978 86, 831 1495 86, 831 1405 86, 831 1405 86, 831 1405 86, 831 1405 86, 831 140	28,988 35,434 
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	183	247
218 222 222 223 206 306 207 273 203 203 203 204 204 204 204 204 204 204 204 204 204	4,369	
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	чЯпо	Total Cargo thr Canal.	Tons.	1,075		1,752	1,718	1,546	1.581	1,757	1,703	1,683	1,472	1,568	1,714	1.703	1,564	1,742	1,633	1,746	1,674	
luded.		Holling freight	Tons.	:	VESSELS—Continued.					330	516		340		323	689	800 2000				147	
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CANADIAN	Grain Cargo and Rolling Freight through this Canal	.staO	Tons.	<u>:</u>	UNITED ST		922		<u>š</u>			330	320	:	<u>: :</u>	:	:		937		<b>8</b> :	_
	Cargo an	. Вую.	Bush.		UNI				:						: :	:			:			
	Grain (	Corn.	Bush.			61,629	8,73 8,83 8,83	43,858	2,4 8,6	51,309	27,718	38,061	32,55	44,731	41,70	43,325	35,438 25,438	52,394	13,340	55,323 51,743	36,535	
		Wheat	Bush.	35,818					:							:	:		:			_
		Name of Vessels.		Nov. 14 Myles	-	Gov. Smith	28 H. R. James	W. J. Averill.	J. K. Langdon	12 F. H. Prince	13 Gov. Smith	H. R. James	22 Pueblo.	W. A. Haskill.	1 Uregon 8 H. R. James	10 J. R. Langdon	13 W. J. Averill	Gov. Smith.	22 F. H. Prince	24 H. K. James	⋖⋗	
		Date of Arrival	1891.	Nov. 14	6	April	<b>න</b> දි		9 <del>(</del>		do 13		8 E	ි දි ද	00	=	දි ද		٠	8-8 8-8	88 -	•

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969	::	:	::		:	. :	:	: 983 3	1.413		1,392	1,112		1 328	: :	:		: :		990		1 095	663				815	:	:	:		:	: :	. 1,146
369	::	:	::			. :			1.413		1,392	1,112		1.328	: :	:		: :		88		1 095	663				815	- : : : : : : : : : : : : : : : : :	:	:		:	: :	1,146
969	::	:				. :			1.413		1,392	1,112		1.328	: :	:		50,223		000		1 095	663		883		815		:	:		:	: :	1,146
	298						:	:							998	913	96 791	50,223			:	1,237			:	:			535		1.219		896 7770	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237			:	:			535		1.219		896 7770	
	280	107	990	000	445	544	£77	986	0.00	42,400		200	962	49	347 366	913	213	50,223		47.928	:	1,237			:	:			535	:	1.219		: :	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237			:	:			535		1.219		896 7770	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237			:	:			535		1.219		896 7770	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237			:	:			535		1.219		896 7770	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237		39,624	16,000	:			26,723 535		1.219		896 7770	
488 974	280	107	990	000	445	544	£77	986	0.00			200	962	49	347 366	753 561	213	50,223			:	1,237			16,000	:			535		1.219		896 7770	
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286			1.219		896 7770	
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
41,488 16,974 28,287	28,620	12, 107 771 56, 314	38,066	49,850	50,000	50,644	43,477	32,686	02,210	42,400	9,631	50.558	45,226	47,032	48,647	28,753 561	30,213	50,223	39,067	47,928	49,515	1,237 14,702 1,237	21.505	39,624	16,000	700,000	14,875	52,286		31 611 311	1.219	792.04	7,673	1
12 F. H. Prince 13 Gov. Smith. 22 A. McVittie.	24 W. J. Averill 28,082 28,082	29 W. A. Haskill. 771 31 Gov. Smith 56.314	4J. O. Ford.	6 J. K. Langdon 49,800	3 A. McVittie 50 3000 50 445	15 Jno. Rugee.	18 F. H. Prince 43,477	20 Gov. Smith 32,686	20 11. R. James	27 W. J. Averill	30 A. McVittie 9,631	3. Jno. Rugee	6 Gov. Smith 45,226	7 F. H. Prince 47,032	12J. R. Langdon 48,647 366	14 W. J. Averill. 28,753 561 15 A. McVittie 913	22 W. A. Haskill 30,213	23 John Rugee. 50,223	24 Gov. Smith 39,067	30 H. R. James 47,928	1 J. R. Langdon 49,515	5 A. McVittie 1,237 1,237	9 W. J. Averill 21.505	12 W. A. Haskill. 39,624	15 Gov. Smith	20 H. K. James 53,050	25 A. McVittie 14,875	29 W. J. Averill 52,286	5 Gov. Smith 26,723 535	7 W. A. Haskill. 1,106 31 611 3111	1.219	792.04	896 7770	1
41,488 16,974 28,287	24 W. J. Averill 28,082 28,082	29 W. A. Haskill. 771 31 Gov. Smith 56.314	4J. O. Ford.	6 J. K. Langdon 49,800	3 A. McVittie 50 3000 50 445	15 Jno. Rugee.	18 F. H. Prince 43,477	20 Gov. Smith 32,686	20 11. R. James	27 W. J. Averill	30 A. McVittie 9,631	3. Jno. Rugee	6 Gov. Smith 45,226	7 F. H. Prince 47,032	12J. R. Langdon 48,647 366	14 W. J. Averill. 28,753 561 15 A. McVittie 913	22 W. A. Haskill 30,213	23 John Rugee. 50,223	24 Gov. Smith 39,067	30 H. R. James 47,928	1 J. R. Langdon 49,515	5 A. McVittie 1,237 1,237	9 W. J. Averill 21.505	12 W. A. Haskill. 39,624	15 Gov. Smith	20 H. K. James 53,050	25 A. McVittie 14,875	29 W. J. Averill 52,286	5 Gov. Smith 26,723 535	7 W. A. Haskill. 1,106 31 611 3111	11 H. R. James 1.219	12 Samuel Marsdall.	7,673	22 Escanaba   1

J .- STATEMENT of Large Class Vessels Lightened at Welland Railway Elevator at Port Colborne, &c. - Continued. UNITED STATES STEAM VESSELS—Continued.

	Date of Arrival.	1891.	Nov. 25 W do 28 Gc do 29 Jo do 29 Jo	64		April 30 Ba Oct. 7 R.	
	Name of Vessel.		Nov. 25 W. J. Averill. do 28 Gov. Smith do 29 John Rugee. do 29 Denver			April 30 Baltic	
	Wheat.	Bush.		34,144		58,189 43,177	101,366
Grain Ca	Согп.	Bush.	18,835 15,934 45,434	2,579,286			
Grain Cargo and Rolling Freight through this Canal.	-Rye.	Bush.		86,954			
Rolling ]	.staO	Tons.	1,249	27,325	UNITE		
Freight	Wheat.	Tons.		1,025	D STA	1,746	3,042
through	Сопъ.	Tons.	528 447 1,273	72,256	UNITED STATES SAILING VESSELS		
this C	Rye.	Tons.		2,436	VILLING	::	
anal.	.atsO	Tons.	1,249	27,325	VESS.		
	tdgiert gaillog	Tons.	355	20,167	ELS.		:
ų <i>S</i> no	Total Cargo thre Canal.	Tons.	1,489 1,600 1,249 1,273	123,209		1,746	3,042
through	retaW to figed lidabiM lanaO	Ft. in.	ដដែន មិន មិន មិន			13 11 13 11	
Desti	Frem		Chicago do do			Chicago Duluth	
Destination.	T <sub>0</sub>		Ogdensbur do do do			Ogdensburg. Kingston	
Re ber	Cost of Lighters	Cts.	<u> </u>			% : 01 61	
-3dSiA a	Time occupied i	H. M	4000 8888 8888			73.4 00	

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, Febuary, 1892.

K.—Statement showing the Quan and St. Lawrence Canals, to 1 1889, 1890 and 1891.	Quantity of Freight passed Eastward, from Lake, to Montreal, during the Seasons of Navigation i	reight p during	assed Eath	stward, fi	from Lake Erie, through Navigation in 1881, 1882,	e Erie, t in 1881,	hrough , 1882, 1	the whol 1883, 1884	e length t, 1885, 1	whole length of the Welland 1884, 1885, 1886, 1887, 1888,	Velland 7, 1888,
	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
Articles.	Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.											
Iron, pig. do all other. Skone for cutting. A polee	858	459 99	20		7 513	15		418			37.1
Barley Flour. Flour. 99 Meal, all kinds	69,066	269 17,474 5,920	109,191 5,089 1,188	38 55,552 9,659	2,874 16	116,517 2,934 125	24,609 6,140 87	66,443 3,865 100	195,350 6,841 148	139,798 3,065 222	52,539 3,324 67
Oats. Peace. Reace. Seeds, all kinds.		1,269	726 518	872 483 477	11	809	362	123	1,284 8	1,120	390 64,978
Tobacco, raw. Wheat. Wheat. Wheather agricultural products, vegetable.	77,061	161,692 1	76,879	84,822	52,157	86,815	160,063	93,915	70,815 798	75,515	159,785
Horse, same, norms and noors  Hord and lard oil.  Pork. All other agricultural products, animal.	5,141	206 278	212	318	g 84	88 88 88 88	418 29	22 %	1,220	221 117	201
Total, Class 3	157,196	187,609	193,393	152,171	100,058	208,148	191,759	165,113	276,813	220,545	281,762
Ashee Furniture. Glass, all kinds. Molasses. Nails. Oil. Paint.	E 4.24	01198 8 54-11	ထစ ဆို	38 10 12 78	97 5	40 % 91	9 113	₩ e1 e2	107	70	<b>Q</b> 67-1

K.—Statement show	wing the	Quantity	r of Frei	enr showing the Quantity of Freight passed Eastward, from Lake Erie, &c.—Concluded.	d Eastw	ard, from	Lake E	ie, &c.—	Conclude	d.	
	1681.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
Articles.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Concluded.				,							
Sugar Stone, wrought. Turpentine. Whiskey, beer and other spirits Merchandise not enumerated		\$ 2 8 51	258 882	317	: : : : : : : : : : : : : : : : : : : :	8 901	12 12 72 72 72	105	88	83	106
Total, Class 4	415	1,092	412	480	138	193	236	198	324	246	428
Class 5.  Sawed lumber. Sawed lumber. Staves, pipe and barrel. do West India and pipe. Timber, square, in vessels. Woodenware.	2,849 1,001 1,198 3,227 3,250 76	3,638 2,356 1,130 1,574 1,149 205	6,311 2,024 451 250 2,314 199	37 7,531 200, 863, 7,365 68	128 19,946 856 856 11,128	18,707 332 287 1,330 15,410	88 7,001 184 131 14,890	40 5,175 139 1,623 11,586	6,118 270 9,302	3,679	3,908
Total, Class 5Special Class.	11,602	10,059	11,589	16,064	32,772	36,173	21,839	18,588	15,690	3,580	9,588
Coal Grand total	169,213	198,835	205,394	168,715	132,968	244,514	213,834	183,899	292,827	224,371	291,776

L.—Statement showing the Quantity of Freight and Welland Canals to Lake Erie during the 1890 and 1891.	ty of Fre	eight pass g the Sea	passed Westward from Montreal, threesons of Navigation in 1881, 1882,	ward from Navigatio	m Montre in 1881	al, thros	gh the v 1883, 188	rhole len 4, 1885,	gth of t 1886, 18	Quantity of Freight passed Westward from Montreal, throwen the whole length of the St. Lawrence ake Erie during the Seasons of Navigation in 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889,	wrence 1889,	
	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Bricks. Cement and water lime. Clay, lime and sand. Fish.	88 E 81	883 82 83 84 84 84 84 84 84 84 84 84 84 84 84 84	78 508 56	200 219	44	498 1	1,740 134 95	187 1,177 1	28.3	<u>జ్ఞ్య జ్ఞ</u>	2,380 206 7	
Iron Railway Iron Railway do Pig do all other. Salt	16,476 8,131 900 5,175	11,246 3,575 686 1,820	8,725 2,460 5,824 5,824	2,031 43 366 802	12,356. 23 290 1,574	6,629 10 76 5,609	153 368 1,997 4,197	9,148 573 297 3,599	15,513 250 290 4,216	20,02 2,03 2,044,7 2,044,04 2,04 2,04 2,04 3,04 4,04 4,04 4,04 4,04 4,04 4,04 4	2,855 112 112 5,865 4,391	
	356	84	\$ 2° 28				4	æ . %	25.	9		
Agricultural Products not enumerated, vegetables Hornes	69	68	প্ত	F	<b>F</b>			* **	61 8		22	
Lard and lard oil  Pork. Wool All other articles not enumerated		8		24	60	•	ত কক	22		2882		
Total Class 3	81,871	18,469	17,994	3,707	14,428	12,896	8,702	15,244	21,496	28,674	11,071	
Class. 4. Ashes, pot and pearl Crokery and earthenware	*	116	137	47	28 10 10	83-	164	988	211	25	321	
	9.7	48,58	48500	1381	\$3	108-8	.പ <u>ജ</u> പ	-2	12 98	83	. 81	~

L.—Statement sh	ENT showinfi the Quantity of Freight passed	Quantit	y of Fre	ight pass		Westward from Montreal, &c.—Concluded.	Montre	al, &c.—(	%oncluded		
	1881.	1882.	1883.	1884.	1885.	1886.	. 1887.	1888.	1889.	1890.	1891.
Arddes.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Concluded. Nails. Oil in barrels. Paint. Pitch and tar.	258 24 1	576 119 124	1,085 1,085 103 103 50	160 80 161 1	205 10 24	389 82 36 5	147 88 1	, 578 22 50	736 9 49	453 11 13 13	56 26 26 26 26 26 26 26 26 26 26 26 26 26
Kosin Sods, seh Seel.	3,177	1,040	1,801	1,427	164	975	1,116	1,196	766	120	377
Stone Wrought. Sugar Tin	929	465 641	375	1,832	64 10	316	2,225		480	551 40 60	######################################
of unpending. White lead. Whiting. Whiskey, beer, &c. Merchandise not enumerated.	10 10 98	14 5 564 1,992	19. 791 2,608	384	259 712	174	287 619	2 228 1,259	33 124 1,422	350 350 1,180	3 50 294 810
Total Class 4	5,758	6,093	8,957	5,687	1,725	3,678	5,373	4,066	3,873	3,277	2,989
Class 5.											
Barrels, empty. Lumber, sawn, in vessels Woodenware.	\$ 8	138 178	179	က		227			5		
Total Class 5	99	328	497	3	2	122			2		
Special Class.		, :	<b>4</b>	88				:	:	:	
Grand Total	37,190	24,881	27,488	9,425	16,155	16,801	14,075	19,\$10	25,370	31,951	14,060

	1880.	1881.	1882	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.
ARTICLES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 3.												
Bricks Cement and water lime	83		667	1			<b>48</b>	64	4		4 : :	
Iron, railway.		62	114	242 242 242	9		.34			520	-	10 10 494
Stone for cutting	258		oc	<b>28</b>	15							
Barley 69 Corn.	16,122	30,031	537 32,433 107	735 66,128 041	53,707	63,229	93,503	1,709 83,431 11,780	2 102,974 8,563	147,045 5,017	6,519 180,842 9,204	8,113 127,494 6,802
Hay, pressed			1	8,579	113 8,170		13,201	10,726	11,598	17,224	20,482	36,096
Oil cake. Oats	968			731	9,874	883	4,790	12,050	26,510	27,492	27,080	52,823
Forexores Seeds, all kinds Wheat	30,611	34,320	90,227	662 54,282	511 40,956	53,235	53,258 23,258	37,678	179 48 39,999	39,229	135 31,527 14	256 32,097 42
Agricultural products, vegetatore Hides and skins, &c Lard and lard oil, &c. Meaks, other than pork.			) <del>-</del>	800 5 2 3 3	£7 8 € 7 +		414 13 100 106	170 180 180 180 180 180 180 180 180 180 18	39 119 124			
Sheep					<b>-</b> :		1,125	<b>98</b>	18	462		1,237
Total, Class 3	47,309	64,447	64,129	138,782	115,092	117,470	174,369	157,820	189,986	237,188	275,893	255,553
Class 4.												
Agricultural implements		<b>છ</b> 4	- 1		<u> </u>		55	° ₹	- 8	1	<b>.</b>	

Articipae	1880.	1881.	1862	1883.	1884.	1886.	. 1886.	1887.	1888.	1889.	1890.	1891.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Class 4—Concluded. Chass, all kinds Nails Oil, in: barrels Soda, seh Recel		102	66 	206 206 6	188 88 88 88 88 88 88 88 88 88 88 88 88		940	20	ev ev		60	
Stone, wrought. White lead. Whisey, beer and all other spirits Merchandise, not enumerated.	•	98 84 64	88 91 91 91	87 5 156 941	7 28 481	ব	38 21 824	63 469	151	2 190 1,679	228 1,822	1,865
Total, Class 4	207	189	1,237	1,479	812	5	916	573	1,638	1,902	2,075	2,041
Lamber, sawn, in vessels Hoops Skingles Staves, barrel Woedenware, &c.	33,555	30,462	34,182	¥ 84 82 82 82 83 83 83 83 83 83 83 83 83 83 83 83 83	43,713	44,668	43,776	29,845	28,333 6 82 141	55,074	38,030	45,504
Total, Class 5	\$3,565	30,466	34,234	34,279	43,800	44,779	44,241	29,871	28,562	55,458	38,038	45,508
Coal Stone not suitable for cutting Kryolite	871	1,164	10,686	5,372	4,893	4,974	5,400	1,163	878	1,124	615 18 1,620	1,382
Total, Special Class	871	1,164	10,686	5,372	4,293	4,974	6,400	1,163	878	2,805	2,253	3,155
Grand Total	81,962	96,266	110,286	174,912	163,997	167,225	224,916	189,427	221,064	297,353	318,259	306,257

N.—Statement showing the Number of Vessels and their Cargoes of Wheat, from ports west of Port Colborne to Montreal; the Quantity transhipped at Kingston, and the Quantity of each Cargo, through the St. Lawrence Canals, during the Season of Navigation in 1891.

	Names of Vessels.	Original Cargo through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canal.
		Tons.	Tons.	Tons.
Canadian steam	ner "Acadia".	480		480
do	do	653	148	505
do	do	501		501
do	"Alma Munroe"	662	237	425
do	do	600	198	402
do	do	661	252	409
do	"Canada"	547	215	332
do	do	549	216	333
do	do	549	246	303
do	do	540	246	294
do	do	528	233	295
do	" Celtic "	510	232	278
do	do	520		301
do	do	525	232	293
do	do	519	224	295
do	do	515	223	292
do	do	486	277	209
do	" Cuba "	570	185	435
do	do	563	157	406
do	"Glengarry"	648	312	336
do	"Lake Michigan"	511	210	301
do	do	540	221	319
do	do	525	219	306
do	do	374	211	163
	g vessel "Glenora"	1.396	751	645
do	do	1,401	747	654
do	"John Gaskin"	1,090	447	. 643
To	tal	16,963	6,589	10,155

Number	of cargo of wheat	27	
Quantity	through Welland Canal to Kingston	16,963 T	ons.
do	transhipped at Kingston	6.589	"
do	transhipped at Kingstontaken to Montreal in vessels in which it arrived at Kingston	10,155	"
do	remaining at Kingston	219	"

N.—Statement showing the Number of Vessels and their Cargoes of Corn and Pease from ports west of Port Colborne to Montreal; the Quantity transhipped at Kingston, and the Quantity of each Cargo through the St. Lawrence Canals, during the Season of Navigation in 1891.

	Names of Vessels.		Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals.
		Tons.	Tons.	Tons.
Canadian stear do do do do do do do	mer "Acadia" do "Alma Munroe". do "Celtic". "Cuba" do do Total.	495 560 476	620 142 495 156 560 222 476 196 476 184 569 174 460	
•	PEASE.		1	1
Canadian steam	mer "Lake Michigan"	390	137	253
Quant	per of cargoes of corn.  bity through Welland Canal to Kingston  transhipped at Kingston  to Montreal in vessels in which it arrived at Kingston		4,161 1,308	do

N.—Statement showing the Number of Vessels and their Cargoes of Ryc from ports west of Port Colborne to Montreal; the quantity transhipped at Kingston, and the Quantity of each Cargo through the St. Lawrence Canals, during the Season of Navigation in 1891.

Names of Vessels.	Original Cargo through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals.
	Tons.	Tons.	Tons.
anadian steamer "Alma Munroe".	483	190	293
do do	667	270	397
do "Canada"		199	304
do "Celtic"	504	224	280
do "Cuba"	585	260	325
do do	609	193	416
do do	560	182	378
do "Lake Michigan"	492	210	282
do do	504	204	300
do do	484	204	280
do do	713	252	461
Total	6,104	2,388	3,716

RECAPITULATION of the Number of Vessels passed down the Welland Canal with Cargoes of Grain to Kingston, the quantity transhipped and quantity taken to Montreal, for the season, 1891.

					Number of Cargoes.	Total.
Corn Pease	• • • • • • • • • • • • • • • • • • • •	otal		***************************************	27 8 1 11	477
		Otal	• ••••••	••••••••••		47
Quantity do do do	of wheat three corn pease rye	ough the Welland Ca do do do	anal bound for Mont do do do	real	Tons. 16,963 4,161 390 6,104	Tons.
	T	otal through Wellan	d Canal			27,618
When Corn Pease	at	transhipped at King			6,589 1,308 137 2,388	10,422
		cargoes taken to Mo	ontreal in vessels in	which it arrived		
V C I	orn				10,155 2,803 253 3,716	
		otal quantity to Mor quantity remaining a				16,927 269
	т	'otal				27,618

O.—STATEMENT showing the Quantity of Grain passed down the Welland Canal to Kingston in Canadian and United States Vessels entering the Canal at Port Colborne during the Season of Navigation in 1891.

	Canadian Vessels.				United States Vessels.				. ,	· Total.	
Articles.	Steam.		Sail.		Steam.		Sail.		Steam and Sailing.		
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage	
	129	48,836	80	38,397	54	35,100	23	12,734	286	135,067	
•	Tons.		Tons.		Tons.		Tons.			Tons.	
CornPease		20,283 390		10,484		20,752		5,807		57,326 <b>390</b>	
Rye		30,071 60,723		12,496 56,217		16,361 28,325		7,343 11,565		66, <b>271</b> 156,830	
		111,467		79,197		65,438		24,715	-	280,817	

			Tons.
129 c	argoes i	n Canadian steam vessels, total quantity	111.467
80	go	do sailing do do	
54	do	United States steam vessels, total quantity	65,438
23	do	do sailing do do	TA

# P.—Total Quantity of Grain arrived in Kingston in vessels which passed down the Welland Canal during the season of navigation in 1891:—

Summary.	Tons.	Total Tons.
Canadian steam vessels, 129 cargoes of grain	111,467 79,197	
Total in Canadian vessels		190,664
United States steam vessels, 54 cargoes of grain	65,438 24,715	
Total United States vessels		90,153
Total in Canadian and United States vessels	 	280,817
Distributed as follows:—  3 cargoes taken to Montreal in Canadian vessels without breaking bulk  44 do arrived at Kingston in Canadian vessels with an aggregate quantity of  Transhipped	26,177 10,422	1,441
Quantity taken to Montreal in vessels in which it arrived at Kingston  Vessels arrived at Kingston and discharged all of their cargo as follows:—  162 cargoes in Canadian vessels		15,755
Aggregate quantity discharged	253,199	
Quantity transhipped to Montreal	249,233	
Total quantity transhipped to Montreal		259,655
Transhipped to Cardinal         2,725           Remaining at Kingston         1,241		3,966
Total	<b>}</b>	280,817

#### -Combarative Statement of the Quantity of Grain passed down the Welland Canal to Kingston for the Seasons of 1890 and 1891.

	1890.		1891.	
•	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston in Canadian vessels do do do in United States	203 35	184,275 35,560	209 77	190,664 90,153
Total	238	219,835	286	280,817
Quantity transhipped at Kingston in Canadian vessels for Montreal.  Quantity taken to Montreal in vessels in which it arrived at Kingston.		185,170 27,497		259,655 17,196
Quantity transferred in cars and taken to Montreal by rail  Quantity remaining at Kingston		972 1,089 5,107		1,241 2,725
Total		219,835		280,817

R.—Statement showing the Quantity of Oats arrived at Montreal by Canal and Rail during the Years 1884 to 1891, inclusive, and the total shipments for the same period.

Years.	Receipts vid Lachine Canal.	Receipts vid C. P. R. and G.T.R. is reported as follows.	Total Receipts at Montreal.	Shipments vid River St. Lawrence and G. T. R.	
1884. 1885. 1896. 1887. 1888. 1889. 1890.	Bushels.  297,326 678,866 650,910 341,568 123,213 119,958 200,896 102,162	528,082 550,425 595,756 452,748 542,007 812,750 1,448,187 1,616,004	Bushela.  825,368 1,229,291 1,246,666 794,316 665,220 982,708 1,649,083 1,718,166	Bushels.  246,643 1,463,932 2,033,098 509,010 70,809 88,910 244,380 791,691	

S.—The Quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1891, inclusive, and the amount of Tolls Collected thereon, is as follows:—

Year.	From Canadian Ports to Canadian Ports.	From United St. United St.	ates Ports	Fro United Sta to Canadia	ates Ports	Total Tons.	Amount of Tolls Paid.
	Up.	Up.	Down.	Üp.	Down.		20 cents a ton.
1885 1886 1887 1887 1888 1899 1890		Tons. 193,442 184,564 81,617 172,381 226,352 116,616 185,190	Tons. 4,974 5,400 1,163 878 1,124 615 1,382	Tons. 10,321 22,187 26,775 17,365 12,036 17,280 17,374	Tons. 31,350 49,724 25,968 27,183 25,931 22,781 20,698	240,087 261,875 135,523 217,907 265,443 202,372 224,644	\$ cts. 48,017 40 52,375 00 27,104 60 43,561 40 53,188 60 38,222 30 44,928 20

NOTE.—Tolls on Soft Coal passed down the Welland Canal, during the Season of 1890, were reduced from 20 to 10 cents a ton, per O.C., 11th May, 1890, for the season of 1890 only, the rate for 1891 being 20 cents a ton for passage either eastward or westward.

The Quantity of Coal passed down (or eastward) through the Welland Canal in Canadian and United States Vessels for the Years 1885 to 1891, is as follows:—

Year.	i	7 Carriéd n 1 Vessels.	, - ,	Carried n tes Vessels.	Total Quantity Carried in Canadian and United States Vessels.		
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	
1885. 1886. 1887. 1888. 1889. 1890.	17,764 43,477 25,023 23,853 24,679 22,781 20,546	\$ cts. 3,552 80 8,695 40 5,004 60 4,770 60 4,935 80 2,365 60 4,109 20	18,560 11,647 2,208 4,208 2,376 615 3,851	\$ cts. 3,712 00 2,329 40 421 60 841 60 475 20 61 50 670 20	36,324 55,124 27,131 28,061 27,055 23,396 24,397	\$ cts. 7,264 80 11,024 80 5,426 20 5,612 20 5,411 00 2,427 10 4,879 40	

T.—Statement showing the Quantity of Coal passed through the whole length of the St. Lawrence Canals during the Seasons of 1885 to 1891, inclusive.

Year.	Quantity passed up Free of Tolls.	Quantity passed down to Montreal.	Total Quantity passed up and down.	Amount of Tolls on Quantity passed down to Montreal.	
	Tons.	Tons.	Tons.	\$ cts.	
1885	5,035	122,829	127,864	18,424 35	
1886	3,301	118,802	122,103	17,820 70	
1887	7,579	121,618	129,197	18,242 70	
1888	8,341	123,050	131,391	18,423 90	
1889	5,360	124,290	129,650	18,604 90	
1890	6,538	135,168	141,706	20,275 20	
1891	7,951	141,701	149,652	21,255 15	

U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, showing the Quantity to Montreal, the Quantity to Canadian Ports between Port Dalhousie and Cornwall, and the Quantity to United States Ports, Oswego, Ogdensburg, &c., on the south side of Lake Ontario, for the Years 1883 to 1891, inclusive.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1883.	Tons.	Tons.	'Tons.
Ashes, pot and pearl		2 3 6	3
Agricultural implements			_1
Barley. Coal. Corn.	109,191	89,344 6,815	735 5,372 66,128
Crockery and earthenware			1
Flour. Furniture.	5,089 6	8	2,041 25
Hass	1	9	
Horses Hides and skins.  Iron, railway.	77	26	6 60 142
do all other	5 6 1,188	39 1 138	90 5 8,579
Meats, other than pork		2	12 4 1
Nails Dats			51 731
Dil, in barrels	726	300	206 1
Pork. Paint.	212	13	163 6
Rags. Rye Salt	518		271 8
Stone, intended for cuttingdo wrought	269 2	2,584 353	38 87 662
Steel	1		• • • • • • • • • • • • • • • • • • • •
Sugar	2 35	98 5	156
Tallow Wheat White lead.	76,379	3,835	54,282 5
Wool All other merchandise, not enumerated Barrels, empty	52	109 4	95 665
Firewood, in vessels	6,311	930 792	26 94 799
do pipe	2,024 451	31 2,738	34,732
Staves, salt barrel	491	1,946	25 9
Split posts and fence rails, in vessels	2,604 199	1 74,329 35	30
Total	205,394	184,502	175,455

## U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1884.	Tons.	Tons.	Tons.
Ashes, pot and pearl	36	10 7 2	
Sariey	38	32,598	4,293
orn attle Sish Nour	l 	9,552 1 13	53,707
urniture	10	17 10	1,715 16 1
forses Iides, horns and hoofs	•••••	2 8	6 78 40
iryolite and chemical ore, and other ore, except iron. ard and lard oil		10 2 5	8,170
farble fails aats	1 872		1 26 9,874
il, in barrelseaseork	78 433 318	354	255
tyealt,tone, intended for cuttingdo wrought		364 2,059 190	15 7
heep pirits, beer, &c		111	511 1 26
urpentine  Vheat  Il other goods and merchandise not enumerated.	84,822 37	2,549 104	40,975 480
sarrels, empty 'irewood, in vessels	7.531	930 85	45,239
taves and headings, barreldo pipe do West India	200 863	22 487 406	76
ningles.  Cimber, square	7.365	50,414 3	11
Total	168,715	100,425	165,543

A refund of 10 cents per ton was allowed on wheat, corn, oats, barley and rye passed down to Montreal, per O. C. 28th May, 1884.

### U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1885.	Tons.	Tons.	Tons.
Ashes, pot and pearl	513 1 2		228
Coal	44,401	31,350 9,906	4,974 63,229
Flour. Furniture Horses. Iron, pig.	2,874 5 2	11 1 100	124
do all other., Iron ore Lard and lard oil Meal, all kinds	7	2	987
OatsOil, in barrels	7	568	882
Paint Pork Salt Stone, for cutting	30	407 3,749	
do wrought. Seeds, all kinds Spirits, beer, &c. Tallow.	42	8 10 25 4	
Wheat All other merchandise not enumerated. Barrels, empty	52,157	2,003 8 8	53,235 2
Firewood, in vessels. Lumber, sawn. Staves and headings	19,945 856	540 6,774 604	49,561
Shingles	11,767 76	69,616	111
Total	132,968	125,762	173,333

A refund of 10 cents per ton was allowed on wheat, corn, oats, pease, barley and rye passed down to Montreal, per O. C. 17th June, 1885, and a refund of 18 cents per ton from 1st July, 1885, per O. C. 4th July, 1885.

U.—Comparative Statement of the quantity of Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Ontario Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1896.	Tons.	Tons.	Tons.
Ashes, pot and pearl	44	10	11
pplesgricultural products, not enumerated, vegetable	49	1	1
Bricks		1	41
ement and water lime.			26
oal		49,724	5,400
Sorn	116,517	8,871	93,503
lour	2,934	<b> </b>	7,591
'urniture	6	15	21
lass, all kinds			2
	1		1
Iides and skins, &cron, pig		Q17	414
do all other	15	617 12	1
ard and lard oil	22	9	13
feal, all kinds	125	18	13,201
feats, other than pork	67	64	1
farble		2	l
Iolasses	28	7	
Vails			4
)ats		41	4,790
Dil	6	28	6
ease	608 936	407	
aint	930	1 1	106
lags		<b>.</b>	13
alt		29	1
tone for cutting		4.314	l.::::::
do wrought		103	38
eed, all kinds	33	3	236
lugar			3
pirits, beer, &c	. 8	12	21
obacco, raw	25		
CallowVheat	86,815	969	53,258
Vool		909	1,125
Merchandise, not enumerated	100	46	793
Barrels, empty	6	2	
loats		20	
umber, sawn, in vessels	18,707	7,546	53,124
dasts, spars, &c	ļ	22	
Staves and headings, barrel		57	
do do pipe	332	339	
do do West India	287	444	
Shingles Simber, square	16,740	12	463
Nimber, square	10,740	44,335 45	2
Total	244,514	118,127	234,254

A refund of 18 cents per ton was allowed on wheat, corn, oats, pease, barley and rye, passed down to Montreal, per O. C. 21st April, 1886.

### U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1887.	Tons.	Tons.	Tons.
Ashes, pot and pearl	33		• • • • • • • • • • • • • • • • • • • •
Agricultural Products not enumerated, vegetable Agricultural Implements.			2
Barley			1,709
CoalCorn	94 609	25,968 6,898	1,163 83,431
Fish			2
Flour Furniture Horses	6,140 9 1	9	11,780 24 2
Hides, skins, &c		 	170
Iron, pigdo all other	ļ	1,137	
Lard and lard oil.		6	14
Meal, all kinds. Meats, other than pork Nails	87 29 1	42 15	10,726 18
Oats			12,050
0il	14	190	8
Oil cakePease	17 362	• • • • • • • • • • • • • • • • • • • •	
Pork	418	86	108
Stone, for cutting		3,531	
do wrought.	12	543	
Sugar	15	*	44
Spirits		99	. 63
Wheat	160,063	4,940	37,678
All other merchandises, not enumerated	72	123	86 468
Barrels, empty Lumber, sawn	88	<u>.</u> . <u></u>	24
Staves and headings, barrel	7,001	1,816 27	44,733
do pipe	184		
do West India	131	838	
Timber, square. Woodenware and wood partly manufactured	14,390 45	21,351 1	
Total	213,834	67,632	204,315

A refund of 18 cents per ton was allowed on wheat, corn, pease, barley and rye, passed down to Montreal, per O. C. 28th March, 1887.

U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports, between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1888.	Tons.	Tons.	Tons.
Ashes, pot and pearl	85		 
Apples	<i></i>	45	
Barley			2
Coal		27,183	878
orn.	66,443	25,469	102,974
Prockery and earthenware	00,720	4	102,514
Clour	3,865	l	8,563
Turniture	2	1	30
lass, all kinds	3	2	
Iay, pressed		2⊎	· · · · · · · · · · · · · · · · · · ·
dorses	2		
Iides and skinsron, pig		****	89
do all other		549 490	
ard and lard oil	418 54	12	18
Meal, all kinds	100		11,598
Meats, other than pork	39	6	14
Dats			26,510
<u> </u>			
ease			
Pork	265	61	19
lags	j		14 179
tone, for cutting		6,535	119
do wrought		126	
leeds, all kinds	19	1	48
teel	l	J	8
lugar		. 2	4
pirits	3	2	151
fallow			1
Wheat	93,915	14,365	39,999
All other goods and merchandise not enumerated	105	34	18
Barrela, empty	105	<b>71</b>	1,480
Lumber, sawn	5.174	4.515	45.818
Staves and headings, barrel	18	7	20,020
do pipe	124	1	
do West Indies		13	
do salt barrel	1	1	
Shingles	11 700	99 000	.  6
Woodenware	11,586 25	33,669	8
·		.	
Total	183,899	113,801	238,467

A refund of 18c. per ton was allowed on wheat, corn, pease, barley and rye passed down to Montreal, per O. C. 20th April, 1888.

# U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c.—Continued.

	Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	1889.	Tons.	Tons.	Tons.
Ashes, pot and pe	arl	107	5	ļ
	• • • • • • • • • • • • • • • • • • • •		25,931	1,124
Corn			11,200	147,045
	thenware		1 5	1
			5	K 017
Flour				5,017 30
		9	l	1
		J	613	1
	×	1		520
	• . • • • • • • • • • • • • • • • •		5	19
			<u>.</u>	17,224
	pork	32	2	3
(Iolasses				88
Date	•••••	320	2	27,492
		798	2	
ork		1,220 1,284	114 634	21
		1	316	
	<b> </b>	. . <b></b>	6,784	
	, *********************************		11	2
do not suitab	le for cutting	.  <u>.</u>	375	1,681
				151
			8	190
			7,241	13
Wool			1,011	39,229 452
	• • • • • • • • • • • • • • • • • • • •		129	1.591
	*********		l	178
			4,669	71.055
Masts, spars, &c.	• • • • • • • • • • • • • • • • • • • •		220	
			852	[ ··· · · · · · · · · · · · · · · · · ·
saw logs				158
staves and headi	ngs, barrel		904	
do	pipe West India	. 202	304 559	
do			508	51
			17	91
			70,579	240
				270
··· ··································	•• •••• ••• •••• ••••	·		l ———
,	Total	. 292,827	130,584	313,574

A refund of 18 cents per ton was allowed on wheat, corn, pease, barley and rye passed down to Montreal per Order in Council 18th March, 1889.

## U.—Comparative Statement of the Quantity of Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity. passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1890.			Tons.
Ashes. All other products, animal	70 14 1		6,519
Bricks. Coal. Corn. Fish.	134,966 49	22,781 11,584	6,515 615 180,842
Flour. Furniture. Glasses, all kinds.	3,065 1 1	1	9,204 21
Horses Iron, all other. Kryolite. Lard and lard oil.	222	1,280 5	1 1,620 30 20,482
Meats. Dats Dil, in barrels. Dil cake	479 6 2	73	20, 402 15 27,030
Paint	221	19	3 14 88 1
RyeSaltStone, for cutting.	1,120	701 5,761	
do wrought. Seeds, all kinds. Spirits, &c Tailow	2 26 54		18 135 228
Wheat. White lead. Merchandise	75,515 142	5,241	31,527 1 1,822
Firewood, in vessels	3,195 384	1,398 3,767	47,590
7 do West Indies. Shingles. Square timber, in vessels. do rafts.		73,112	14
Woodenware. 16.033	219,589	17,683	327,833
Oats			*16,483
Total	235,972	144,300	311,400

<sup>\*</sup>This quantity of grain was transhipped at Ogdensburg and passed down the St. Lawrence canals to Montreal.

A refund of 18 cents Welland Canal tolls was allowed on wheat, Indian corn, pease, barley, rye (and cats for export), when shipped for Montreal or some port east of that point per Order in Council 26th February and 5th May, 1890.

# V.—Summary of Quantity of Freight passed down Wolland Canal on which full . Tolls were paid.

<u></u>	Quantity passed down to Canadian Ports: Toronto, Hamilton, King- ston, Cornwall, &c.	Quantity passed down to United States Ports: Oswego, Ogdens- burg, &c., on south side, of Lake Ontario.
Train	Tons. 10,650 173,852	Tons. 121,876 53,579
Total	184,502	175,455
Grain. 1884. Other Articles	12,153 88,272	104,556 60,987
Total	100,425	165,548
Grain	11,909 113,853	117,574 55,759
Total	125,762	173,333
GrainOther Articles	9,881 108,246	151,551 82,703
Total	118,127	234,254
Grain	11,838 55,794	134,868 69,447
Total.	67,632	204,315
GrainOther Articles	25,599 73,281	169,664 68,803
Total	98,880	238,467
Grain	19,075 111,509	213,766 99,806
Total	130,584	313,574
1890. GrainOther Articles	16,899 127,401	* 245,982 81,901
Total	144,300	327,833
Grain. 1891. Other Articles	6,805 47,510	* 220,527 96,682
Total	54,315	317,209

<sup>\*</sup> Of this quantity of grain 16,433 tons was transhipped to Montreal for 1890; and 17,817 tons for 1891.

COMPARATIVE Statement of the quantity of freight passed down the Welland Canal, showing the quantity to Montreal, the quantity to Canadian Ports between Port Dalhousie and Cornwall, and the quantity to United States Ports, Oswego, Ogdensburg, &c., on the south side of Lake Ontario, for the Year 1891.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1891.	Tons.	Tons.	Tons.
Ashes	. 40 2		42
Bariey. Corn. Coal.	52,539	5,144 20.698	8,113 127,494 1,382
Flour Fish.	3 324	20,000	6,802
FurnitureGlass	2 1	2	7
Horses	2	21	3
iron, pig	371	128 1,036 16	10 10
Meal, all kinds	67	1	26,096
Molasses		20	18 52,82 <b>3</b>
OilPeasePork	390 201		73
RagsRyeSeeds, all kinds	64,978	969	256
SeltStone for cutting	2	1,861 6,602	494
do wrought	·····i	7	
Tallow	159,785	692 8	32,097
Whiskey and all other liquors	105	57	167 1,237
Merchandise	278	1,098	1,779 1,778
Lumber, in vesselsdo in rafts	2,991 917	1,300	56,456
Timber, square, in rafts.  Barrels	5,680	14,638	4
Corn	291,776	54,815	317,209
Wheat	17,817		*17,817
Total	309,593	54,315	299,392

<sup>\*</sup>This quantity of grain was transshipped at Ogdensburg and passed down the St. Lawrence Canals to

A refund of 18 cents a ton Welland Canal tolls on wheat, Indian corn, pease, barley, rye and (for export) oats, originally shipped for Montreal or some port east of Montreal, per Order in Council 25th March, 1891.

# STATEMENT showing the quantity of freight passed down the Welland Canal to Canadian Ports, &c.—Continued.

### RECAPITULATION.

		Quantity passed	Quantity passed
Articles.	Quantity passed to Montreal.	down to Canadian Ports between Port Dalhousie and Cornwall.	down to United States Ports on the South Side of Lake Ontario.
1884.	Tons.	Tons.	Tons.
BarleyCorn OatsRye	38 55,552 872 477	52 9,562	53,707 9,874
Wheat	84,822	2,549	40,975
Total GrainOther Articles	141,761 <b>2</b> 6,954	12,153 88,272	104,556 60,987
Total	168,715	100,425	165,543
1885.			
Barley	44,401	9,906	228 63,229 882
Rye			
Wheat	52,157	2,003	53,235
Total GrainOther Articles	96,569 36,399	11,909 113,853	117,574 55,759
Total	132,968	125,762	173,333
1886.			
Barley	116,517	8,971 41	93,503 4,790
Rye Wheat	86,815	969	53,258
Total GrainOther Articles	203,940 40,574	9.881 108,246	151,551 82,703
Total	244,514	118,127	234, 254
1887.			
Barley	24,609	6,898	1,709 83,431 12,050
Pease. Rye	362		
Wheat	160,063	4,940	37,678
Total GrainOther Articles	185,034 28,800	11,838 55,794	134,868 69,447
Total	213,834	67,632	204,315

<sup>\*</sup> There was no refund on Oats for 1887, 1888 and 1889.

# STATEMENT showing the Quantity of Freight passed down the Welland Canal to Canadian Ports, &c.—Concluded.

### RECAPITULATION—Concluded.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on the south side of Lake Ontario.
1888.	Tons.	Tons.	Tons.
Barley	66,443	25,469	102,974 26,510
Pease. Rye	93,915	54 632 14,365	179 89,999
Total GrainOther Articles	160,358 23,541	†40,520 73,281	169,664 68,803
Total	183,899	113,801	238,467
1889.			
Barley	195,350 320	11,200	147,045 27,492
Rye. Wheat.	1,284 70,815	634 7,241	39,229
Total GrainOther Articles	267,769 25,158	19,075 111,509	213,766 99,808
Total	292,927	130,584	313,574
1890.			e K10
Barley	150,999 879	11,584 73	6,519 180,842 27,030 14
Rye Wheat.	1,120 75,515	5,241	81,527
Total Grain Other Articles	228,513 7,459	16,899 127,401	‡245,932 81,901
Total	235,972	144,300	327,883
1891.			0 110
Barley		5,144	8,113 127,494 52,823
Pease	390 64,978 159,785	969 692	32,097
Total Grain	277,692 + 17,817	6,805	220,527 — 17,817
Total Other Articles	295,509 14,084	47,510	202,710 96,682
Grand Total	309,593	54,315	299,392

<sup>†</sup> Owing to a break in the Cornwall Canal, 14,921 tons of the above quantity of grain was transhipped to Montreal vid Canadian Pacific and Grand Trunk Railways, and the refund of 18 cents per ton allowed.

‡ Of this quantity of grain, 16,433 tons was transhipped at Ogdensburg to Montreal.

CANAL COMPARATIVE Statement for Years ended

<del></del>	January.	February.	March.	April.	May.
	\$ cts.	\$ cts.	\$ cts.	<b>\$</b> cts.	\$ cts
Welland Canal, 1890do 1891	205 00			17,294 68 6,519 99	27,985 15 28,972 97
Increase	205 00			10,774 69	1,037 82
St. Lawrence Canals, 1890	52 60 15 52			667 03 201 50	8,103 19 8,151 22
Increase	37 08			465 53	48 08
Chambly Canal, 1890do 1891				7 45	1,140 30 3,310 07
Increase				7 45	2,169 77
Rideau Canal, 1890do 1891	2 00			41 14	896 <b>3</b> 6
Increase	2 00			41 14	287 0
Ottawa Canals, 1890do 1891				570 00 541 88	8,676 20 8,064 90
Increase				28 12	611 30
St. Peter's Canal, 1890do 1891	3 79			60 17 28 89	275 3 154 7
Increase Decrease.	3 79			31 28	120 6
Trent Canal, 1890do 1891				10 61 2 70	51 0 71 5
Increase				7 91	20 4
Murray Canal, 1890do 1891				13 52	106 6 54 8
Increase				13 52	51.7
Total Increase	162 13			11,260 32	2,205 2

Amount refunded on account of reduction of tolls on grain through Welland and St. Lawrence Canals, 1890. \$41,635.46; actual revenue, \$306,421.05.

Amount refunded on account of reduction of tolls on grain through Welland and St. Lawrence Canals, 1891, \$49,834.98; actual revenue, \$300,516.99.

REVENUE.

31st December, 1890, and 1891.

June.	Jul <b>y.</b>	August.	September.	October.	November.	December.	Total.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ eta
25,323 04 28,772 52	29,219 82 25,662 27	25,407 30 31,879 90	27,792 97 33,200 17	21,998 15 29,979 75	19,682 69 14,234 57	15 12 976 16	194,668 92 200,403 30
3,449 48	3,557 55	6,472 60	5,407 20	7,981 60	5,448 12	961 04	5,734 38
10,541 08 13,629 48	12,570 66 15,732 89	14,050 70 12,600 99	12,741 35 10,688 44	11,611 53 10,892 53	6,882 11 8,640 03	70 41 101 37	77,290 66 80,653 97
3,088 40	3,162 23	1,449 71	2,052 91	719 00	1,757 92	30 96	3,363 31
3,186 29 3,026 21	2,422 48 3,176 19	2,843 64 2,746 49	3,533 65 2,180 91	3,423 79 3,197 81	1,627 15 1,897 20		18,184 78 19,534 86
160 08	753 71	97 15	1,352 74	225 98	270 05		1,350 13
1,039 30 1,151 39	1,229 55 1,145 24	934 90 966 88	886 50 819 04	868 18 901 42	430 82 508 61	1 16 2 84	6,288 77 6,145 89
112 09	84 31	31 98	67 46	33 24	77 79	1 68	142 8
7,402 31 6,938 18	8,939 14 6,898 19	7,131 95 5,4 <b>22 3</b> 3	5,397 41 4,598 07	6,072 30 4,649 97	4,962 99 3,343 87	1 00	48,252 3 40,458 3
464 13	2,040 95	1,709 62	799 34	1,422 33	719 12	1 00	7,793 9
170 40 112 98	203 26 192 35	203 18 111 36	440 84 286 05	301 75 438 40	217 51 383 37	43 65 163 66	1,919 9 1,781 7
57 42	100 91	91 82	154 79	136 65	165 86	120 01	138 1
110 34 119 95	124 96 129 86	132 90 139 60	123 45 125 24	113 62 95 05	42 00 19 80		708 9 703 7
9 61	4 90	6 70	1 79	18 57	22 20		5 2
131 57 135 67	107 93 146 09	152 86 178 74	84 52 63 85	77 17 46 05	46 34 31 28	38 16	745 1 670 0
4 10	38 16	25 88	20 67	31 12	15 06	38 16	75 1
5,982 05	1,824 72	3,188 86	961 08	5,734 49	3,932 88	1,076 58	2,292 4

			Na V	Vegetable Food.	000				Ē
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	* All other.	Lumber	Total
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland Canal, 1890.	14,509	118,002	327,394 185,180	10,830	27,728 52,959	1,549	20,876 28,042	60,398 64,887	681,286 617,244
	266	80,656	142,214	2,717	25,231	64,339	7,166	4,489	35,958
55. St. Lawrence Canals, 1890	6,865	101,420	161,720 67,603	1,569	4,597 8,923	4,376 66,917	31,448	43, 437	355,342 451,067
Increase	1,258	89,423	94,117	16,087	4,416	62,541	11,282	4,885	96,725
Chambly Canal, 1890. do 1891.	202	45	7	496 842	632 1,239		562 2,474	83,183 97,561	86,132 102,344
Increase.	22	45	<u></u>	346	607		1,912	14,378	17,212
Rideau Canal, 1890. do 1891.	784 069	191	***************************************	101	91	107 170	342	38,651 38,524	40,005
Increase.	2003	66	13	272	33	83	<b>8</b> 8	127	625
Ottawa Canals, 1890	19	4		119	1,378	8	2,139	531,076	534,795

St. Peter's Canal, 1890     1,629       Increase.     830       Newcastle District Canals, 1890.     48       Decrease.     48       Increase.     1891.       Decrease.     1891.       Decrease.     1891.       Increase.     1891.       Increase.     1891.       Increase.     1891.       Increase.     1892.       Increase.     17       Abd 126,596     17       Abd 126,596     29,964.       126,996.     21,018       Total Increase.     1801.       Total Decrease.     170.589.       286,548     13,656.       29,964.     126,996.       21,018	2,5667 2,867 3,87 1,94 1,14 1,14 1,14 1,14 1,14 1,14 1,14	
45       25       18       14       46       47       7       86       86       86       86       86       86       86       86       86       86       86       86       86		
48       18       14       14       46       482       8       17       18       17       18       17       18       17       18       17       18       17       18       17       18       17       18       19       10 <td>1 1</td> <td>නිති   නූ</td>	1 1	නිති   නූ
60     384     1,070     17     454     1,070       482     3     756     17     527     17       46     482     3     814     17     73       486     482     8     814     17     73       486     170,589     13,656     29,964     126,996     21,86,996	1 1	නින් : නූ
884 1,070 17 527 1,	23 28 213	
46     432     8     17     73       189     170,539     13,656     29,964     126,996     21,	213	
. 189 170,539 236,348 13,655 29,964 126,996		
	82,415	
Total for year 1890.		1,604,827 1,648,425
*Comprises apples, meals, peace and potatoes.  B. H. TEAKLES, Chief Clerk, Canals Revenue.  Department of Railways and Canals, Ortawa, 1st March, 1892.	anals Rev	Revenue.

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APPENDIX	
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SUPPLEMENTARY	
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Amount of	Total Amount of Tolls.		eta.	& 88 8 8	08 88	1,622 60	. 68 %	4,8 8,8 8,8 8,8 8,8 8,8 8,8 8,8 8,8	0.10	90 04	1,911 76	19 20	3 02	13 06
Canal, and the	Total Amount Amount of Tolls, Tolls, Up. Down.		cts.	27.8 25.8	88	1,622 60		4,416 00 87,035 40		08.0	1,911 76	0 4 3 8	1 57	
			e cts.	6.43		5 52	° 5	40,51	0 10	40.36	1 65	15 00	1 45	13 05 57 50
				1,223	444	8,113	66 418	224,644 185,180 1	1 10	306	13,517	32 131	29	1,150
the W in 1891	Tons.	Down.		1,101	4	8,113	: :20	22,080 185,177			13,617	: <b>3</b>	**	: :
rted on gation	To.	Up.		122		: : : <b>\$</b>	66 413	202,564	1 10	. <b>3</b>	: <b>:</b>	 30 100	:28	1,150
ranspol	From United States to Canadian Ports.	Down.		ිසි : :	89			20,698			2,191		. <b>*</b>	:::
rticle t	F. United	Up.			<u>:</u>			17,374						
showing the Quantity of each Article transported on the Welland Rovenuc collected during the Season of Navigation in 1891.	From United States to to United States Ports.	Down.			42	8,113		1,382		:	6,802			
ntity of	F. United United Po	Up.		19	:		66 413	185,190		<u> </u>	: :67		:-	87
he Qua	From Canadian to to United States Ports.	Down.			400									
wing the	Fr Can United	Up.		103							: :6 : :	: <b>8</b> 3 :	: <b>69</b> :	350
MENT sho	From anadian to anadian Porta.	Down.		1,101	<u>.</u>					: : : : : :	4,524	: : <b>5</b> ;	2	:::
54 1	Can Po	Up.		: :	:	18		0	120	: :		100	. 25 	:
No. (A) 6.—General Stati	Articles.			Ashes, Pot and Pearl	Agricultural Products, not en- umerated, Vegetable. Agricultural Products, not en-	unerated, Annual Agricultural Implementa. Barley Bricks	Frinstone Cement and Water Lime	Coal Coal Coal Coal Coal Coal Coal Coal	Cotton (Raw) Crockery and Earthenware	Dye Wood and Dye Stuffs	Flax and Hemp. Flour. Furniture.	Gypsum Glass, all kinds Hay, pressed	Horses	Hoofs.

	143 55 25 25 5,232 70 3 00 533 40		102 00 2 23 255 10 20 55 89 56 12 12 60 13,186 75	281 30 51 60 51 60	: 128886 8886 8886 8886 8886 8886	39,092 84 0 45 248 30 7,472 07	19 56 1 75 407 44
02 03 06 06 06 06	143 25 25 25 20 25 20 0 0 0 0 0 0 0 0	7 60 10,591 80	102 00 54 80 12 00 13,014 20	471 00 1,326 40 1 40 51 60	තී ය හ 	39,049 06 247 40 421 34	
81.8		20 88 7 21 12 88 7 7 7	8880 B	31.80 0.80 0.80 0.80	35 00 35 00 35 00 35 00 36 00 36 00 36 00	43 79 0 45 0 90 7 050 73	18 78
1,610	2,871 26,164 3,556	25 28 28 28 28 28 28 28		2,567 6,602 9 9 2,813 2,58	6,220 346 177	198,658	96.
1,062	2,871 126 26,164 3	38 52,959	630 274  60 60,071	:	323	196,526	7,082
548	16	18 18 18 18 18	25. 24. 24. 26. 24. 26.	212222,813	6.220 8.33 17 17 2.60 2.60	2,332	92,154
- 499	1,098 116 67	200	201	6,351		129, 136	1 : : : :
: : <b>%</b>							
101	1,773 10 26,096	18 52,823		494	291	32,097	1
. :88		139 45 47	131	211	6,230 202 602 603 603	9 4	3
			240				
: : <b>%</b>	19	প্রপ্ত স	: : : : : : : : : : : : : : : : : : :				§ \$ : 8
1,052		136		1,861	119	<b>12</b>	3 3 3 2 2
×		: : : : : : : : : : : : : : : : : : :				883	3
do Pig.		Marbie Manilla Molasses Nails Oats					
way	Chemical re, except Lard Oil. kinds	Marble Manills Molasse Nails Oaks	ř	anded for (nugut suitable for unwrought kinds.	leh, Beer, &c	ed. Goods	chandlee not enumerated.  Bark Bark Empty.  Boat Knees Float. Floats.
do Fig.	Cryolite other Or and and feel, all I	farble fanilla folasses fails ats	Marker Cake Coastons	Cosin Cosin Come inte do wro do not	Sheep Soda Ash Skeel Sugar Tobacco (I	Turpentine Wheat White Lead Whiting Wool. All other Goods	chandler ark arrels, E cat Knee loats

	From	dian	From Canadian	rn dian	From United States	States	From United States	States	E					
Articles.	Canadi Porte	vo madian Ports.	United States Ports.	States ts.	United States Ports.	States Is.	to Canadian Ports.	dian ts.	Lone	.80	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
										<u> </u>		e cts.	e cts.	<b>⇔</b>
Hop PolesLumber, sawn, in Vessels		2,482	1,641	11,002		45,504		4,248	1,641	63,236	64,877	295 37	11,249 66	11,546 03
Maste, Spars and Telegraph Poles, in Vessels. Maste, Spars and Telegraph														
es, in Kaite ay Ties, in Vessels		:28		: 28		<del>.</del> :			: i	327	327		: 88 63	80 82
Staves and Headings, Barrell of the Market India.	878	1,961		1,462					<b>24</b> 8	3,423 155 8	3,766 155 8	19 82	141 05 12 40 1 50	160 87 12 40 1 50
Staves, Salt Barrel Shingles. Split Posts and Fence Rails,		19						: :		19	19		18.2	18 2
in Vessels. Split Poets and Fence Rails, in Rafts. Timber, Square, in Vessels do Rafts	245	2,116						18,238	245	20,354	20,354	14.18	3,049 94	3,049 94
Woodenware and Wood partly manufactured					# ::::::::::::::::::::::::::::::::::::						<b>#</b>	4 40		4 40
Total Freight paying Tolls.	6,453	58,170	4,203	13,963	247,543	306,257	17,409	306,022	275,608	684,412	960,020	50,457 41	131,027 27	181,484 68
Articles having paid full Tolls on the St. Lawrence Canals, Free.										,				
Ashes, Pot and Pearl	:	:	8	:	:			:	8	:	31	:		
nerated, Vegetable	-		62	:	:	:	:	_: :	29	- : :	25			

2,855 303 303 527 778 88 88 778 778 11,416 58,559	venue.	EAKLES, Chief Clerk, Canals Revenue.	LES, Clerk, C	<b>E</b>	В. Н.						6001	CANALS,	S AND CANALS,	MILWAY Orm	DEPARTMENT OF RAILWAY
1,694   1,694   1,694   236	200,403 30	139,736 41		•••	ılic Rents	f Hydrau	cclusive o	venue, es	Total Re						
1,694   1,69	198,823 88 1,338 22 241 20	139,736 41						: : : : : : : : :	id Damag eceipts	Fines an Other R					
Tree, having on Rideau  Ty Tree, having on Ridea	16,905	8,479	8,426 04	2,153 96			: : :	essels ssengers ee Goods	olls on Voles on Ps	Total To					
6366         1,664         2,380           7         7         7           1         1         1           1         1         1           1         1         1           2,865         2,865         2,865           2,865         112         112           303         292         2,865           6         16         64           6         16         64           6         16         64           6         16         64           7         22         22           83         339         377           1         22         22           2         2         2           1         22         2           2         2         2           2         2         2           2         2         2           2         2         2           2         2         2           3         389         389	`			975,013		290,212	1	17,409	306,257	247,543	13,963	13,845	58,559	11,415	Grand Total Freight
686     1,664       7     7       1     1       1     1       1     1       1     1       2,866     2,865       303     292       304     2,865       112     12       303     292       52     12       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       6     64       7     839       830     839       831     830       7     834       7     834       7     834       8     83       8     83       1     49       8     84       1     49       1     49       1     49       1     49       1     40       1     40       1     40       2     64       2     64 <td></td> <td></td> <td></td> <td>388</td> <td>389</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>88</td> <td></td> <td>Port Robinson</td>				388	389								88		Port Robinson
6586         1,664         2,380           7         7         7           1         1         1           1         1         1           1         1         1           2,866         30         2,855           1,12         33         30           2,856         1,12         2,855           1,12         2,855         2,855           1,2         2,855         2,855           1,2         2,855         2,12           6         1,6         64           6         1,6         64           6         1,6         64           6         1,6         64           7         83         377           83         377         22           1         22         22           2         2         2           2         2         2           3         3         3           4         4,9         3           1         4,9         4           2         2         2           3         3         3           4         3		:		544	:	544		:				244	:	:	paid full Tolls on Rideau Canal
Limbor   1,684   1,684   2,330   2,066   1,684   2,330   2,066   2,066   2,066   2,2,856   2,2		-		810		810						283		:	erchandise
Lime   686   1,684   2,380   206   1,064   2,380   206   2				° 25		28.						6		-	
Limbor   CSS   1,684   2,330   2,330   2,340   3,340				SS °	:	នះ			:	:	:	a °	:	-	:
Limbor   CSS   1,684   2,330   1,004   2,330   1,004   1,004   1,006				412 48		212		:			: :	219		33	urits, Beer, &c
Limb   686   1,684   2,330     nd				377		377	: :					88		88	da Ash
Limb   686   1,684   2,330     nd				22.5		22.52		:	:	:	:	16	:	327	tch and Tar.
Lime   686   1,684   2,380   206				<b>3</b> E	: :	<b>3</b> 5					: :	2123	: :	8 25	L, in barrels
Lime 686 1,684 honware 77 206 honware 77 7 7 7 1 7 7 7 1 1 1 1 1 1 1 1 1 1 1				260 560		1 560					: :	333		7267	ails.
henware 686 1,684 2,380 and 206 henware 77 206 201 and				292	: :	269				: : : :		292		303	o all other
Lime 686 1,684 2,380 and 2,380 and 206	-			2,855	:	2,855	:	:	:	:		112		2,800	on, Kallway
77 77 174 174 2530				-8		- 8°			: :			ିଛ :			ass, all kinds.
							: : : :			: :		. н		:	:
2,330				251		251						174		77	ockery and Earthenware sh
				986,	:	2, 380, 90,	:	:	:	:	:	1,694		<b>3</b>	ment and Water Lime

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SUPPLEMENTARY APPENDIX A.—Continued.

	aliu va	and the fillipound of Lone Confeder motors, during the comme	4 10 11											
Articles.	Fr Cans Cans Po	From Canadian to Canadian Ports.	From Canadian to United States Ports.	om dian States ts.	Fr United United Po	From United States to United States Port.	Fr United t Cans	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tölls, Up.	Amount of Tolls,	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
					İ							e cts.	s cts.	<b>⇔</b> CHt.
Ashes, Pot and Pearl		40	:	:	.01	: :	:	*8	- 5	9	<b>4</b> E	4 65	8 00	& 4 00 %
Appues. Agricultural Products, not enumerated, Vegetable. Agricultural Products, not			1		1 :	43		8		4	•	: :	08 8	08 8
65 enumerated, Animal. Agricultural Implements Bricks	4					8,113			: : : : : : : : : : : : : : : : : : :	8,113	8,113	55	1,622 60	1,622 60
Bones. Brimstone Cement and Water Lime		: : :			66 413				66		66 413	9.90		990
Clay, Line and Sand			: :		185,190	1,382	17,368	20,698	202,558	22,080 185,177	224,638 185,180	40,511 60	4,416 00 37,035 40	44,927 60 37,035 85
Cotton, Raw. Crockery and Earthenware. Dye Wood and Dye Stuffs.					7.6				488	-	\$68 	35 10	8	
Flax and Hemp Flour Flour Furniture			6			6,802		2,191	_	8,993		_::	1,79	1,798 60
Gypsum Glass, all kinds Hay, Pressed	100	21	68			:		<b>-</b>	- 68 - 68 - 68 - 68 - 68 - 68 - 68 - 68	22		4 35 15 00	0 40 4 20	4 75 19 20
Horses. Hides and Skins. Horns and			: C7		-	· es		4	eo :	7	01	:	1.40	1 85
		:::	350		80.00		: :	: : : : : :	1,150	::	1,150	13 06		13 05 57 50

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5 398 46,355
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Articles.	Fr. Cana Oana Po	rom nadian to nadian orts.	From Canadian to United States Ports.	lian States	From United States to United States Ports.	States States States	From United States to Canadian Ports.	States States dian	Tons.	n8.	Total Tons.	Amount of Tolls, Up.	Amonnt of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				•
												cts.	e cts.	es.
Hoops Hop Poles Lumber, sawn, in Vessels		096	1,641	10,952		45,504		4,248	1,641	61,664	63,305	295 37	11,091 15	11,386 52
Rafts			:	:	:	:	:	:					: :	
Masts, Spars and Telegraph	:	:	:		:	:	:	:			:	: : : : : :		
Poles, in Rafts														
w Loos		: :	: :		: :									
wes and Headings, barrel.	:		:	:	- - -	:		: 00		: 00	:00		1 50	1 50
" W.India								:	:	:		•		
Staves, Salt Barrel														
it Posts and Fence Rails, n Vessels	:					:	:	:	:	:		•	•	•
Split Posts and Fence Rails,												•	:	
Timber, Square, in Vessels		2,080						18,238		20,318	20,318		3,046 56	3,046 56
Traverses	•						:	:	:			:	:	:
Woodenware and Wood partly manufactured	:	:	:	:	Ħ	:	:	:	Π		11	4 40		4 40
Total Freight paying Tolls.	089	38,802	3,357	10,952	247,543	306,257	17,368	305,586	268,948	661,687	930,635	50,271 40	129,647 94	179,919 34
Articles having paid full Tolls on the St. Lawrence Canals, Free:—														
hes, Pot and Pearl	:	:	31	:	:	:	:	:	31	:	33			
Agricultural Products, not enumerated. Vegetable			25		:	:		:	22		29			

nue.	TEAKI.ES, Chief Clerk, Canals Revenue.	erk, Can	KLES,	H. TEA	B. I								,	
196,171 71	58,322 75 137,848 96		•••	Total Through Tolls		gh Tolls	tal Thro	To						
16,117 57 134 80	8,128 52	7,989 05	\$2,196.20				Vessels Passengers Free Goods	Total Tolls on Vessels	Total To					
			945,239	661,687	283,552	305,586	17,368	306,257	247,543	10,962	12,999	58,892	5,642	Grand Total, Freight
			544		\$	:				:	544			paid full Tolls on Rideau
			810		810						583		227	Merchandise
			301		200						<u>6</u> 8			Whiting
			က ရှိ		3 00 (						300		• • • •	White Lead
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			412	<u>:</u> :	377 412				: :		88		<del>2</del> 28	Soda Ash.
	N		4,391		4,301		: : : : :	<del></del>			4,064		327	Fixen and Lar.
			58						::		183		<u>इ</u> क्ट य	Paint.
	**************************************		8		.002						- <del>22</del>		223	Nails
			595	:	595						88		88	ther.
			2,855		2,855	:	:	:	:	:	119	<u>:</u>	2,855	Iron, Railway
			78		8			: :			: 8	:		Furniture Glass all kinds
					1			: :						Flax and Hemp.
			707	:	103 103		:	: :	:	:	174	:	77	Crockery and Earthenware
			2	:		:		-	-	-	1	<del>-</del>	8	Cement and Water Lime

SUPPLEMENTARY APPENDIX A-Continued.

From Canadian   Canadian   Canadian   Canadian   Canadian   Ports.   Ports.   Ports.   Down.   Up.   Down.   Up.   Down.   14   14   14   14   15   15   15   15							
Up. Down. Up. Down.  1,101 91 400  1,101 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	From From Control States to the States Control States Control Ports.	From United States to Canadian Ports.	Tons.	Total Tons. Tr	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
not not 1,101 91 1.4 1.4 524 35	Down.	Up. Down.	Up. Down.				
not not 2					e cts.	s cts.	• cts.
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: :: :83					0 10		0 10
	35		20	70	22		5 26
Kurnitura			4,524	4,524		113 16 0 03	113 16 0 03
la).			:==	·	0 00		0 0
Hay, Pressed.  Hogs.  Horse 50 7  History and Skins. Horns and			2 20	22	1 00	0 17	1 17

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other Ore, except Iron	:		:	:	:	:	:	:	<del></del> 	- <u>;</u> ,	:	:	:	<u>:</u>	<del>-</del> : :
Meal, all kinds		-						· · ·	<u> </u>	· 	<u>न</u> :-		0.1	:	0 10
Meats, other than Pork.													:		:
								<u>·</u>					:		
Naila	53								63			1 00	: :8 : :8	:	88:
Oil, in barrels.	9	601						<u>:</u> :	9	95 :	9	0 12	,	5	30 32 31
Oil Cake	:	:	:	076	:			:	<u>:</u> : :	076	046	:	00 76	:	34.00
Potatoes	13			:				<u> </u>	: <b>22</b>	2 :	<u> </u>	. 0 53	<b>5</b>	<del></del>	28 28
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Pitch and Tar.	' : :								•					<u>:</u>	
Rags		:	:		:	:	<u>:</u>	<del>:</del>	<del></del>	:	***	:	:	<u>:</u>	<del>-</del> :
								<del></del>						<u> </u>	: :
Salt		:	:::::::::::::::::::::::::::::::::::::::		:	:	:	- <del>-</del> -	<del></del> 			:	:	<u>:</u> :	<del>-</del> -
Stone intended for Cutting		:	:		:	:	• • • • • • • • • • • • • • • • • • • •	:	<del>-</del>	:		:	:	<u>:</u>	<del>-</del>
do not suitable for Cutting,								<u>.                                    </u>	:	<u> </u>				: :	
unwrought		:	:	:	:	:	:	:	:	<del></del>	:	:	:	<u>:</u>	<del></del>
Sheep.										<del>: :</del> : <u>:</u>					: :
Soda Ash	~		:	:	:	:::::::::::::::::::::::::::::::::::::::	:	- : :	<u>.</u>	:	CN	<b>S</b>	:	<del>.</del>	ਣ ਣ
Sugar	182							<u> </u>	182	<u> </u>	182	3 43		<u>:</u> :	3 43
Spirits, Beer, &c.	·->					•	:		က		es .	8			
Tallow	•											: 8			
Turpentine	_					: :			<del>•</del> :		•	3	: :	<del></del>	3 :
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Wool. All other Goods and Merchan-	:	:	:		:	:		:	:	<u>.</u> <u>.</u> 		:		:	==
	026	206			:			9	970	317	1,287	22 23	8 74		31 67
Barrels, Empty.		:	:	•			:	:	:	 :	•		:	<u>:</u>	<del>-</del>
Floats		\$						<del></del>		9	\$		2.1		1 75
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NO. (A) 8—01	GENERAL		CIALEMENT	Sur word	9110	Sugaring	5	CACIL A	Arueie or	W Wy	r reigiau,	rioight, we.—Concraaca,	ceaaca.	
Articles.	From Canadian to Canadian Ports.	m Jian Lian ts.	From Canadian to United States Ports.	m lian States ts.	From United States to United States Ports.	States States States ts.	From United States to Canadian Ports.	From nited States to Canadian Ports.	Tons.	ož.	Total Tons.	Amount of Tolls, Up.	Amount of Tolls,	Total Amount of Tolls.
	Up.	Down.	Up.	Боwп.	Up.	Down.	Up.	Down.	Up.	Down.				
												•	cts.	e cts.
Fire Wood, in Vessels	1,434	7,032	8						2,154	7,032	9,186	88 : 98 :	347 11	407 44
: : :		1,522		: :28						1,572	1,572		158 51	158 51
do Rafts Masts, Spars and Telegraph	:				:			:	:	:			:	
Poles, in Vessels  Masts, Spars and Telegraph  Poles, in Rafts														
Railway Ties, in Vessels		83		264						327	327	:	88 88	<b>88</b>
Headings, Barrel.	348	1,961		1,462					343	3,423 155	3,766	19 82	141 12 40	160 87 12 40
do W.India														
		19								: 19	19		18.1	7 81
Split Posts and Fence Rails, in Rafts.		96		: :		: :				· · · · · · · · · · · · · · · · · · ·			86.8	er er
	245	17							245	17.	363 1	14 13	8	16 49
Woodenware and Wood partly manufactured.					:									
Total Freight paying Tolls	5,773	19,278	#	3,011			41	436	6,660	22,725	29,385	186 01	1,379 33	1,565 34
land to Port Robinson		380					:			88	380			
Grand Total Freight	5,773	19,667	8 <del>4</del> 6	3,011	:	:	41	436	6,660	23,114	29,774		•	

99 VIC	, coi ia.	COSSIOILEI	1 april (110.	023.)	
787 97 298 86	2,652 17				
350 98 157 14	1,887 45 nals Rev				
436 99	764 72 IES, Clerk, Co				
Total Way Tolls on Vessels do Passengers \$17.76	Total Way Tolls	DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 1st Murch, 1892.			

•	orted on the St. Lawrence Canals, and the Amount avigation in 1891.
SUPPLEMENTARY APPENDIX A-Continu	wing the Quantity of each Article transported on the St. L tevenue collected during the Season of Navigation in 1891.
	.—General Statement shov

	Total Amount of Tolls.		e cts.	21 47 726 09	89 11				1,517 89	2,1, 2,8,8	3-8							4 52
	Amount of Tolls, Down.		e cts.	13 40 721 45	40 70		347 94 0 23		0 93 624 72	1,838 1,838 1,838 1,838		388		123 19	12 96 20 80	8	4 81 88	4 43
	Amount of Tolls, Up.		e cts.	8 07 4 64	48 41		573 93 86 86					8 rc 8					8 18	60 0
	Total Tons.		****	112 5,088	627	973	17,606	159	22,259 92,259	12,339	200	\$ 2 <b>\$</b>	300	1,013	1,718	1,599	3300	88
6	Tons.	Down.		5,035	278	895	17,386	135	88.65 60.65		•	885		4, 696 969	187	557	386	31
0	To	Up.		<del>2</del> 82	349	78	13,704	159	4,587 22,960	· ***	300 3	ş Ş Ş	<b>2</b>	317	1,531	1,042	124	67
	From United States to Canadian Ports.	Down.		: :	:	:				12,169				: :			: :	
	Fr United Can	Up.	-		:	&	222		3,371			. <b>8</b> 8		: :				: :
0	From United States to United States Ports.	Down.				:			2	 				107	:		: :	
	Unite Unite	Up.		9 9	:	:				: :			: :'					
	From Canadian to United States Ports.	Down.		<u> </u>	:	<u>:</u>				Z4 :								
	F. Can Unite	Up.		31	22	:	391		1,463	: :		:	:	:-		8	: :	: : : :
	From Janadian to Janadian Ports.	Down.		5,035	278	895	17,	<b>33</b>	88,		:	822					7 9g	<b>弱</b> : 
	Can Can Can	Up.		8 74	297		13,091	150	. 61	: -4.8	301	25 <del>25</del> 5	200	316	1,531	666	124	67
	Articles.		,	Ashes, Pot and Pearl.	Agricultural Products, not enumerated, Vegetable.	Agricultural Froducts, not en- umerated, Animal	Barley	Bones	Cement and Water Lime.	Corn Corn	Cotton, Raw	Crockery and Earthenware Dye Wood and Dye Stuffs	Flax and Hemp.	Furniture	Gypsun.	Hay, Pressed	Horses	Hides and Skins, Horns and Hoofs.

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112		99		520	750			83	475	75
112		363		28.29	3,997			88 ° 28	475	75
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3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	782 12 23 782 12 2430 405 527 281	13 456 72 6 13 5,635 19,775 278	6,368 2,822 856 475 228 24 12 2 51	460     4,280       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	782 12 23 782 12 2430 405 527 281	13 456 72 6 13 5,635 19,775 278	6,368 2,822 856 475 228 24 12 2 51	460     4,280       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	782 12 23 782 12 2430 405 527 281	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,280       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	782 12 23 782 12 2430 405 527 281	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,280       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	429 6 350 782 12 23 2,640 22 439 967, &c 405 527 291	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,290       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	280 280 118 118 28 177	77 1,862 4,440 109 344 1,428	8,043 1,920 9,043 1,920	429 6 350 782 12 23 2,640 22 439 967, &c 405 527 291	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,290       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	and Tar. 289 289 and Tar. 118 25	77 1,862 4,440 109 344 1,428	tot suitable for cutting, 11,028 all kinds. 8,043 1,920	429 6 350 782 12 23 2,640 22 439 967, &c 405 527 291	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,290       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	and Tar. 289 289 and Tar. 118 25	77 1,862 4,440 109 344 1,428	tot suitable for cutting, 11,028 all kinds. 8,043 1,920	429 6 350 782 12 23 2,640 22 439 967, &c 405 527 291	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,290       2,256     7,992       1,065     75
3.294 6  4,352 11 10,577 644	2,063 92 244 68 762 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	and Tar. 289 289 and Tar. 118 25	77 1,862 4,440 109 344 1,428	tot suitable for cutting, 11,028 all kinds. 8,043 1,920	429 6 350 782 12 23 2,640 22 439 967, &c 405 527 291	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460 4,290 1,066 75
3.294 6  4,352 11 10,577 644	and 2,063 92 244 68 762 20 20	2,111 878 2,111 878 1,246 7,677	11 565 35,660 18 109	and Tar. 289 289 and Tar. 118 25	77 1,862 610 109 109 3,100 intended for cutting 344 1,428 wrought 362	8,043 1,920 9,043 1,920	sh. 429 6 350 782 12 23 764 22 439 Beer, &c 405 527 281	13 456 72 6 13 5,635 19,775 278	and merchan. 6,368 2,822 856 475 228 24 12 2 51	460     4,290       2,256     7,992       1,065     75

1,518 45 0 15 Total Amount of 38 223 \$ 12 43,513 ( 828 885 88 . . . 524 0 Down. 32,909 828 No. (A) 9.—General Statement showing the Quantity of each Article transported, &c.—Continued. Tolls, Up. 10,603 74 cts. ন্ত্ৰ 8 Amount = **60 1**00 Total Tons. 1,983 10,280 10,280 392,295 Down. Tons. 151,892 83 Up. 137,013 Down. From United States to Canadian 900,6 Up. 1,701 Down. From United States to United States 637 Up. 1,545 Down. to United States From Canadian Ports. 252,036 Down. From Canadian to Canadian Ports. 131.622 क्ष Up. Masta, spars and telegraph poles, in vessels.

Masta, spars and telegraph poles, in rafts.

CRailway ties, in vessels. Total Freight paying Tolls. in rafts.....Timber, square, in vessels... do in rafts.... Staves, salt barrel.
Shingles
Split poets and fence rails, Woodenware and wood partly All other products, vegetable. Free articles having paid full tolls on the Welland Canal: in rafts . . . Split posts and fence rails Saw logs.
Staves and headings, barrel.
do do pipe.
do do W.Indi Articles.

80,653 97	42,210 27	20,516 29	69		nlicRente	Total Revenue, exclusive of Hydraulic Rents	clusive o	venue, ex	Total Re					
4,187 84 13,566 27									ges	Fines and Damages	Fines a Wharfa Other H			
3,024	2,334	689 95	\$13,145 38						Passengers . Free Goods.	" Passeng " Free G	Hines a			
16,188 33	6,965 73	9,222 60						•	essels.	Total Tolls on Vessels	Total T			
			936,794	688,899	247,895	137,926	33,314	1,701	645	1,545	10,725	547,727	203,211	Grand Total, Freight
			1, TL									1,110		run 10118 on raidesa Canal.
			1 410	1 410								-		Kryolite, Free, having paid
			563 750		35 35							: :	25 55 25 55	per Order in Council.
			539	539						:	:	539	:	Cement and Water Lime, Free, per Order in Council.
			201	:	2006	:				:	3	:		Material for Canal Construc-
			04 690		94 690		906 706		œ		2		70 976	Coal, Free, per Order in
		•	5,680	5,680			: :					5,680	: i	uare Ilmber, in vessels
			917	917								917		Rafts
			278 2.991	2,991		g 6						2.591		Merchandise
			105,780	106,100		490						301,300		Wheat. Whiskey and other Spirits
			180 404	150 701								1100		Tobacco.
			64,978 2	64,978							:	64,978	:	Rye
			200	202								88		Pork.
			<u> </u>	265		S	 : : :		:	:		3 8	: : :	Meal, all kinds
_			190	91								18		Lard and Lard Oil.
			37.1	371	:	:	:		:	•	:	37.1		Iron, Pig.
				67		:-		:	:	:	:	7-	:	Glass
	•	_	N	7	:	:		:::::::::::::::::::::::::::::::::::::::	:	-	:		:	Furniture

No. (A) 10.—General Statement showing the Quantity of each Article of Through Freight transported on the St. Lawrence SUPPLEMENTARY APPENDIX A-Continued.

Amount Total of Tolls, Down.		s cts.	0 13 40 20 <b>20</b>	20 40 05 68 25	75 127 95 128 7		15 45 15	367 80 407 255 18 21 255	1,827 <b>66</b> 1,	26 00 76 00 3 3 60 00 3 3 60 00 3 3 60 00 3 3 60 00 3 3 60 00 3 3 60 00 3 3 60 00 3 3 60 00 00 00 00 00 00 00 00 00 00 00 00	597 00 597 116 00 133	. 273	
Amount of Tolls, Up.		ets Cts	01 6 80 26 6 80	555 43 2	858 0 7		<u>:</u> :	. 556 39 89		382 0 3 382 71 4 18 104	17	62	
Total Tons.			101	10		8,871		3,713 2,718 141,701			භ	:	
Tons.	Down.		4,726	292	853	<u>∞</u> ,	103	2,452	12,263	138:	3,980		228
T <sub>0</sub>	Up.		ਲ :	888	10	7.5	:	3,713		352	87	314	97 :
From United States to Canadian Ports.	Down.		: :	:	:			008 001	12,169				
Fr United Cans Po	Up.												
From United States to United States Ports.	Down			:	:							: :	
From United States to United States Ports.	Up.			:	:	76	2 :						
From Canadian to United States Ports.	Down.			:	:								
From Canadian to United State Ports.	Up.		31	25	:		5	1,463		251	<del>-                                    </del>	: <b>&amp;</b>	
om dian dian rts.	Down.		4,726	2967	853	8,871	103	2,452	26,32 14,32	:82	3,980	95	82
From Canadian to Canadian Porta.	Up.		e:	983	70		<b>?</b> :	2,250		106	. : :88 : : :	28	160 10
Articles.			Ashes, Pot and Pearl	Produc Vegeta	Agricultural Products, not enumerated, Animal	tural Implements	Bones	Clay, Lime and Sand	Corn	Cotton, Raw Crockery and Earthenware Dye Wood and Dye Stuffs	Fish and Hemp Flour Furniture	Glass, all kinds	Hay, Fressed Hogs Horses

fron. Railway.	3,118	, <del>=</del>	:	:	:		:	:	-	118	=	3,119			
Fig.	3,226	8	478		<u>:</u> :	<u> </u>	<u> </u>	: : : :	es −1	3,338 1,915	:&	8,4, 8,8,	250 287 287 287 287 297 297	3.00	28
Kryolite chemical ore and other ore, except iron	: : \$	2,065								: : :8	2,065 111	2,065 139		103 25 16 65	108 20 20 85
Meats, other than pork Marbie	ळिच्छ	F :	-					: : :	<u> </u>	≋ e ë	<del>- : :</del>	13 ° 51	888 888 888		888 888
	109	: : : : :							: <b>-</b>	100 969	: : : ∞ : :	109	21 80 393 80		21 80 395 40
Oats. Oil, in barrels.	357	38	- 38	``					; ; ; ;	:84	<del>5</del> 8	140 512	•	18 93 00	
		10,367				1	::	<u>: :</u> : :	<u>:                                    </u>	:	10,367	10,367			
Potatoes	၈ ဝ	:: :: ::	<u>:</u> :				<u>: :</u> : :	<u>: :</u> : :		n 0 8	× 20 6	188	828	111	
	<b>3</b> 8	3-	88			<u>: :</u> : :	<u>: :</u>	<u>: :</u> : :	<u> </u>	<u>8</u> 4.	3-5	£25;			
	T ::	288		: :				<u>: :</u> : :	<u>:</u> : :	<del>- :</del> -	2 8 8 1	: 88 7			
Roein. Salt	2,138		3,997			: :	: :	<u> </u>		6,135	98	6,135	- 83 - 83 - 83 - 83	910 90	920 25
Stone intended for cutting	: :	0)#(T						: : : :		က	P	: es	09.0		
do not suitable for cut- ting, unwrought.		00 kg					::	::	<u>:</u> ::	· <del></del>	100 229	230 230	0.15	3.8 3.5 3.5 3.5 3.5	34 50 34 50
	:38		320			::	::	: :	<u>:</u> <u>:</u> :	714	<u>:</u> : :	714		: : : : : : :	
Steel	1. 15. 15. 15. 15. 15. 15. 15. 15. 15. 1		<b>8</b>			-	: :	: :		578	<del>:</del> -	2,279		080	
	171	510	8			-	-	: :		158	510 3	8 8 4		20 0 24 34	
Tallow	13	61	: :83							13	:61	13 417	8 8 8 8 8	0 40	- 8 - 8 - 8
	4	K 042				:	:	:	618	4.	11.591	11.591		90 996	
	26	3 :	ကဋ					<u> </u>		9.8 2.8		100	88	:	
	2 o	:63	80				: ; : ;	: :	<u> </u>	11	:87	13		08: 0	
All other goods and merchandise not enumerated	3,169	1,641	847	:	: :		_ <u>:</u>	_ <u>:</u> _:	:	4,016	1,641	2,657	830 20	328 20	1,131 40
Bark Barrels, empty.	165	17	<b>-</b>				::	::		166	12:		31 18		33 44
Eloats Floats						: :		: : :			96	200		.86	65 80
· · ] · · · · · · · · · · · · · · · · ·	<del>-</del>	700	<del>-</del>	:	<u>:</u>	<u>:</u>	: :-	<u>:</u>	<u>: -</u> .	<del>-</del>	3	•	:	}	- ; }

Total Amount of 8 :: 8 ........ 32,996 26 102 No. (A) 10.—General Statement showing the Quantity of each Article of Through Freight transported, &c.—Concluded. Amount of Tolls, 27,519 48 Down. 8 Amount 5,476 78 : = 239,891 Total Tons. Down. 207,346 Tons. 32,545 83 Up. Down. 118,617 From United States to Canadian Ports. Down. From United States United States Ports. From Canadian to United States Ports. Down. Up. 88,729 Down. From Canadian to Canadian Ports. 22,920 ह्य  $\mathbf{Op}$ Masts, spars and telegraph
Poles, in rafts. Saw logs Staves and headings, barrel... Hop poles. Lumber, sawn, in vessels. Masts, spars and telegraph Staves, salt barrel.
Shingles
Split posts and fence rails, in Split posts and fence rails, in Traverses Woodenware and wood partly Timber, square, in vessels.... Agricultural products, vegemanufactured ..... Total Freight paying Tolls. Free Articles having Paid Full Tolls on the Welland Canal

							90	es	
							10,723 36 1,989 40	45,709 02	enue.
							5,364 22 1,696 50	34,580 20	ınals Rev
	=		,			<del></del>	5,359 14 242 90	\$11,128 82	H. TEAKLES, Chief Clerk, Canals Revenue.
52,539 3,324 2	371 100 2,991	917 67 278	390 201 64,978	5,680 159,785 105	7,951	541,028	\$8,444.47	:	BAKLF Chief
52,539 3,324 2	371 100 2,991	917 67 278	390 201 64,978	5,680 159,785 105	1 410	500,532			В. Н. Т
					7,951	40,496		:	-
	1	88		480		119,530			
		: : : : : : : : : : : :					£ <u>s</u>	Folls	
						2.9	Total Through Tolls on vesselsdo passengers do do free goods	Total Through Tolls	·
						2	Tolls on	Total	&
					9	6.	Through do do		WAYS AND CANALS. OFTAWA, 1st March, 1892.
	0-		S-100	3.0101	100	9,649	Tota		CANAI St Mar
52,539 3,324 1	371 100 2,591	28.99	64,978 201 201 201	5,680 159,305 105	1.410	%			8 AND AWA, 1
					7,851	30,771			AILWAY OTT
	li n vessels.	do rafts. Meal, all kinds Merchandise	Pork. Rye Seeds, all kinds	Timber, square, in rafts. Wheat. Whiskey, &c		Grand Total, Freight			DEPARTMENT OF BAILWAYS AND CANALS. OTTAWA, 1st March

# SUPPLEMENTARY APPENDIX A-Continued.

No. (A) 11.—General Statement showing the Quantity of each Article of Way Freight transported on the St. Liwrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1891.	STATEM	ENT She	wing (mount	he Qua	ntity o	f each ted duri	Article ng the	EMENT showing the Quantity of each Article of Way Freight trunsported and the Amount of Tolls collected during the Season of Navigation in 1391	Freigl of Nav	nt trans igation	ported o in 1891.	n the St.	Lawren	e Canals,
Articles.	Fr Cana to Cans Poo	From Canadian to Canadian Ports.	Fr Can t United Por	From Canadian to United States Ports.	From United States to United States	From United States to United States	From United States to Canadian Ports.	om States o dian ts.	Tons.	zi,	Total Tons.	Amount of Tons, Up.	Amount of Tolls,	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												e cts.	ee cts.	es cts.
Ashes, pot and pearl.	47	300	:		9	: :		: :	1183	306	362	1 27 4 64	12 55	$\begin{array}{c} 1 \ 27 \\ 17 \ 19 \end{array}$
Agricultural products not enumerated, vegetable		11	_ :	:		:	:		61	11	72	5 21	0 65	5 86
Agricultural products not		₫.				:	8	:	73		115	5 51	3 2 3 3 3 3	
Agricultural implements Barley	288	8,515					000		220	8,515	8,735 19,195	4 6	170 52	174 92 497 92
Bones.	12,303	8			: . : : :		13		14, 14	33	94			
Brimstone	150 874	:					S ::		159 874		968	4 8 8 8 8 8 8 8 8		
Clay, lime and sand	19,323	6,847		62		1,040	3,371	18,384	22,694	<b>ల్ట</b> క్రి	8,83,04 14,08,04 14,000		1,525 62	1,110 19 1,525 62
Corn.	4 B			: : : : : :	: :	28 : :			4 KS	33 ES	<del>\$</del> \$	- <del>2</del>	25 61	3 67 27 49
Cotton, raw. Crockery and earthenware		:		: :			. :8		:ळ <sup>8</sup> :		: 68 S		0 00	
Dve wood and dye stuffs	<u>4</u> 85.		: : : :		: :		<b>8</b> :		1882.	:4	227	12 5 2 7 5 2 7 6	2 88	
Flour.	693	: '			2	107			700 r	119	819 846	45 52 10 10	8 52	. 22 & . 22 & . 28 &
Gypsum	1,531								1,55 8	781	1,718	21 59 12 10	88	
Hay, pressed	3 <del>5</del> 5	557	ිසි : :		: <b>°°</b>				<u>2</u>	292	1,499		33 64	
Horses	114								114	231	345	9 9	13 11	19 79
hoofs	- 63	61	:		<u>:</u>	:			67	61	4	60 0	80 0	0 17

do pigdo all other.	1,126 9,140	11 624			::"				176 1,126 9,142	624 624	181 1,137 9,766	9 04 46 65 364 35	0 39 0 42 25 02	9 43 47 07 389 37
Exposite chemical ore and other ore, except iron.	: :22	133								133	18 197 814		0 90 5 25 33 47	0 90 11 57 37 63
Meats, other than pork Marble	327	ē : :				• : :			325	::	22.	888		
	610	147			: :		:81	10	735	:	882			
Nails. Oats	1,246	870 7,537				: :	: : '		1,246		1,375 8,783		43 50 193 94	
Oil cake.	<b>3</b> ∓;	2 : S			<u>:</u>	0	<u> </u>		112	:	11			
Potatoes	9 <b>5</b>	6 8 10 10 10		: :	<u>:</u> :	<u>:</u> :	<u>:</u> :		96	N	0110			
Pork. Paint.	8 % 8	25 83 25 83			: :	::	<u>:</u>		333		289 89	-		
Pitch and tar	<b>₩</b>	18		:	:	:			88.		338			
Rye Rosin	34	1,029					1.23		1,839		1,106			
Stone intended for cutting	2, 25,28	ន្តន					3.35	2	3,302		2,332 3,723			
do wrought	349	:	:	:	:	:	<del>-</del>	3	362	:	362		:	
do not suitable for cutting, unwrought	8,042	10,928					- :		8,042	10,928	10,928	301	218 55 63 49	218 365 24
Sheep.	:#8	8.6		: :	:	:	: :		67		38	9		
Steel.	S S S	শ্ব			: :		<u>:</u>	1	227		88	`& ;		
Spirits, beer, &c.	₹ 8	Z1 17	: : :	: :	:	22	: :		28		247	\$ 23		
:	<b>30</b>	:	:	:	:		: <del>*</del>		∞ <u>t</u>	:	∞ <u>~</u>	00		
Tin	2	20	: :				4	1	38	:	133	တ် •		
Turpentine.	5,635	13,832	: :	: :	: :	: :	ot :	9	5,68 88		101 19,467	4 23 8 23	276 64	
White lead.	88	<b>:</b> ::		: :	: :	<u> </u>	:67	. 63	88	:	33	4 70		
Wool. All other goods and merchandise not enumerated	3,199	1,181	. 6		475		<u>:</u>	2	3,895	1,661	5,556	424 96		
Barrels, empty		3 -	11			: : : : : : : : : : : : : : : : : : :			125	30	38	10.94	90	11 50
Boat knees	460	4 990		:	: : :	: :::::	: : :	:						

:822

88

Total
Amount of
Tolls. 828 10,517 388 8 Amount of Tolls, Down. 5,390 828 No. (A) 11.—General Statement showing the Quantity of each Article transported, &c.—Continued. of Tolls, Up. 38 8 Amount 5,126 : es 28 304,296 Total Tons. 1,933 3,348 10,280 2,725 8,070 184,949 Total. 2,331 Down. 18,396 From United States to Canadian Ports. 9,008 Down. United States 1,701 From United States 637 Down. 1,545 United States Ports. From Canadian Down. 1.025  $\mathbf{Up}$ From Canadian to Canadian Ports. 2,256 108,622 Down. Saw logs Staves and headings, barrel. Staves, salt barrel. Shingles Split posts and fence rails, in Woodenware and wood partly Firewood, in vessels. Total freight paying tolls.. manufactured....... Timber, square, in vessels ... do rafts.... Split posts and fence rails, ii Hoops Hop poles. Lumber, sawn, in vessels. Railway ties, in vessels vessels....

Coal, free, per Order in Council 62, 425	62,425		:	:	50	:	24,306	24,306		86,739	86,739				
Free articles for Canal con- struction, per Order in Coun- oil, 1884:—							<del></del>								
Cement and water line Clay, lime and sand Iron, all other Stone, for cutting Timber, square, in vessela	750	539							563	539	539 563 14 750 140				
Grand total freight 172,360	172,360	166,725	1,080	1,545	645	1,701	33,314	18,396	18,396 207,399 188,367	188,367	395,766				
			Total	Total way tolls on vessels do passengers do iree goods	on vessel passed free						8 4,700 91	3,863 46	1,601 51 638 18	3,863 46 1,601 51 5,464 97 397 06 638 18 1,036 23	
			1	To	tal way t	olls.	Fotal way toils.	:				\$ 9,387 47	\$ 9,387 47 7,630 07 17,017 54	17,017 54	

SUPPLEMENTARY APPENIDX A-Continued.

Articles,	From Canadian to Canadian Ports.	From Canadian to Canadian Ports.	Fr Cans United	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports.	Fr United t Cana Por	From United States to Canadian Ports.	Ĭ	Tons.	Total Tons.	Anount of Tolls.
	Up	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl Apples. Agricultural products, vegetablé. do animal. Agricultural implements	118	28 28 1,407 150							188	28 432 1,407 150 150	28 44 433 1,413 16 150	cts 5 32 1 93 40 79 117 02 2 62 2 12 2 12 2 12
Bones.		18								18	18	1 86
Brimstone Cement and water lime Clay, lime and sand.	402	7,689							402	7,689	8,091 848	222.23
Corn. Cattle		750								750	750	48 96
Crockery and earthenware.  Dye wood and dye stuffs  Fish	: : : : : : : : : : : : : : : : : : : :	5								. 63		98 0
Flax and hemp. Flour Furniture	99	106							9	106	112	10 05 4 44
Gypsum Glasg, all kinds. HAy, pressed HOgs		488 88								288 8 8 8	263 8 8	: :0805 :5885
Horses Hides and skins, horns and hoofs If the railway	9 : : :	37										en :
do pig. do al other	:00	:32					: :		: <b>∞</b> :	: 64	72	3 15

Kryolite chemical ore and other ore, except iron.	1,78	4.4		<u>:</u>	<u>:</u> :	:	1,784	1,784	
Meal, all kinds. Meats, other than pork.							17. 81	17 81	1 57 7 83
Marble Manilla Molasses	25.					: :27.5	<del>: : :</del>		1
Nais. Oats Oil in barrels		1 20 67				3 : 22	1,038	1, 88,8	282
Oil cake. Pease Potatoes Pork.	2749 14 451 25 27						2,749 451 27	2,749 465 52	191 78 38 00 2 85 0 19
Pitch and tar. Rags Rye							: 67	3	.04
Kesin Salt Skone intended for cutting do wrought	16					16	:- :e	17	:
do not suitable for cutting, unwrought. —Seeds, all kinds. —Slabesp. —Soda sah.	431	77					431	431	3 46 32 59
Steel Sugar Spirits, beer, &c	16 17					16		18 20	1 2 2 2
Tobacco, raw. Tallow. Tin. Turpentine.	2	· · · · · · · · · · · · · · · · · · ·				: 61	<b>3</b>	র ন	0 15
Whest White lead Whiting Wholing All other goods and merchandise not enumerated	1 9 86 317	20 HDF				28	18 1 317	18	1 76 0 05 53 90 53 90
Bark Barrels, empty		 88					· · 88	88	4 60
Boat knees. Floats. Floats. Firewood, in vessels.	31,600	06	1,542			75	31,600	31,600	335 18 1,812 71
les do	236 317,923 159 169	ည် အတ္	105,548				23. 47.1 159	235 423,471 159	27 88 32,352 80 9 15

No. (A) 11.—General Statement showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.	om dian dian ts.	From Canadian to United Stat Ports.	From Canadian to United States Ports.	From United States to United States Ports.	States States States	From United States to Canadian Ports.	States dian	Tons.	18.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
						-		. :				s cts.
Maets, spars and telegraph poles, in rafts		435						: :		435	435	76 17
Inay use, in vessus.		12,662								12,662	12,662	292 24
Staves and headings, barrel												
Staves, salt barrel. Shingles		: : : : : : : : : : : : : : : : : : :		<u> </u>						597	597	465 49
Timber, square, in vessels		3,240		: : :					<i>i</i> : :	3,240	3,240	103 90
Traverses Woodenware and wood partly manufactured.	: 4	000 000 000 000 000 000 000 000 000 00							4	B 67	9	
Total freight paying tolls	771	432,225		107,435					771	539,660	540,431	36,601 56
Articles Free per Order in Council.										-		
Lumber, sawn, in rafts Tinber square, do Floats Saw logs Railway ties, in rafts	100	2,220 16,440 10,678 10,000							100	386 2,220 16,440 10,678 10,000 4,786	2,220 16,440 10,678 10,000 4,786	
rand to	871	476,735		107,435					871	584,170	585,041	

3,675 92 162 91 10 00 10,450 39	•
162	
3,675 92 162 91 10 00 \$ 40,450 39	oeur
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	B. H. TEAKLES, Chief Clerk, Canals Revenue.
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vessels passengers free goods. storage ages	
Total tolls on vessels  do passengers do free goods. Wharfage and storage Fines and damages Other receipts.  Total revenue, exclusive of hydraulic rents	
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	DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 18t March, 1892
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SUPPLEMENTARY APPENDIX A—Continued.  EMENT showing the Quantity of each Article transported on the Chambly Canal, and the Amount of Revenue collected during the Season of Navigation in 1891.	l Amount of Of Tolls.	1	958 61 84 1 0 10	:48%		-	23 25 20	228 7 60 7 1 08	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9		<b>5</b>
nd th	Total Tons.			:	4,8		:	· ;	. ซุ			
Canal, a	Tons.	<b>Down</b> .	955	338	140 31 3,948 86,216	57	818 : :	27.	2,323	9	6	N
mbly	Ţ,	Up.	6	: 504 341	 685 76			201	462			8
the Cha 1891.	From United States to Canadian Ports.	Down.	46:	217	3,948 85,995		22	7	<del>-</del>			N
ntinued ed on ion in	Fr United Can	Up.										:
SUPPLEMENTARY APPENDIX A—Continued. showing the Quantity of each Article transported on the Revenue collected during the Season of Navigation in 1891	From United States to United States Ports.	Down.										:
APPENDIX ach Article trans ne Season of I	From United Sta to United Sta Ports.	ď.										:
APPE ach Ar he Seas	om dian States	Down.										:
TARY ty of e	From Canadian to United States Ports.	Up.		52.	245			: : :	133			:
EMEN Quanti ected d	m dian dian ts.	Бомп.	606	338	215	57	ह्य : :	27	2,323	9		:
SUPPLEMENTARY ing the Quantity of enue collected during t	From Canadian to Canadian Ports.	Up.	:60	150	410 76			201	329			8
S. (A) 13.—General Statement showi Revei	Articles.		Ashes, pot and pearl. Apples. Agricultural products, vegetable	Agricultural implements  Barley Libricks Nicks	Brimstone. Cement and water lime. Clay, lime and sand. Coal.	Corn Cattle Contron raw	Crockery and earthenware.  Dye wood and dye stuffs.	Flax and hemp. Flour Furniture	Gypeum Glass, all kinds Hay, pressed.	Hogs. Horses Hofse and skins, horns and hoofs	Ice Iron, railway do pig	do all other.

Layonce cuchinea ore and outer ore, except non- Layd and layed oil.  Meat, all kinds.  Meata, other than pork.								
Marble. Manilla. Molasses.				130		150	1280	12 00
rrels	3 1,236			: : <b>8</b>	: : : :	1,236	1,239	41 83 3 89
do cake Pease Potatoes. Port	7 1,506					1,509	1,509	50 35 0 70 0 10 0 10
Pitch and tar. Rags. Rye.				114		<b>1</b>	114	• .
Roein Salt Stone, intended for cutting. do wrought, do not suitable for cutting, unwrought	187 373			1,378 1,304 900 566	187	1,978 1,304 900 566	1,978 1,304 1,273	196 30 1 46 132 45 102 45 56 60
Seeds, all kinds Sheep. Coolea seh Skeel. Sugar. Spirits, beer, &c.	9					146	152	20 04
Tobacco, raw Tallow Tin Turnentine. Wheat.				63		:::39 :::	65	6.20
W niting. Wool All other goods and merchandise not enumerated Bark	618	898		2,482	. : 	2,804	3,690	279 51
Barrels, empty Bost knees. Flosta Fire wood, in vessels do rafts.	11,485	13	•		19,161	135	19,296	1 64 0 25 649 54
Hop poles Lumber, sawn, in vessels.  Masts, spars and telegraph poles, in vessels.	40,550	56,878		20	97,428	: :2 : :2	97,498	5,791 76

	Con Con Fig.	From Canadian to Canadian	Fr Cans TInited	From Canadian to United States	United	From United States to	United	From United States to	To	Tons.	Total	Amount
Articles,	A.	Ports.	Po	Ports.	Po	Ports.	Po	Ports.			Tons.	of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
			_		-							. es cts.
Railway ties, in vessels	1,859	189	745	:					2,604	189	2,793	218 93
Saw logs									: :			
do do pipe.				: :								
Staves, salt barrel.			: :8									
Split posts and fence rails, in vessels	= : :: ::		8 :						O# : :		140	% /T : :::
Timber, square, in vessels	: : : : : :	: :			: :			::				
Traverses. Woodenware and wood partly manufactured.												
Total freight paying tolls	56,418	7,547	66,881					98,073	123,299 345	105,620	228,919 345	16,842 15
Grand total freight.	56,763	7,547	66,881	•				98,073	123,644	105,620	229,264	
				Tot Oth	Total tolls on vessels do passen do passen for free gr	Total tolls on vessels do passengers do free grods Fines and damages.	ers				\$30.34	2,437 84 66 59 9 00 75 30
					F.	Total revenue, exclusive of hydraulic rents	ue, exch	usive of hy	draulic	rents		\$ 19,430 88

SUPPLEMENTARY APPENDIX A.—Continued.

Amour	
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r showing the Quantit	Revonne collected dr
MENT showing the Quantit,	Revenue collected du
ATEMENT showing the Quantit,	Revanue collected du
L STATEMENT showing the Quantit,	Revenue collected du
ERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, and the Amount of	Revenue collected du
GENERAL STATEMENT showing the Quantit,	Revenue collected di
14.—General Statement showing the Quantit,	Revenue collected dr
A) 14.—General Statement showing the Quantit,	Revenue collected dr
to. (A) 14.—General Statement showing the Quantit,	Revenue collected di
No. (A) 14.—General Statement showing the Quantit,	Revonue collected dr

Articles.	From Canadian to Canadian Ports.	in lian dian ts.	From Canadian to United States	rom nadian to d States orts.	Fr United United Po	From United States to United States Ports.	Fr United th Cans	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up	Down.	Up.	Down.		
Ashes, pot and pearl.	31	85,							31		88 107	** ***********************************
Agricultural products not enumerated, vegetable Agricultural implements Barley Barley CBBricks CBBricks	1158827	320							388337	370 99 7.28 21.28	373 373 873 89	12 88 88 88 88 88 88 88 88 88 88 88 88 88
Brimstone Cement and water line Clay, lime and sand Coal Coal Corn Coal	180	11,391							180	425 11,391 22 33	222 92 11,391 7	: ::::::::::::::::::::::::::::::::::::
Cotton, raw Corokery and eartherware Dye wood and dye stuffe. Fish									37 11 70		57 85 85	
Flax and hemp. Flour Furniture	141	549							141	549		17
Gypsum Glass, all kinds Hay, pressed	73 879								73 879	-C		: ** &
Hogs Horses Horses and skins, horns and hoofs.	  	-44.00							 5 14	· 4+ 00	.6 88 	00
Licon railway do pig	728								25.52.52	: : : : : : : : : : : : : : : : : : :	60 88 895	

No. (A) 14.—Gener 1. Statement showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.	niian lian s.	En Cans United	Erom Canadian to United States Ports.	Fr United	From United States to United States Ports.	From United State to Canadian Ports.	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1												e cts
Kryolite chemical ore and other ore, except iron	1,815	886		<u>:</u>	:	:	:		1,815	88	2,703	135 15
Meal, all kinds	5-1	3 ∞		:			:		2	3 ==	24	
Meats, other than pork	10	-1					: :		10	-1	17	
Marble	4	:	:	:	:	:	:		4	:	4	98 0
Molasses	6	5				•			26	10	102	
Nails	314	10							314	10	319	8,8
Oats	<u> </u>	9	:	:	:	:		:	3	61	22	
COIL in parrels	147	20 er	:	:	:	:	:	:	147	55 F	416	39 12
Pease	131	9 00			:			:	131	n <del>c.</del>	. 3	4 6 5
:	88	100							8	100	183	. ro
Pork	178	<del>1</del> 9		:		:	:	:	178	61	<b>8</b>	& 8 •
Pitch and to	38	3		:	:	:	:	:	38	<del>2</del>	<b>3</b>	4. 88
	<u>;</u> e	:	:	:	:	:		:	8 3	:	8 4	8 2
PVe	149	21	: : :	:	:	:	:	:	149	2	170	4
Rosin	20	:							10	:	, rc	•
Salt	1,54	139	:	-	:	:			1,544		1,683	47
Stone intended for cutting	8	678		:	:	:	:	-	<b>8</b>	678	713	æ,
do wrought	61	4		:	:	:	:	:	61	4	ន	21
do not suitable for cutting, unwrought	: 0		:	:	:	:	:	:	:::::	: 1		07
Speeds, an Amus	100		:	:	:	:	:	:	0 5	-	CT C	9
Social and	-	:	:	:	:	:	:	-	1 1	:	31	66
	8			:	:	:	:	:	38	:	38	-
Sugar	4	72							447	72	20.0	49 53
Spirits, beer, &c	62	8							62	8	88	98 8
Tobacco, raw	:	:::::::::::::::::::::::::::::::::::::::	:	:		-	- : :	:	-:	:		
Tallow	::	:	:	:	:	:		:			:	
Timontine	<u>:</u>	:	:	:	:	- -	:	:	21	:	12	1 17
Wheat	27		:	:	:	:	:	:	:	5%	00%	σ
	•		•		:				1	3		

	-											
6,145 89	:			nts	Total revenue, exclusive of hydraulic rents	ve of hyd	ie, exclusi	tal revenu	To			
10 00 185 50									жеже	Fines and damages Other receipts	Fines Other	
86 88	242 00 8 18 27 70							ife ife	do nrewood do stone do kryolite storage	uo uo nrew do do ston do do kryo Wharfage and storage	Whari	
1,786 69 130 86									vessels passengers free coal	Total tolls on v	Total	
	109,313	28,142	81,171	:					11,457	28,142	69,714	Grand total freight
	554		25	:	:						254	
	350		850 850	: :			: : : : : :		:		350	Litewood, 11ce up to Solution No. 11ce from hearing noise free, for canal construction No. 11ce from Welland
3,992 86	89,576	28,142	61,434		: :	: i		: :	2 11,457	28,142	49,977	Total freight paying tolls
22	22 22	13	900								700	Traverses Woodenware and wood partly manufactured.
	319		536							· . :8		do do rafts Timber, square, in vessels do rafts
818. 88.	572 157	187 74	82							187	385 110	
601 86 86 86	5,700 815	¥8	5,634							<b>£</b> 8	5,634	Masta, spars and telegraph poles, in vessels Railway ties, in vessels
	38,519	9,113 0,113	29,406						11,44	9,113	17,967	Lumber, sawn, in vessels do rafts
a 4 8 8 8 8	1,415	300 300 363	1,115				::				1,115	Barrels, empty Flocks Theward in vessels
	1,240	31	3			_	_	_	,		•	

DEPARTMENT OF RAILWAYS AND CANALY,
OTTAWA, 1st March, 1892.

SUPPLEMENTARY APPENDIX A-Continued.

	F		ß		rs	11	<u> </u>	al Ca				
Articles.	Can	f rom Canadian to Canadian Ports.	Can Unite	Canadian to United States Ports.	United Parket	United States to United States Ports.	Unite Can	United States to Canadian Ports.	,	Tons.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												s cts.
Fish Flour Coal Lumber 80Cher agricultural products Other merchandise	35 1,161 530 1,523 2,592 671	413 138 22,071 1,304 3,597 485							35 1,161 530 1,523 2,592 671	413 138 22,071 1,304 3,597 485	1,299 22,601 2,827 6,189 1,156	226 01 226 01 227 03 228 27 61 89 11 56
Total freight paying tolls	6,512	28,008	:						6,512	28,008	34,520	345 20
					Tolls	Tolls on vessels. Other receipts						1,433 28
		٠					Total re	Total revenue		:		8 1,781 76

B. H. TEAKLES, Chief Clerk, Canals Revenue.

	STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals, and the Amount of Bevenue collected during the Season of Navigation in 1891.
ued.	n the Trent V n in 1891.
IX A—Contin	transported or of Navigation
Y APPEND	feach Article
SUPPLEMENTARY APPENDIX A-Continued.	ENT showing the Quantity of each Article transported on the Trent of Revenue collected during the Season of Navigation in 1891.
SUI	MENT showing of Revenu
	ENERAL STATE
	o. (A) 16.—G
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Articles.	Fr Cana t Cana Pon	From Canadian to Canadian Ports.	Fr Cana t United	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports.	Fr United t Cans Po	From United States to Canadian Ports.	To	Tons.	Total Tons.	An ount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												e cts.
Ashes, pot and pearl Apples Agricultural products not enumerated, vegetable. do animal												
Agricultural implements  Barley  Princks										2		89 0
6 Bones. Brimstone	: : : : : :	<u> </u>							· :	: :		
Cement and water lime. Clay, lime and sand	::			: :								: :
Con												
Cattle.		: : : : :	<u>: :</u>									
Crockery and earthenware  Dye wood and dye stuffs.	: :	::		: :								
Fish Flax and hemp. Flour	: :8 : :								: :X		<b>8</b>	0.35
Furniture												
Take, pressed.											: :	
TO'SE												
Indes and aking, norths and nous									:	:		
Iron, railway	,			: : : :								-:
do all other.	:	<u>:</u>	:	:	:					: :::	• • • • • • • • • • • • • • • • • • • •	

Kryolite chemical ore and other ore, except iron.  Kryolite chemical ore and other ore, except iron.  Lard and lard oil.  Meat, all kinds.  Maarble.  Manilla.  Molasees.  Nails  Coli; in barrels  Coli; cake  Pease.  Potatore.  Potatore.  Potatore.  Potatore.  Potatore.  Rage.  Rage.  Rage.  Rage.	From Canadian to the Canadian	<del></del>	From United States United States Ports.  Up. Down.		From United States Canadian Ports. Up. Down.	G G G	Tons.	Tous,	Amount of Tolls.
Up.	<u> </u>	Down	l <del>-1-:::::::::::::::::::::::::::::::::::</del>		Down	d D	Down.		• ct
Kryolite chemical ore and other ore, except iron.  Mard, and land oil.  Mardila.  Marilla.  Marilla.  Molasee.  Nails  Oats.  Oats.  Pease.  Pease.  Pease.  Pitch and tar  Rags.  Rags.  Rags.  Rags.									e cts
Kryolite chemical ore and other ore, except iron.  Lard and lard oil.  Meat, all kinds.  Meatle other than pork.  Marble  Manills.  Manills.  Malosee.  Oata  Oata  Obl. in barrels  Oil cake.  Perse  Pork  Perse  Pork  Rags  Rich and tar  Rich and tar  Rich Rich  Rich									
Meak, all kinds. Meak, other than pork. Marble. Manills. Manills. Mals control of the control of									
Mosta, other than pork. Marble Manills Molasees Nails Oaks Oaks Oil cake. Pesse Pork Pork Pork Pork Rags Rags Rye Rags									
Marbie Manila Manila Maloseee Nails Oaks Oaks Oil, in barrels Oil cake. Perse Pork Pork Pork Rich and tar Rich and sar Rich Sar									
Manila Malis Malis Malis Malis Malis Obata Obata Obi cake. Pease Poratoes Pork Paint Plock Rages Rage Rage									
Molasees Molasees Nasis Onasis Onasis Oil, in barrels Oil cake. Persee Poratoes Poratoes Paint Rags Rags Rags Rags									
Datas Datas Oil, in barrels Oil cake. Petastoes. Pork. Paint. Paint. Rags. Rags.								-	
July in barrels Oil cake. Pease Port Port Paint Paint Rage Rage Rage Rage Rage Rage Rage Rage		<u>: :</u> 							
Oil cake. Pease. Portatoes. Portatoes. Paint. Pitch and tar Pitch and sar Rages. Rye. Rye.			_	_	-: -:		:		
Pease Potatoes. Pork Paint. Paint. Rags. Rags. Rags. Rags.		• • • • • • • •		:			_	- · · · · · · · · · · · · · · · · · · ·	
Otatoes.  Oork. Saint. Sitch and tar Sags. Sye. Sooin.		<u>:</u>		:	:	:	:	:	:
Ock. Paint. Paint. Sitch and tar Sags Sye. Sye. Sooin	<u>-</u>	<u>:</u> : :	:::::::::::::::::::::::::::::::::::::::	:	:	<u>:</u>	-	:	::
Steph and tar Ages Sye. Sye. Sye.	<u>:</u> : :	<u>:</u> :: ::	<u>:</u> :	:	:	:	:		
Arch and far Sylven and far Sylven and far Sylven S	:::::::::::::::::::::::::::::::::::::::	· : :	:	<u>:</u> :-	<u>:</u>	:			:
			:						
				:	:	:	:	:	•
:		<u>:</u> ::	-:	:	:	:	:	:	:
Stone intended for cutting	:	<u>:</u> ::	: : :	-	:	:	:	:	:
do wrought.	:	<u>:</u> :::::::::::::::::::::::::::::::::::	<u>:</u>	:	<u>:</u>	:	:	:	:
do not suitable for cutting, unwrought	:	<u>:</u> : :	: :- ::	-	:	:	:	:	
Seeds, all kinds	:	<u>:</u> : :	<u>:</u> :	<u>:</u>	<u>:</u> :-	<u>:</u> :	:		
Sheep	:	<u>-</u>	: :		<u>:</u> :	: : :			
Code 880.	: : :	:	:	:					
Guerra									
Spirits, beer, &c									
Товасоо, га.	:	<u>:</u> ::		<u>:</u>	:	:	:	:	
Tallow	<u>:</u>	<u>:</u> ::	: :	: : :	:	:	:		
Tin		:	:	<u>:</u>	:	:	:	:	:
Turpentine	:	<u>:</u> : :	:	:	:	<u>:</u>	:	:	
W heat		<u>:</u> :	:	:	:	<u>:</u>		:	:

601 73 gnue.	I. TEAKLES, Chief Clerk, Canals Revenue.	KLES, erk, Can	H. TEAI	B. E		ents	Total revenue, exclusive of hydraulic rents .	iive of hy	ue, exclu	al reven		
	1					•						
317 42 88 85					ers.	vessels Passengers.	Total tolls on vessels.	Tota				
245 46	20,839	4,207	16,632							4,207	16,632	Total freight paying tolls
6 : 0 :	9 :	. 140	20 20 20 20 20 20 20 20 20 20 20 20 20 2							94 :	<b>19</b>	Traverses. Woodenware and wood partly manufactured.
	· · ·	<u>: :</u> : :	: :									are, in vesselsrafts.
20 20 20 20 20 20 20 20 20 20 20 20 20 2	1,188	1,088	8 00 :							1,088		nd fence rails, in vessels do rafts.
13 89	156		136				•			: :61 : :	136	Gtaves salt barrel.
		::	<u>: :</u> <u>:</u> : :	<u>.</u> 								eadings, barrel
4 7 8 20 10	165 180 3,742		3,542 3,542							200	165 170 3,542	Railway ties, in vessels.
3 60 10 10	171	<b>3</b> 0	166							320	399	do do rafts. Masta, spars and telegraph poles, in vessels.
0 67	: :6	: :8	: :									Hoops Hop poles
12 12 121 90	1,162 12,378	1,162	11,283							1,162	11,283	Took knees  Floats  Privats  Firewood, in vessels
56 : 50 : :	조 조 조 조 조 조 조 조 조 조 조 조 조 조 조 조 3 3 3 3	<u>:</u> :: 3	:: : %55 :		: :					S : :	22 X :	Bark cure goods and metenance not commerced.  Barrels, empty.

mount of	Amount of Tolls.		e cts.	2 80 5 16	0 11 14 19	0 02	37 70 0 06 0 06	0 23 0 05 0 12	0 27 1 86	0 35	0 74 0 02 3 75	0 02 1 18
SUPPLEMENTARY APPENDIX A—Continued. showing the Quantity of each Article transported on the Murray Canal, and the Amount Revenue collected during the Season of Navigation in 1891.	Total Tons.			146	756	102	2,059	689	14 72	13	37 1 150	61
anal, an	ns.	Down.			360		2,059		10		<b>L</b> e :	: :===================================
rray C	Tons.	Up.		92	396	102		6.83	.4.78	£1 .	30 1 150	:ਜਣੂ :
the Mu 1891.	From United States to Canadian Ports.	Down.					1,237		: : <b>-</b>			
SUPPLEMENTARY APPENDIX A—Continued. showing the Quantity of each Article transported on the Revenue collected during the Season of Navigation in 1891	From United St. to Canadia Ports.	Up.										
A—Continued ransported on Navigation in	From United States to United States Ports.	Down.		:::								
NDIX rticle to son of ]	Fr United United Po	Up.				•						
APPENDIX each Article the Season of	From Canadian to United States Ports.	Down.					520					
TARY tity of luring t	Fr Cans t United Por	Up.			: :98 : :				: :2			
SUPPLEMENTARY ring the Quantity of some collected during it	From Canadian to Canadian Ports.	Down.			360		572		10		2	: : <b>-</b>
SUPPL ing the	Fr Cam Can Can	Up.		92		102		6.63	: :4.88	13	30	: : : :
No. (A) 17.—General Statement show Reve	Articles.			Ashes, pot and pearl. Apples Agricultural products not enumerated, vegetable.	Agricultural implements.	Sones Brinstone. Cament and water line	Clay, line and sand Coal. Corn Coartie	Cotton, raw. Crockery and earthenware Dye wood and dye stuffs. Fish	Flax and hemp. Flour. Furniture.	Gypsum. Glass, all kinds Hav ressed.	Hogs Horses. Hides and skins, horns and hoofs Ioe	Iron, railway. do pig do all other.

	,	:					· 69	.es :	90 0
Meats, all kinds. Meats, other than pork. Marble. Manila. Molasses.					173	:		101 7 4 221 771 771	0 26 0 18 0 18 1 10 3 59 0 32 0 32
Uli, in barrels.  Dil, cake. > Pease.  Pease.  Potatoes.  Porations.		98			13:				: :
Pitch and tar Rags. Rye. Rye. Radit		. 8 .8	· · · · · · · · · · · · · · · · · · ·						: :
Stone intended for cutting do wrought. do not suitable for cutting, unwrought. Seeds, all kinds Cosheep.									
Steel. Sugar. Sugar. Sugar. Tobaco, raw Tallow Tin Tin Tin Tin Wheat.	25 1 2 1 2 2 2 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	531					286 1 2 12 2 287 1 2 2 23 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	818 818 818 818	25 52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
w nice lead Whiting Wool All other goods and merchandise not enumerated Bark Enrels, empty		: : : :							
Boat knees. Floats Floats Froats Froats An rafts Hopps Hop poles.			375						88 - 49

No. (A) 17.—General Statement showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United State	From Canadian to United States Ports.	From United States to United States Ports.	States States States ts.	From United States to Canadian Ports.	om States dian ts.	Tons.	<b>.</b>	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												cts.
Masta, spars and telegraph poles, in rafts Railway ties, in vessels			: :			• :						
do rafts Saw logs.		22								: 23:	22	0.30
Staves and headings, barrel do pupe	<del>: :</del>	: :										
Skaves, salt barrel	4								₩	-		0 31
CSplit posts and fence rails, in vessels.	* :	•					:		:	:	:	1
Timber, square, in versels do rafts.	: <b>&amp;</b> &	1,400							- <b>8</b> 8	1,400		0.50 18.50
Traverses Woodenware and wood partly manufactured	#	<del>-</del> :							<del>-</del>		41	0 75
Total freight paying tolls	5,002	4,322	905	350			22	1,238	5,932	5,810	11,742	191 91
				Total	Total tolls on vessels.		Passengers.					281 12 197 02
	•	lotal rev	enne, exc	slusive of	hydrauli	Total revenue, exclusive of hydraulic rents	:		:			670 06

B. H. TEAKLES, Chief Clerk, Canals Revenue.

# STATEMENT.

SUPPLEMENTARY

No. (A) 18.—Statement of Traffic on the undermentioned Canals, and

Audition	Welland	d Canal.	St. Lawrer	ice Canals.	Chambl	y Canal.
Articies.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 1.		\$ cts.		\$ cts.		\$ cts
Canadian vessels, steam	353,971	3,952 11	676,266	3,920 31	64,052	206 7
United States vessels, steam	478,656	7,187 03	23,980	184 98	1,025	10 5
Canadian vessels, sail	173,921	3,460 34	1,075,155	11,565 42	44,782	632 2
United States vessels, sail	103,608	2,306 06	66,228	517 62	115,871	1,588 3
Total, Class No. 1	1,110,156	16,905 54	1,841,629	16,188 33	225,730	2,437 84
Class No. 2.						
Passengers	No. 35,080	433 66	No. 63,283	3,024 63	No. 3,783	66 59
Class No. 3.						
	Tons.		Tons.		Tons.	
Bricks	49	5 52	13,710	574 16	467	30 7
Brimstone	66 418	9 90	159	14 98 647 57	140	27 6
Clay, lime and sand	70	62 58 5 25	4,609 32,259	1,517 89	31 4,603	$\begin{array}{c} 3 \ 1 \\ 462 \ 7 \end{array}$
Fish Jypsum	305	40 56	328	31 27		
Gypsum			1,718			
fron, railwaydo pig	127 499	19 05	3,300	477 28 547 77		
do all other.	1,610	99 80 291 31	4,475 11,701	679 62	27	1 0
Balt	2,567	502 80	8,467	1,128 66	187	7 4
Steel	6,220	933 00	817	109 32		
Stone, for cutting	6,602	1,320 40		352 16	1,304	130 4
Apples Barley	1,223 8,113	33 98 1,622 60	5,088 17,606	726 09 352 34	958 842	61 8 44 9
Corn	185,180	37,035 85	12,339		042	*** 3
Cotton, raw			2	0 30		
Flax and hemp			2 700	0 19		· · · · · · · <u>-</u> · <u>.</u>
Flour	13,517 121	1,911 76 19 20	4,799 1,599	655 09 86 49	$\begin{array}{c} 228 \\ 2,785 \end{array}$	76
Meals, all kinds	26,164	5,232 70	833	39 88	2,100	113 8
Dil cake			11	1 08		
Qats	52,959	10,591 80	8,923	243 80	1,239	41 3
Pease Potatoes Potato	630	102 00	36,225	748 89 10 15	1,509	
Rye	25 65,888	2 33 13,136 75	$127 \\ 1,939$	39 04	7	0 7
Seeds, all kinds	258	51 60	9,963	399 84		
Tobacco, raw	1	0 20	12	1 40		
Wheat	198,658	39,092 84	31,058	1,364 92		
All other agricultural products, vegetable	444	28 80	627 149	89 11 18 38	341	
Cattle	1	0 02	402	29 59	57	19
logs			27	4 05		
Hides and skins, horns and hoofs	87	13 05	33	4 52		
Ard and lard oil	67 126	3 02 25 20	390 336	26 54 39 49	6	0 2
dests, other than pork	19	3 00		32 42 3 56		
Pork	276	55 10	581	51 34	3	0 1
Sheep	• • • • • • • •		96	7 34	152	5 0
Tallow	1 243	12 40 248 30	26 13	2 44	• • • • • • • • • • • • • • • • • • • •	• • • • • • • •
Wool	1,243	248 30	13 973	1 95 137 46	• • • • • • • • • • • • • • • • • • • •	
		112,512 67		13/ 40		

### APPENDIX A-Continued.

the Amount of Tolls collected during the Season of Navigation in 1891.

Canal.	Murray	ey Canals.	Trent Vall	's Canal.	St. Peter	anal.	Rideau (	Canals.	Ottawa
Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
\$ cts 226 9 0 5 51 6 2 0	134,369 168 13,002 92	\$ ets. 223 59 0 50 93 33	29,593 8 22,975	970 28	23,150 48,514	\$ cts.  762 11 16 83 766 05 241 70	78,137 711 68,965 16,644	\$ cts. 682 17 2 29 2,274 15 717 31	167,576 186 161,026 30,939
281 1	147,631	317 42	52,576	1,433 28	71,664	1,786 69	164,457	3,675 92	359,727
. 197 (	No. 16,651	88 85	No. 9,547		No.	130 86	No. 5,423	162 91	No. 12,569
		0 68	Tons.		Tons.	1 20	Tons.		Tons.
0 ( 1 9	102		• • • • • • • • • • • • • • • • • • • •			5 90	222	2 36	24
0 1	6			4 48	448	2 16 1 90	92 73	229 22 0 26	8,091 3
0 ( 1 1 0 t	1 61 28					1 78 1 96 8 08 47 33	60 63 295 1,683	3 15 0 50	72
0 ( 2 8 14	1 146 756					1 01 33 36 3 60 8 89	30 713 107 373	0 02 1 93 11 22	1 44 150
0 (	3					0 61	22		
0 :	14	25			1,299	17 51 20 72 0 18	690 880 7	10 05 25 23 · 1 57	112 263 17
0 6 0	17 366 7 527					0 10 3 27 4 20 5 56 4 51	3 124 140 183 170	82 86 191 78 38 00 4 32	1,038 2,749 465 47
0 15 5	816 267				6,189	0 48 8 90 17 26	15 290 360	3 46 1 76 40 79	37 18 433
	3					1 26 0 19	32 7	1 80 48 96	18 750
0	1 37 3					0 82 0 33 1 24	22 9 42	. 0 60 3 33 10 51 0 39	8 37 184 4
0 0 0	1 10 2					0 48 6 28 0 29	17 239 10	7 83 2 85 32 59 2 27	81 52 431 24
						0 19 12 60	6 397	0 90 117 02	9 1,413
59	3,178	0 93	32	79 36	7,936	224 15	7,416	877 53	16,592

## No. (A) 18.—Statement of Traffic on the undermentioned

Articles.	Welland	d Canal.	St. Lawrer	nce Canals.	Chambly	y Canal.
Articles,	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 4.		\$ cts.		\$ cts.		\$ cts.
Ashes, pot and pearl	40	8 00	112	21 47		
Agricultural implements			87	13 14		
Crockery and earthenware		0 10	464	90 52	23	2 3
Dye woods and dye stuffs		9 00	100	8 40	55	5 5
Furniture	23 32	3 88 4 77	1,013 464	161 63 87 10	1	1 0 0 1
Marble.	3,556	533 40	20	3 93	-	0 1
Manilla	139	20 85	i	0 19		
Molasses	85	14 65		98 31	120	12 0
Nails	129	12 40		521 13	•••••	
Paint	56 144	7 67 20 56	1,036 632	150 79 89 30	39 1	3 8 0 1
Pitch and tar.	264	39 60		34 72	114	11 4
Rags	60	12 00		35 20		
Rosin			1,949	98 54	1,978	196 3
Soda ash	99	14 59		149 97	• • • • • • • • •	
SugarStone, wrought.	393 9	35 08 1 70		581 34 18 70	1 079	100 4
Pin	246	36 51	552	96 86	1,273	102 4
Turpentine			105	6 13	62	6 2
White lead	3	0 45		25 22	· • • • • • • • • • • • • • • • • • • •	
Whiting.			330	65 32	•••••	
Whiskey and all other spirits	346 50,202	67 96	1,215 11,213	226 70 1,673 86	9 600	970 8
actionalities, not onumerated		7,472 07	11,210	1,075 60	3,690	279 5
Total, Class No. 4	55,831	8,306 24	28,597	4,258 47	7,363	620 8
Class No. 5.						
Bark. Barrels, empty		10.50	13	3 75		
Boat knees	96	19 56	317	44 94	18	16
Cloats.	40	1 75	4,740	82 30	3	0 2
Firewood, in vessels		407 44	11,388	330 27	19,296	649 5
do rafts						
	64,877	11,545 03	44,410	1,518 45 0 15	97,498 63	5,791 7 5 0
do rafta					00	3 0
do rafts			l			
do rafts Hoops	327	28 03	745	14 87	2,793	218 9
Hoops	327	28 03	745		2,793	218 9
do rafts	327	28 03	745		•• • •••	218 9
do rafts  Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels	327	28 03		14 87		
do rafts  Hoops .  Railway ties, in vessels do rafts  Masts, spars and telegraph poles, in vessels  Masts, spars and telegraph poles, in rafts	327		20,986	14 87 524 65	•••••	
do rafts	327		20,986 2,183	14 87	•••••	
do rafts  Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels Masts, spars and telegraph poles, in rafts quare timber, in vessels do rafts Woodenware and wood partly manufac-	327 20,354 262	3,049 94 16 49	20,986 2,183 6,770	524 65 36 78 169 70	•••••	
do rafts	20,354 262	3,049 94	20,986 2,183 6,770	524 65 36 78 169 70		
do rafts	327 20,354 262	3,049 94 16 49	20,986 2,183 6,770	524 65 36 78 169 70	•••••	
do rafts	327 20,354 262 11 19	3,049 94 16 49 4 40 7 81	20,986 2,183 6,770	524 65 36 78 169 70		
do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels  do rafts.  Guare timber, in vessels  do rafts  Woodenware and wood partly manufactured  Shingles  Split posts and fence rails, in vessels  do rafts  Saw logs	327 20,354 262 11 19	3,049 94 16 49 4 40 7 81	20,986 2,183 6,770 36 16	524 65 36 78 169 70		218 9
do rafts  Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels Masts, spars and telegraph poles, in rafts Guare timber, in vessels do rafts Woodenware and wood partly manufactured. Shingles Split posts and fence rails, in vessels do rafts Saw logs Staves and headings, barrel.	20,354 262 262 11 19	3,049 94 16 49 4 40 7 81 160 87 12 40	20,986 2,183 6,770 36 16	14 87 524 65 36 78 169 70 12 40 3 26		
do rafts  Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels Masts, spars and telegraph poles, in rafts Guare timber, in vessels do rafts. Woodenware and wood partly manufactured Shingles Split posts and fence rails, in vessels do rafts Saw logs Staves and headings, barrel do pipe	327 20,354 262 11 19	3,049 94 16 49 4 40 7 81	20,986 2,183 6,770 36 16	14 87 524 65 36 78 169 70 12 40 3 26		
do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels  Masts, spars and telegraph poles, in rafts  Guare timber, in vessels  do rafts  Woodenware and wood partly manufactured.  Shingles  Split posts and fence rails, in vessels  do rafts  do rafts  Saw logs  Staves and headings, barrel  do West India	20,354 262 262 11 19	3,049 94 16 49 4 40 7 81 160 87 12 40	20,986 2,183 6,770 36 16	524 65 36 78 169 70 12 40 3 26		
do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels  Masts, spars and telegraph poles, in rafts  Go rafts  Woodenware and wood partly manufactured  Shingles  Split posts and fence rails, in vessels  do rafts  Saw logs  Staves and headings, barrel  do pipe  do West India  do salt barrel  Traverses	20,354 262 262 11 19	3,049 94 16 49 4 40 7 81 160 87 12 40	20,986 2,183 6,770 36 16 15,598	14 87 524 65 36 78 169 70 12 40 3 26 355 94		
do rafts  Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels Masts, spars and telegraph poles, in rafts Square timber, in vessels do rafts Woodenware and wood partly manufactured. Shingles. Split posts and fence rails, in vessels do rafts Saw logs Staves and headings, barrel do pipe do West India	20,354 262 262 11 19	3,049 94 16 49 4 40 7 81 160 87 12 40	20,986 2,183 6,770 36 16	524 65 36 78 169 70 12 40 3 26		
do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels  Masts, spars and telegraph poles, in rafts  Square timber, in vessels  do rafts  Woodenware and wood partly manufactured  Split poets and fence rails, in vessels  ado rafts  Saw logs  Staves and headings, barrel  do pipe  do West India  do salt barrel  Traverses	20,354 262 262 11 19	3,049 94 16 49 4 40 7 81 160 87 12 40	20,986 2,183 6,770 36 16 15,598	14 87 524 65 36 78 169 70 12 40 3 26 355 94	146	

# Canals, and the Amount of Tolls collected, &c.—Continued.

Ottawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Val	ey Canals.	Murray	Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls,	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
28 16	5 32 2 62	28 131 67	2 99 15 95 8 68	••••	• • • • • • • • • • • • • • • • • • • •		•••••	4 9	0 11 0 23
33 4	4 44 0 76	25 40 78 4	2 25 4 56 8 55 0 36	• • • • • • • • • • • • • • • • • • • •			•••••	2 72 13 10	0 05 1 86 0 35 0 26
24 11 25 1	1 42 0 75 2 70 0 19	102 319 416 36	9 55 30 06 39 12 4 25	••••••				7 44 122 85	0 18 1 10 3 59 2 17
3	0 44	28 6 5	2 99 0 54 0 45	••••				5	0 18
18 3 2	1 24 0 29 0 15	15 501 23 12	1 94 49 53 2 82 1 17	••••••••			• • • • • • • • • • • • • • • • • • • •	13 99 1	0 35 2 55
1 20	0 05 1 34	25 33 88	2 31 3 00 8 86				••••	25 12	0 6
402 591	53 30 75 01	1,246 3,228	146 37 346 30	1,156 1,156		129	3 87	965 1,488	24 0- 37 9:
		. <u>51</u>	1 92			32	0 94	5	0 10
31,600 45,466	335 18 1,812 71	77 1,415 16,430	6 28 24 85 320 85			1,162 12,378	12 12 121 90	945	7 8
423,471 159 235	32,352 80 9 15 27 88	38,519 5	1,685 15 0 19	2,827		592 202	9 67 3 60	825	9 6 0 1
435	71 97	5,700 815	601 15 86 69			180			•••••
2,684 3,240	1 57 103 90 55 32	34 319	1 68			1,188	10 10 21 25	80 1,480	0 5 18 5
6 597 4	1 01 465 49 1 72		2 55 31 08 3 74				13 39	4 <u>1</u>	0 7 0 3
12,662		572	13 40			3,742		1	0 3
	0 50	700	5 44			705	5 50		
200	l								

### No. (A) 18.—Statement of Traffic on the undermentioned

Articles.	Welland	Canal.	St. Lawren	ce Canals.	Chambl	y Canal.
Atticles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Special Class.		\$ cts.		* cts.		\$ ets.
Coal	224,644 2,871					8,455 12
Stone, unwrought, not suitable for cut- ting	2,813 1,150	281 30 57 50		226 95	566	56 60
Total, Special Class	231,478	45,410 55	177,211	23,111 87	86,852	8,511 72
Total freight and tolls. Timber and other wood, free	960,020 389	198,823 88 17 76		62,726 56 1,056 98		19,346 58
free	14,604	2,136 20	382,879	12,188 40	345	30 34
Grand Totals, passengers and ton- nage of vessels not included	975,013	200,977 84	936,794	75,971 94	229,264	19,376 92

Canals, and the Amount of Tolls collected, &c .- Concluded.

Ottawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Valle	ey Canals.	Murray	Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.				\$ ets.		\$ cts.		\$ cts.
648 1,784	23 78 89 20		483 88 135 15	22,601				2,059	37 70
,,,		-,,,,,				3	0 09		
								1,450 150	14 50 3 75
2,432	112 98	14,094	619 03	22,601	226 01	3	0 09	3,659	55 95
540,431 44,610	40,440 39 515 72	89,576 14,520			1,778 48	20,839	651 73	11,742	670 05
		5,217	151 01					•••	
585,041	40,956 11	109,313	6,303 42	34,520	1,778 48	20,839	651 73	11,742	670 05

B. H. TEAKLES, Chief Clerk, Canals Revenue.

### SUPPLEMENTARY

No. (A) 19.—Summary Statement of Traffic on the undermentioned Canals during each description of Property passed through,

	Welland	l Canal.	St. Lawren	ce Canals.	Chambly	Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	•	\$ cts.		\$ cts.		\$ cts.
Vessels of all kinds	1,110,156	16,905 54	1,841,629	16,188 33	225,730	2,437 84
Passengers	No. 35,080	433 66	No. 63,283	3,024 63	No. 3,783	66 59
Forest—Produce of Wood.	Tons.		Tons.	0.85	Tons.	
BarkBoat knees			13	3 75		
Floats Free	40	1 78	4,740	82 30	3	0 25
Firewooddo Free	9,186	407 44	11,388	330 27	19,296	649 54
Hoops and hop poles	64,877	11,545 0		1,518 60	97,561	5,796 76
do Free		28 03	3,908 20,986 745	524 65 14 87	2,793	218 9
do Free	3,766	160 87		355 94		
do Free Staves, all kinds Shingles	19	13 90 7 81		0 17 3 26	146	17 34
Split posts and rails	20,616	3,066 4	8,953 5,820	206 48		• • • • • • • • • • • • • • • • • • • •
Traverses			10,280	26 75		
Total	99,383	15,231 2	126,870	3,067 04	119,799	6,682 8
Farm Stock.						
Cattle	1	0 02	2 402 27	29 59 4 05	57	190
Horses	67	3 02	390	26 54	6	0 20
do Free			96	7 34	152	5 07
Total	68	3 04	917	67 52	215	.7 17
Produce of Animals.	ļ					
Bones Horns and hoofs, hides and skins, raw	87	13 0		18 38 4 52	341	34 10
Lard and lard oil do Free	126	25 20	336 100	32 42		• • • • • •
Meats, other than pork	19	3 0		3 56		• • • • • • • • • • • • • • • • • • • •
do Free	276	55 10	581	51 34	3	0 10
do Free	77	12 4	. 201	2 44		
Wool	1,243	248 3		2 44 1 95		
do FreeAgricultural products not enumerated, animal	2		973	• •• ••••		
			-	137 46	····	
Total	1,831	357 0	5 2,445	252 07	344	34 2

### APPENDIX A-Continued.

the season of Navigation ended 31st December, 1891, showing the Total Quantity of and the amount of Tolls collected thereon.

Ottawa (	Canals.	Ridesu	Canal.	St. Peter	's Canal.	Trent Val	ley Canals.	Murray	Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
359,727	\$ cts. 3,675 92	164,457	\$ cts. 1,786 69	71,664	\$ cts. 1,433 28	52,576	\$ ets. 317 42	147,631	\$ cts. 281 12
No. 12,569	162 91	No. 5,423	130 86	No.		No. 9,547	88 85	No. 16,651	197 02
Tons.	••••	Tons.	1 92	Tons.	<b></b>	Tons.	0 94	Tons.	. 0 10
31,600	335 18	1,415	24 85			1,162	12 12	<b>.</b>	
16,440 45,466 4,786 235	1,812 71		320 85			12,378	121 90	945	7 89
4,786	27 88	14,520							
423,630	32,361 95	38,524	1,685 34	2,827	28 27	794	13 27	834	9 83
486 19 435	1 57 71 97	34 6,515	1 68 687 84			171 345	10 10 11 85		
10,000 12,662	292 24		13 40		• • • • • • • • • • • • • • • • • • • •	3,742	30 10	27	0 30
10,678	ACK AC	187	31 08			155	19 90		
597 4	465 49 1 72	22	3 74			155	13 39 0 15		0 31
5,924 2,220 200	159 22	1	18 41			1,188		1,560	19 00
200	0 50	700	5 44		<u> </u>	705	5 50		
565,382	35,530 43	79,259	2,794 55	2,827	28 27	20,675	240 57	3,376	37 43
750	48 96		0 19					3	0 08
184	0 60 10 51		0 33					37	0 74
431	32 59	i0	0 29					10	0 02
1,373	92 66	26	0 81					50	0 82
18 37	1 80 3 33	32 22	1 26 0 82					i	0 02
4	0 39	42	1 24					3	. 0 06
81	7 88	17	0 48						
52	2 8	239	6 28					i	0 02
24	2 27							2	0 04
9	0 90	) 6 	0 19						
1,413	117 02	397	12 60		<b> </b>				
1,638	136 39							7	0 14

No. (A) 19.—Summary Statement of Traffic on the undermentioned Canals

	Welland	Canal.	St. Lawren	ce Canals.	Chambly	y Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Agricultural Products.		\$ cts.		\$ cts.		\$ ets.
Agricultural products not enumerated, vegetable	444	28 80	627	89 11	1	0 10
"do Free	52		2			
Apples Barley	1,223 8,113	33 98 1,622 60	5,088 17,606	726 09 352 34	958 842	61 84 44 92
Cotton; raw			2	0 30		• • • • • • • • • •
Corn	185,180	37,035 85	12,339 55,264	1,831 35		• • • • • • • • •
Flax and hemp	••••••		2	0 19		
do Free	13,517	1,911 76	4,799	655 09	228	7 60
do Free		19 20	3,324	86 49	2,785	113 81
Hay, pressed	26,164	5,232 70	833	39 88		119 61
do Free	139	20 85	67	<b>19</b>	• • • • • • • • • • • • •	, . , . , .
Manilla	52,959	10,591 80	8,923	243 80	1,239	41 33
Pease for the first term of the first term	630	102 00	36,225 390	748 89	1,509	50 35
do Free	25	2 33	127	10 15	7	0 70
Rye Free	65,888	13,136 75	1,939 64,978	39 04		• • • • • • • • • • • • • • • • • • • •
Seeds, all kinds	258	51 60		399 84		
do Free	i	0 20	12 12	1 40		•••••
Tobacco, rawdo Free	· · · · · · · · · · ·		1			
do Free	198,658	39,092 84	31,058 159,785	1,364 92		
Total		108,883 26		6,589 07	7,569	320 65
Town of fractions a						
Manufactures.	•					
Ashes, pot and pearldo Free	40 31	8 00	112 40	21 47		
Agricultural implements			87	13 14		
Barrels, empty	96 49	19 56 5 52		44 94 574 16		1 64 30 72
do Free	469					
Cement and water lime do Free	418 2,380	62 58	4,609 539	647 57	31	3 10
Crockery and earthenware	. 5	0 10		90 52	23	2 30
do Free	251 23	3 88	1,013	161 63	7	1 08
do Free	1		2			
Glass, all kindsdo Free	32 30	4 77	1	87 10	1	0 10
Iron, railway	127	19 05	3,300	477 28		
do Free	2,855 499		4,475	547 77	l:::::::	
do Free	112		371			
Iron, all other Free	1,610 595		14	679 62	1	1 04
Molasses.	85 190			98 31		(
Nailsdo Free	129 560		[	521 13		
Oil, in barrels	56	7 67	1,036	150 79	39	3 89
do Free	64		11	1 08		
Paint	144		632	89 30	1	0 10
do Free	61	144	1			1

during the Season of Navigation, ended 31st December, 1891, &c.—Continued.

Óttawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Vall	ey Canals.	Murray	Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ ets.
433	40 79	360	17 26	6,189	61 89			267	5 16
44 150	1 93 11 22	107 373	3 60 8 89					146 756	2 80 14 19
	· · · · · · · · · · · · · · · · · · ·	22	0 61				• • • • • • • • •	3	0 06
				• • • • • • • • • • • • • • • • • • •					
112	10 05	690	17 51	1,299	12 99	25	25	14	0 27
263 17	25 23 1 57	880 7	20 72 0 18						
									0 18
1,038 2,749	82 86 191 78	124 140	3 27 4 20					17 366	0 32 6 87
465 47	38 00 4 32	183 170	5 56 4 51					 7 527	0 14 9 91
	3 46	15	0 48						
									0 04
•••••		900	8 90						15 32
18	1 76	290						816	
5,373	412 97	3,361	95 69	7,488	74 88	25	25	2,928	55 26
		:							
28	5 32	28	2 99	• • • • • • • • • • • • • • • • • • • •				ļ	• · · · · · · · • •
16		131	15 95					4	o ii
38	4 60	77 40	6 28 1 20			7	68		
24	2 36	222	5 90	• • • • • • • • • • • • • • • • • • • •				102	1 92
		67	8 68					]······	0 23
33	4 44	40	4 56		• • • • • • • • • • • • • • • • • • • •			72	1 86
4	0 76	78	 8 55			• • • • • • • • • • • • • • • • • • • •		13	J 35
		60	1 78						
******		63	1 96					i	0 02
72	3 15	]	8 08					61	1 18
24 11								44	1 10 3 59
								122	1
<b>2</b> 5	2 70		39 12					85	2 17
1	0 19	3 36	0 10 4 25				,		
				l					,

No. (A) 19.—Summary Statement of Traffic on the undermentioned Canals

	Welland	Canal.	St. Lawren	nce Canal.	Chambly	y Canal
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Manufactures—Con.		. \$ cts.				\$ cta
itch and tar	264	39 60	390	34 72	114	11 4
do Free	22			00 54		
osin	99	14 54	1,949 787	98 54 149 97	1,978	196 3
oda ash Free	377	14 50	101	149 91		
pirits, whiskey, &c	346	67 90	1,215	226 70		
do Free	294		105			
teel	6,220	933 0		109 32		
ugar	393 412	35 0	3,101	581 34	••••••	
do Free	246	36 5	552	96 86		• • • • • •
do Free	23		302			
urpentine			105	6 13	62	6
Vhite lead	3	0 4	137	25 22		. <b></b>
do Free	3		330	65 32		•••••
do Free	50		330	00 32		• • • • • • • •
Voodenware	11	4 4	36	12 40		
Total	19,485	1,701 4	56,765	5,612 33	2,888	269
Merchandise.						
Brimstone	66	99	0 159	14 98	140	27
lay, lime and sand	70	5 2	32,259		4,603	462
do Free	206	····	563		345	
oal	224,644	44,928 2			86,286	8,455
do Free			. 94,690		55	5
ish	305	40 5				1
do Free	7					
ypsum			1,718			
res, all kinds	2,871	143 5				· · · · · ·
do Free	544 3,556	533 4	1,410 0 20		3	
Aarble	3,500	12 0				1
alt.	2,567	502 8				7
do Free	4,391	l	1			
tone, all kinds	9,424	1,603 4		597 81	3,143	289
do Free		····	. 750		<b> </b>	1
All other goods and merchandise, not enumerated	51,352	7,529 5	7 11,213	1,673 86	3,690	279
do Free	81.0		278		0,000	<b></b>
Total	300,873	55,308 6	3 334,841	27,925 57	98,449	9,527
		<u> </u>	_	ļ	-	
Grand totals (passengers and ton- nage of vessels not included)	0== 010	198,823 8	8 936,794	62,726 56	229,264	19,346

## during the Season of Navigation ended 31st December, 1891, &c.—Concluded.

Ottawa	Canals.	Rideau	Canal.	St. Peter	r's Canal.	Trent Val	ley Canals.	Murray	Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts,		\$ cts.		\$ cts.		\$ cts.
		298	2 99	••••	· • • • • • · · ·		• · · · • · •		
		5 15	0 45 1 94		•••••			13	0 33
20	1 34	88	8 86		•••••			12	0 32
18	1 24	30 501	1 01 49 53	••••••				99	2 5
2	0 15	12	i 17		• • • • • • • • • • • • • • • • • • • •			1	0 0
		25	2 31					25	0 64
···i	0 05	33	3 00		• • • • • • • • • • • • • • • • • • • •		• • • • • • • •		•••
6	1 01	22	2 55		••••			41	0 78
323	32 10	2,736	222 82			7	0 68	704	17 13
 8,091	229 22	92	2 16	•			• • • • • • • •	1	0 02
648	23 78	11,391 4,313	483 88	22,601	226 01	•••	•••••	2,059	87 70
3	0 26	25 73	2 25 1 90	448	4 48			2 6	0 00 0 15
1,784	89 20	2,703	135 15			3	0 09		
3 17	0 44 0 50	554 4 6 1,683	0 36 0 54 47 33					10 5 28	0 26 0 18 0 5
4	0 31	736 350	36 18					1,451	14 52
402	53 30	1,246	146 37	1,156	11 56	129	3 87	1,115	27 78
10,952	397 01	23,176	856 12	24,205	242 05	132	3 96	4,677	80 13
585,041	40,440 39	109,313	5,910 41	34,520	1,178 48	20,839	651 73	11,742	670 08

B. H. TEAKLES, Chief Clerk, Canals Revenue.

No.

		ended 31st	st December,	nber, 1891	<u>i.</u>					
Canals and Offices.	April.	May.	June.	July.	August.	September	October.	November	November December.	Total Tolls.
Welland Canal. Chippawa Colborne. Dalhousie Dunnville Maidand Robinson FSt. Catharines	\$ cts. 3,746 67 2,620 79 8 75 49 46 64 32	22 24 17,236 94 11,465 72 30 19 0 65 105 53 80 83	8 cts. 11 03 18,931 79 8,606 53 118 38 71 93 54 76	\$ cts. 3 73 19,048 57 6,407 44 40 95 1 23 32 81 87 48	\$ cts. 11 84 24,780 58 6,852 84 6,852 84  64 99 109 84	24,832 34 8,199 83 8,199 83 8 73 8 73 8 55	\$ cts. 6 02. 18,735 94 10,952 98 106 48 106 95 95 91 65 47	\$ cts. 5 30 10,127 52 3,694 07 116 57 116 57	8 cts. 840 43 24 35 113 39 3 24	28, Cts. 70 00 138, 280 78 55, 494 13 11 63 592 96
Total, Welland Canal	6,489 99	28,942 10	27,794 42	25,622 27	31,872 90	33,165 02	29,963 75	14,092 02	881 41	198,823 88
Sr. Lawrence Canals.  Beauharnois Cardinal Cornwall Kingston Lachine Montreal	1 44 7 80 19 19	45 14 151 68 2,047 43 1,687 13 252 74 2,789 07	117 04 100 24 4, 297 33 1, 969 31 3, 390 96	237 38 211 59 4,866 31 1,909 78 330 29 4,371 38	235 03 24 04 3,160 57 1,242 03 273 96 4,605 41	374 20 74 69 2,729 29 813 58 457 25 3,961 51	177 72 91 82 3,108 80 1,681 84 451 94 3,146 65	115 01 48 61 2,506 68 1,169 74 270 58 2,622 00	1 45 66 89 4 92	1,302 96 711 92 711 92 10,473 41 2,427 20 25,027 77
Total, St. Lawrence Canals	169 22	6,973 19	10,241 21	11,926 73	9,541 04	8,410 52	8,658 77	6,732 62	73 26	62,726 56
Chambly. St. John's St. Ours. Total, Chambly Canal.		648 74 2,613 46 47 87 3,310 07	1,098 87 1,856 57 70 77 3,026 21	1,196 00 79 38 1,875 41 3,150 79	1,281 19 1,401 14 60 16 2,742 49	885 01 1,192 17 103 73 2,180 91	1,511 46 1,353 25 178 20 3,042 91	927 83 864 50 100 87 1,893 20		7,549 10 9,350 47 2,437 01 19,346 58
-	-	•	•	•	•	•	•			

==	25 55 55 55 55 55 55 55 55 55 55 55 55 5	10 39		79 96 32 11	14 41	) 	84 8		12.82.85 12.82.73 12.82.73 12.83.73	51 73	<del></del>	670 05	88
	21,734 118 17,065 0 1,521	0 40,440		1,479 3,898 532	6,910		9,778			651		. 67	330,348
	1 00	1 00					163 66					:	1,119 33
	1,520 54 32 11 1,697 12 94 10	3,343 87		112 96 348 11 31 82	492 89		383 37	10 25	175 125 655	19 80		31 28	26,889 05
	2,457 39 24 82 1,863 28 304 48	4,649 97		153 16 681 64 52 56	887 36		438 40	57 03		95 05		46 05	47,882 26
	2,268 53 5 69 2,078 88 245 07	4,598 07		178 89 539 26 85 27	803 42		282 77		21. 3 70 2 25 2 25 2 25	125 24		63 85	49,629 80
	2,629 84 6 10 2,542 39 234 00	5,412 33		257 00 600 07 102 81	959 88		111 36		11. 0 50 0 50 18 74 18 74	137 60		178 74	50,956 34
•	3,597 40 8 98 3,017 00 274 81	6,898 19		329 49 620 32 175 69	1,125 50		102 35		21 8 0 20 8 50 8 50 8 50 8 50 8 50 8 50 8	129 86		146 09	49,101 78
	3,941 19 9 64 2,784 31 203 04	6,938 18		282 46 706 02 54 91	1,043 39		112 98		32 24 25 25 25 25 25 25 25 25 25 25 25 25 25	113 95		135 67	49,406 01
	5,129 73 21 92 2,757 48 147 77	8,056 90		165 94 393 84 29 65	588 83		154 70	9 20	3 93 0 50 1 50 12 10	27 53		54.85	48,108 17
	190 03 9 67 325 09 17 09	541 88		9 14	9 14		28 89		2 70	2 70		13 52	7,255 34
OTTAWA CANALS.	Ottawa. Carillon Grenville. St. Anne's	Total, Ottawa Canals	RIDEAU CANAL.	Kingston Mills. Ottawa. Smith's Falls.	Total, Rideau Canal.	St. Peter's Canal.	St. Peter's	NEWCASTLE DISTRICT CANALS.  54 62bbcaygeon.  Buckhom.	Burleigh Burleigh Fenelon Falls Hastings. Peterborough.	Total, Newcastle District Canals	MURRAY CANAL	Brighton.	Grand Total

No. (A) 21.—General Statement the Season of Navi	S : showi gation	SUPPLEMENTAINY MENT showing the Number, Ton-Navigation ended the 31st Decen	EMEN' Numbe	r, Tonr Decem	APPENDIX nage and Nation nber, 1891, and	NDIX i Natio 91, and	A—Continued.	tinued. f Vesse nount o	els pass f Tolls	ed thre collect	SUPPLEMENTARY APPENDIX A—Continued.  MENT showing the Number, Tonnage and Nationality of Vessels passed through all the Navigation ended the 31st December, 1891, and the Amount of Tolls collected thereon.	the Can	AIY APPENDIX A—Continued. Tonnage and Nationality of Vessels passed through all the Canals during December, 1891, and the Amount of Tolls collected thereon.	
	у.тәсі	From Canadian to	m Jian	From Canadian to	om dian	From United States	m States	From United States	m States	Tons.	nB.	Total	Amount	
Vessels.	muN	Canadian Ports.	lian Ss.	United States Ports.	States ts.	United States Ports.	Ntates ts.	Canadia Ports.	cts.			Tons.	of Tolls.	
	LatoT	Up.	Down.	Up.	Домп.	Up.	Down.	Up.	Down.	Up.	Домп.			
Welland Canal			•										e cts.	
Canadian vessels, steam do sail	1,147	92,764 30,005	86,418 28,405	74,643	2,352	2988 8888	292	7,294	89,946 52,624	174,963 88,057	179,008 85,864	353,971 173,921	3,952 11 3,460 34	
Total Canadian	1,788	122,769	114,823	123,351	7,187	220	292	16,350	142,570	263,020	264,872	527,892	7,412 45	
United States vessels, steamdo	284	91	40	9,180	204 576	227,752 48,252	195,905 35,005	201 754	45,412 15,300	237,134 52,687	241,522 50,921	478,656 103,608	7,187 03 2,306 06	·-
Total United States	88	92	41	13,067	78	276,004	230,910	658	60,712	289,821	292,443	582,264	9,493 09	
Grand Total, Welland Canal	2,594	122,861	114,864	136,418	7,967	276,554	231,202	17,008	203,282	552,841	557,315	1,110,156	16,905 54	
ST. LAWRENCE CANALS.										,	·····			
Canadian vessels, steamdo	3,041 5,706	353,192 550,410	299,992 407,809	17,127 46,487	9350 330		: :	: :	5,347	370,319 596,897	305,947 478,258	676,266 1,075,155	3,920 31 11,565 42	
Total Canadian	747	903,602	707,801	63,614	826				75,476	967,216	784,205	1,751,421	15,485 73	
United States vessels, steamdo	582	307	1,377	3,761	1,602	6,134	6,965	30,362	5,298 10,497	10.265 39.103	13,715 27,125	23,980	184 98 517 62	
Total United States	1,186	824	15,460	11,110	1,677	7,009	7,908	30,425	15,795	49,368	40,840	90,208	702 60	
Grand Total, St. Lawrence Canals	1,983	904,426	723,261	74,724	2,605	7,009	7,908	30,425	91,271	91,271 1,016,584	825,045	1,841,629	16,188 33	
CHAMBLY CANAL.														
Canadian vessels, steam	464	32,206	31,006	8	94	:			746	32,300	31,752	64,052	206 74	

do sail	200	10,411	9,792	7,339	:		:		17,240	17,750	27,032	44,782	632 22
Total Canadian	1,019	42,617	40,798	7,433		:			17,986	20,050	58,784	108,834	838 96
United States vessels, steamdo	1,006	352 1,471	2,660	134					230 69,865	43,346	539 72,525	1,025	10 54 1,588 34
Total United States	1,034	1,823	2,969	42,009					70,095	43,832	73,064	116,896	1,598 88
Grand Total, Chambly Canal	2,063	44,440	43,767	49,442			:		88,081	93,882	131,848	225,730	2,437 84
OTTAWA CANALS.													
Canadian vessels, steamdo	1,025	52,480 8,699	112,784		2,312					52,480 8,699	115,096 152,327	167.576 161,026	682 17 2,274 15
Total Canadian	2,148	61,179	247,071		20,352					61,179	267,423	328,602	2,956 32
United States vessels, siteaun do sail	312	102	1,043		51 25,219					102	26,262	186 30,939	2 29 717 31
Total United States	316	4,779	1,076		25,270			:		4,779	26,346	31,125	719 60
Grand Total, Ottawa Canals	2,464	65,958	248,147		45,622					65,958	293,769	359,727	3,675 92
RIDKAU CANAL													
Canadian vessels, steamdo asil	1,299	35,585 32,445	42,426 35,649	126 871		: :	•			35,711 33,316	42, 426 35, 649	78,137 68,965	762 11 766 05
Total Canadian	2,244	68,030	78,075	266		:			:	69,027	78,075	147,102	1,528 16
United States vessels, steamdo	69 181	323 2,314	388 9,851	4,479		: :				323 6,793	388 9,851	711	16 83 241 70
Total United States	520	2,637	10,239	4,479						7,116	10,239	17,355	258 53
Grand Total, Rideau Canal	2,494	70,677	88,314	5,476	:				:	76,143	88,314	164,457	1,786 69
ST. PETER'S CANAL. Canadian vessels, steam.	129	11,167	11,983			<b>A</b> :	:	:	:	11,167	11,983	23,150	463 00
do sail	365	24,150	24.364			:				24,150	24,364	48,514	970 28
Grand Total, St. Peter's Canal	1,121	35,317	36,347			:		:		35,317	36,347	71,664	1,433 28
		Ī			Ī					-	-		

55 Victoria.

# SUPPLEMENTARY APPENDIX A-Continued.

	,		٥		`	0							
		Fre	From	From	From	Fr	From United States	Fr	From United States	To the second se	The state of the s		
Vessels.	тәсіпий	to Canadian Ports.	dian ts.	to United Sta Ports.	to United States Ports.	United Po	to United States Ports.	Cans Po	to Canadian Ports.	Tons.	18.	Total Tons.	Amount of Tolls.
	LatoT	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
TRENT VALLEY GANAIS.											!		e cts.
Canadian vessels, steam do sail	747	14,749	14,844 11,071	,			•			14,749 11,904	14,844 11,071	29,593 22,975	223 59 93 33
Total Canadian	1,132	26,653	25,915							26,653	25,915	52,568	316 92
United States vessels, steam do do	67	4	4							4	4	oo :	0.0
Total United States	63.	4	4							4	4	80	20
Grand Total, Trent Valley Canals.	1,134	26,657	25,919							26,657	25,919	52,576	317 42
Murray Canal.													
Canadian vessels, steamdo	859 188	90,376 5,975	31,935 4,403	5,325	175		: :		6,733	95,701 7,013	38,668 5,989	134,369 13,002	226 93 51 69
Total Canadian	1,047	96,351	36,338	6,363	175		:		8,144	102,714	44,657	147,371	278 62
United States vessels, steamdo		188	57							163 35	57	168	0 20 0 20 0 20
Total United States	œ	198	62	:			:			198	62	260	2 50
Grand Total, Murray Canal	1,055	96,549	36,400	6,363	175				8,144	102,912	44,719	147,631	281 12

SITPPLEMENTARY APPENDIX A....Continued

DIA A Combinette.	nnage and Nationality of Vessels, &c.—Concluded.	
SOILLEMENIANI ALLENDIA AC''M	ATEMENT showing the Number, Tonnag	
	No. (A) 21.—GENERAL ST	

					0 7 7 7	NECKLICALION INCHAI								
Vessels.	Number.	From Canadian to Canadian Ports.	m dian i i isn ts.	From Canadian to United States	dian dian States ts.	From United States to United States Ports.	om States States ts.	From United States to Canadian Ports.	om States Jian ts.	Tons.	n8.	Total Tons.	Amount of Tolls.	
	ГетоТ	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
CANADIAN VESELS. Steam and Sail.										,			ets.	
Welland St. Lawrence Chambly. SERideawa. SERideawa.	1,788 747 1,019 2,148 2,244	122,769 903,602 42,617 61,179 68,030	114,823 707,801 40,798 247,071 78,075 36,347	123,351 63,614 7,433	7,187	<u> </u>	2062	16,350	142,570 75,476 17,986	263,020 967,216 50,050 61,179 69,027	264,872 784,205 58,784 267,423 78,075	527,892 1,751,421 108,834 328,602 147,102	7,412 45 15,485 73 838 96 2,956 32 1,528 16	
Trent Valley. Murray.	1,132	96,351 96,351	25,915 36,338	6,363	175				8,144	26,653 102,714		52,568 147,371		
Total Canadian	11,246	1,356,518	1,287,168	201,758	28,642	550	202	16,350	244,176	1,575,176	1,560,278	3,135,454	30,250 44	
UNITED STATES VESSELS. Steam and Sail.				,	*,*************************************									
Welland. St. Lawrence Mambly Ottawa. Rideau.	806 1,186 1,034 316 250	92 824 1,823 4,779 2,637	15,460 2,969 1,076 10,239	13,067 11,110 42,009 4,479	1,677	7,009	230,910	30,425	60,712 15,795 70,095	289,821 49,368 43,832 4,779 7,116	292,443 40,840 73,064 26,346 10,239	582,264 90,208 116,896 31,125 17,355	9,493 09 702 60 1,598 88 719 60 258 53	
St. Feters Trent Valley. Murray.	:0100	198	62							 4 198	62	8 260	0 50 2 50	
Total United States	3,602	10,357	29,851	70,665	27,727	283,013	238,818	31,083	146,602	395,118	442,998	838,116	12,775 70	
Grand Total, Canadian and United States	14,848	1,366,875	1,317,019	272,423	56,369	283,563	239,110	47,433	390,778	1,970,294	2,003,276	3,973,570	43,026 14	
Valley  Yalley  Total United States  Grand Total, Canadian and United States	3,602	1,366,875	29,851 1,317,019	70,665		7,727		283,013	283,013 238,818 283,563 239,110	283,013 238,818 31,083 283,563 239,110 47,433	283,013 238,818 31,083 146,602 283,563 239,110 47,433 390,778	283,013     238,818     31,083     146,602     395,118       283,563     239,110     47,433     390,778     1,970,294	283,013         238,818         31,083         146,602         395,118         442,998           283,563         239,110         47,433         390,778         1,970,294         2,003,276	283,013         238,818         31,083         146,602         395,118         442,998         838,116         12,775           283,563         239,110         47,433         390,778         1,970,294         2,003,276         3,973,570         43,026

SUPPLEMENTARY APPENDIX A-Continued.

Jo	
MPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of	f 1890 and 1891, and the Amount of Tolls collected on the same, including Tolls on Vessels and Passengers.
ATIVE S1	and 18
214.—Compar	vigation of 1890
No. (A)	Na

					·							
	From Canadian to Canadian Ports.	m lian lian se.	From Causdian to United States Ports.	om dian States ts.	From United States to United States Ports.	m States States	From United States to Canadian Ports.	States States dian	Tons	<b>%</b>	Total Tons.	Amount of Tolls.
	ď.	Down.	Up.	Down.	Up.	Боwп.	Up.	Боwв.	Up.	Down.		
1890.												e cts.
Welland Canal. St. Lawrence Canals Chambly Canal. Rideau Canal. Ottawa Canals. Sr. Peter's Canal. Murray Canal.	30,274 216,557 8,224 81,219 52,21 22,297 4,606	26,535 27,136 28,289 28,325 28,325 27,889 7,896	35,959 11,052 85,113 6,066 8 8 6,190	10,283 3,253 6,085 113,567	216,698	318, 259	17,358	331,799 102,264 98,867 	299,289 270,075 93,337 87,385 5,385 5,889 22,397 10,798	716,876 583,778 109,070 26,820 26,820 26,342 2,382 7,985	1,016,165 863,863 202,407 113,574 651,355 32,231 18,783	194,089 53 60,720 30 18,171 00 6,145 21 48,226 36 1,742 11 708 94 707 03
Welland Canal. St. Lawrence Canals Chambly Canal. Rideau Canal. Rideau Canal. St. Peter Sanal. St. Peter Canals Muray Canal.	11,415 203,211 56,763 69,714 871 6,512 16,632 5,002	58,559 547,727 7,547 88,142 476,735 28,008 4,207 4,322	13,845 10,725 66,881 11,457	13,963 1,545 1,07,435	247,543	645 1,701	17,409 33,314	306,022 137,926 98,073 11,238	290,212 247,895 123,644 81,171 6,512 16,632 5,932	684,801 688,899 105,620 28,142 28,008 4,207 4,207 5,810	975,013 936,794 229,264 109,313 585,041 34,520 20,839 11,742	198, 823 88 62,726 56 19,726 56 19,10 41 40,440 39 1,778 48 651 73

B. H. TEAKLES, Chief Clerk, Canals Revenue.

RATES OF TOLLS.

No. 22.—RATES of Tolls on the Canals WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA AND CHAMBLY CANALS (O.C., 25th April, 1873.)

The Rates of Tolls are divided into Six Classes, as under, and as per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Ridean Canal, each way.	Ottawa Canals and St. Ann's Lock, each way.	Ottawa to St. John's, each way.
Class No. 1.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.
Vessels, steamper ton. do sail and other do	$\begin{array}{ccc} 0 & 01\frac{1}{2} \\ 0 & 02\frac{1}{4} \end{array}$	$\begin{array}{ccc} 0 & 01\frac{1}{2} \\ 0 & 02\frac{1}{4} \end{array}$	$\begin{array}{ccc} 0 & 02\frac{1}{4} \\ 0 & 03\frac{3}{4} \end{array}$	0 00½ 0 01½	0 00 <del>3</del> 0 01 <del>4</del>	$\begin{array}{ccc} 0 & 01\frac{1}{2} \\ 0 & 02\frac{1}{4} \end{array}$	0 00 <del>§</del> 0 01	0 01½ 0 02§
Class No. 2.								
Passengers, 21 years of age and upwards	0 10 0 05	0 10 0 05	0 20 0 10	0 10 0 05	0 05 0 02	0 08 0 04	0 02 <del>1</del> 0 01 <del>1</del>	0 09 <del>3</del> 0 04½
Class No. 3.								
Bricks, cement and water lime Clay, lime and sand. Brimstone Corn. Flour. Iron, railway do pig do all other, including steel (O. C., 1st Feb., 1888). Plaster, gypsum. Salt Salt meats or fish in barrels or otherwise. Agricultural products, vegetable, not enumerated. Agricultural products, animals, not enumerated. Stone, for cutting. Wheat.	0 15	0 20	0 20	0 15	0 10	0 07	0 06	0 193
Class No. 4.	0.15		0.00		0.10			
All other articles, not enumerated	0 15	0 0	0 20	0 20	0 10	0 26	0 14	0 29

of the Dominion of Canada, 1891.

TRENT VALLEY CANAL (O.C., 25th JULY, 1888.)

1st Section.	2nd Section.	3RD Section.	4TH SECTION.	Тнкоисн.	Whitlaw's		
Fenelon Falls to Bobcaygeon to Buckhorn.		Buckhorn Burleigh to Burleigh. Lakfield.		Fenelon Falls to Lakefield.	to Hastings.		
Tolls chargeable at Fenelon Falls.	Tolls chargeable at Bobcaygeon.	Tolls chargeable at Buckhorn.	Tolls chargeable at Burleigh.	Tolls chargeable at Fenelon Falls.	Tolls chargeable at Whitlaw's.		
8 cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ ets.		
$0 00\frac{3}{18}$	0 00 <del>1</del> 8	0 00 <sup>3</sup> 0 00 <sup>1</sup>	$\begin{array}{c} 0.00_{18}^{3} \\ 0.00_{4}^{1} \end{array}$	0 00 <del>3</del> 0 01	$0.00\frac{3}{16}$		
0 01 0 00½	0 01 0 00½	0 01 0 00½	0 01 0 00½	0 04 0 02	0 01 0 00½		
0 01	0 01	0 01	0 01	0 04	0 01		
0 03	0 03	0 03	0 03	0 12	0 03		

No. 22.—RATES of Tolls on the Canals WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA AND CHAMBLY CANALS.

The Rates of Tolls are divided into Six Clases, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.	Welland, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Rideau Canal, each way.	Ottawa Canals and St. Anne's Lock, each way.	Ottawa to St. John's, each way.
Class No. 5,	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	S cts.	\$ cts.
Bark Barrels, empty, each Boat knees, each Floats, per 1,000 lineal feet Firewood, per cord, in vessels do rafts Hoops Masts and spars, telegraph poles, per ton of 40 cubic fet, in vessels. Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts. Railway ties, in vessels, each do rafts, each Sawed stuff, boards, planks, scantling and sawed timber, per M. feet, board measure, in vessels Sawed stuff, boards, plank, scantling and sawed timber, per M. feet, board measure, in rafts Square timber, per M. cubic feet, in rafts Square timber, per M. cubic feet, in rafts Waggon stuff, woodenware and wood, partly manufactured, per ton of 40 cubic feet Shingles, per M Split posts and fence rails per M., in vessels Split posts and fence rails per M., in rafts Sawlogs, each standard log Staves and headings, brls. per M. do pipe do do will dia, per M. do salt barrel, sawn or cut, per M	0 20 0 02 0 05 1 40 0 25 0 25 0 25 0 25 0 25 0 30 0 30 0 60 3 00 4 50 0 40 0 60 0 40 0 80 0 40 0 80 0 40 0 75 0 75	0 20 0 02 0 05 1 40 0 22 0 25 0 25 0 25 0 25 0 30 0 60 3 00 4 50 0 40 0 06 0 40 0 80 0 80 0 40 0 75 0 08	0 20 0 02 0 05 1 40 0 20 0 25 0 25 0 25 0 15 0 20 0 01 0 02 0 30 0 60 3 00 4 50 0 40 0 06 0 40 0 08 0 40 0 08 0 40 0 08	0 15 0 02 0 02 1 40 0 20 0 25 0 20 0 05 0 10 0 00½ 0 01 0 15 0 30 1 00 2 00 0 40 0 06 0 40 0 80 0 80 0 80 0 60 0 0 40	0 10 0 02 0 02 1 20 0 15 0 15 0 15 0 05 0 10 0 001 2 00 1 00 2 00 2 00 2 00 2 0	0 07 0 02 0 02 1 05 0 15 0 19 0 15 0 08 0 15 0 002 0 111 0 19 0 56 1 12 0 30 0 041 0 23 0 38 0 06 0 15 0 07 0 045 0 045	0 06 0 01 0 01 0 50 0 08 0 09 0 10 0 002 0 01 0 063 0 09 0 44 0 63 0 20 0 022 0 12 0 17 0 06 0 17 0 06 0 10 0 09 0 09 0 09 0 09 0 09 0 09 0 09	0 191 0 037 0 032 2 05 0 23 0 302 0 302 0 018 0 022 0 20 0 362 1 69 3 13 0 55 0 08 0 42 0 77 0 13 0 03 0 05 0 05 0 05 0 05 0 05 0 05 0 0
Traverses, per 100 pieces Hop poles, per 1,000 pieces	0 50 2 00	0 50 2 00	0 50 2 00	0 50 2 00	0 40 1 50	0 38 1 50	0 15 0 65	0 67½ 2 65
Special Class.  Gypsum, crude (per O. C., 28th October, 1882)  Coal	0 15 0 20	0 05 0 20	0 20	0 05 0 15	West 0 10	0 08	0 05	0 172
suitable for cutting, per cord Kryolite, iron ore or chemical ore Ice	0 75 0 05 0 05	0 75 0 05 0 05	0 75 0 05 0 05	0 60 0 05	0 37½ 0 05	0 28 0 05 	0 24 0 05	0 77½ 0 05

## of the Dominion-Continued.

TRENT VALLEY CANAL.

			MEI CANAL.	<del></del>	
1st Section.	2nd Section.	3rd Section.	4th Section.	Тнвоисн.	W/L !A1 ) .
Fenelon Falls	Bobcaygeon.	Buckhorn	Burleigh	Fenelon Falls	Whitlaw's
to	to	to	to	to	to
Bobcaygeon.	Buckhorn.	Burleigh.	Lakefield.	Lakefield.	Hastings.
Tolls Charge-	Tolls Charge-	Tolls Charge-	Tolls Charge-	Tolls Charge-	Tolls Charge-
able at	able to	able to	able at	able at	able to
Fenelon Falls.	Bobcaygeon.	Buckhorn.	Burleigh.	Fenelon Falls.	Whitlaw's.
\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
0 01	0 01	0 01	0 01	0 04	0 01
0 00½	0 00½	0 001	0 00½	0 01	0 001
0 00½	0 00½	0 002	0 00½	0 01	0 002
0 13	0 13	0 13	0 13	0 52	0 13
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 02	0 02	0 02	0 02	0 08	0 02
0 02	0 02	0 02	0 02	0 08	0 02
0 01	0 01	0 01	0 01	0 04	0 01
0 001	0 00 <del>1</del>	0 00 <del>1</del>	0 00 <del>1</del>	0 00½	0 00±
0 001	0 00 <del>1</del>	0 00 <del>1</del>	0 00 <del>1</del>	0 01	0 00±
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 07	0 07	0 07	0 07	0 28	0 07
0 14	0 14	0 14	0 14	0 56	0 14
0 04	0 04	0 04	0 04	0 16	0 04
0 00 <del>3</del>	0 004	0 00 <del>2</del>	0 00 <del>2</del>	0 03	0 004
0 03	0 03	0 03	0 03	0 12	0 03
0 05	0 05	0 05	0 05	0 20	0 05
0 00 <u>\$</u>	0 002	0 00 <del>2</del>	0 00 <del>2</del>	0 03	0 00 <del>3</del>
0 02	0 02	0 02	0 02*	0 08	0 02
0 10	0 10	0 10	0 10	0 40	0 10
0 05 <u>1</u>	0 051	0 05½	0 05½	0 22	0 05 <del>1</del>
0 00½	0 00½	0 00½	0 00½	0 02	0 00½
0 05	0 05	0 05	0 05	0 20	0 05
0 20	0 20	0 20	0 20	0 80	0 20
Free.	Free.	Free.	Free.	Free.	Free.
0 01	0 01	0 01	0 01	0 04	0 01
0 031	0 034	0 031	0 031	0 14	0 031
0 002	0 002	0 002	0 002	0 03	0 004
Free.	Free.	Free.	Free.	Free.	Free.

# Sec. 76.—Standard for estimating weight, for canal tolls.

·	Tons.		Tons.
2,000 lbs. avoirdupois. Per M. is per thousand feet. Per Mille is per thousand pieces. Green fruit, 9 barrels are. Ashes, 3 barrels are. Bark, 4 cords. Beef, 7 barrels. Biscuit and crackers, 9 barrels. Biscuit and crackers, 9 barrels. Bricks, common, 1,000 Butter, 22 kegs or 7 barrels. Cattle, 3. Cement and water lime, 7 barrels. Fire bricks, 1,000. Fish, 7 barrels. Flour, 9 barrels. Gypsum and manganese, 6 barrels. Horses, 2 Lard and tallow, 7 barrels or 22 kegs Liquors and spirits, 215 gallons. Liquors, all others, 215 gallons Nuts, 9 barrels. Oysters, 6 barrels. Pork, 7 barrels. Salt, 7 barrels. Salt, 7 barrels. Seed, 9 barrels. Sheen, 20	1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Stone, 12 cubic feet Stone, 1 cord Whiskey, 4 barrels or 215 gallons. Empty barrels, 10. Barrel hoops, 10 Mille. Board and other sawed lumber, 600 feet board measure. Boat knees, 4. Firewood, 1 cord. Hop poles, 60 or 40 cubic feet. Shingles, 12 M. or bundles. Split posts and fence rails, 1 Mille. Staves and headings, Pipe, 1 Mille. do W. India, 1 Mille. do Barrel, 1 Mille. Sawlogs, standard, 1. Square timber, 50 cubic feet. Telegraph poles, 10 or 40 cubic feet. Masts and spars, 40 cubic feet. Railroad ties, 16 or 50 cubic feet. All other woodenware, or partly manufactured wood, 40 cubic feet as per tariff Traverses, 40 cubic feet or 5 pieces. Floats, 50 lineal feet.	177 11 11 33 11 11 84 22

Note.—By the Weights and Measures Act, Chapter 104 of the Revised Statutes of Canada, Section 14, all the above named articles are to be estimated by the cental of 100 lbs.

#### WAY RATES.

Sec. 77. The following way rates are to be levied on vessels and property passing the several subdivisions of the canals:—

Welland Canals.	Rate.
<ol> <li>From Port Maitland, Dunnville and Port Colborne to Port Robinson or Allanburg, not passing the lock, each way.</li> <li>From Chippawa Cut, or any part thereof, to Dunnville, Port Maitland or Port Colborne.</li> <li>From Dunnville to Port Colborne.</li> <li>From Maitland, Dunnville, Colborne or Port Robinson to Marshville and intermediate places.</li> <li>From Marshville or internediate places to Port Maitland, Dunnville, Port Colborne and Port Robinson</li> <li>From Port Robinson to Allanburg or Thorold.</li> <li>From Port Robinson to St. Catharines or Port Dalhousie.</li> <li>From St. Catharines to Port Dalhousie.</li> <li>From Dunnville to Maitland.</li> <li>From Port Robinson through the Lock and Chippawa Cut.</li> <li>From Port Colborne to Port Maitland.</li> <li>From Chippawa Cut through Lock to Port Robinson</li> <li>From Colborne, Dunnville, Maitland and Marshville to Thorold.</li> <li>From Colborne, Dunnville, Maitland and Marshville to St. Catharines.</li> <li>Through the Chippawa Cut only.</li> <li>Through the Port Robinson Lock only.</li> </ol>	-endit-to-tendo obloba-te-ta-ta-ta-ta-ta-ta-ta-ta-ta-ta-
St. Lawrence Canals.	_
Sec. 78. The navigation is divided into four sections, viz., Cardinal, Cornwall, Beauharnois and Lachine. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.	
. Chambly Canal.	
Sec. 79. Vessels and property passing from Sorel to Chambly, to pay.  Vessels and property passing from Chambly to St. John's, to pay	1000

#### OTTAWA CANALS

Sec. 80. The navigation is divided into three sections, viz., Grenville, Carillon and St. Ann's Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

#### RIDEAU CANAL.

Sec. 81. The navigation of this canal is divided into three sections, viz., Ottawa, Smith's Falls and Kingston Mills. Vessels and freight passing one section are to be charged one-third; two sections, two-thirds.

#### GENERAL.

Sec. 88. (a) Any fraction of a ton freight is to be charged one ton, and portions of sections are to be charged as a whole section on all the above canals.

b) The passing of sawlogs or other lumber through any of the canals, or sections thereof, shall be at all times governed by the regulations for their management.

SPECIAL REGULATIONS RELATING TO TOLLS ON SOME OF THE CANALS.

Sec. 83. Coal may pass up all canals, except the Welland Canal, free of toll. O. C. June 7, 1869. Sec. 84. Logs, lumber or other produce may pass free of toll down the Chippewa Creek, between the Aqueduct and Port Robinson. O. C. May 18, 1863.

#### NOTE.

O. C. 27th June, 1890.

That the following words be added to Section 84:-

- (1.) "Save in cases for which special permission may be given, the Grenville "Canal is closed to the passage of rafts or any portion of a raft of any kind "whatever, as provided by the Order in Council of the 9th July. 1888.
- (2.) "Rafts may be passed through the Carillon Canal free of tolls, as pro-"vided by the Order in Council of the 9th July, 1888."
- Sec. 85. Iron ore, kyrolite or chemical ore, may pass through one section, or through all the canal sections aforesaid, for 5 cents per ton.
- Sec. 86. (a) All goods having paid full toll through the whole line of the St. Lawrence Canals, or through the Lachine Canal, St. Ann's Lock, or Ottawa and Rideau Canals, shall be allowed to pass free through the Welland Canal; and if tolls have been paid at the Chambly Canal such tolls shall be refunded at Montreal or Kingston Mills; and having paid full tolls through the Welland Canal, they shall be allowed to pass free through the St. Lawrence Canals, or through the Ottawa and Rideau Canals, St. Ann's Locks, the Lachine Canal and the Chambly Canal; provided always:—That the articles to be entitled to the above exemptions shall go downwards through the whole length of the canal to Monfreal, or pass upward from Montreal through the whole length of the St. Lawrence Canals, or the Ottawa and Rideau Canal, to Lake Ontario.
  - (b) All articles, goods or merchandise, not enumerated above, shall be charged to Class No. 4.
- (c) No let-passes shall be issued to steam tugs or other small vessels for less than 25 cents, as a minimum charge; but such vessels, not carrying freight or passengers, can obtain, on payment of \$30, a season "Let-Pass," which will pass them up and down the canals as often as desired. U. C. April 18, 1873.
- Sec. 87. Goods shipped to any port west of the St. Lawrence Canals, tolls upon which have already been paid for passage through such canals, may be re-shipped from such ports and be passed through the Welland Canal free of tolls, in the same way as if they had been shipped through direct in the first instance; and goods going eastward, having paid Welland Canal tolls, may be transhipped at any port on Lake Ontario, and thereafter pass free through the St. Lawrence Canals, as if they had been shipped through direct in the first instance. O. C. June 23, 1883.
- Sec. 88. During the season of navigation for 1889, the rate of toll for the passage of wheat, Indian corn, pease, barley and rye, when shipped for Montreal or for any port east of Montreal, shall be two cents per ton, such toll covering the Welland and the St. Lawrence Canals; and during the said period, if the ordinary full tolls for passage of the said food products through the Welland Canal have been paid, the said products shall be exempted from payment of any further toll for passage through any portion of the St. Lawrence Canal system, though not traversing the whole distance to Montreal O. C. March 18, 1889.

#### HARBOUR DUES.

Sec. 89. Vessels receiving or discharging freight at the premises of the Welland Railway, at Ports Colborne or Dalhousie, are to be free from harbour dues; but all other vessels discharging or receiving cargo at Port Dalhousie, Port Colborne or Port Maitland, shall pay on every ton of freight so received or discharged, two cents.

#### TOLLS AT SHEDS AT LACHINE CANAL BASIN.

Sec. 90. The following tolls shall be levied upon property stored at the Sheds at the Lachine Canal Basin:—

		Cents.
Wheat and other grain, per	week, per bushel	1
	lo per barrel	4
Pork, beef, butter and lard d		5
	lo per hhd, 10 cents; per brl	5
Ŭ , ,	lo per pipe, 15 cents; per pun	12
Liquors {	lo per hhd, 10 cents; per qr. cask	7
Iron (bars)	lo per ton	24 .
	lo do	12
Salt, except at the St.		
	lo per 100 minots	36
Salt at the St. Gabriel	- '	
Sheds, Montreal, after	•	
	lo per bag	1
	lo per ton weight or measurement	
	lo per chaldron	

- Sec. 91. (a) No charge shall be made for property stored in the sheds of the Lachine Canal basin for the first forty-eight hours, after which period, except in the case of flour, the foregoing rate of storage for the use of the sheds are to be raised, levied and collected.
- (b) Articles unenumerated are to be charged according to the above rates as nearly as the same can be computed.
- (c) All property stored in the sheds remaining after the first forty-eight hours will be liable to one week's storage, although it should only have been stored for a portion of the same, and so on for each succeeding week.
- (d) The labour of receiving property into the sheds and delivering the same shall be at the expense of and be furnished by the owners of the property or their agents.
- (c) All property stored in these sheds shall be at the risk of the proprietor from damage by fire or otherwise.
- (f) All dues for storage shall be paid before the removal of the property. O. C. August 21, 1846, October 28, 1846.

#### Flour

- Sec. 92. (a) Flour shall be allowed to remain in the sheds for two whole days free of charge.
- (b) If kept there beyond two days or 48 hours, such flour shall be liable to a charge of one cent per day per barrel for the first four days after the expiration of the 48 hours of the exemption.
- (c) Should the flour be kept in the sheds beyond four days at one cent per day per barrel, it shall be liable to pay two cents per day per barrel for every day subsequent to the expiration of such four days.
  - (d) Any part of a day shall be considered as one day. O. C. May 31, 1856.

# Tolls on Vessees Trading to Lower Ports and Entering the Lachine Canal at Montreal Harbour.

Sec. 93. The following rates of toll shall be levied upon vessels trading to lower ports, and entering the Lachine Canal from the harbour of Montreal, and on certain goods herein mentioned; said vessels to be allowed 48 hours for discharge of cargo before the following be incurred; and said discharge to be made below the St. Gabriel Lock.

Steamboats measuring 50 tons or upwards, per ton register, per day of 24 hours 4  All other vessels measuring 50 tons or upwards, per ton register, per day of 24 hours 4	1
Steamboats measuring under 50 tons register, each day of 24 hours. 40.  All other vessels measuring from 25 to 50 tons register, per day of 24 hours. 20  All vessels measuring less than 25 tons register, per day of 24 hours. 10  Coal, per chaldron 10  Salt, per 100 minots 15  Iron of all kinds, per ton weight 15  Merchandise as in class No. 6 of the tariff of tolls on Dominion Canals. 10	

Provided always that the above tolls be levied only on goods for consumption in Montreal, and on vessels trading with that port. O. C. June 8, 1860.

CHARGES FOR WHARFAGE ON FIREWOOD ON WHARVES AND BANKS OF LACHINE CANAL.

Sec. 94. The following rates of tolls shall be collected as herein mentioned, that is to say:—

(a) Firewood landed on wharves or banks of the Lachine Canal, or in boats, barges or other crafts occupying any of the basins between Wellington Street Bridge and Lock No. 3, four cents per cord, and for every day the wood is allowed to remain in either the canal or basin, or on the wharves or banks, after the first five\_days, an additional charge of four cents per cord. O. C. Aug. 7, 1860.

162

(b) The clause next preceding shall not only apply to the rates of toll to be collected on firewood on wharves at Lachine and the Lachine Canal and Basin, but are also extended and made applicable to the banks and grounds at Côte St. Paul and at Lachine. O. C. Jan. 27, 1862.

#### CANAL BASINS IN MONTREAL PART OF MONTREAL HARBOUR.

Sec. 95. Whereas under existing regulations for the collection of Canal tolls, eastern bound vessels having paid the charges one way in full through the Welland Canal are chargeable one Section Canal Toll if re-entering the Lachine Canal;

And whereas vessels loaded with grain destined for the Montreal Harbour frequently unload only part of their cargoes on board sea-going vessels in that harbour, and re-enter the Lachine Canal for the purpose of unloading the balance of their cargoes either in elevators or mills located along the canal basins;

It is ordered that the Lachine Canal basins, within the Montreal city limits be considered as part of the Montreal Harbour, in so far only as regards the collection of tolls on the class of vessels above referred to, which re-enter that portion of the canal for the purpose of unloading the balance of their cargoes, but that the same shall not apply any further, as in the event of vessels returning to the harbour to take cargo, in which case the usual toll shall be charged against them on passing out of the canal a second time into the harbour. O. C. Aug. 8, 1878.

#### PHOSPHATES.

Sec. 96. Whereas vessels laden with grain for delivery in Montreal Harbour frequently carry also deck loads of phosphates, and being compelled to proceed at once to the harbour for the discharge of the grain, they pay tolls through to that point, subsequently re-entering the Lachine Canal for the storage of the phosphates, and in accordance with the existing regulations, paying canal dues a second time for such

The phosphases, and in accordance when the statement of the Montreal city limits, be considered as part of the Montreal Harbour, for the purposes of the unloading of phosphates carried by vessels in addition to their grain cargoes as described in this section; it being, however, provided that in the event of their returning to the harbour to take cargo, the usual tolls shall be charged against such vessel on their passing out of the canal a second time. O. C. July 12, 1881.

#### CHARGES ON VESSELS WINTERING IN LACHINE CANAL.

Sec. 97. The following rate per ton shall be charged for wintering vessels in the Lachine Canal, viz.:-For each boat, barge, scow or other vessels of ten tons measurement or under, seventy cents per vessel for the entire winter; and every ten tons above the first ten, an additional rate of eight cents. O. C. Aug. 22, 1879.

#### DURS ON VESSELS IN THE NEW BASIN, LACHINE CANAL.

Sec. 98. The Montreal Harbour Commissioners shall be allowed to retain the right of levying dues in respect of the old lower basin of the Lachine Canal, but the Government shall retain full control of the respect of the did lower tasin of the Lacente Canal, but the Government stant retain full control of the new works and basins of said canal and of the revenue that may be derived from their use, and the rates shall be levied by the Government on vessels loading or unloading in the new basins equal and similar to those levied by the Commissioners in respect of the old basin. O. C. Jan. 26, 1883.

DUES IN THE HARBOUR OF MONTREAL UNDER ACTS 40 VIC., CHAP. 53, AND 42 VIC., CHAP. 28.

#### Sec. 99 .- Tonnage Dues.

On steamboats, for each day of twenty-four hours, or part of a day they remain in the harbour, reckoned from the hour of their arrival to that of their departure On all other vessels, per day, as aforesaid	Per ton register.  1 cent.  1 do
Sec. 100 Wharfage Ducs.	
All goods, wares and merchandise, not elsewhere specified.  Hay, straw, pig and scrap iron, pot and pearl ashes.  Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep, swine  Ballast, clay, fire-bricks, gypsum, lime, marble, phosphates, sand, salt  Coal and coke, grain and seeds of all kinds.  Special.—Bricks, 10 cents per 1,000, cordwood, 5 cents per cord, lumber, 10 cents per	Per ton. 25 cents. 20 do 15 do 10 do 7½ do
1,000 feet, board measure. Bullion specie	Free.

#### Note.

Sec. 101 (a.) On all goods, wares and merchandise whatsoever, the quantity of which by weight, measurement or other mode of estimate provided for in the tariff of the next preceding section can not be conveniently ascertained, it shall be lawful for the Harbour Commissioners to levy a rate of  $\frac{1}{4}$  of 1 per cent on the value thereof.

(b.) Each entry shall pay not less than 5 cents.
(c.) All property landed on the wharves for re-shipment shall only pay one wharfage.
(d.) The ton mentioned in the tariff of wherfage dues shall be 2,000 lbs. weight or 40 cubic feet measurement, according to the bill of lading.

163

#### Sec. 102.—Standard for Estimating Weights.

Ashes, pot or pearl	3 b	rls. t	o 1 ton.
Apples, flour, meal, potatoes	9	do	1 do
Fish, meat, pitch, tar	7	do	1 do
Horses	2 t	ю 1	ton.
Neat cattle	3 t	ю 1	do
Sheep	15 t	to 1	do
Swine	10 t	ю 1	do
O. C. April 1st, 1881.			

Tolls on Floated Timber, &c., entering the Basin at Lachine.

Sec. 103. The following rates of tolls shall be collected on floated timber, lumber and firewood entering the basin at Lachine and Lachine Canal:—

Kinds of Timber.	For receiving Timber, &c., to include use of Basin and Wharf for one Month.	For each succeeding month during the Season of Navigation.	For Wintering in basin or on wharf.
	Cents.	Cents.	Cents.
Timber, square or round, of all kinds, above 12 x 12, per M cubic feet	25	20	35
Timber, round or flatted, of all kinds, under 12 x 12, per M lineal feet	20	15	30
Timber, round or flatted, of all kinds, under 12 x 12, per M lineal feet Planks and boards to include all kinds of sawed lumber in rafts, per M feet,		10	50
hoard measure	3	2	3
Saw-logs, 12 feet long, if longer in same proportion per log	1	1	3 2
Floats, per 100	10	5	10
Traverses, per 100	10	5	10
Fence posts and rails, per M	10	5	10
Staves, barrel, per M	8	4	8
do pipe do		4	8
_do West India, per M	8	4	8
Firewood on bank of canal between Lock No. 3 and Lock No. 5, and also on wharves in canal basin at Lachine	3	3	3

#### Note.

#### O. C. 27th June, 1890.

3. That the following words be added to Section 103:—"The monthly charge "of 3 cents per cord on firewood is cancelled, as provided by Order in Council "of the 4th February, 1880."

#### Note.

Sec. 104 (a). No allowance shall be made for fractional parts of a month or winter season.

- (b.) The firewood shall be corded across the bank while being delivered from the boat in such manner and at such points as the superintendent may direct.
- (c.) The rates on timber to take effect upon the completion of the booms in Lachine Canal. O. C. June 8, 1860.

#### CHARGES FOR WINTERING VESSELS IN RIDEAU CANAL.

Sec. 105. The winterage dues for vessels wintering in the canal basin, at Ottawa, or other points along the line of the Rideau Canal, shall be as follows:—

In canal basin, C			on	. \$	8 00
do	do barges	ďο			4 00
	do steamers	do			50 <b>60</b>
do other	stations do	do	••• •••••••	7	15 00

If the Minister of Railways and Canals deems it advisable, he is authorized to take security from parties wintering their vessels in locks against damage to Government property by fire. O. C. March 19, 1887.

#### CHARGES FOR REPAIRING VESSELS ON THE BANKS OF CANALS.

Sec. 106 (a). Persons using the banks of the Lachine Canal as a site for the repair of their vessels shall be subject to a charge of four dollars, payable in advance, for each vessel; the period during which such site may be occupied under any one payment being limited to six months, and permission for repairing being first obtained from the proper officer, in conformity with the existing canal regulations.

(b.( In the event of failure to remove vessels so occupying the banks at the expiration of the period named, no fresh permits having been obtained, such vessels may be sold under the 16th section of the canal regulations. O. C. March 5, 1880.

Sec. 107. Rules with respect to the repairing of vessels on the banks of the Lachine Canal, the Beauharnois and the Chambly:-

- (a.) Repairs shall only be executed at such points as may be indicated and approved by the superintendent.
- (b.) For each vessel hauled up or beached for repairs, a charge of one dollar, over and above all other charges, shall be made, carrying the privilege of remaining one month, a further sum of one dollar being charged for each additional month, or fraction of a month, the vessel may remain.
- (c.) In cases, however, where a vessel hauled up for repairs upon the canal bank remains there throughout the winter, a charge of four dollars only shall be made (in addition to the ordinary winterage dues), the period covered being from the 1st of November to the 1st June, inclusive.
- (d.) Any vessel remaining on the canal bank after having wintered thereon shall be charged at the rate of one dollar a month or fraction of a month of her subsequent stay.
- (e.) Any vessel remaining more than one year on the bank of the canal shall for such time as she may remain in excess of that period pay at the rate of two dollars a month or fraction of a month throughout the whole year.
  - (f.) All charges shall be payable at the colector's office in advance on the first day of each month.
- (g.) These rules shall be understood as applying to all cases where the canal bank is used in a manner for the repairs of vessels, whether such vessels are actually hauled up or not. O. C. August 6, 1881.

#### ST. PETER'S CANAL

Sec. 109. On each and every vessel passing through the said canal, two cents per ton on vessel and one cent per ton on the freight, each way. O. C. June 23, 1883.

#### ORDER IN COUNCIL.

12th December, 1889.

On a memorandum dated 10th of December, 1889, from the Minister of Railways and Canals, representing that in certain instances it has been the practice to tie up vessels for the winter alongside of canal piers, but not inside the gates, and that consequently such vessels thereby, to some extent advantaged, do not receive there the protection from the rise and fall of water which they would obtain inside, that nevertheless they have been charged with winterage dues.

The Minister recommends that henceforward, including the winter now current, but not otherwise retroactive, no charges be made for vessels so wintering outside the locks of any Government Canal.

The committee submit the above recommendation for your Excellency's approval.

O. C. 16th May, 1890.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the Rules and Regulations for the management, maintenance, proper use and protection of the Canals of the Dominion of Canada, made and established by the Order in Council of the 26th day of October, 1889 (Consolidated Orders in Council of 1889), together with any amendments thereof or additions thereto, shall be, and the same are hereby made applicable to the Murray Canal, with the exception of such sections or provisions as relate especially and only to other works named therein.

O. C. 20th May, 1890.

His Excellency, in pursuance of the provisions of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the Rates of Toll to be imposed and collected on the Murray Canal, now open for regular traffic, shall be and the same are hereby fixed at the rate of one-eighth of those charged for passage through the St. Lawrence Canals.

#### ORDER IN COUNCIL.

27th September, 1890.

On a Memorandum dated 25th September, 1890, from the Minister of Railways and Canals representing

that under date the 20th August, 1890, an Order in Council was passed prohibiting the use of horses for towing purposes between the lower entrance of the Cornwall Canal and Look No. 20, during the progress of the works of Canal enlargement.

The Minister recommends as this prohibition has entailed the use of tugs and consequently expense to the parties concerned, and upon the advice of the Deputy Head of the Department of Railways and Canals, that all tugs used solely for the purpose of towing on the section in question, be permitted to pass free of toll, up and down the Canal between the lower entrance of the Canal and Look No. 20 until the completion of the allegement graphs on that extring of the enlargement works on that section.

The Cummittee submit the above recommendation for your Excellency's approval

#### ORDER IN COUNCIL.

27th day of September, 1890.

#### PRESENT :

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, under the authority conferred upon him by chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council of Canada, is pleased to declare the now completed Tay Canal to be part of the Rideau Canal, and that the rules and regulations for the management, maintenance, proper use and protection of the canals of the Dominion of Canada, made and established by the Order in Council of the 26th of October, 1889 (Consolidated Orders in Council of 1889, chapter 115), together with any amendments thereof or additions thereto, shall be applicable to the said Tay Canal, and the same are hereby made applicable to the Tay Canal accordingly with the exception of such sections or provisions as relates specially. applicable to the Tay Canal accordingly, with the exception of such sections or provisions as relate specially, and only to works other than the Rideau Canal named therein.

and only to works other than the Rideau Canal named therein.

And His Excellency is further pleased, under the authority of the above cited Act, and by and with the advice of the Queen's Privy Council for Canada, to impose and authorize the collection of the following rates of toll upon the said Tay Branch of the Rideau Canal system, now open for regular traffic, namely:—

From Perth to Smith's Falls, 1 section, or \(\frac{1}{2}\) of Rideau Canal rates.

From Perth to Kingston, 2 sections, or \(\frac{2}{3}\) Rideau Canal rates.

From Perth to Ottawa Basin, 2 sections, or \(\frac{2}{3}\) Rideau Canal rates.

From Perth to River Ottawa, 3 sections, or full Rideau Canal rates.

A portion of a section to be charged as a whole section.

A portion of a section to be charged as a whole section.

#### AT THE GOVERNMENT HOUSE, AT OTTAWA,

WEDNESDAY, the 25th day of March, 1891.

#### PRESENT :

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency having had under consideration the Tariff of Tolls on the Canals of the Dominion, and the several Orders in Council under which a special rate has from time to time been established temporarily on certain food products passing through the Welland Canal and through the St. Lawrence Canals for shipment at Montreal and ports east of Montreal, is pleased to Order in virtue of the powers vested in him by Chapter 37 of the Revised Statutes, intituled "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, that the following amendments shall be and the same are hereby made to the Tariff of Tolls in force on the said Canals, viz.—

A refund shall be made on the tolls collected on wheat, Indian corn, peas, barley, rye, and (if for export) oats, which may be carried through the Welland Canal and the St. Lawrence Canals to Montreal, or any port east of Montreal.

The refund shall be such as to reduce the tolls to two cents per ton of the said products or any of

them, and the conditions of such refund shall be the following:

1. The products aforesaid, on which the refund may be claimed, shall be shown to have been originally shipped for Montreal or some port east of Montreal before entering the Welland Canal, and

2. Shall be shown to have been actually carried to Montreal or some port east of Montreal.

3. Transhipment, if at a Canadian intermediate port, shall not prevent the refund aforesaid being

made.

This Order in Council shall remain in force only for the present year, 1891.

(Signed)

JOHN J. McGEE.

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

#### AT THE GOVERNMENT HOUSE, AT OTTAWA.

WEDNESDAY, the 29th day of April, 1891.

#### PRESENT:

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Order in Council of the 25th day of March, 1891, authorizing the reduction of toll to two cents (2 cts.) per ton for the passage through the Welland and St. Lawrence Canals of certain agricultural products therein named, shall be understood to apply to any portions of such cargoes lightered at Port Colborne and re-shipped at Port 166

Dalhousie, and also that the provisions of the said Order be made applicable to the therein named products when shipped from Canadian Lake Ontario ports.

(Signed)

JOHN J. McGEE.

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

#### AT THE GOVERNMENT HOUSE, AT OTTAWA.

WEDNESDAY, the 29th day of April, 1891.

#### PRESENT :

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL

His Excellency, in virtue of the provisions of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Orders in Council dated respectively the 22nd day of May, 1890, and the 30th day of June, 1890, under which, in the case of steamers specially chartered for the conveyance of excursion parties going and returning in the same boat on the same day, one-half only of the usual rates of passenger tolls were charged for passage through the Lachine Canal and the Ste. Anne Lock, and for passage through the Welland Canal, in the case of excursion parties leaving Toronto or Hamilton for St. Catharines, be continued in force for the forthcoming season of navigation only, adding to the said provisions, however, for the forthcoming season, that this conditionally reduced rate shall apply to excursion parties leaving St. Catharines for Toronto or Hamilton.

(Signed)

JOHN J. McGFE.

(Signed.)

JOHN J. McGEE,

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

CERTIFIED Copy of a Report of a Committee of the Honourable the Privy Council, approved by His Excellency the Governor General in Council, on the 18th May, 1891.

The Committee, on the recommendation of the Minister of Railways and Canals, advise with reference to the Orders in Council dated respectively the 25th of March and the 29th of April last, authorizing the reduction of canal tolls on certain food products, the provisions of which Orders are carried out by way of refund of the excess tolls paid, that such refund be made at the close of the present season, on or about the 1st day of December and not during the season as heretofore.

JOHN J. McGEE.

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

#### AT THE GOVERNMENT HOUSE, AT OTTAWA.

MONDAY, 18th day of May, 1891.

#### PRESENT:

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the powers vested in him by Section 13 of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that all Government dredges and scows shall be permitted to pass through the canals free of tolls, but that such dredges and scows shall not be so passed as to interfere with the passage of other vessels of any kind whatever.

JOHN J. McGEE,

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

O. C. 18th May, 1891.

Whereas, in consequence of the operations of the contractors for the enlargement of the Cornwall Canal, access to the river wharf opposite the town of Cornwall is temporarily prevented for the steamers of the Richelieu and Ontario Navigation Company, such steamers being obliged in place of stopping at such wharf to pass through the two locks at the lower entrance of the canal to another wharf in the town; 167

His Excellency, under the authority conferred upon him by Section 13 of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that during the current season the steamers of the said Richelieu and Ontario Navigation Company shall be allowed passage free of toll through the said two locks at the lower entrance of the Cornwall Canal.

(Signed,)

JOHN J. McGEE.

Clerk of the Privy Council.

O. C. 31st October, 1890.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to impose and authorize the collection of the following tolls and dues for the use of the dry dock at Bobcaygeon, and of any of the locks on the Trent Valley Canal, during the winter or other shorter period.

For Vessels.	Wintering.	Per Day.	Per week.
Over 15 tons	\$	\$	\$
	30	4	12
	20	3	10

B. H. TEAKLES,

Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS, 1st March, 1892.

# REPORTS

# RAILWAY STATISTICS

OF

# CANADA

AND

# CAPITAL, TRAFFIC AND WORKING EXPENDITURE OF THE RAILWAYS OF THE DOMINION

1891

PRINTED BY ORDER OF PARLIAMENT



#### OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY

1892

#### CANADIAN GOVERNMENT RAILWAYS.

# Office of the Chief Engineer and General Manager, Ottawa, 28th April, 1892.

SIR,—I have the honour to submit to you the Railway Statistics of the Dominion for the year ended on the 30th June, 1891, compiled from sworn returns made by the several railway companies to the Minister of Railways and Canals. I introduce, in the first place, a table showing the growth of the railways from year to year, since the opening of the first line in 1837.

· Year.	Miles in Operation.	Year.	Miles in Operation
1836		1864	2.145
1837	16	1865	2,145
1838	16	1866	2,150
1839	16	1867	2,258
1840	16	1868	2,269
1841	16	1869	2,497
1842	16	1870	2,497
1843	i 16	1871	2,497
1844	16	1872	2,508
1845	1 1	1873	2,638
1846	1 ' 1	1874	
1847	59	1875	4.826
	59	1876	5.157
1848	59	1877	
1849	71		5,574
1850		1878	6,14
1851	93	1879	
1852	212	1880	
1853	423	1881	7,260
1854	657	1882	7,530
1855	855	1883	8,726
1856	1,296	1884	9,658
1857	1,428	1885	10,149
1858	1,654	1886	10,697
1859	1,997	1887	11,691
1860	2,087	1888	12,162
1861	2,087	1889	12,628
1862	2,110	1890	13,256
1863	2,110	1891	14,009

The tables appended may be summarized as follows:—	
Miles of railway completed (track laid)	14,633
do sidings	1,665
do iron rails in main line	764
do steel do	13,869
Capital paid (including the four following items)	
Government bonuses paid	147,165,432
do loans do	21,201,314
do subscriptions to shares paid	300,000
Municipal aid paid	13,792,509
Miles in operation	14,009
Earnings	<b>\$4</b> 8,192,099
Working expenses	34,960,449
Net earnings	13,231,649
Passengers carried	13,222,568
Freight carried (tons)	21,753,290
Train mileage	43,399,178
Passengers killed	13
Number of elevators	42
do guarded level crossings	131
do unguarded do	8,708
do overhead bridges	384
do level crossings of other railways	193
do junctions with other railways	297
do do branch lines	187
do engines owned	1,800
do do hired	50
do sleepers and parlour cars owned	125
do do do hired	17
do first class cars owned	818
do do hired	31
do second class and immigrant cars owned	609
do do do hired	15
do baggage, mail and express cars owned	535
do do do hired	25
do cattle, box and freight cars owned	30,740
do do do hired	3,625
do platform cars owned	14,325
do do hired	289
do coal and dump cars owned	3,437
do do hired	122

#### NOMINAL CAPITAL PAID. ·

	Miles Constructed	Anjount.	Per M	ile.
		\$ cts.	\$ cts.	
Ordinary share capital	14,633	238,769,386 36	16,317 11	
Preference do	14,633	101,000,400 39	6,902 23	
Bonded debt		292,291,653 68	19,974 82	
Aid from Dominion Government	14,633	142,934,780 54	9,767 97	1 981 1
do Ontario do	6,089	6,032,584 92	990 73	naver- 759.34 on to- e.
do Quebec dodo New Brunswick Government	2,806   1,360	10,879,133 93	3,877 09	å86 ⊊ .
do Nova Scotia do	-/	4,297,500 71 2,007,995 87	3,159 98 2,548 22	5 C S
do Prince Edward Island Government			2,340 22	al to an of \$1.78 of mile or mileage.
do Manitoba Government			1,888 15	E S E
do British Columbia Government.		37.500 00	54 58	Equal age of per n
do North-West Territories Government	1,373		J 30	2 3 8 8 E
do Municipalities in Ontario.		10,166,305 81	1,669 63	<b>E</b>
do do Quebec		2,428,918 62	865 62	
do do New Brunswick	1,360	286,500 00	210 66	
do do Nova Scotia	788	277,685 00	352 39	
do do Prince Edward Island		211,000 00	002 00	
do do Manitoba		595,600 00	453 96	
do do British Columbia	687	37,500 00	54 58	
do do North-West Territories		25,000 00	18 21	
Capital from other sources	14,626	2,102,062 38	143 73	
Total paid Capital	14,633	816,647,758 21	55,808 62	

GOVERNMENT and municipal loans, bonuses, &c., promised to railways completed and under construction:—

Dominion Go	vernment\$	146,791,274 10
Ontario	do	6,187,007 44
Quebec	do	14,397,508 12
New Brunsw	ick Government	4,587,346 81
Nova Scotia	do	2,135,995 87
Manitoba	do	2,478,300 00
British Colum	nbia do	37,500 00
Municipalitie	s in Ontario	10,347,041 78
do	Quebec	4,255,774 00
do	New Brunswick	316,500 00
do	Nova Scotia	277,685 00
do	Manitoba	595,600 00
do	British Columbia	37,500 00
do	North-West Territories	25,000 00

**<sup>\$</sup>** 192,470,033 12

#### FATAL ACCIDENTS.

	Passengers Killed.	Employees Killed.	Others Killed.	Total Killed.
Falling from cars or engines.  Getting on or off trains in motion  At work making up trains.  Coupling cars.	1 4	23 1 1 7	2 11	26 16 1
Collisions and derailments. Striking bridges. Walking or being on track Other causes	8	10 2	99 5	19 2 111 14
Totals	13	65	118	196

Land Grants made by Governments to railways completed and under construction:—

Name of Railway.	Government.	Acres Granted.	Acres Sold.	Amount Realized.
				*
Calgary and Edmonton	Dominion	2,176,000		
Canadian Pacific	do		10,427,129	22,189,657
Manitoba and South-Western Colonization	do		108,995	471,468
Esquimalt and Nanaimo	do	1,900,000	j	•
Great Northern	Quebec	140,000		
Great North-West Central	Dominion	2,880,000		
Lake Temiscamingue Colonization	Quebec	250,000		
Lower Laurentian	do	480,000	385,386	134,885
Manitoba and North-Western	Dominion	2,918,400	225,762	573,284
Montreal and Western	Quebec	350,000	,	
*North-Western Coal and Navigation	Dominion	1,401,600	95,641	128,399
Ottawa and Gatineau Vallev	Quebec	450,000	i i	•
Qu'Appelle, Long Lake and Saskatchewan	Dominion	1,329,333	128,000	121,600
Quebec and Lake St. John	Quebec	1,390,000	1,390,000	973,000
Western Counties	Nova Scotia	150,000		
Wood Mountain and Qu'Appelle	Dominion	1,536,000		ı
Winnipeg and Hudson Bay	do	8,480,000		

<sup>\*</sup> Now Alberta Railway and Coal Company.

The statistics have again been greatly delayed owing to the difficulty of obtaining the returns of many of the smaller companies, some of which have come in at various dates in March and April, instead of on or before the 1st October, as the Act requires. I can only repeat the recommendation I have so often made already, that the law in the case made and provided be enforced.

I have the honour to be, Sir, Your obedient servant,

COLLINGWOOD SCHREIBER,

Chief Engineer and General Manager.

The Secretary,

Department of Railways and Canals.

Table showing Locations of the Railways of the Dominion of Canada, 30th June, 1891.

N CD Thomas	Devices	Dist	Distance.	
Name of Railway.	Description.	Miles.	Total.	
Alberta Railway and Coal Co	Late North-Western Coal and Navigation Co.—From Dunmore, on C.P.R., westerly to colliery at Leth- bridge, and from Lethbridge to Coutts		174.10	
Albert Southern	Metapedia to Paspebiac (60 miles of track laid).  Deseronto, on Bay of Quinté, Lake Ontario, to Deser-		174·12 17·00 100·00	
Brantford, Waterloo and Lake	onto Junction, Grand Trunk Railway  Brantford, Ont., to Waterford, Ont		3·50 17·00	
Brotouche and MonctonBrockville, Westport and Sault	Moncton, on Intercolonial Railway, to Buctouche, N.B.		32.00	
Ste. Marie	Brockville to Westport.  Calgary to Edmonton do Macleod (156 30 miles of track laid).	191 · 97 105 · 00	45 00	
Canada Atlantic	City of Ottawa to Bourdary. Crosses the St. Lawrence at Coteau by bridge. Connects with Grand		296 · 97	
Canada Southern	Trunk Railway at Coteau and Lacolle	126 18 15 70	138 00	
	St. Clair Branch—St. Clair Junction to Courtright Fort Erie Branch—Fort Erie to Welland Junction Erie and Niagara Branch—Fort Erie to Niagara	62.63 17.50 30.60		
	Oil Springs Branch—Oil Springs to Oil City	5·50 7 00 13·80		
Canada Eastern	Late Northern and Western of New Brunswick—Gibson to Chatham Junction, I. C. R	107:00	378.91	
O 11 D 10	Blackville to Indiantown Chatham to Chatham Junction	9·00 9·00	100.00	
Canadian Pacific: Owned	Main Line—Montreal to Vancouver	2,906 · 50 159 · 80	127.00	
(Formerly North Shore Ry.)	Branch—Grand Piles to Three Rivers	27 · 50 16 · 80 2 · 00		
	do Ste. Thérèse to St. Lindo St. Eustache	15 00 8 00		
	do St. Lin Junction to St. Jérôme	7.50		
	do Carleton Junction to Brockvilledo Sudbury to Copper Minesdo do Sault Ste. Marie	45 50 5 00 182 50	ł	
(Including Manitoba South-	do Winnipeg Junction to Emerson	64 80 201 60		
Western Colonization Ry.) \	do do Glenboro'	116 · 80 13 · 70 22 · 50	1	
	do do Stonewall	18·10 1·20 9·20		
Leased lines	Total mileage owned.  Atlantic and North-West-Mile End to Mattawam-	3,839 20		
	keag Junction (including former International and Waterloo and Magog Railways).  St. Lawrence and Ottawa—	336.10		
	Ottawa to Prescott	56.50	•	
	Carried forward	392 60		

# TABLE showing Locations of Railways, &c.—Continued.

	,	Dista	nce.
Name of Railway.	Description.	Miles.	Total.
Canadian Pacific—Continued.	Brought forward	392 60	
Leased Lines	Ontario and Quebec—         Montreal to Toronto Junction.         339 00           London to Windsor         112 00	451 · 00	
	Credit Valley— Toronto Junction to St. Thomas	101 00	
	Toronto, Grey and Bruce— Toronto to Owen Sound	175 · 20	
	Orangeville to Teeswater	188·70 26·60	
	Guelph Junction— Guelph, Ont., to Guelph Junction, on Credit Valley Railway, C.P.R	15.50	
	New Brunswick		
	Carleton to St. Croix and Vanceboro' 92 00 Fredericton Junction to Fredericton 22 50	415.50	
	Columbia and Kootenay— From outlet Kootenay Lake to Columbia River Toronto Junction to Strachan Avenue.	28·50 3·20	
	Total Mileage Leaseddo Owned	1,696·80 3,839·20	
anadian Government Railways,	do Worked		5,536.0
	Halifax to Lévis       675 00         Moncton to St. John       89 00         Truro to Trenton       44 00         New Glasgow to Mulgrave       82 00		
	Pt. Tupper to Sydney       91 00         Trenton to Pictou Landing       7 00         Painsec to Pte. du Chêne       11 00		
	do         Dalhousie         7 00           do         St. Charles         25 00           do         Dartmouth         5 00		
	do Indiantown	1,141.00	
	Prince Edward Island—   Main Line—Alberton to Georgetown	-,-22 00	
	do County Line to Cape Traverse 12:10	210.60	1,351

# TABLE showing Locations of Railways, &c .- Continued.

		Dist	ance.
Name of Railway.	Description.		· Total,
	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippigan		
Carillon and Grenville	Harbour, N.B. Carillon to Grenville, P.Q., connecting at both termini with Ottawa River Navigation Company's steamers	• • • • • • • • • • • • • • • • • • • •	68.00
Central Ontario	(Gauge, 5 ft. 6 in.)		13:00
Central Railway of New Bruns-	and Quebec, in Township of Rawdon.,		104.00
wick	From Norton Station, on the Intercolonial Railway, to Chipman.  From Hampton to Quaco (formerly St. Martin's and Upham Railway)	44·66 30·00	i
Cornwallis Valley	From Kingsport, on Basin of Minas, N.S., to Kent- ville on Windsor and Annapolis Railway		74·66 14 00
Company (formerly Spring Hill	Spring Hill Junction, Intercolonial Railway, to Spring Hill Coal Mines, N.S., and Parraboro', on the Bay of Fundy	32 · 00	
Drummond County	Glasgow Railway	14.00	46.00
	From Elgin, County of Albert, N.B., to Petitcodiac Junction with Intercolonial Rejlyry thouse to	• • • • • • • •	62 · 81
Erie and Huron	Havelock, in County of King's  Rondeau, Lake Erie, Ont., to Sarnia, passing through  Town of Chatham. Ont.: connects with Canada	•••••	28.00
Esquimalt and Nanaimo Fredericton and St. Mary's Rail-	Southern and Great Western Railways. Victoria to Wellington.	• • • • • • • •	73·75 78·00
way Bridge Co	Connecting the Fredericton Railway, at Fredericton, with the Northern and Western Railway at St. Mary's	· · · · · · · · · · · · · · · · · · ·	1:33
Grand Trunk Division (owned).	Main Line—Port Edward to Point Lévis and Island Pond.  Montreal to Dorval  Sarnia Extension—Port Edward to Great Western. Branch—Montreal to Wharves.  Three Rivers Branch—Arthabaska to Doucet's Landing.  Kingston Branch—Main Line to Kingston. Galt and Waterloo Branch—Waterloo and Berlin to Galt.  London Branch—St. Mary's to London.  Champlain Branch—St. Lambert to Rouse's Point, Montreal to Lachine, St. Isidore to Province Line.  Jacques Cartier Union—Jacques Cartier to Canadian Pacific Railway Junction.  Northern Railway—  Main Line—Toronto to Gravenhurst.  Branch—Allandale to Collingwood.  do Collingwood to Meaford.  do Flos Tramway—Elmsvale to Hillsdale.  Carried forward.	719 50 10 25 3 00 2 00 35 25 2 25 14 50 22 00 66 00 6 50 111 49 31 76 20 50 8 28	

## TABLE showing Location of Railways, &c .- Continued.

Name of Railway.  rand Trunk—Continued. Grand Trunk Division owned	Description.  Brought forward	Miles.	Total.
rand Trunk—Continued. Grand Trunk Division owned	Brought forward	Miles.	Total.
rand Trunk—Continued. Grand Trunk Division owned	Brought forward		
rand Trunk—Continued. Grand Trunk Division owned	,	1,053 28	
	Hamilton and North-Western— Main Line—Port Dover, on Lake Erie, to Allandale,		
	on Lake Huron	134 07	
•	Branch—Beeton to Collingwood	39.83	
Great Western Division	Main Line-Niagara Falls to Windsor	229 50	
	Toronto Branch—Hamilton to Toronto	38.50	
	Galt do Harrisburg to Guelph Brant Branch—Harrisburg to Brantford	27·18 8·00	
	Sarnia do Komoka to Sarnia.	50.75	
	Petrolea do Wyoming to Petrolea	4.75	
	Loop Line—Fort Erie to Glencoe	145.50	
Leased and Operated	Allanburg Branch—Allanburg to Clifton Junction Welland—From Port Colborne to Port Dalhousie, Ont Wellington, Grey and Bruce—Guelph to Southampton	8·32 25·00	
	and Palmerston to Kincardine	168 35	
	London and Port Stanley—London to Port Stanley. London, Huron and Bruce—Hyde Park to Wingham	23.66	l
	Junction	68.89	
	Tilsonburg Junction	34.75	
	includes the former Georgian Bay and Wellington, Port Dover and Lake Huron, and Stratford and Huron Railways.		
	Buffalo and Lake Huron—Goderich to Fort Erie	162 00	
	Georgian Bay and Lake Erie—Port Dover to Wiarton South Norfolk—Simcoe to Port Rowan	172·75 17·00	
	Montreal and Champlain Junction—Brosseau to Dun- dee and St., Martin's to Valley field	81 · 25	
	Northern and Pacific Junction (from Northern Railway at Gravenhurst to Junction with Canadian		
	Pacific Railway at La Vase River, Lake Nipissing)	111 37	1
	North Simcoe—Colwell to Penetanguishene	33 · 34	
	Blairton to C. P. R 8.00		1
Leased-Midland Division.		18 00	
	Georgian Bay. Toronto and Nipissing (including former Lake Simcoe	165.75	1
	Junction Railway). Grand Junction—From Belleville to North Hastings and Peterboro'.	111 50	
	whitby and Haliburton (including former Victoria, and Whitby, Port Perry and Lindsay Railway)	1	ļ
	Madoc Junction to Bridgewater	8.20	
•	Madoc Junction to Bridgewater Peterboro' to Chemong Wharf.	8.22	3,143
Great Eastern	From Dundas, County Huntingdon, Que., to Lévis, Que. (under construction, 60 miles)	220.00	
	Branch from St. Lambert's to Rouse's Point (13 miles	36.00	ļ.
Leased	track laid)	45.00	1
Great Northern			301
	lienne	1	170 50

<sup>\*</sup>Including sundry connections, 5.06 miles.

# TABLE showing Location of Railways, &c .- Continued.

Name of Poilman	Description.	Dista	nce.
Name of Railway.	Description.	Miles.	Total.
Hereford	From International Boundary to Dudswell, County		
	Wolfe, connects with Canadian Pacific Railway at Cookshire, and with Quebec Central at Dudswell Dudswell to Lime Quarries (Dominion Lime Company)	48.04	52.84
Iroudale, Brancroft and Ottawa	From Orillia, Ont., to Ottawa (located from Mackinmont to Brancroft, 50 miles). Will connect with G. T. R. and Northern Railways at Orillia. Also with Kingston and Pembroke and with C. P. R. at		
Joggins.  Kent Northern.  Kingston and Pembroke	Richibucto, N. B., to Intercolonial Railway		225·00 13·00 34·00
Angson and remorate	McLaren's Mills, Bethune's Mines, Lavant Mills, Clyde Forks Mills and Francis Mills. (Connects with Grand Trunk at Kingston, Canadian	4.00	112 · 00
Kingston, Napanee & Western	Pacific at Sharbot Lake and at Renfrew.)  Late Napanee, Tamworth and Quebec:  Napanee to Tamworth  Yarker to Harrowsmith  Tamworth to Tweed		
L'Assomption.  Lake Erie, Essex and Detroit River.		l	56·45 3·00
Lake Temiscamingue Colonization Railway Lower Laurentian (formerly St	on Canada Southern Railway  Mattawa to head of Lake Kippewa		42·00 15·50
Lawrence, Lower Laurentian and Saguenay)	1		42·75
Manitoba and North-Western	Portage la Prairie to Yorkton Shell River Branch Leased—Saskatchewan and Western—Minnedosa to Rapid City	11.45	
Massawippi Valley			249 97
Montreal and Lake Makinongé.	Branch—Stanstead Junction to Stanstead From St. Félix to St. Gabriel de Brandon	2.00	34·00 12·75
Montreal and Vermont Junction	From Junction with Stanstead, Shefford and Chambly Railway, 2½ miles east of St. John, P.Q., to Junction with Vermont and Canada Railway, at Vermont boundary; also connects at Stanbridge with Lake Champlain and St. Lawrence Junction Railway	i i	23.60
Montreal and Western	From St. Jérôme, on C. P. R., to Ste. Agathe (18 miles constructed)		30.00
Montreal and Ottawa	Vaudreuil Junction, G. T. R., to Rigaud		16.50

## · TABLE showing Locations of Railways, &c .- Continued.

Name of Bailman	Description	Dista	nce.
Name of Railway.	Description.	Miles.	Total.
New Brunswick and Prince Edward Island	From Sackville Station, Intercolonial Railway to Cape Tormentine.		36.00
Northern Pacific and Manitoba	Winnipeg to International boundary Portage Junction to Portage la Prairie Morris to Brandon	65 30 52 50 145 50	
	From Nosbonsing, on Canadian Pacific Railway, to		263 · 30
	Lake Nipissing		5.50
Orford Mountain	N.S Eastman to Kingsbury, P.Q. (10 miles under con-		74.00
Ottawa and Gatineau Valley	struction) Canadian Pacific Railway Station at Hull, Que., to Wakefield		31.00
Pontiac and Renfrew	Prom Wyman's Station, on Pontiac Pacific Junction Railway, to Bristol Mines, County Pontiac, Que		20·00 4·25
Pontiac and Pacific Junction	From Junction with Canadian Pacific Railway at Aylmer, Que., to Pembroke, Ont		85:00
Port Arthur, Duluth & Western.	(Rails laid on 71 miles only from Aylmer.) Port Arthur to International Boundary		84 · 66
Qu'Appelle, Long Lake and Sas- katchewan	William; 60 miles track laid.)  From Canadian Pacific Railway at Regina, northwesterly to Prince Albert		247 · 19
Quebec and Lake St. John	Quebec to Roberval	191·00 5·00 8·00	
	Junction with North Shore Railway 4 miles from Quebec to Roberval, Lake St. John, 191 miles com- pleted.		204 · 00
	Branches not built— St. Gabriel to Rivière aux Pins Rivière à Pierre to La Tuque Chambord to Chicoutim	10·00 45·00 70·00	
Quebec Central	Main Line—Sherbrooke to Harlaka Junction, Inter- colonial Railway, 5 miles from Lévis, Que	137·50 15·00	153.50
	Angus Branch—East Angus to Angus Mills	1.00	25.00
Quebec, Montmorenci and Char- levoix			21 · 00
Stanstead, Shefford and Chambly.	From Junction with Montreal and Vermont Junction Railway, near St. John, Que., easterly to Waterloo (Connects with South-Eastern, and Chapleau and St.	.	43.00
Shuswap and Okanagon Shore Line (formerly Grand	Lawrence Junction Railways.) Sicamous, C.P.R., to near Lake Okanagon		51.00
Southern)	St. John to St. Stephen, N.B		82.50
Stewiacke Valley and Lansdowne.	Graham's Siding, Intercolonial Railway, to Upper Stewiacke, thence to Lansdowne (12 miles under construction)	r	37.00

# TABLE showing Locations of Railways, &c .- Continued.

Name of Pailmon	Description.	Dista	ince.
Name of Railway.	Description.	Miles.	Total.
South-Eastern	Main Line—West Farnham to Boundary Line Northern Division—Sutton Junction to Sorel Branch—Drummondville to L'Avenir Leased Lines— Montreal, Portland and Boston—Longueuil and St. Lambert to Farnham Branch—Marieville to St. Césaire Lake Champlain and St. Lawrence Junction—Stanbridge to St. Guillaume	36·00 9:00 12·00	940.00
	(Connects with Connecticut and Passumpsic Railway, Grand Trunk and Stanstead, Shefford and Chambly.)		260 · 00
St. Catharines and Niagara Cen- tral St. John Bridge and Railway Extension	St. Catharines, Ont., to Niagara Falls		12:35
St. John Valley and Rivière du	and connects the Intercolonial and New Brunswick Railways		1.75
Loup	From Fredericton, N.B., to Woodstock, N.B. (7 miles under construction)		65.00
Sansoury and Markey	Salisbury to Albert Branches to Mills Hillsboro' to Gray's Island Albert to Prescott Harvey to Albert Stony Creek to Manganese Mine	45.00 2.00 1.00 1.00 3.00 1.25	53·2¢
St. Clair Tunnel Co	From point on G.T.R. in Town of Sarnia to point on Chicago and G.T. Junction in Port Huron, U.S.A.		2.23
Thousand Islands Témiscouata	Gananoque to Gananoque Station, G.T.R		4·06
Tobique Valley	From Perth Centre on C.P.R. to Red Rapids (6 miles of track laid.)	<b></b>	14.00
Waterloo Junction Western Counties Windsor and Annapolis Leased Line	Waterloo to Elmira (under construction)  Yarmouth to Annapolis, N.S.  Windsor to Annapolis, N.S.  Windsor Branch — Windsor to Windsor Junction, Intercolonial Railway, 14 miles from Halifax	84.00	i
Wood Mountain and Qu'Appelle.			116.00
Winnipeg and Hudson Bay	(17 miles under construction). Winnipeg to Port Nelson on Hudson Bay. (Constructed 40 miles, Winnipeg to St. Laurent on Lake Manitoba.)		110·00 650·00

# No. 1.—Summary Statement of Capital for the Year ended 30th June, 1891.

	LENGTH	OF LINE.	Ordina	RY SHARE CAP	PITAL.	PREF	ERENCE SHARE (	APITAL.	Box	NDRD DEBT.				Governme	NT AID.			MUNICIP	AL AID.		Capital FROM OTHER SO		Total Ca	PIT <b>∆</b> L.	FLOATING	DEBT.		
NAME OF RAILWAY.	Completed	Under Construc-	`	Subscribed.	Paid Up.	Authorized	. Subscribed.	Paid Up.	Authorized.		Rate of terest.	Name of Government.	Loan.	Bonus.	Subscription to Shares or	Paid Up.	Loan.	Bonus.	Subscription to Shares or	Paid Up.	Subscribed. Pa		Subscribed.	Paid Up.	Amount	Rate of	Total t of Railway nd Rolling Stock.	REMARKS.
	(Rails laid.  Miles.		\$ cts.	\$ cts.	\$ cts.		s. \$ cts.	\$ cts.	\$ cts.	\$ cts. per			\$ cts.	\$ cts.	Bonds.	\$ cts.	8 ets.	\$ cts.	Bonds.	\$ ets.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.		\$ cts.	
Alberta Railway and Coal Co	. 174 12		742,429 29	492,429 29 150,000 00	492,429 29 125,920 00						6	Dominion \$ 51,200 00 \\ Brunswick. 52,500 00 \\ Ominion 620,000 00 \\		103,700 00		78,000 00							1,492,429 29 253,700 00	4,693,236 79 203,920 00	261,929 39	1 1	4,997,728 94 1 192,000 00 2	
Baie des Chaleurs	. 60·00 3·50 17·00 45·00		3,000,000 00 500,000 00 500,000 00	300,000 00 100,000 00 107,600 00 1,185,000 00	30,000 00 77,000 00 17,600 00 1,185,000 00				60,500 00 760,000 00	60,500 00	6 Doi	200,000 00   700,000 00   miniondo		1,320,000 00 		52,810 00 92,400 00		5,000 00 39,000 00 116,000 00	25,000 00	5,000 00 61,500 00 116,000 00			1,620,000 00 105,000 00 228,600 00 1,429,000 00	924,175 00 142,500 00 131,910 00 2,518,400 00	77,947 00	8	87,500 00 4 198,101 64 5	
Buctouche and Moncton  Calgary and Edmonton	32:00 156:30		250,000 00 1,000,000 00	250,000 00° 250,000 00	250,000 00 25,000 00		0 1,000,000 00	1,000,000,00	310,000 00 5,549,946 66	310,000 00 5,549,946 66	6 (N	Marion   M		198,400 00		161,520 00							448,400 00 250,000 00	721,520 \00 5,574,946 66 3,737,355 20			1,875,600 00 8	
Canada Atlantic  Canada Eastern	138 00		2,000,000 00 1,000,000 00	1,000,000 00	2,000,000 00 1,000,000 00				20,000,000 00	10 979 600 59		Quebec     200,000     00       Dominion     344,439     84       V. Brunswick     353,500     00       Dominion     51,200     00		784,400 00 697,939 84		689,939 84 199,058 65	20,000 00	355,500 00		352,500 00	211,909 00 2	11,909 00	3,784 400 00 1,929,848 84	1,901,848 84			6,746,223 82 9 	
Canada Southern.   Canadian Government Railways :   Intercolonial   963 · 50   Eastern Extension   80 · 00	1,352 60	1 :	15,000,000 00	15,000,000 00	15,000,000 00				20,000,000 00	19,272,000 5.7	Do	Ontario 147,858 65)  minion.  Oominion 81,321,986 89  Nova Scotia 643,545 00)		199,058 65 48,767,865 46 1,965,531 89		48,767,865 46 1,965,531 89		335,500 00		3/2,500 00			15,521,558 65 48,767,865 46 1,965,531 89	34,824,159 24 48,767,865 46 1,965,531 89			28,592,606 31 11 	•
Cape Breton   98.50   Prince Edward Island   210.60			65,000,000 00	65,000,000 00	65,000,:000 00			• • • • • • • • • • • • • • • • • • • •		83,324,687 99	3½ to 5	do Dominion		3,541,194 23 3,741,780 89 58,230,211 40		3,541,194 23 3,741,780 89 58,230,211 40		447,500 00	42,500 00	490,000 00			3,541,194 23 3,741,780 89 123,720,211 40	3,541,194 23 3,741,780 89 207,044,899 39		1	3,541,194 23 3,741,780 89 07,044,899 39 13	
Atlantic and North-West			1,000,000 00 1,000,000 00	180,000 00 700,000 00	176,000 00 700,000 00		3,240,000 00	3,240,000 0	3,744,000 00	2,544,000 00	5   Î I 5   Ma 5   Ma	3. Columbia. 37,500 00   156,800 00   156,800 00   711,122 02   37,500 00   37	900,000 00	867,922 02		855,992 08 900,000 00		325,000 00		325,000 00			4,512,598 30 1,600,000 00	11,069,658 08 4,144,000 00			10,078,240 51	
North Shore         206:10           St. Lawrence and Ottawa         56:50           Toronto, Grey and Bruce         188:70	il		1,000,000 00 2,710,090 80 1,000,000 00	1,000,000 00 	785,490 00	. 789,909 2	789,909 20	789,909 20	3,500,000 00	1,593,533 60 973,334 00 3,500,000 00 19,502,591 33	4 (I	Quebec       2,546,000       00         2,546,000       00         Dominion       \$ 18,656       00         375,282       00	2,540,000 00	954,000 00 393,938 00		3,500,000 00 	300,000 00	988,000 00	90,000 00	390,000 00 969,561 44 52,500 00		22,583 30	4,500,000 00 1,179,909 20 2,518,321 30	5,593,533 60 2,153,243 20 5,970,228 74			5,547,338 12	
Ontario and Quebec         451 50           Credit Valley         175 20           West Ontario Pacific         25 60           Guelph Junction         15 00           New Brunswick         174 90			2,000,000 00 500,000 00 30,000 00 3,500,000 00	210,000 00 10,000 00 3,000,000 00	2,000,000 00 21,000 00 1,000 00 3,000,000 00					4,504,324 37 4	On Do	ntario. minion. do Brunswick.		531,000 00 256,000 00 51,200 00 76,000 00		531,000 00 60,000 00 46,000 00 76,000 00	155,000 00	52,500 00 1,085,000 00 23,000 00	20,000 00	1,085,000 00 175,000 00 23,000 00			2,052,500 00 1,616,000 00 466,000 00 236,200 00 3,099,000 00	21,751,091 33 1,616,000 00 81,000 00 222,000 00 7,603,324 37		1	23,686,070 18 	
New Brunswick and Canada         127 '00           St John and Maine         92 '00           Fredericton         22 '50           Columbia and Kootenay         28 '50			2,288,000 00 2,676,666 66 500,000 00 1,000,000 00	1,178,000 00 2,654,153 44 500,000 00	1,178,000 00 2,654,153 44 318,200 00 25,000 00	610,000 0	610,000 00	610,000 00		170,000 00 216,664 00 100,000 00 693,500 00	6 5 6 4 Do	do do do ominion		575,000 00		230,000 00		47,500 00 80,000 00	60,000 00	47,500 00 60,000 00 80,000 00			2,410,500 00 3,894,154 44 810,000 00 250,000 00	2,580,500 00 4,110,817 44 728,200 00 718,500 00			3,546,000 00 2,698,589 00 728,200 00	Cost in 1880. Cost to bondholders at foreclosure in 187
Toronto Junction to Strachan Avenue . 3 · 20  Montreal to Ottawa (Section Q.M.O. and O)	68.00		950,000 00	950,000 00	950,000 00				500,000 00	500,000 00		Dominion \$1,440,000 00 Quebec 1,903,956 00 Dominion	1,176,956 00	2,167,000 00		3,343,956 00 404,000 00	2,434,000 00	25,000 00		796,644 62	•••••		5,802,956 00 1,354,000 00	4,140,600 62 1,854,000 00			7,200,000 00	ı İ
Carillon and Grenville	74.66		200,000 00 450,000 00 900,000 00	100,000 00 450,000 00 900,000 00	100,000 00 450,000 00 900,000 00	300,000 0	300,000 00	300,000 00	900,000 00	900,000 00	On 6 1 2	tario  Dominion \$226,012 54  N. Brunswick 277,665 00  44,800 00		126,500 00 503,677 54		126,500 00 436,916 54		93,500 00		93,500 00			100,000 00 970,000 00 1,403,677 54	100,000 00 970,000 00 2,236,916 54			1,511,941 01 16	
Cornwallis Valley  Cumberland Railway and Coal Co  Drummond County	. 14·00 46·00		1,000,000 00 1,000,000 00 650,000 00	30,000 00 1,000,000 00 650,000 00	20,000 00 1,000,000 00 400,000 00		.					Nova Scotia. 44,800 00 Dominion		89,600 00 233,830 93 736,200 00		87,470 00 184,080 93 447,132 54		27,685 00 		27,685 00 15,000 00		75,600 00 	222,885 00 1,233,830 93 1,401,200 00	210,755 00 1,184,080 93 891,467 23	92,631 8	3 *7 & 8	222,885 00   16 881,778 32   19 984,102 12   20	9
Elgin, Petitcodiac and Havelock	. 28.00		200,000 00	165,250 00 105,500 00	165,250 00 105,500 00		-		260,000 00	260,000 00 740,000 00	$\begin{bmatrix} 6 \\ 2 \\ 5 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \\ 0 \end{bmatrix}$	Quebec     549,000     00       Dominion     82,652     82       N. Brunswick     107,500     00       Dominion     96,000     00       Ontario     83,000     00		190,152 82 179,000 00		190,152 82 179,000 00		13,000 00 13,000 00 257,500 00		13,000 00 13,000 00 257,500 00	25,334 15	,	368,402 82 542,000 00	628,402 8			1,282,000 00 2	0 *On \$25,071.83 of this amount. 1 2
Esquimalt and Nanaimo. Fredericton and St. Mary's Ry. Bridge Co. Grand Trunk	78·00 1·33 3,143·22		3,000,000 00 400,000 00 104,012,600 10	1,500,000 00 200,000 00 99,913,288 66	1,200,000 00 20,000 00 99,913,288 66			89,244,199, 19 2,555,657,00	300,000 00,	50,000 00 85 850 896 41 3,715,982 20	6 6 6	ominion do do do do do do do do do do do do do	300,000 00 15,142,638 33	750,000 00 <b>30,000 00</b>		750,000 00 330,000 00 15,142,633 33		966,000 00		966,000 00	1,022,096 22 1,	022,096 22	<b>3,272,096 22</b> <b>530,000 00</b> 204,300,120 18 3,521,657 00	<b>2,972,096 2</b> <b>400,000 0</b> 269,659,706 59 <b>7,237,639 2</b>	)	*	2,987,846 49 414,086 75 287,091,690 70 6,271,639 20	5 *Including cost of Great Western, Norern and Hamilton and North-Western
G. T. Georgian Bay and Lake Erie       172.75         Montreal and Champlain Junction       81.25         Great Western       540.72				483,250 00 250,000 00	483,250 00 250,000 00					930,020 00 507,593 33 13,270,816 00	· · · · ·   [[]	Ontario		384,000 00 528,673 00		. 336,000 00 476,473 00		929,000 00 21,774 00		929,000 00 21,774 00			1,796,250 00 800,447 00	2,678,270 0 1,255,840 3 13,270,816 0	3		2,678,270 00 1,255,840 33	Railways.
London and Port Stanley				441,500 00 221,200 00 22,210 00 30,000 00 4,381,311 84	441,500 00 221,200 00 22,210 00 30,000 00 4,381,311 84					680,311 00 549,933 33 912,646 00  7,467,413 00	Or	ntario. do		241,276 00 178,630 00 168,350 20		241,276 00 178,630 00 168,350 20		682,000 00 311,500 00		682,000 00 311,500 00 144,870 85			441,500 00 1,144,476 00 512,340 00 30,000 00 4,694,532 89	1,121,811 0 1,694,409 3 1,424,986 0 30,000 0 12,161,945 8	3		1,121,811 00 1,694,409 33 1,424,986 00 30,000 00 *14,067,413 33	
Midland       173 97         Toronto and Nipissing       111 50         Grand Junction       85 40         Whitby, Port Perry and Lindsay       46:50	}		••••	4,001,011 01	1,4M1,011 01					1,101,110 00		do Dominion . \$ 22,400 00 Ontario . 182,500 00 ntario.	}	158,212 00 204,900 00 94,957 59		. 158,212 00 . 204,388 00 . 94,957 59		488,500 00 213,000 00 222,094 93	50,000 00	476,702 59 263,000 00 222,094 93			646,712 00 467,900 00 317,052 52	634,914 5 467,388 0 317,052 5	)		14,007,413 33	Including four following lines.
Victoria         53°25           Northern         205°37           Northern and Pacific Junction         111°37           Hamilton and North-Western         173°90           South Norfolk         17°00			200,000 00	23,000 00	23,000 00				170,000 00	5,422,683 32 4 1,992,413 33 170,000 00	2 12.	do do ominion ominion ominion		312,000 00 196,188 00 1,320,000 00 565,020 00 54,400 00		312,000 00 196,188 00 1,320,000 00 565,020 00 54,400 00		186,000 00 241,980 00 675,596 00 65,000 00	390,000 00	186,000 00 631,980 00 775,596 00 65,000 00			498,000 00 828,168 00 1,343,000 00 1,363,616 00 139,400 00	498,000 0 6,250,851 3 1,343,000 0 3,333,029 3 309,400 0	3		1,343,000 00	
Madoc Junction to Bridgewater 8 60 Jacques Cartier Union 6.50 Cobourg, Blairton and Marmora 18 00 Great Eastern 13 00	J		200,000 00 1,000,000 00 1,150,000 00	200,000 00 1,000,000 00 1,150,000 00	20,000 00 1,000,000 00 1,150,000 00							ominion	26,000 00	20,000 00 18,740 00 385,500 00		44,740 00 82,919 50		113,500 00 20,000 00		113,500 00			220,000 00 1,158,240 00 1,585,500 00	20,000 0 1,158,240 0 1,232,919 5	0			96
Montreal and Sorel. 45.00 Great Northern. Great North-West Central.	50.00		2,000,000 00 800,000 00	750,000 00 178,000 00 500,000 00 800,000 00	750,000 00 160,000 00 500,000 00 800,000 00				730,000 00 1,250,000 00 800,000 00	800 000 00	Ďo	ominion		112,000 00 112,000 00 241,700 00		93,757 57 54,588 00 170,560 00		14,100 00 6,000 00	-	6,000 00			876,100 00 296,000 00 500,000 00	843,757 5 220,588 0 500,000 0	7 0 0 675,215 1	9 6, 7 & 10	1,320,000 00 360,000 00 448,335 93	27 28
Hereford	. 12.00	8.00	9,000,000 00 350,000 00	53,500 00 350,000 00	53,500 00 270,000 00				3,375,000 00	500,000 00	D	Quebec       62,500 00         ominion       \$42,400 00         Nova Scotia       38,400 00         Dominion       80,734 87	}	160,000 00 80,800 00		15,000 00 72,700 00						••••••••••••••	1,041,700 00 213,500 00 430,800 00	1,770,560 0 68,500 0 342,700 0	0		1,795,700 00 2	30
Kent Northern.  Kingston and Pembroke.  Kingston, Napanee and Western.	34 · 00 112 · 78 56 · 48	5	100,000 00 5,000,000 00 750,000 00	80,000 00 4,485,000 00 44,500 00	4,408,800 00	1			2,160,000 00 600,000 00	,	6 5½ & 6 D	N. Brunswick 156,000 00 Dominion 48,000 00 Ontario 456,493 00	}	236,734 87 504,493 00 204,400 00		236,734 87 504,493 00 192,944 00		491,000 00 157,500 00		491,000 00 157,500 00	18,320 00 5,490 93	18,320 00 5,490 93	316,734 87 5,498,813 00 411,890 93	236,734 8 5,994,613 0 1,000,434 9	7	3 6	246,000 00 3 4,064,956 00 3 918,475 51	33
L'Assomption.  Lake Erie, Essex and Detroit River.  Lake Temiskaming Colonization.	42.00		19,000 00 1,000,000 00 100,000 00	19,000 00 200,000 00 50,000 00	10,000 00 20,000 00 12,500 00				500,000 00	500,000 00	6	Dominion       \$11,200 00         Quebec       7,350 00         ominion       \$177,200 00         Dominion       \$177,200 00         Quebec       250,000 00	<u> </u>	18,550 00 118,400 00 427,200 00		14,875 00 118,400 00 91,180 00		45,000 00		45,000 00	7,289 18	7,289 18	37,550 00 370,689 18 461,000 00	24,875 ( 690,689 1 103,680 (	8	00	660,689 18	
Lower Laurentian	<b>/  </b>		1,500,000 00 12,000,000 00	500,000 00 12,000,000 00 232,500 00	110,000 00 5,837,500 00 232,500 00	415,000 ( 77,500 (	00 415,000 00	415,000 00 77,500 00	9	3,241,200 00 181,040 00 .	5 & 6 M	Dominion	739,000 00			259,701 00 739,000 00 50,000 00		25,000 00 215,600 00 10,000 00		215,600 00 10,000 00			910,600 00 13,369,600 00 370,000 00	369,701 ( 10,448,300 ( 551,040 (	0		615,000 00 3,538,261 41	39
Massawippi Valley  Montreal and Lake Maskinongé  Montreal and Ottawa	. 13.0	)	735,000 00 100,000 00 1,000,000 00	735,000 00 25,000 00 227,200 00	735,000 00 25,000 00 22,500 00				100,000 00	100,000 00	5 {	lominion       \$42,200 00         Dominion       \$7,250 00         Dominion       96,000 00         Quebec       96,000 00	<u>}</u>	100 000 00		128,530 00 137,705 00		2,500 00	65,000 00	2,500 00			880,000 00 154,450 00 421,700 00	1	0 100,000	00 5	800,000 00 244,770 46	41
Montreal and Vermont Junction	23 6 18 0 36 0	35.00	10,000,000 00	300,000 00	20,000 00					100,000 00		Dominion	 }	711,270 00	1	153,813 00 213,148 90					280,000 00	72,000 00	1,291,270 00 439,250 00	245,813 ( 525,998 s				Leased to Central Vermont. No return capital.
Northern Pacific and Manitoba Nosbonsing and Nipissing Nova Scotia Central	263 3	)	1,000,000 00 250,000 00 1,000,000 00	1,000,000 00 250,000 00	1,000,000 00 205,000 00	)	00 1,000,000 00	700,000 00	2,800,000 00		5 M	Dominion. \$256,000 00 Nova Scotia. 411,119 94	}	533,300 00		532,250 00					. 233,000 00	233,000 00	1,533,300 00 250,000 00	7,542,250 205,000	00		5,490,500 00 237,000 00	
Orford Mountain  Ottawa and Gatineau Valley  Parry Sound Colonization	10.0	1	1,000,000 00 1,000,000 00 500,000 00	50,000 00 1,000,000 00 50,000 00	5,000 00 4,000 00 5,000 00	)						Dominion       99,200 00         Quebec       124,000 00         Dominion       320,000 00         Quebec       320,000 00         ominion	}	223,200 00 640,000 00 128,000 00		242,412 00							. 273,200 00 1,640,000 00 178,000 00	5,000 6 246,412 6 5,000 6	00 225,911	59 7		49 50 51
Pontiac and Renfrew Pontiac and Pacific Junction Port Arthur, Duluth and Western.	4.2	14.00	250,000 00 3,000,000 00 1,200,000 00	100,000 00 300,000 00 24,900 00	30,000 00	)			1,344,000 00			do		19,200 0 937,100 0 511,200 0	)	13,600 00 600,828 00 172,577 68		101,000 00	.	35,000 00			759,200 00 759,200 00 1,338,100 00 576,100 00	43,600 900,828	00	32 7	42,802 24	52 53 54
Qu'Appelle, Long Lake and Saskatchewan	247 1	9	2,000,000 00 6,000,000 00	210,000 00 3,800,000 00	210,000 00 3,800,000 00	0			3,814,980 00 6,000,000 00	3,814,980 00 3,796,000 00	6	Ontario       240,000 00         Dominion       \$1,003,495 00         Quebec       2,433,000 00         Dominion       348,342 00	}	3,436,495 0	0	2,297,731 81			450,000 00	450,000 00	)		210,000 00 7,686,495 00	4,024,980 10,343,731	31		2,471,930 00 10,292,649 00	56
Quebec, Montmorency and Charlevoix	21.0	0	3,039,930 00 1,500,000 00 150,000 00	3,039,930 00 50,000 00 150,000 00	3,039,930 00 10,000 00 150,000 00				250,000 00	4,743,360 00		Quebec     1,041,250       Dominion     96,000       Quebec     192,000       Dominion     24,265       N. Brunswick     464,000	15 000 0	1,389,592 0 288,000 0 488,265 4	1	. 741,592 00 203,600 00 498,944 58		. 103,000 00		70,000 0			. 4,532,522 00 . 338,000 00 . 723,265 45	213,600	00 318,208	02 7	517,683 79	
Shore Line Shuswap and Okanagan Stanstead, Shefford and Chambly St. Catharines and Niagara Central	82·5 51·0 43·0 12·3	0	500,000 00 750,000 00 300,000 00	500,000 00 150,000 00 100,000 00	101,000 00 15,000 00 68,359 00	)			\$00,000 00 1,240,000 00 1,780,000 00	671,661 72	4 D	7. Brunswick. Dominion Dominion		425,000 0 163,200 0			3,000 00		0	3,000 0	0		928,000 00 213,200 00 427,200 00	520,000 686,661 246,759	00 72 		461,760 00	
St. Clair Tunnel Co St. John Bridge and Railway Extension Co St. John Valley and Rivière du Loup	2.2	3	700,000 00 200,000 00 400,000 00	70,000 00 200,000 00	70,000 00 10,827 13 30,600 00	3			2,240,000 00	2,240,000 00	5 6 {	do	433 900 0	375,000 0	1	316,400 00 439,081 81							445,000 00 639,081 81 469,400 00	2,626,400 574,908	00 61,127 94	55 5	2,676,858 59 581,081 30 22,400 00	64 65
South Eastern 152.00  Montreal, Portland and Boston 45.00  Lake Champlain and St. Lawrence Junc. 63.00	260.0	0	4,800,000 00 986,600 00 600,000 00 160,000 00	2,012,500 00 986,600 00 600,000 00	2,012,500 00 986,600 00 600,000 00 8,134 00	0			2,000,000 00	2,000,000 00 901,000 00 378,000 00	6 Q	do	ή ή	497,007 1 232,000 0 380,000 0	0			. 51,000 0		528,000 0 25,000 0 36,000 0	0		3,037,507 10 1,243,600 00 1,031,000 00	5,037,507 2,143,722 1,264,280	10 00 00 		_ag 100 00	67
Temiscouata	81.0	0 32.00	1,000,000 00	800,000 00	791,000 00	o			. 1,574,640 00	1,574,640 00		Nova Scotia. 80,000 00 [Ouebec 462,000 00 [N. Brunswick] 36,000 00	3	1,147,200 0	0	847,470 00		25,000 0		25,000 0	0		249,340 00	3,238,100	00		99 114 99	69
Tobique Valley	14.0	0	250,000 00 40,000 00 250,000 00	l '	60,000 00 200 00 5,000 00	0				30,000 00		Dominion     \$124,800 0	50,000,0	54,400 0 194,800 0 35,200 0	0	10,400 00 23,150 24		10,000 0		10,000 0		•••••••••••	124,400 00 196,400 00 85,200 00	23,350 35,000	24		82,114 08	70   71   72   73   74   75   76   77   77   78   78   78   78   78
Western Counties         84:0           Windsor and Annapolis         84:0           Windsor Branch         32:0           Winnipeg and Hudson Bay         30:0           Wood Mountain and Qu'Appelle         30:0	0) 116·0 0)40·0	0	1,000,000 00 489,100 00 15,000,000 00 2,000,000 00	-,,	400,800 00 489,100 00 285,793 00 20 100 00	1,073,100			16,250,000 00	1,223,524 00	4 & 6 I	Nova Scotia 679,100 0 Dominion Manitoba	256,000 0	1,089,674 0	0	256,000 00		150,000 0				104,439 00	1,506,000 00	3,974,873 541,793	00		3,974,873 00	75
	• • • • • • • • • • • • • • • • • • • •	11.00	2,000,000 00	l		· · · · · · · · · · · · · · · · · · ·						• · · · · · · · · · · · · · · · · · · ·						35,000 0			3	0.100.000.00	226,000 00	20,100	<u></u>			10

# SUMMARY STATEMENTS

No. 2.—Summary Statement of Characteristics of

		I	ength	of Line	e.		Weight per Yard.					
Number.	Name of Railway.	Completed. (Kails laid.)	Under Construction.	Irvn Rails.	Steel Rails.	Length of Sidings.	Iron Rails.	Steel Rails.				
	Alberta Railway and Coal Co	174 · 12	ļ 		174 · 12	12·31	Lbs.	Lbs. 28, 30, 35				
2 3 4 5 6 7 8 9 10	Albert Southern. Baie des Chaleurs Bay of Quinté Ry, and Navigation Co. Brantford, Waterloo and Lake Erie Brockville, Westport & Sault Ste. Marie Buctouche and Moncton Calgary and Edmonton Canada Atlantic. Canada Eastern Canada Southern Canadian Government Railways—	17:00 60:00 3:50 17:00	1.00		17 00 60 00 3 50 17 00 45 00 32 00 156 30 138 00 127 00 346 79	38 6.00 3.00 66 1.80 3.25 4.30 40.00		56 56 50 56 56				
	Intercolonial Prince Edward Island Canadian Pacific	1142·00 210·60		136·91	1142·00 73·69	140·25 15·71	40	56, 57‡ & 67 50 & 5				
	St. Lawrence and Ottawa       56:50         Toronto, Grey and Bruce       188:70         Ontario and Quebec       451:50         Crédit Valley       175:20         West Ontario Pacific       26:60         Guelph Junction       15:00         New Brunswick       416:40         Columbia and Kootenay       28:50         Toronto Junction to Strachan	5536 · 90		74·50	5462 40	484 · 60		52 to 72				
15 16 17 18 19 20 21 22 23	Avenue. 3-20/ Caraquet Carillon and Grenville. Central Ontario Central of New Brunswick. Cornwallis Valley Cumberland Railway and Coal Co. Drummond County. Elgin, Petitocoliac and Havelock. Erre and Huron. Esquimalt and Nanaimo.		••••	13 00 50 1 75	68:00 74:66 14:00 46:00 62:31 28:00 74:00 78:00	1·00 3·20 2·00 4·87	65	42 & 56 52 & 56 56 & 67 56 & 67 44, 52 & 56 54 & 56 50 & 54				
	Fredericton and St. Mary's Railway Bridge Co.	1 33			1·33			60				

Roads. &c., Year ended 30th June, 1891.

Number of Ties to Mile.	Nature of Rail Fastening	No of Crain Elevators	L	Not Guarded.	No. of Overhead Bridges.	Height of Overhead Bridges above Rail Level.	Level Crossings of other Railways.	No. of Junctions with other Railways. No. of Junctions with Branch Tines	Radius of Sharpest Curve.	No. of Feet per Mile of heaviest Gradient.	Gauge of Railway.
2640 2600 3000 2700 2640 2600 3000 2640 2800	do do do Fisher Bridge Joint Fishplates.			10 11 11 18 20 30 375 429 956	1  3  16	22	6 1 17	16 16	573 - 955 - 717 - 400 - 956 - 1146 - 2865 - 1146 - 2865 - 913 0 694 - 396	120 67 90 39 6 58 73 53 40 80 75	4·81 2 4·81 3 4·81 4
<b>2640-3</b> 168	Fishplates and angle bars		6 24	2562	75	20 to 22·10	46	71 4	2 500	*237 · 6	4 81 18
1760 2640 2640 2600 2600 2640 2200 2240 & 2816	do and screw bolts.			94 40 21 13 37 22 108	• • • • • • • • • • • • • • • • • • • •	23	1 1 4		. 1910 . 955 . 955 . 955 . 820 1 717 . 717 . 661 . 573	100 105 74 74 80 160 80 90 52 80	4 83 14 5 6 15 4 83 15 4 83 17 4 83 18 4 83 20 4 83 21 4 83 22 4 84 23 4 84 23 4 84 23 4 84 24
••••			7 48	5 4798	130		88	150 70	<b></b>		

No. 2.—Summary Statement of Characteristics of

	:			•				
	• .	I.	ength	of Line			Weight	per Yard.
Number.	Name of Railway.	Completed. (Rails laid.)	Under Contruction.	Iron Rails.	Steel Rails.	Length of Sidings.	Iron Rails.	Steel Rails.
							Lbs.	Lbs.
	Brought forward	8603 88	1.00	258 · 78	8345 · 10	887 · 83		
	Toronto and Nipissing	3143 · 22		186.00	2957 22	595 · 00		56 to 79
	Victoria       53 25         Northern       205 37         Northern and Pacific Junc.       111 37         Hamilton & North-Western       17 39         South Norfolk       17 00				·			. ′
	Cobourg, Blairton and Marmora 18:00 Madoc Junction to Bridgewater 8:60	,						
6	Jacques Cartier Union	58.00		]	58.00			ε
7 (	Freat Northern	25·00 50·00			25·00 50·00			5 5
9 1	Hereford	52·84 12·00			52·84 12·00	4.27		5
31 J	loggins	13·00 34·00		3.50	13 00 30 50			Ē
33 I	Kingston and Pembroke Kingston, Napanee and Western	112·75 56·45		9.75	103·00 56·45	21 00	50 to 84	Ì
35 J	L'Assomption	3.00			3 00	25		
37 1	Lake Erie, Essex and Detroit River Lake Temiscaming Colonization	42.00 15.50			42.00 15.50			16 &
38 1	Lower Laurentian	39.00			39.00	•		
į	Saskatchewan and Western. 15.47	249 97	1		249 97	I .		
41 1	Massawippi Valley			1	34·00 13·00	.50		
42 I	Montreal and Ottawa	16 50 23 60			16·50 23·60			60 & 7
44]	Montreal and Western	18:00	35.00	)	18.00	50		
	New Brunswick and P. E. Island Northern Pacific and Manitoba	263 30	)		36·00 263·30	15 40		′
	Nosbonsing and Nipissing Nova Scotia Central	5 50 74 00				1 25		
49	Orford Mountain		10.00	)				
	Ottawa and Gatineau Valley Parry Sound Colonization	20.00			20.00			
52	Pontiac and Renfrew	4 2	5 <b>∤</b> .		4 25	1 66		
54	Pontiac Pacific Junction Port Arthur, Duluth and Western	60.00	14·00 24·60	) 	71·00 60·00			
55	Qu'Appelle, Long Lake & Saskatchewan	247 19	9		247 19	6.50		
	Quebec and Lake St. JohnQuebec Central		)		204·00 153·50			56 &
58	Quebec Central Quebec, Montmorency and Charlevoix Salisbury and Harvey	21 · 00 53 · 24		42.75	21 00	1.50	)	
60	Shore Line	82.5		42 /	10.50 82.50			
	Carried forward	1-2001 - 04	149.6	8 500 70	19400 . 46	1000:15		

Roads, &c., Year ended 30th June, 1891—Continued.

-															
Number of Ties to Mile.	Nature o	of Rail Faste	enings.	No. of Grain Elevators.	No. Le cross	vel ings	No. of Overhead Bridges.	verhead Bridges il Level.	sings of other	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radius of Sharpest Curve.	No. of Feet per Mile of heaviest Gradient.	ailway.	•
Number of				No. of Gra	Guarded.	Not Guarded	No. of Ove	Height of Overhead above Rail Level.	Level Crossings Railways.	No. of Jun Railways	No. of Junc Lines.	Radius of S	No. of Fee heaviest	Gauge of Railway.	Number.
 2640	Fish and a	ngle plates.		7 12		4798 2643	130 232	Feet.	88 63	1	l i	1100	 105 <sup>.</sup> 60	4 81	25
,															
		•					•								
2640	Fishplates.		•••••	ļ.,		6			1	3		2282	26	4.81	26
2640 2650	do do									2 1		1237 966	52.80	4.81	27
2640 2640						28 3 4			2	1		955 1000	66 60	4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8	9
3000 2432 2640	ا ما م	and halta	••••			5 55	4	16 & 213	1 1 4	1 1 4	13	955 1000 955		4 84 3 4 84 3 4 84 3	54
3000	i r isno istes	angular fish fishplates.	<b></b>			36 1				3		882 955	88 20	4 8 8 8 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4	34 35
9640				١		43 25		19.6		3		1433			37
2700		and angle b				180				2 2	1		105·60 105·60	-1	
2800 2640	do			١	1	19 9	1	19	1	2	1	442 955	52	4·81 4·81	11
2640 2640	24-in. angl Fishplates	e bars and bolts				8 51	····i	17.5		1 2		1146	39.60	4 · 81 4 4 · 81 4 4 · 81 4	12
2640 2400	do do	· · · · · · · · · · · · · · · · · · ·		::		19 26				1		574 1000	66	4 81 4	l5
2640 2600 2640	do	and angle b				175 1 23		21	1		2	573 966	132	4 · 8 4 4 · 8 4	17
		· · · · · · · · · · · · · · · · · · ·		::				21		1 i		819  573	1 1	4 81 4 4 81 5	19
2600 2640	do do	and bolts .				3				1 1		955 717	53 2	4 81 4 81	51 52
2640 2640	Angle fish Fishplates	plates			2				2	1		1433 955	52 80 66	4 81	13 14
2640	Fishplates	and bolts		i	···· <u>·</u>		3			1 2	2	1146 955	65	4·84 4·84 4·84	55
2640 2640	do	• • • • • • • • • • • • • • • • • • • •			···i	26 5	····i	22	<b>2</b>	5 1		630 1433	52 80	4.81	18
2600 2992		· · · · · · · · · · · · · · · · · · ·				23 15	5	23	3	3		573	80 85	4·81 4·81	9
	<b> </b>			42	129	8273	379	l	178	267	178				

### No. 2.—Summary Statement of Characteristics of

		I	ength	of Line	<b>).</b>		Weight	per Yard.
Nnmber.	Name of Railway.	Completed. (Rails laid.)	Under Construction.	Iron Rails.	Steel Rails.	Length of Sidings.	Iron Rails.	Strel Rails
	Brought forward	13921 20	142 · 66	500 78	13420 · 24	1608 · 13	Lbs.	Lbs.
62 5 63 5 64 5 65 66	Shuswap and Okanagan Stanstead, Shefford and Chambly St. Catharines and Niagara Central St. Clair Tunnel Co St. John Bridge and Ry. Extension St. John Valley and Rivière du Loup South Eastern 152.00 Montreal, Portland & Boston Lake Champlain and St. Law-	51 00 43 00 12 35 2 23 1 75	6.00	29.00	51·00 14·00 12·35 2·23	5·50 ·65	60	56 100 60
69 771 772 773 774 775 775 775 775 775 775 775 775 775	rence Junction. 63·00  Stewiscke Valley and Lansdowne.  Temiscouata Thousand Islands.  Tobique Valley.  Waterloo Junction Western Counties.  Windsor and Annapolis. 84·00 Windsor Junction. 32·00  Winnipeg and Hudson Bay.  Woo dMountain and Qu'Appelle.	87 · 00 116 · 00	32 00  10 25	61 00 98 25		1·00 4·00 4·50	50 & 67	
		14633 · 61	217 · 91	764 · 03	13869 58	1665 78		

<sup>\*</sup>Operated by C.P.R.

# Roads, &c., Year ended 30th June, 1891—Concluded.

Mile.		ors.	No. Lev	vel	idges.	Bridges. sad Bridges		ith other	h Branch	Curve.	Mile of ent.			
Number of Ties to Mile.	Nature of Ra	il Fastenings.	No. of Grain Elevators	Guarded.	Not Guarded.	No. of Overhead Br	Height of Overhead Bridges above Rail Level.	Level Crossings of Railways.	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radius of Sharpest Curve.	No. of Feet per Mi heaviest Gradient.	Gauge of Railway.	Number.
			42	100	ones	970	Feet.	150	007	150				
2640 2400 2500	Fishplates do and wro	ought iron chair	8		8273 15 42 17 			3 1	267 1 4 1	178	717	57 60 79	4·81 4·81 4·81 4·81 4·81	6
<b>264</b> 0	Fishplates and	angle bars		1	221	2	19·2	10	15	6	819	86	4.81	6
3000 2640	Fishplates Angle bars Angle bars Fishplates and				27 8 12 15			i	2 1 1	i	955 660 717 2292 600	84·4 52	4 · 8 · 4 · 8	7 7 7
2640	do			····	69	1	32		4		696	75.50	4·81	1
	• • • • • • • • • • • • • • • • • • • •		: :							<u></u>				1
			. 42	131	8708	384		193	297	187				1

No. 3.—Summary Statement of the different descriptions of

Name of Railway.	Length o	f Line.	Number of En-	8 mes	Number of Sleep-	ing Cars.	Number of Pal- ace or Drawing Room Cars.
Number	Com- pleted.	Under Con- struc- tion.	Owned.	Hired.	Owned.	Hired.	Owned. Hired.
1 Alberta Railway and Coal Co. 2 Albert Southern 3 Baie des Chaleurs 4 Bay of Quinté Railway and Navigation Co. 5 Brantford, Waterloo and Lake Erie 6 Brockville, Westport and Sault Ste. Marie. 7 Buctouche and Moncton. 8 Calgary and Edmonton. 9 Canada Atlantic 10 Canada Eastern. 11 Canada Southern. 12 Canadian Government Railways— Intercolonial. Prince Edward Island. 13 Canadian Pacific 3,412 30	17:00 45:00 32:00 156:30 138:00 127:00 378:91	1.00	2 3 1 2 2 2 2  11 8 115	15			in
Atlantic and North-West       336·10         Manitoba South-Western Colonization       217·80         North Shore       206·10         St. Lawrence and Ottawa       56·50         Toronto, Grey and Bruce       188·70         Ontario and Quebec       451·50         Credit Valley       175·20         West Ontario Pacific       26·60         Guelph Junction       15·00         New Brunswick       416·40         Columbia and Kootenay       28·50	5,536 90		489	*17	87	*17	in fore- going.
Toronto Junction to Strachan Avenue . 3 20 14 Caraquet	13·00 104·00 74·66 14·00 46·00 62·81 28·00 75·75 78·00		3 3 10 1 1 10 4 2 2 2	2			
Buffalo and Lake Huron       162 00         G. T., Georgian Bay and Lake Erie       172 75         Montreal and Champlain Junction       81 25         Great Western       540 72         London and Port Stanley       23 84         Wellington, Grey and Bruce       168 09         London, Huron and Bruce       68 89         Brantford, Norfolk and Port Burwell       34 73         Midland       173 97         Toronto and Nipissing       111 50         Grand Junction       85 40         Whitby, Port Perry and Lindsay       46 50         Victoria       53 25         Northern       205 37         Northern and Pacific Junction       111 37         Hamilton and Northwestern       173 90         South Norfolk       17 00         Cobourg, Blairton and Marmora       18 00         Madoc Junction to Bridgewater       8 60         Jacques Cartier Union       6 50	3,143 · 22	3	717		. 11		

Rolling Stock for the Year ended 30th June, 1891.

11011	-ng		JUK.	101	the	1 041	011	160 9	<u> </u>	Jul	ο, ι	105	/1.
Number of First	Class Cars.		Emigrant Cars.		Express Cars.	Number of Cat-	Freight Cars.	Number of Plat-	Iorm Cars.	Number of Hop-	ing Cars.		Remarks.
Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Number.	
4 1 1 1 3 4 34 87	3	3  1 1 1  3 2 23 101 15		1 1 1 2 30 63 4		26 5 2 20 1 510 12 2027 2174 178	1360	4 8 30 5 10 20  397 78 293 2123 *125	14	310  24  6  48 2209	122		
162	*5	145	*11	141	*16	9387	1671	<b>306</b> 5	91	475		13	*Special trust.
1 2 2 1 1 3 1 2 8 8	2	1 3 3  1  2 1 		2 1 3  3 1 1 3 		4 34 6 8 3 9 1 29 12		16 30 30  12 40 20 9 12 55		240		14 15 16 17 18 19 20 21 22 23 24	
380	••••	225		214		15,529		6,098			•	25	
724	11	534	11	472	20	29980	3053	12518	109	3332 25	122		

No. 3.—SUMMABY STATEMENT of the different descriptions of

	Name of Railway.	Length of	f Line.	Number of En-	0	Number of Sleep-	ers.	Number of Palace or Drawing Room Cars.	
Number.	• .	Com- pleted.	Under Con- struc- tion.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
	Brought forward	11747 · 10	1.00	1638	40	119	17		
278 GHL LOKK KLLLLL LM MMMMNNNNN NO OF PAPA O O O O O O O O O O O O O O O O O	Montreal and Sorel	52 84 12 00 13 00 34 00 112 75 56 45 3 00 42 00 15 50 39 00 249 97 34 00 16 50 23 60 18 00 26 30 5 50 74 00 4 25 71 00 60 00 247 19 204 00 247 19 204 00 153 50 21 50	8·00 50·00 35·00 10·00 14·00 24·66	1 1 2 2 2 10 10 10 1 4 4 2 2 2 5 5 1 1 4 4 2 2 1 1 4 4 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1	1 2 2	3		in fe goi	ore- ng.
61 SI 62 SI 63 SI 64 SI 65 SI 66 SI 67 SI 68 SI 70 T 71 T	huswap and Okanagan tanstead, Shefford and Chambly t. Catharines and Niagara Central t. Clair Tunnel Co t. John Bridge and Railway Extension Co t. John Valley and Rivière du Loup outh-Eastern  Montreal, Portland and Boston  Montreal, Portland and Boston  Montreal, Portland and Boston  Service Champlain and St. Lawrence Jn  63:00  tewiacke Valley and Lansdowne éiniscouata housand Islands obique Valley	260 · 00 81 · 00 4 · 08 14 · 00	10°00 32°00	30		2	2	1	
72 W 73 W 74 W	Vaterloo Junction Vestern Counties Vindsor and Annapolis 84 00 Windsor Junction 32 00 Vinnipeg and Hudson Bay. Vood Mountain and Qu'Appelle.	87 00 116 00 40 00 14,633 61	17.00	12		-	1 17		1

First	nê.	Š	and ars.	Bag.	and Fr	f Cat-	ars.	Plat-		-dol-	L.		
* 0 *	s Car	or of	Class rant(	ar of [		er of	zh C	r of I		arof I	ers.		
Zumb	Class Cars.	vamb.	ond Class and EmigrantCars.	Number of Bag	gage, Mail and Express Cars.	Number of (	Frei	Number of Plat-		qun	ing Cars.		Remarks.
	1			·			1				1	.:	
Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired	Owned.	Hired.	Number	
724	_	534			<del> </del>			12518		3332	122	-	
	2		2	<b>.</b>			1		6			26	
	1	<b></b>	ļ		1		<b> </b>					27	
• • • •				ļ		••••		•••••				28 29	Operated by Maine Central
		1						2				130	Operated by Maine Central.
1		1		2		1 1		6				31 32	
5		5		5		22		164				33	
9				ļ		16		77				34	
7		2		2		10		85		10		35 36	
	ļ	2		<b> </b>		1		17				37	
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3	2	3		4		113	50	62			• • • •	39	
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···i			i	i		10						42	1
• • • •												43	Furnished by lessees (Central Vermont
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4		5		3		138	150	' 180				46	
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		::::	::::									52	
1		1	· · · ·	1		5 2		33				53	
								45				54 55	
6		9		9		57		193	• • • •			56	
7		11 14		10		151 5		191 24	• • • •	• • • •	• • • •	57 58	
3				i		9		20				59	
5				3		7		61	64	• • • • •		60 61	,
4				····ż			::::					62	
2								2			ļ	63	,
• • • •							1			25		64 65	Operated by C.P.R.
			ļ	ļ	<b> </b>			• • • • •				66	
9	15	8		6	4	61	371	248	100	50		67	
					<b> </b>							68	
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4	• • • •	2	J	2		16		61	••••		• • • •	73	i
8	••••	5		8		80		107	••••	20	• • • •	74	
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			<del></del>	-		00.7							
818	31	609	15	535	25	30,740	3625	14,325		3437	122		

No. 4.—Summary Statement of the Operations of the

Name of Railway.    Alberta Railway and Coal Co.	174 12 3 50 17 00 32 00 138 00 127 00 378 91	Passenger Trains.	Freight Trains.	Mixed Trains.
Alberta Railway and Coal Co.	174 12 3 50 17 00 32 00 138 00 127 00	Trains.	Trains.  211,409	
Bay of Quinté and Navigation Co.	3 50 17 00 32 00 138 00 127 00	4,382		
Canada Southern		193,770	235,046	72,856 15,337 23,656 20,700
Intercolonial   Prince Edward Island   Prince Edward   Prin		73,242 1,174,330	96,361 1,915,062	in forego'g 164,878
Atlantic and Northwest.       336:10         Manitoba Southwestern Colonization       217:80         North Shore       206:10         St. Lawrence and Ottawa       56:50         Toronto, Grey and Bruce       188:70         Ontario and Quebec       451:50         Credit Valley       175:20         West Ontario Pacific       26:60         Guelph Junction       15:00         New Brunswick       416:40         Columbia and Kootenay       28:50         Toronto Junction to Strachan Ave       3:20	1,142·00 210·60	1,261,471 92,261	3,766,320 173,405	in forego'g do
Ontario and Quebec.         451-50           Credit Valley         175-20           West Ontario Pacific         26-60           Guelph Junction         15-00           New Brunswick         416-40           Columbia and Kootenay         28-50           Toronto Junction to Strachan Ave         3-20			•	
	5,536 90	5,209,356	7,515,135	1,029,523
0 Caraquet	68·00 13·00	7,950	450	28,560
2 Central Ontario	104·00 74·66 14·00	20,000	1,056	66,000 50,100 9,744
5 Cumberland Railway and Coal Co. 6 Drummond County. 7 Elgin, Petitoodiac and Havelock. 8 Erie and Huron. 9 Esquimalt and Nanaimo. 0 Fredericton and St. Mary's Railway Bridge Co.	46:00 62:81 28:00 75:75 78:00 1:33	20,625 45,246 92,093	39,886 64,078	31,175 16,794 45,147 in forego'g
Grand Trunk	3,143 22	5,495,194	8,790,668	2,196,345
22 Great Eastern	58.00	22,680	1	1
23 Great Northern	25.00	22,000	9,000	in forego' 5,008

Year and Mileage, for the Year ended 30th June, 1891.

Total Train Mileage.	Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs., Handled.	Average rate of Speed of Passen. ger Trains. Miles per Hour.	Average rate of Speed of Freight Trains. Miles per Hour.	Number.	Remarks.
284,265 21,910 23,656 20,700 428,816 169,603 3,254,270 5,027,791 265,666	404,582 21,910 24,156 20,700 513,851 174,583 4,303,192 6,080,791 335,202	2,476 9,970 25,000 9,187 120,666 30,240 626,411 1,298,304 145,508	184,754 96,120 5,250 11,840 465,354 63,475 3,925,312 1,304,534 59,511	12 20 17 35 23 35 25 20	14 12 15 17 15 15 20 15	1 2 3 4 5 6 7 8	
13,754,014	18,061,823	2,971,774	3,675,113	<b>23</b>	15	9	
28,560 8,400 110,000 50,100 10,800  52,670 16,794 130,279 156,171	31,160 8,800 110,000 50,100 10,884 149,919 64,000 16,794 167,837 156,171	6,907 7,900 58,131 13,945 8,115 22,956 9,395 6,685 112,815 29,257 4,150	11,071 225 72,500 11,957 6,858 443,102 55,000 12,003 78,815 37,150 20,089	20 25 20 17 15 20 25 16 <u>4</u> 25 20	20 18 16 17 20 15 16 <u>1</u> 18 12	10 11 12 13 14 15 16 17 18 19	
16,482,207	22,579,481	5,908,987	7,736,069	30	18	21	•
31,680 5,008 78,624 40,411,984	31,680 5,008 78,624 53,401,248		5,990 5,225 76,787 18,364,104	_	15	22 23 24	

# No. 4.—SUMMARY STATEMENT of the Operations

Name of Railway.	Mileage.	Train Mileage.					
		Passenger Trains.	Freight Trains.	Mixed Trains.			
Brought forward	11,604 64	13,757,528	22,878,633	3,775,823			
Joggins.	13.00		4,500	11,500			
Kent Northern	34 00			18,366			
Kingston and Pembroke	112.75	95,000		120,000			
Kingston, Napanee and Western	56 45	39,000		80,547			
L'Assomption	3.00			4,608			
Lake Erie, Essex and Detroit River	42 00	47,576	12,966				
Lake Témiscamingue Colonization	15 50			20,100			
Manitoba and North-Western 234 50)	249 · 97	65,498	71,997	5,581			
Saskatchewan and Western 15 47   Massawippi Valley	34 00	70,451	108,762	<u>'</u>			
Montreal and Lake Maskinongé	13.00	10,401	100,102	14,64			
Montreal and Ottawa	16.50		•• •• •••••	15.64			
Montreal and Vermont Junction	23 60	69 719	95,666 9,556	5,07			
New Brunswick and Prince Edward Island	36 00	5,128	0.556				
Northern Pacific and Manitoba.	263 · 30	76,702	71.320	22,520 54,930			
Nosbonsing and Nipissing	5.50			04,95			
Nova Scotia Central	74.00		6,280	C4 00			
Pontiac and Renfrew.	4.25			64,28			
Pontiac Pacific Junction			1 000	95.50			
Qu'Appelle, Long Lake and Saskatchewan	61 00		1,808	37,76			
Quebec and Lake St. John.	247 19	105 550	79.302	39,81			
Onches Control	204 00	125,557	19,302	40 40			
Quebec Central Quebec, Montmorency and Charlevoix	153 50	130,779	106,453	49,40			
Salisbury and Harvey	21.00	35,317		0= =0			
Shore Line	53·25 82·50		1	37,58			
Stanstead, Shefford and Chambly.		00.054	90 900	17 00			
St. Cathorines and Niceson Control	43:00	38,054		15,62			
St. Catherines and Niagara Central	12·35 1·75	12,000		6,00			
	1.19			•••••			
Montreal, Portland and Boston.  Lake Champlain and St. Lawrence Junction	260.00	249,699	102,592	234,86			
Temiscouata.	81.00	-	-	58,06			
Thousand Islands.	4.08	13,332		4,36			
Western Counties	67.00	42,378		37,52			
Windsor and Annapolis. 84 00)		1	268	(			
Windsor Branch 32 00	116.00	114,930		80,84			
		l		<b> </b>			
1.	14,009 08	14,987,647	23,592,370	4,819,16			

of the Year and Mileage, &c .- Concluded.

Total Train Mileage.	Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs., Handled.	Average rate of Speed of Passenger Trains. Miles per Hour.	Average rate of Speed of Freight Trains. Miles per Hour.	Number.	Remarks.
40,411,984	53,401,248	11,464,358	18,364,104				
16,000 18,366 215,000 119,547 4,608	17,000 18,366 260,000 119,547 4,608	9,947 4,225 43,008 44,073 7,105	49,314 11,469 102,136 92,515 604	18 25 24 15	14 18 18 17 15	25 26 27 28 29	
84,330	129,431	68,855 2,998	166,404 1,300	35	25	30 31	
143,076	199,888	25,010	88,907	27	15	32	
193,858	193,858	61,056 4,780	136,981 5,169	24	12	33 34	
15,642	16,084	13,842	1,059	20	20	35	
169,455	169,455	113,874	663,980	30	12	36	,
37,204	39,994	18,714	36,394	20	18	37	İ
202,952	205,612	47,748	130,781	35	15	38	
6,280 64,287	7,800 64,287	52,633	76,800 16,811 9,311	19 <del>3</del> 12	25	39 40 41	
39,574	42,084	19,647	24,574	30	20	42	61 miles operated.
39,819	45,015	735	4,016			43	,
204,859	241,342	87,068	95,902	22	12	44	
286,637	411,743	132,070	128,771	25	15	45	
41,186	43,386	167,960	17,853	20	15	46	
37,584	37,584	5,188	14,958	18	18	47	1
		12,187	16,466	27	22	48	
90,073	90,073	173,778 23,075	681,313 31,709	23 25	12	49 50	1
18,000	18,000	23,075 114,139	148,243	25	20	51	
587,151	867,463	274,299	496,749	26	16	52	
58,064	60,200	11,333	19,874	20	20	53	
17,700	17,700	20,186	11,000	15	15	54	
80,171	92,704	46,629	20,437	27	20	55	67 miles operated.
195,771	195,771	152,038	87,117	22	14	56	
43,399,178	56,950,343	13,222,568	21,753,021	-			

# No. 5.—Summary Statement of Description of

=							
.:	Name of Railway.	Mileage.	Flou	u <b>r.</b>	Grai	n.	Live
Number.			Barrels.	Tons.	Bushels.	Tons.	No.
1 2 3	Bay of Quinté and Navigation Co Brantford, Waterloo and Lake Erie	174·12 3·50 17·00	8,800 18,630 750	880 1,863 75	39,975 141,200 20,000	975 4,232 60	4,002 36 56
5 6 7	Buctouche and Moneton. Canada Atlantic Canada Eastern. Canada Southern Canadian Government Railways—	32 00 138 00 127 00 378 91	128,780 57,616 1,314,110	12,878 5,762 131,411	922,172 100,159 15,123,286	22,492 1,752 334,837	25,332 815 834,504
	Intercolonial Prince Edward Island Railway Canadian Pacific	1,142 · 00 210 · 60	1,013,129 26,750	101,312 2,675	2,890,921 242,923	61,048 4,218	95,529 11,184
	Toronto, Grey and Bruce.   188'70     Ontario and Quebec	5,536*90	2,231,856	223,187	20,905,105	523,149	297,923
11 12 13 14 15 16 17 18 19 20	chan Avenue. 3·20) Caraquet Carillon and Grenville. Central Ontario. Central Ontario. Central of New Brunswick Cornwallis Valley. Cumberland Railway and Coal Co. Drummond County. Elgin, Petitcodiac and Havelock. Erie and Huron. Esquimalt and Nanaimo. Fredericton & St. Mary's Ry. Bridge Co Grand Trunk. 879·59 Buffalo and Lake Huron. 162·00	68 00 13 07 104 00 74 66 14 00 46 00 62 81 28 00 75 75 78 00 1 33	5,000 19,300 2,391 10,085 6,270 3,261 135,943 1,680	500 1,920 239 1,008 672 326 13,805 194	5,000 85,000 2,650 17,000 5,986 4,503 336,266 750,000	45 289 146	50 600 1,960 38 720 1,242 6,684 3,663
	Grand Trunk, Georgian Bay and Lake Erie	3,143 · 22	5,315,200	531,520	46,796,760	<b>1,169,919</b>	2,737,288
	Madock Jn. to Bridgewater. 8:60   Jacques Cartier Union 6:50   Carried forward	11 468 - 80	10 200 551	1 020 997	98 990 One	9 141 010	A 003 000
	Carried Iorward	11,400 001	10,288,001	1,000,227	88,388,906	2,141,018	4,021,626

Freight Carried, for the Year ended 30th June, 1889.

Stock.	Lumb of all kinds Firewo	except	Fire	wood.	Manufactured Goods.	All other Articles.	Total Weight Carried.	ır.	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.	Number	•
667 24 30 4,222 395 139,084 12,278 1,255	8,419,680 26,460,000 240,000 4,976,640 164,952,000 14,321,225 188,246,160 184,138,324 3,508,861	11,694 31,754 900 6,912 229,100 18,109 261,453 230,172 5,992		74,456 9,732 73,766	3,538 10,660 755 9,559 6,507 351,039 303,197 39,317	1,000 4,928 112,647 21,218 2,633,722	184,754 96,120 5,220 11,840 465,354 63,475 3,925,312 1,304,534 59,511	2 3 4 5 6 7 8	* Coal, 166,509 tons.
90,161	600,118,709	786,177	127,857	228,161	996,439	827,839	3,675,113	9	,
25 100 950 19 120 374 1,489 909	4,436,000 ,400,000 6,161,040 276,480 12,152,000 9,828,000 7,789,000 19,988,000 1,740,944	6,300 1,240 8,557 384 15,190 13,650 8,635 25,250 3,500	7,960 520 126	8,720 12 11,940 650 222	35 18,600  14 4,737 28,517 572 5,748	90 33,770 3,400 6,164 *421,859 in forego'g 1,354 22,280	55,045 12,003 78,815 37,150	11 12 13 14 15 16 17	*Coal.
453,945	693,077,605	1,042,237	169,967	305,941	1,046,022	*3,186,485	7,736,068	21	Including 980,772 tons coal and 92,089 tons coal oil.
706,047	1,960,230,658	2,707,228	455,169	778,269	2,827,578	8,085,752	18,276,117	7	

No. 5.—Summary Statement of Description

Name of Railway.	Mileage.	Flo	ur.	Gra	in.	Live
		Barrels.	Tons.	Bushels.	Tons.	No.
Brought forward	11,468 80	10,299,551	1,030,227	88,388,906	2,141,018	4,021,626
Great Eastern	58.00	1,418	221	9,450	162	
Great Northern	25.00		1			
Hereford	52·84	5,859	586	9,848	196	2,112
Joggins.	13.00				241	2,11
Kent Northern.	34.00	9,500		4,500	130	20
Kingston and Pembroke.	112.75	21,750			1.065	30
Kingston, Napanee and Western	56.45	30,670		111,600	2,790	
L'Assomption.	3.00			111,000	2,190	1,85
Lake Erie, Essex and Detroit River	42.00		64 426	160 490	4 606	
Lake Temiskaming Colonization	15·50	2,190		169,438	4,696	9,16
Manitoba and North-Western. 234 50)	15 50	2,190	219	3,936	96	• • • • • • • •
Saskatchewan and Western. 15 47	249 · 97	43,271	4,327	2,128,125	56,637	12,91
Massawippi Valley	34.00	6,250	625	220,662	5,382	7 40
Montreal and Maskinongé	13.00	3,201	320	4,032		7,48
Montreal and Ottawa	16.50	965	97		72 63	
Montreal and Vermont Junction.	23.60	309,434	39,054	2,725		1 100 70
New Brunswick and P. E. Island	36.00	00 509	00,004	4,146,413	124,377	1,108,76
Northern Pacific and Manitoba	263 30	20,583		16,807	289	76
Nosbonsing and Nipissing	203 30 5·50	7,561	756	1,172,286	35,169	57
Nove Sectio Centre	74.00			• • • • • • • • • •	• • • • • • • • •	• • • • • • •
Nova Scotia Central	4.25		• • • • • • • •		• • • • • • • • •	• • • • • • • •
Pontiac and Renfrew			0.00	155 005		
On'A prolle Toron Take & Sechetchemen	61.00	9,563		157,927	3,280	2,75
Qu'Appelle, Long Lake & Saskatchewan Quebec and Lake St. John	247 19	5,605		6,020	103	14
Quebec and Lake St. John	204 00	27,991	2,799	20,209	404	1,33
Quebec Central	153 50	74,480		113,652	2,772	10,71
Quebec, Montmerency and Charlevoix.	21 00	960	95	2,830	64	2
Salisbury and Harvey	53:25				•••••	
Shore Line	82.50	20,000	2,000	5,000	100	300
Stanstead, Shefford and Chambly	43:00	407,005	40,636	4,236,623	125,564	
St. Catharines and Niagara Central	12.35	3,755	375	15,215	456	18
St. John Bridge and Railway Extension	1.75	• • • • • • • • •		• • • • • • • • •		• • • • • • • • •
South Eastern.	000.00	000 000	00.000	0.405.450	00.000	
Montreal, Portland and Boston	260 · 00	200,030	20,003	3,465,456	86,023	16,50
Lake Champlain & St. Lawrence Jn.	01.00	00 505	0.0≥0	42 0		
Temiscouata	81.00	23,595	2,359 300	45,277	1,132	56
	4.08	3,000		3,533	106	518
Western Countries	67 00	8,209	821	935	18	360
Windsor and Annapolis 84 00 \\ Windsor Branch 32 00 \\	116.00	49,810	4,981			11,618
Total	14.000.00		1 100 500	104,511,278		

<sup>†</sup>These companies having failed to comply with the law by giving details of description of freight

of Freight Carried, &c .- Concluded.

Stock.	Lum of all kind Firew	s except	Fire	ewood.	Manu- factured Goods.	All other Articles.	Total Weight Carried.	ن	Remarks.
Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.	Tons.	Number.	
706,047	1,960,230,658	2,707,226	455,169	778,269	2,827,578	8,085,752	18,276,117		•
	160,000	260	360	591	1,967	2,789	5,990	22	
	595,440	827	677	1,000		3,398	5,225	22	
352	20,065,000	30,244					76,787	24	
302	167,760			1,007	870	47,714	49,314	25	
100				639		2,700	11,471	00	
	35,150,000	52,725				7,020	100 190	20	
150			10,124			45 004	102,136	21	
901	16,043,000					45,604		28	1
16									ļ
4,428	18,532,800	25,740	4,706	7,765		118,752	166,404	30	
• • • • • • • •					520	465	1,300	31	
2,152	4,162,000	6,244	594	891	10,156	8,500	88,907	32	
1,248	25,045,200	34,785			<b>.</b>	*95,941	136,981	33	*Including 69
260		696		905		2,916		34	485 tonsore and
2	36,000	53			379	260	1,059	35	copper matte.
184,794	21,466,505				695		663,980	36	copper masses.
62				1,165	1,677	19,950		37	i
575		6,980	9,658	21,731		in forego'g	130,881	20	
010	2,000,000	0,000	0,000	22,101	00,010	76,800		30	*Sawlogs.
		• • • • • • • • • • • • • • • • • • • •				+16,811	16,811	40	Daw ToRe
						9,311		41	
284	344,649	727	2,311	4,375	2,319	12,633		31	
37	339,964							49	
	30.162.000				10,160			44	
217		58,603		1,675	2,798	53,789		122	
1,786	42,194,160		673					40	
23	191,575	277	013	120	901	16,012			
			320	500	1 440	+ 14,958	14,908		For six months.
50	3,914 000	5,150		300	1,442	7,224	16,466	48	
185,157	23,171,675	33,179		• • • • • • • • • •	2,548	294,229	681,313		
120	429,339	886		• • • • • • • • •	7,245	22,627	31,709		
• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			• • • • • • • •		+148,243	148,243	51	
3,886	61,927,920	86,011	23,229	34,843	73,399	192,584	496,749	52	
004	0.901.510	വെ വ	3,915	6,703	got:	E 00E	10.074	-	
281	2,391,512	2,989 1,532	9,919	0,703		5,805		03	
259	1,000,000		2,043	3,230	5,352 2,706	3,451 430			
92	10,179,000		•				1	1	
2,316	8,704,000	13,065	1,827	2,611	22,335	41,808	87,116	56	
1,095,599	2,301,741,757	3,191,806	555,794	946,175	3,071,130	9,687,415	21,753,290		

carried—the total weight has, in these instances, been entered in column of "All other Articles.'

1891.
ied 30ti
rear en
or the
Earnings, for the Year ended 30th June,
ATEMENT OF E
SUMMARY ST
No. 6.

,				•				ot s ot s g n
Name of Railway.	Mileage.	Passenger Traffic.	Freight Traffic.	Mails and Express Freight.	Other Sources.	Total, Gross Earn- ings.	Total, Net Earnings.	Proportion Earning Worki Expense
		s cts.	S cts.	e cts.	e cts.	s cts.	s cts.	per cent.
Alberta Railway and Coal Co.	174.12		272,417 86	5,114 99	1,299 36	290,115 44 31,117 32	47,422 87 15,810 96	119 203
Lake Eri	17.00					10,675 39		88
4 Buctouche and Moncton	138.00	100,311 95	368,558 54	41,152 89	48,808 17	558,831 54,931 55		165
6 Canada Eastern	378.91				3,281 01	4,408,964 33		139
8 Canadian Government Railways— Intercolonial	1,142.00	962,316 88	1,854,629 88	160,448 62 19,917 00	388 00	2,977,395 38 174,258 05	- 684,946 56 - 83,732 03	81 67
.es	217						. ,	
Colonization.								
100	5,536-90	5,151,120 63	11,643,641 29	734,523 30	1,142,888 82	18,672,174 04	7,134,040 51	162
West Ontario Pacific 26:06 Guelph Junction 15:00 New Rennswick 416:40								
naystrachan Avenue				3			***************************************	. 8
	88			1,881 23			-1,535 07	8
2 Central Ontario.	32	26,916 19	52,373 74	7,292 22	1,343 47	87,925 62	-3,663 34	82
3 Central of New Brunswick	74.66 9.4.60				23		2,370 64	3.5
5 Cumberland Railway and Coal Co	46.00			1,763 33			58,370 22	212 119
15 Elgin Petitodia: and Havelock	58 88 88			676 08	145 81		123 39	101
	75.75			5,850 70 8,850 70			- 40,545 64	144
Sailway Bridge							1,608 69	
Grand Trunk 879 59 Buffalo and Lake Huron 162 00								

																				_	
38	62		157	81	£ 25	16	8	115	117	22	38	119	6	<u>8</u>	911	33	<b>3</b> 5	26	11	<b>\$</b>	6
4,802,381 78	- 3,965 86		-15,939 37						23,156 56												
17, 423,860 26	15,052 80		38,661 41 20 114 06																		
95,828 17			172 04		15,988 00			6,828 59	2,512 31			599 74		541 33		3	265 00				
642,723 66	1.024 20		131 46					7,646 65			6,523 47				0 916 04	2,226 78	8,072 63	9,906 90		2,072 40	
11,223,961 89	4.065 73		82,066 09						96,370 81	2,437 152 154 154 154							_	-	_	16.83 28.83 28.83	
5,461,346 54	9.962.87	1.368 89	6,463 86	2,44 30,00 3	34,406 00	1,203 35	26,682 09 6,074 00	46,947 59	57,082 31	1,982 47	50,338 94	6,749 52		28,646 47						14,198 46	
-3,143-22		36.98	35	38	112.75	38	85 85	76.676	8.38	13.00	38	98	85.7	3.5	4.8 8.8	947.19	20.70	153.50	88	388	8.8 8.8
Montreal and Champian Junction. of 20 Moreteal and Champian Junction. 540-72 London and Port Stanley. 28-84 Wellington, Grey and Bruce. 68-89 Brantford, Norfolk and Port Burwell. 34-73 Middand. Standard Standard. Mipissing. 68-40 Whitby, Port Perry and Lindsay. 68-40 Whitby, Port Perry and Lindsay. 68-50 Victoria. 88-40 Withby, Port Perry and Lindsay. 68-50 Victoria. 88-50 Withorn and Pacific Junction. 111-37 Northern and Pacific Junction. 111-37 Hamilton and Northwestern. 17-30 South Norfolk.	Cobourg, Blairton and Marmora 18:00 Madoc Junction to Bridgewater 8:00 Jacques Cartier Union 6:50 22 Great Eastern 13:00		24 Hereford	25 Joggins	Zi Kingston and Pembroke	Napanee and western	30 Lake Erie, Essex and Detroit River	and Northwestern.		34 Montreal and Lake Maskinonge	and Vermont function	New Brunswick and Prince Edward Island.	Northern Pacific and Manitoba	40 Nova Scotia Central	d Renfrew	kethe Junetion.	44 One her and Lake St. John	45 Quebec Central	ontmorence and Charlevoix.	Salisbury and Harvey	Stanstead, Shefford and Chambly

Proportion of Earnings to Working Exper cent. 88 52 152 152 153 153 cta. Net Earnings ಷ೪ 8 258 4 88 -245 37,430 13,231,649 Total, Gross Earncts. 83 8 582 8 8 No. 6.-SUMMARY STATEMENT of Earnings for the Year ended 30th June, 1891.—Continued. 587,595 **36,634** 16,522 71,518 19,511 64,299 48, 192, 099 Other Sources. cts. 8 ଞ 뛊 :82 6 12,720 20g 86g 1,452,083 Mails and Express ( Freight, cţs. 8658 8 # % 3 18,317 1,235 1,702 5,942 1,904,961 G. 28 2 2 2 3 3 8 369,219 30,548,645 <u>ş</u> 28 327 8 84 æ 12,008 4,119 46,642 187,339 14,286,408 12.35 1.75 81.00 4.08 67.00 16.00 14,009.08 olis.....84.00 50|St. Catharines and Niagara Central. 51|St. John Bridge Railway Extension Co....... 52|South Eastern— 58 Temiscousts
54 Thousand Islands
55 Western Counties
556 Windsor and Annapolis
6066 Windsor Branch
72 Windsor Branch
73 Windsor Branch Montreal, Portland and Boston.
Lake Champlain and St. Lawrence Junction. Brought forward.. ... Name of Railway. Number.

Name of Railway.	Mileage.	Maintenance of Line, Buildings, &c.	Working and Repairs of Engines.	Working and Repairs of Cars.	General Operating Ex- penses.	Total.	Remarks.
1 Alberta Railway Coal Co. 2 Bay of Qrinte Railway and Navigation Co. 9 Brantford, Waterloo and Lake Erie 6 Canada Atlantic 6 Canada Staten 7 Canada Bastern 8 Canada Covenment Railwaya	174.12 3.50 17.00 32.00 138.00 127.00 378.91	46,805 83 2,582 88 2,620 18 5,850 86 45,319 99 16,368 65 617,840 83	\$ cta. 68,757 34 5,416 24 4,462 31 4,900 58 127,584 18 25,212 90 881,737 86	• cta. 14,732 473 473 473 473 473 473 473 473 473 473	\$ cts. 117,397 77 6,384 37 6,729 99 6,729 78 129,864 88 18,765 57 1,278,487 98	\$ cts. 242,692 67 15,806 36 12,925 26 16,898 37 337,773 38 64,396 25	
Intercolonial Prince Edward Island Control Edward Island Atlantic and North-West Manitoba South-Western Colonization St. Lawrence and Ottawa Toronto, Grey and Bruce Toronto, Grey and Bruce Credit Valley Credit Valley West Ontario Resiftc.	1,142 00 210 60 215 60 5,536 90	965,293 68 114,255 69 2,303,423 49	1,281,800 32 64,168 96 4,068,033 19	671,980 22 18,457 22 18,457 22 663,782 01	863,267 72 61,138 21 4,512,894 84	3,662,341 94 257,990 08 57,990 08	
Columbia and Kootenay  Versity of Mary Brunswick  10 Carquet, 11 Cardino and Grenville 12 Central Ontario 13 Central New Brunswick 14 Cornwalls Valley. 15 Cumwalls Valley. 16 Cumberland Railway Cosl Co. 16 Cumberland Railway Cosl Co. 17 Egin, Petacodiac and Havelock. 18 Erie and Huron 19 Equimalt and Nanaimo. 20 Fredericton and St. Mary's Railway Bridge Co.	88.124.68 9.825.88 9.826.88 1.886.88 1.886.88	6,580 07 24,882 83 12,782 85 1,289 50 1,8643 41 7,681 44 2,546 07 21,702 88	6,439 00 2,435 17 8,432 17 1,676 19 19,703 48 2,906 84 22,164 36	910 99 4,389 45 1,301 12 3,973 99 4,973 99 1,587 48 1,28 41 1,581 24	5,594 37,498 37,498 11,098 11,918 12,664 11,506 11,808 11,808 11,808 11,808	19,614 49 4,428 13 19,688 96 30,664 21 4,910 71 53,038 87 31,437 76 10,776 28 11,300 00	·

	No. 7.—Summary Statement	STATEMENT of Operating Expenses, for the Year ended 30th June, 1891.—Continued	g Expenses, f	or the Year	ended 30th	June, 1891	-Continued.	
No.	Name of Railway.	Mileage	Maintenance of Line, Buildinga, &c.	Working and Repairs of Engines.	Working and Repairs of Cars.	General Operating Expenses.	Total.	Rémarks.
	Brought forward		cts.	cts.	es cts.	e cts.	ee cts.	ee cts.
ā	an Bay and Lake Erie ain Junction.  Bruce Bruce Bruce Bruce Junction  I Marnora.	83.98.98.98.98.98.98.98.98.98.98.98.98.98.	2,454,994 08	4, 336, 555 65	1,277,917 47	4,552,011 28	12,621,478 48	
N	ZZ (rreat Eastern II.	28.00	3,841 90	7,780 77	238 92	7,147 07	19,008 66	
828828828	/estern roit River mization fern stern	25.00 25.84 34.50 36.45 3.00 3.00 42.00 16.47 16.47 16.40	2,237 94 28,380 92 3,331 49 3,855 76 28,077 00 13,942 85 12,972 47	4,287 88 4,287 88 4,765 45 45,619 00 24,378 87 776 83 17,703 87 1,908 98 63,294 08	1,248 05 1,731 92 10,814 07 5,510 79 4,2 45 5,207 24 14,353 98	200 00 2,978 01 1,523 00 2,978 01 1,510 05 20,704 07 20,839 64 12,732 66 61,439 39	*3,147 94 54,660 78 12,329 30 10,112 90 124,267 00 64,536 58 1,666 42 14,686 24 14,686 24	Traffic operated by C.P.R.

IM ASSAWIDDI VALIEV	3		47.208 57	10,800	37.163 54		
Montrea and Lake Maskinonos	13.00						*Traffic oronated
M	16.50						Transport
MOINTERS BIRD OFFER WAS	3 2 2						by C.F.R.
Montreal and Vermont Junction	33.53						
New Brunswick and Prince Edward Island	90.98 8	5,133 35	-	820 74	2,781 89		
Northern Pacific and Manitoha	08.896		-				
North Ministra	2		_				
The second and in the second s	3		-		-		
Nova Scotia Central	24.08				-		
Pontiac and Renfrew.	-8 -8						
Pontiac Pacific Innetion	00.19		-				
On' Annelle Long Lake and Saskatchewan	247 · 19						
Chichen and Lake St. John	904.00						
	20.00		-				
Cuebec Central	00.00						
Quebec, Montmorenci and Charlevoix	95.13		_				
Salisbury and Harvey	53.55						_
Shore Line	82.50		-				
Stanstead, Shefford and Chambly.	43.00						
St. Catherines and Niscara Central	12.35		5,722 98	165 52			
St. John Bridge and Railway Extension Co.	15	25,254 98			1,613.34	\$ 888 SG	*Traffic onerated
South Western	•						bu C D D
Montreal Portland and Roston	00.0%	119.704 18	193 901 84	61 058 94	171 777 69	530 441 08	
Take Champlain and St. Lawrence Innetion.	2	2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Ka Tomisconsts	00.18						
Thomsend Islands	4.08	9,201,98	4 590 90	450 07	5,060 64	19 250 90	_
TIPUTOBLE LEGISLAND CO	3.5						
	3						
56 Windsor and Annapolis	116.00	83 195 AS	40 907 97	19 577 93	45 ORK 19	189 475 44	
Windsor Branch 32.00 J							
	14.009.08	7.502.236 52	11.777.898 63	3.191.201.85	12,489,112,20	34.960.449.20	

#### No. 8.—Summary of Accidents

	Name of Railway.	Mileage.	Passengers, Employés, or Others.	Car	s or	on o Trai Eng	ns or ines n in
Number.				Killed.	Injured.	Killed.	Injured.
2 3 4 5 6 7	Alberta Railway and Coal Co.  Bay of Quinté and Navigation Co.  Brantford, Waterloo and Lake Erie.  Buctouche and Moncton.  Canada Atlantic.  Canada Eastern.  Canada Southern.  Canadian Government Railways—	174·12 3·50 17·00 32·00 138·00 127·00 378·91	Others Enployés. Others { Employés		2		1
	Intercolonial	1,142.00	Passengers	5	9		8
9	Prince Edward Island         3,415 30           Canadian Pacific         336 10           Atlantic and North-West         336 10           Manitoba South-Western Colonization         217 80           North Shore         206 10           St. Lawrence and Ottawa         56 50           Toronto, Grey and Bruce         188 70           Ontario and Quebec         451 50           Credit Valley         175 20           West Ontario Pacific         26 60           Guelph Junction         15 00           New Brunswick         416 40           Columbia and Kootenay         28 50           Toronto Junction to Strachan Avenue         3 20	210·60 5,536·90	Others Employés  Passengers Employés Others	1 7			6 11
11 12 13 14 15 16 17	Caraquet Carilfon and Grenville. Central Ontario Central of New Brunswick. Cornwallis Valley Cumberland Railway and Coal Co. Drummond County. Elgin, Petitcodïac and Havelock.	68·00 13·00 104·00 74·66 14·00 46·00 62·81 28·00					
19	Erie and Huron Esquimalt and Nanaimo	75·75 78·00	OthersEmployés.		1		1
20	Fredericton and St. Mary's Railway and Bridge Co.	1·33	Passengers Employés Others				
	Carried forward	11,468.80	-! 	21	76	14	68

#### for the Year ended 30th June, 1891.

on o Ti ma	work r near rack king up ains.	Ar He ou	ting ems or eads t of d'ws		ipling ars.	by T	isions, or Frains rown rom rack.	stan ly beir	lking, ding, ing or ng on ack.	Eplosi	x- ions.	Stril Brid			her ises.	Tot	tals.	
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
	8			i				1	3 10				1		1 1	1 1 2 7 8 7 9	14 5 58 100 14 4	1 2 3 4 5 6 7 8
	1			3	97	6 1	11 15 2	1 36	5 13			1	1 	1 -	12	1 24 38	18 165 18	9
••••					2			1									2	12 13 14 15
i	4		1 1	3	149	3	6 18 11	7 47	1 12 53			1	3	3	6 24 2	3 22 58	27 247 84	21
	13		2	7	304	19	116	107	103 43	\ <u>-</u>	-	2	5	11	72	182	759	

# No. 8.—Summary of Accidents

	Name of Railway.	Mileage.	Passengers, Employés, or Others.	Car	from rs or rines.	Jum on of Trai Eng whe mot	r of nso ines n in
			Others.	Killed.	Injured.	Killed.	Injured.
	Brought forward	11,468 80		21	76	14	68
Mo	Eastern	58.00					
3 Great	Northern	25.00			1		
	ord	52 84	Employés		1	1	
5 Joggi	ns	13.00		<b> </b>	ļ	l	
6 Kent	Northern	34.00				1	
7 Kings	ton and Pembroke	112.75		1	1		l
8 Kings	ton, Napanee and Western	56.45	Employés	1	1		l
9 L'A88	omption. Erie, Essex and Detroit River.	3.00					
Lake	Erie, Essex and Detroit River	42.00	Í				
Lake	Temiscamingue Colonization.	15.50					
2 Manit	cobs and North-Western 234 50)		Passengers				
	katchewan and Western	249 97	Tassengers			1	• • • •
Mogge	wippi Valley.	94.00	Employés		1	1	:
Mont	mal and Tales Marking w	34:00	Employes			[	1
Mone	real and Lake Maskinongé.	13.00	Others				1
MODE	real and Ottawa	16.50	. <u> </u>				
Mont	real and Vermont Junction	23.60	∫ Passengers				
			Others				
New 1	Brunswick and Prince Edward Island	36.00					
North	ern Pacific and Manitoba	263 · 30	[Employés		1	1	]
. 1		203.30	Others				
Nosbo	onsing and Nipissing	5.20					
Nova	Scotia Central	74.00					1
Ponti	ac and Renfrew	4.25					
2 Ponti	ac Pacific Junction	61.00					
3 On'A	ppelle, Long Lake and Saskatchewan	247 19	Employés				
1		221 13	(E				:
4 Quebe	ec and Lake St. John	204 · 00	Employés   Others	3		1	1
K	C	450.50	Otners		1		
Quebe	c Central.	153.50	Employés				
Quebe	ec, Montmorenci and Charlevoix	21.00	do				
Salied	ury and Harvey	53 25			1	į	ļ
Shore	Line	82.20	Employé	1	1		
9 Stans	tead, Shefford and Chambly.	43.00	Others	1	1	1	1
이St. Ca	stharines and Niagara Central	12.35		1	1	1	١
1 St. Jo	ohn Bridge and Railway Extension	1.75		1	1	l	١
2 South	Eastern—	1		1	1	1	1
Mo	ntreal, Portland and Boston	000.00	Employés	1	2	l	1
Lak	te Champlain and St. Lawrence Junction	260.00	Others	1	١ ~	1	*
3 Temis	eouata	81.00		1	1		i
	sand Islands	4.08				::::	,
	ern Counties	67.00					
6 107:	and Annanolia	ĺ	Passengers		1		
VV 1110	sor and Annapolis	116.00	Others	1	J	1	l
W 11	nusor sunction			1	1	-	1
	Total	14 000 : 00	1 *	00	07	1 30	-
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### for the Year ended 30th June, 1891-Concluded.

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No. 9.—Lines of Railway owned by Coal and Iron Mines for the Year ended 30th June, 1891.

Name.	Length of Railway.	Gauge.	No. of Engines.	No. of Waggons.	Remarks.
Nova Scotia.					
Intercolonial Coal Mining Co. Acadia Coal Co. Londonderry Iron Co. do do do Albion.	8:00 6:00 9:27 3:55 3:00	4·81 4·81 4·82 3·0 4·82	4 2 3 2 3	168 } 43 180	Cars furnished by Intercolonial Ry.
Cape Breton.	29.82		14	391	
Old Bridgeport General Mining Association— Sydney. Victoria Sydney and Louisburg. Gowrie	50 4·80 5·00 43·00 2·25	4·8½ 4·8½ 4·8½ 3·0 3·6	3 2 3 2	220 125 224 148	Rolling stock furnished by Inter- national Coal and Railway Co.
International	12·00 2·25	4·81 4·81	5 2	233 120	
	69.80		17	1,070	•

cts. Total. No. 10.—Statement of Aid grunted to Railways—Constructed and under Construction—by Governments, for the Year ended Subscrip-tion to Shares or Bond. ę, CES. Total. 114,608,628 63 **4882228888888888** 8888884888 224,000 226,012 24,439 88 Bonus. 용 Total. 30th June, 1891. Carried forward ..... 115,457,633 33 Loan. Drummond County Erie and Huron
Eequimals and Nanaimo
Fredericton and St. Mary's Railway Bridge Company DOMINION GOVERNMENT. Sastern Extension Name of Railway. Georgian Bay and Lake Erie Cornwallis Valley
Cumberland Railway and Coal Company Buctouche and Moncton
Canada Atlantic
Canada Central Albert (now Salisbury and Harvey) Belleville and North Hastings.... Great Eastern Great Northern Jacques Cartier Union .... Dominion Lime Company Columbia and Kootenay

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
	e cts.	e cts.	e cts.	e cts.	cts.	es cts.
Brought forward	15,457,633 38	:				:
Joggins Kant Northam			42,400 00 58,334 87			
Kingston and Pembroke.			48,000 00			
L'Assomption			118,400 00			
Lake frite, Essex and Petroli.  Lake Temiscanningue Colonization			177,200 00			
Learnington and St. Clair			51,200 00			
Lower Laurentian			80,000			
Montreal and Lake Maskinonge			42,200 00			
Montreal and Champlain Junction	:		188,600			
Montreal and Ottawa			13,000			
Montreal and Western			361,270 00			
Napanee, Tamworth and Quebec (now Kingston, Napanee and Western).	:		204,400 00			
New Brunswick and Prince Edward Island Northway and Wooten of New Brunswick (new Consde Restorn)	:	:	320,000,00			
Northern and Pacific Junction			1,320,000 00			
Nova Scotia Central						
*Ontario and Quebec		::				
Ortona Mountain			320,000 00			
Parry Sound Colonization						
:						
Fontiac and Kenfrew.  Down Authur Duluth and Western	:		271,200,00	,		
Prince Edward Island						
Quehec and Lake St. John.			8			
Quebec Central						
Quebec, Montmorenci and Charlevoix	:		4054 200 200 200 200 200 200 200 200 200 20			
on mari						
:			147,200 00			
St. Louis, Richibucto and Buctouche. St. John Bridge and Railway Extension.	433.900 00		22,400 00			
St. John Valley and Rivière du Loup			140,800 00		_	

197 000 748 01	700,000 00 1156,000 00 154,000 00 62,500 00 891,122 02	16 917 633 33	Baie des Chaleurs Canada Atlantic Granada Atlantic Granada Atlantic Granaticont Thereford. International Carried forward
			Quebro Govrenment.
6,161,007 44	888	- 26,000 00	Victoria Wellington, Grey and Bruce. Whitby, Port Perry and Lindsay.
	240,000 00 105,212 00 63,000 00 375,282 00		Port Arthur, Duluth and Weetern Toronto and Nipissing. Lake Simcoe Junction. Toronto, Grey and Bruce.
	456,493 00 178,630 00 168,350 20		London, Huron and Bruce. Midland,
	83,000 00 182,500 00 386,000 00		Credit Valley Erie and Huron. Grand Junction. Georgian Bay and Lake Erie.
	270,000 00 1,479,000 00 147,858 65 126,500 00		 Ontario Government. Canada Atlantic Canada Central Canada Southern Central Ontario.
130,899,740 77	15, 200 00 6,4,500 00 6,4,500 00 6,4,500 00 124,600 00 124,600 00 25,6,000 00	15,891,633 33	Suth Norfolk Stewiscke Valley and Lansdowne. Stewiscke Valley and Lansdowne. Thousand Islands Tobique Valley Toronto, Grey and Bruce. Varento Junction West Ontario Pacific. Western Counties. Windsor and Annapolis

y.         Loan.         Total.         Bonus.         Total.           \$ cts.	TO TO TOTAL OF THE GLANCE OF THE PARTY OF THE PARTY OF THE CONCENSION.	mar on nam	,				
## cts. ## cts. ## cts. ## cts. ## cts. ## cts. ## cts.   15,917,533 33 2,068,622 02 11	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
rd—Coneluded.  rti—Coneluded.  stay Company  ray Company			cts.	e cts.	* cts	cts.	e cts.
TT—Concluded.  17,350 00  18,000 00  18,000 00  225,000 00  228,000 00  228,000 00  228,000 00  228,000 00  228,000 00  228,000 00  228,000 00  24,30 00 00  24,30 00 00  24,30 00 00  24,50 00 00  24,50 00 00  25,000 00  26,000 00  27,000 00  28,000 00  28,000 00  28,000 00  28,000 00  28,000 00  28,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00  38,000 00	Brought forward		15,917,533 33	2,058,622 02	137,060,748 21		:
289,000 00 289,000 00 28,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00 289,000 00	QUEBRC GOVERNMENT—Concluded.						
Head on 228,000 00 228	ake Champlain and St. Lawrence Junction.  Assormation.			380,000 00 250,000 00 7,350 00			
228,000 00 828,000 00 828,000 00 828,000 00 828,000 00 828,000 00 87,250 00 00 87,250 00 00 87,250 00 00 87,250 00 00 87,250 00 00 87,250 00 00 87,250 00 00 87,250 00 00 87,007 10 462,000 00 87,007 10 462,000 00 87,007 10 87,007 00 87,0	- :			168,000 00			
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390,000 00 124,000 00 124,000 00 124,000 00 124,000 00 124,000 00 124,000 00 124,000 00 124,000 00 125,000 00				96,000			
W.—C.P.R.).  VERNARINT.  VERNA	ontreal, I of while and Western.			350,000			
320,000 00 320,000 00 2,443,000 00 1,041,250 00 192,000 00 37,22,956 00 37,007 10 462,000 00 465,000 00 96,000 00 96,000 00 122,000 00 132,000 00 132,000 00 132,000 00 132,000 00 132,000 00 132,000 00	ontresi and Lake Maskinonge. ford Mountain			87,250 00 124,000 00			
W.—C. P. R.).     3,722,956 00     1,041,250 00       W.—C. P. R.).     3,722,956 00     122,000 00       W.—C. P. R.).     3,722,956 00     92,000 00       Vernment.     455,000 00     96,000 00       98,000 00     96,000 00     96,000 00       982,000 00     98,000 00     98,000 00       180,000 00     32,000 00     93,000 00       299,000 00     32,000 00	tawa and Gatineau Valley			320,000 00			
W.—C. P. R.).  Wernheitt.  Wenthert.  Wenthe	tebec and Lake St. John.			2,433,000 00			
W.—C. P. R.).  WERNMENT.  WERNMENT.  3,722,956 00  465,000 00  52,000 00  132,000 00  132,000 00  132,000 00  2290,000 00	lebec Central.  Montreal, Ottawa and Occidental.	3,722,956 00		727,000 00			
SENMENT. 3,722,956 00 92,000 00 52,000 00 52,000 00 52,000 00 52,000 00 52,000 00 132,00	nuth-Eastern.			497,007 10			
455,000 00 52,600 00 52,600 00 53,600 00 53,000 00 132,			3 799 956 00		10.674.559.19	6	
455,000 52,500 52,600 18,000 132,000 32,000	_						
180,000 132,000 32,000 230,000	bert (now Salisbury and Harvey)			455,000 00 52,700 00 96,008 00			
m). 32,000 230,000	Arounte and Arounted			180,000			
	of Canada 1			32,000 32,000 32,000 32,000			
22),000 9,000 19,000	Grand Southern (now Shore Line).  K. A. F. V. Scharch (now Salisbury and Harvey).			425,000 00 9,000 00		-	

New Brunswick  New Brunswick and Canada  New Brunswick and Canada  New Brunswick and Canada  Northern and Western (now Cadada Eastern)  Petitociaes and Western (Egin, Petitocodiae and Havelock).  St. Martin's and Upham  St. John Barid Rallway Extension.  St. John and Maine  St. John Walley and Rivière du Loup  St. John Valley and Rivière du Loup  St. Louis, Richibucto.  Temiscouata.  Tobique Valley			575,000 00 106,000 00 1106,000 00 1107,000	86.78 86.78 86.78	300,000 00	00 000'008
Nova Scotla Government.		*				
Cornwallis Valley  Halifax and Cape Breton Railway and Coal Co. (Eastern Extension). Jograns Nova Scotia Central Springhill and Parraboro' (Cumberland Railway and Coal Co.). Stewracke Valley and Lansdowne. Western Counties.	90,000,09	50,000 00	44,800 00 643,545 00 38,400 00 411,119 94 189,030 93 80,000 00 679,100 00	2,085,995 87		
MANITOBA GOVERNMENT.						
Manitoba and North-Western Manitoba South-Western Colonization Northern Pacific and Manitoba.	739,000 00 900,000,000	:	533,300 00	000		
Saskatchewan and Western	256,000 00	1,945,000 00		00 008,860		
BRITISH COLUMBIA GOVERNMENT.						
Canadian Pacific			37,500 00	37,500 00		
Total aid from Government		21,635,489 33		154,679,443 01		300,000 00
+ Included in Quebec Central.	th American Ra	ilway.				

51

cts.

25,000 00 42,500 00 Total. Subscriptions to Shares or Bonds. 888 cts. No. 10.—Statement of Aid granted to Railways by Municipalities, 30th June, 1891. 116,000 00 88 Ġ. 8 93,500 00 Total. 10,000 00 2,500 00 21,000 00 60,000 00 888 8888888 966,000 00 8888888 cts. 113,500 00 20,000 15,000 25,000 25,000 25,000 8,000 0,000 0,000 g, Total. cts. Loan. Bay of Quinté and Navigation Company Brantford, Waterloo & Lake Erie. Trenton Village Central Ontario
Wellington Village do
Town of Picton
County of Prince Edward do Brockville, Westport and Sault Name of Railway. Various Municipalities ...... Buffalo and Lake Huron 8888888 Canada Southern Canada Central 8888888 Town of Brockville.... Elizabethtown.
Rear of Yonge and Escott.
Rear of Leeds and Lanedowne.
Bastard and Burgess. South Groeby GVillage of Newboro' North Crosby Horton Admaston. Sault Ste. Marie Northumberland and Durham. Municipalities Deseronto .... Town of Amhertsburg South Norwich Township of Malden do Town of St. 1

VO 000 300	1,063,000 00 1,063,000 00		00 000 000 000
290,000 113,000 113,000 113,000 100,00	155,000 00 30,000 00 20,500 00 11,000 00 14,000 00 16,000 00	41,010 9,020 9	1 8
Credit Valley do do do do do do do do do do do do do d	Erie and Huron do do do do do do do	Georgian Bay and Lake Erie  do do do do do do do do do do do do do d	
do Oxford do Wellington do Wallington do Waterloo do Peel do Halton City of Toronto.  Go St. Thomas Town of Milton do Brampton do Ingersoll do Orangeville Village of Streetsville	County of Kent.  Town of Chatham do Dreeden. do Blenheim Village of Wallaceburg.  Township of Sombra. do Sarnia.	Town of Simcoe Township of South Norwich do North do Township of East Oxford do Woodstock. Town of Woodstock. Town of Woodstock. Town of Woodstock.  Town of Woodstock.  Town of Worlington do Elma. Town of Listowel. Township of Mornington Town of Listowel. Town of Listowel. Town of Harriston Town of Harriston Town of Marriston do Arran do Arran do Arran Town of Mount Forest Township of Egremont	

No. 10.—Statement of Aid grunted to Railways by Municipalities—Continued.

Subscriptions Total. to Share or Bonds.	m :	923,000 00 900 900 900 900 913,000 00 50,000 00	20,000 00	401 DAY DA		,	675,596 00 100,000 00 100,000 00 00 00 00 00 00 00 00 00 00 00
l. Bonus.	\$ cts. 877,000 00 20,000 00 32,000 00	150,000 00 5,000 00 15,000 00 35,000 00 8,000 00		170,000 64 318,000 00 3,000 00	99,733 75,791 11,289 30,974 354,007	20,7520 00 20,7520 00 20,7520 00 20,7520 00 20,000 00 8,700 00 8,000 00	20,386 00 20,000 00 15,000 00
	ee		155,000 00				
Loan.	& cts.		155,000 00				
Name of Railway. Loan. Tota	Brought forward	Grand Junction  do  do  do  do  do  do  do  do	Guelph Junction	Kingston and Pembrokedo	Hamilton and North-Western do do do do do do do	<del>8 2 2 2 2 2 2 2</del>	do do do  Lake Erie, Essex & Detroit River.
Municipalities,	ONTARIO—Continued. Township of Glenelg. Town of Durham.	City of Belleville. Village of Stirling Township of Rawdon do Seymour do Percy. do Asphodel.	City of Guelph	County of Frontenac. City of Kingston Village of Renfrew		Town of Collingwood  Township of Innisfil do Woodhouse. do Adjala. do Essa. do Tossoronto. do Mulmur Village of Alliston.	City of Hamilton Township of Nottawasaga.  do South Colchester.

,				8 8	200,000 00	390,000 00	627,500 00
80 98	00 000 000 000 000 000 000 000 000 000		20,000,000	157,500 00		241,980 00	6,360,446 85
20,000 00 20,000 00 20,000 00 15,000 00	12,000 00 15,000 00 6,000 00	15,000 00 17,500 00 15,000 00 15,000 00 25,000 00 25,000 00 10,000 00 10,000 00 10,000 00 10,000 00 10,000 00 10,000 00	20,000 00 112,500 00 112,500 00 113,70 85 12,000 00 12,500 00 4,600 00	30,000 00 7,500 00 15,000 00 75,000 00	30,000 00 12,500 00	99,430 00	35,000 00
7			<u>'</u>			:	155,000 00
ao	do do	do do do do do do do do do do do do do d		Tamworth and Quebec do do do do do do do do			ward
Lake Simcoe Junction do do do do do	Leamington and St. Clair do do do	London, Huron and Bruce.  do do do do do do do do do do do do do d	pur			:	Carried forward.
	: : .		Midland do do do do do do do do do do do do do	: : : : :		op	-   Western
Township of East Gwillimbury do North do do Georgina do Whitechurch	Village of Leamington Township of Morven Village of Comber	Township of London  do Stephen  do Osborne  do Hay  do Goderich  do E. Wavanosh  do Tuckermith  do Tuckermith  do Morris  do Stanley  Village of Clinton  do Kincardine and Wigan  City of London	GTownship of Thorah Town of Port Hope Township of Orillia and Matchedash Town of Orillia Township of Tay Village of Oneunee Township of Mara Township of Mara	do Napanee Village of Newburgh Township of Canden Gity of Kingston	County of Sincoe  Town of Barrie  do Orillia  Tomnshire of Orlingsood Frankes	and St. Vincent	* Now Kingston Napanee and
waship of East do do Georg	Village of Leamington  Township of Morven  Village of Comber	Township of London  do Stephen  do Osborne  do Hay  do Goderich  do E. Wawano  do Hallowano  do Tuckermiti  do Turnberry  do Morris  Village of Clinton  do Exeter  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton  Code Clinton	of Port Hopship of Thoraship of Orillia of Orillia of Orillia ship of Tay ship of Mara of Peterboro	Napanee. e of Newburship of Came Sheff. f Kingston.	y of Simcoe of Barrie	St. Vincent	* Now King

ş 627,500 00 90,000 00 Total. Subscriptions to Shares or Bonds. cts. 88 90,000 90,000,000 90,000,000 cts. 6,360,446 85 388,500 00 52,500 00 8 65,000 00 10,000 00 No. 10.-STATEMENT of Aid granted to Railways by Municipalities--Continued. Total. 25,000 00 10,000 00 15,000 00 2,500 00 25,000 15,000 00 5,000 6,000 12,500 00 2,000 00 40,000 45,000 60,000 60,000 35,000 00 88888888 80,000 00 20,000 00 Bonus. cts. 80,000 00 300,000 00 155,000 00 Total. cts. 88 8 200,000 90,000 Loan. Port Arthur, Duluth and Western St. Catharines and Niagara Central St. Lawrence and Ottawa..... Brought forward..... Toronto, Grey and Bruce..... Town of Smith's Falls......Ontario and Quebec.... ခု Name of Railway. Toronto and Nipissing <del>9</del>999999 유육 South Norfolk . 용은용 မှ දෙද ಕಿಕಿಕಿಕಿಕಿಕಿಕಿ City of Toronto. Township of Scarboro Township of West Winchester. Town of Simcoe
Township of Charlotteville....
A do South Walsingham Townships of Luxton, Digby and Lang-Scott ONTABIO—Continued. ford Town of Uxbridge Municipalities. Merrickville... 3rock. City of St. Catharines. Bexley Town of Thorold...

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Authur. Orangeville Orangeville Monto Owen Sound Minto Howick Gorrie and Wroxeter Culross. Turnbury.	Town of Lindsay	Feel Feel Forth Feel Maryboro' Nichol Nichol Feel Forth Feel Forth Feel Forth Feel Forth Feel Feel Feel Feel Feel Feel Feel Fee	Village of Port Perry.  Manufacturing Co

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscrip- tion to Shares or Bonds.	Total.	
Фиквис.		3 cts.	e cts.	cts.	e cts.	es cts.	e cts.	
Farnham. Town of Nicolet Municipality of St. Leonard.	Canadian Pacific Drummond County			10,000 00 5,000 00	20,000 00			
St. AntoineSt. Denis	Parish of St. Antoine Great Eastern do St. Denis			10,000 00	15,000 00			
Parish of St. SophieVillage of New Glasgow	Great Northern do			2,000 00	20,000 00			
Scounty of Compton.  St. Pie.   LAnge Gardien.  St. Paul.  Philipsburg.	International Lawrence do do do do do do do do do do do do do			20,000 00 10,000 00 6,000 00 15,000 00	00 000'9	225,000 00	225,000 00	
	Lower Laurentian. Massawippi Valley.				51,000 00 25,000 00	40,000 00 25,000 00		····
Coresing of Ely  Township of Ely  do North Stukeley.  do Bolton.	Missisquoi & Black River Valley.  do do do do Montreal & Champlain Junction.				21.174 00	25,000 00 20,000 00 20,000 00 20,000 00	65,000 00 85,000 00	
Municipality of Rigaud  Parish do Ghambly Canton do Basin	Montreal & Ottawa			2,000 00 500 00 15,000 00 10,000 00	2,500 00			
Town of Sorel. Village of Boucherville do Varennes. Parish of St. Roch	Montreal and Sorel			12,000 00 600 00 1,000 00 500 00	25,000 00			
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		450 000 00	15,000 00 15,000 00 1,368,000 00	
		450,000 00	5. 15. 25. 25. 25. 25. 25. 25. 25. 25. 25. 2	
101,000 00		103,000 00	25,000 00	
100,000 00 1,000 00	25,000 00 25,000 00 25,000 00		25,000 00	
			2,434,000 00	
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Pontiac Pacific Junction.	Quebec Central	Quebec and Lake St. John.	Oucleer, Montreal, Otta Occidental do d	
County of Pontiac		City of Quebec	tébec.  inérèse  inérèse  inerèse  iner	
County of Pontia Village of Shawvi	Parish of Sherbro do Dudswe do Weedor	City of Quebec.	do Montreal.  do Quebec.  do Three Rivers. County of Ottawa. St. Sauveur de Quebec. St. Sauveur de Quebec. Gote St. Louis Village of St. Therese Parish of do St. Jérômal. St. Jérômal. St. Andrew's St. Andrew's St. Andrew's St. Jerusalem of Argenteuil. GCounty of Brome. Township of Brome.  Go Potton.  do Potton.  do Parnham  village of West Farnham  do Bast do  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  do Waterloo  Gounty of Drummond.  Township of Wickham.  do St. Germain  do Storel  Township of Roxton.  do Wexton Falls  Township of Roxton.  do West Wickham.  do Waterloo  Rheafferd.  Municipality of Magog	

	Total.	cts.							00 000'09	00 000,09		100.000 00		100,000 00
	Subscription to Shares or Bonds.	cts.							00 000 00			100,000 00		
Soncluded.	Total.	** cts.	70,000 00	00 000 08		93 000 00	47.500.00	900		233,500 00	27.685 00		150,000 00	177,685 00
cipalities—(	Bonus.	es cts.	40,000 00	30,000 00		12,000 00 11,000 00	12,500 00 22,000 00 13,000 00	13,000 00		:	27,685 00	:	150,000 00	
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od to Railwa	Loan.	es cts.			2,000 00 500 00 500 00			20,000 00			:			
No. 10STATEMENT of Aid granted to Itailways by Municipalities-Concluded.	Name of Railway.		Albert do	Frederictondo	*Grand Southerndo	New Brunswickdo	do and Canada	Northern and Western of New Brunswick Pretitcodiac and Elgin	St. John and Maine		Cornwallis Valley	Western Counties	ф	
No. 10	Municipalities.	NEW BRUNSWICK.	Hillsboro', Hopewell and Harvey Parishes. Coverdale, Hillsboro', Hopewell and Harvey Parishes.	City of Fredericton	Parish of St. George do Pennfield 9 Lepreaux	irfield	City of Calais do Houlton do St. Stephen.	Town of Chatham.	City of St. John	Nova Scotta	:	Township of Yarmouth	Counties of Yarmouth and Digby	

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	an Pac	itoba and	hewan			an Pac		Mount	ı, Peti
	Canadian Pacific	Manitoba a	Saskatchewan and Western			Canadian Pacific		Wood 1	Now Elgin, Petitcodiac and Havelock
			:			<del></del>		Wood Mountain and Qu'Appelle.	+ Nov
		borne e la Prairie. Glosa Shoal Lake Birtle Strathclair.	:		j.		)RIES.	i	
BA.		airie. Lake	:		Витівн Согомнім.	ster	ERRIT		Line.
MANITOBA.	rk Andr	borne.  e la Pr dosa Shoal Birtle			SH Co	stmin	Vest 1		Shore
F	Vinnip f Selki o of St. Morris.	f West Portag Minne dity of	ty.		Вагт	ew We	North-West Territories.	 Ø	* Now Shore Line.
	City of Winnipeg. County of Selkirk Township of St. Andrews Town of Morris.	County of Westborne  Town of Portage la Prairie.  do Minnedosa.  Municipality of Shoal Lake.  do Strathclair.	Rapid City			City of New Westminster	Ž	I Not stated	
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176,614,932 34 15,855,100 78 192,470,033 12 cts. No. 10.—Statement of Aid grunted to Railways—Constructed and under Construction—by Gove:nment and Municipalities, 30th June, 1891—Concluded. Grand Totals. 10,347,041 78 4,255,774 00 316,500 00 27,685 00 595,600 00 37,500 00 25,000 00 146,791,274 10 6,187,607 44 14,397,508 12 4,587,346 81 2,185,995 87 2,478,300 00 37,500 00 cts. 300,000 00 2,245,500 00 2,545,500 00 cts. Total. Subscrip-tions to Shares or Bonds. 717,500 00 1,368,000 00 60,000 00 100,000 00 300,000 00 cts. 10,617,600 78 165,297,043 79 154,679,443 01 ęş Total. SUMMARY. 130,899,740 77 6,161,007 44 10,674,552 12 4,287,346 81 2,085,945 87 533,300 00 37,500 00 9,094,541,78 453,774,00 233,500,00 177,685,00 595,600,00 37,500,00 25,000,00 Bonus. 21,635,489 33 2,992,000 00 24,627,489 33 cţ Total. 15,891,533 33 26,000 00 3,722,956 00 50,000 00 1,945,000 00 535,000 00 2,434,000 00 23,000 00 ę, Loan. Manitoba....British Columbia.... Nova Scotia..... Nova Scotia.... North-West Territories.... Dominion .... Quebec..... New Brunswick.... Municipalities. Governments. Ontario..... Manitoba.....British Columbia. Quebec..... New Brunswick

### DOMINION OF CANADA

### ANNUAL REPORT

OF THE

# DEPARTMENT OF RAILWAYS AND CANALS

## CANALS REVENUE BRANCH

FOR THE PAST

FISCAL YEAR FROM 1st JULY, 1890, TO 30th JUNE, 1891

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE REVISED STATUTE OF CANADA, GHAPTER 37, SECTION 28

PRINTED BY ORDER OF PARLIAMENT



#### OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY

1892

[No. 9c-1891.] Price 10 cents.

# CONTENTS.

No. of tatement		Page
1 5 2 3 4 6	CANALS Revenue, collection of—in Account with Revenue. do do Expenditure HYDRAULIC Rents, &c. MINOR Public Works FINES and Damages. REFUNDS	8 16 12 13 14 18
	STATISTICS (APPENDIX A).	
25 (A) 22½ 23 24	QUANTITY of each article transported during two years ended 30th June, 1890, alphabetically arranged.  Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation, 1889 and 1890, with the amount of Tolls collected on the same, including Tolls on Vessels and Passengers.  Statement showing the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation of 1889.  Statement showing the Number and Classified Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation of 1889.	88 150 151
25 26	TARIFF. HYDRAULIC RENTS—Summary Statement of Lessees' Account.	156 170
	EXPENDITURE (Appendix B).	

STATISTICS (Appendix A)—Continued.
CANALS.

,1891,	years ended 30th Ju	نه نه	9	9				==	<del></del>	
Thou shoot	hmestate evitaraqmoD bna aleaseV to egan	Page.	<b>&amp;</b>	** 	87	<b>\$</b>	87	:	:	84
гту, Развепкега	Comparative Stateme movement of Prope and Vessels for for 30th June, 1891.	Page.	#	2	38	<b>ಪ</b>	85	:		88
Vessels passed through the Canals; Number, Ton- nage and Nationality of.	Season of Maviga- tion, 1890.	Page.	146	146	147	147	147	148	148	147
l ,	Fiscal Year ended 30th June, 1891.	Page.	8	<b>æ</b>	18	81	81	83	8	81
8_,	Season of Naviga- tion, 1890.	Page.	. 144	144	145	145	145	145	145	145
Tolls accrued each Month each Canal	Fiscal Year ended 30th June, 1891.	Page.	82	82	82	28	6.2	79	29	62
Details of Traffic under various heads.	Season of Maviga- tion, 1890.	Page.	138	138	139	138	139	139	139	139
Deta Tra under v	Fiscal Year ended 30th June, 1891.	Page.	92	92	20	29	5	2	2	2
Details of Traffic arranged in Classes.	Season of Maviga- fon, 1890.	Page.	132	132	133	132	133	133	133	133
Deta Tra arran Cla	Fiscal Year ended 30th June, 1891.	Page.	25	<b>6</b> 4	29	2	49	49	25	3
Details of Way Traffic arranged Liphabetically.	Season of Maviga- tion, 1890.	Page.	100	112	:	:	:	:	:	:
Details of Way Traffic arranged Alphabetically	Fiscal Year ended 30th June, 1891.	Page.	31	23	:	:	:	:	:	
is of Traffic nged stically.	Season of Maviga- tion, 1890,	Page.	8	108	:	:	:	:	:	
Details of Through Traffic arranged Alphabetically.	Fiscal Year ended 30th June, 1891.	Раде.	23	88	:	:	:	:	:	:
etails of Fraffic ranged habetily.	Season of Maviga- tion, 1890.	Page.	26	104	116	130	123	126	127	130
Detai Tra arran Alphab	Fiscal Year ended 30th June, 1890.	Page.	x	*	9	25	8	28	22	8
			nal	St. Lawrence Canals	als	unal	La	Oanal	y Canals	
	•		Welland Canal	St. Lawrenc	Ottawa Canals	Chambly Canal	Rideau Canal	St. Peter's Canal	Trent Valley Canals.	Murray Canal

4

# DEPARTMENT OF RAILWAYS AND CANALS, CANALS REVENUE BRANCH, OTTAWA, 6th October, 1891.

#### To the Secretary

Department of Railways and Canals.

Sir,—I have the honour to submit herewith the statements of Canal Revenues collected during the fiscal year ended 30th June, 1891, with the financial statement respecting the source whence the revenues were derived.

The following summary of revenues accrued shows a decrease of \$3,785 after deducting the refunds made under various Orders in Council modifying the Tariff:

	1889-90.	1890-91.	Increase.	Decrease.
Canal tolls, &c	\$ 371,626   38,168   50	\$ 345,143 37,995 41	Per cent.	Per cent. 4.43 0.45 18.00
TotalLess—Refunds	409,844 48,391	383,179 25,511		6.20
Net revenue	361,453	357,668		

The following is a comparative statement of the revenues accrued on the following divisions of the canals for the years 1890 and 1891, showing the increases or decreases as compared with the previous year.

	1889-90.	1890-91.	Increase.	Decrease.
	*	8	Per cent.	Per cent.
Welland Canal St. Lawrence Canals. Chambly Canal. Ottawa Canals. Rideau Canal. St. Peter's Canal Trent Valley Canal. Murray Canal.	220,160 70,604 17,703 53,094 6,782 2,453 238 592	188,586 79,919 20,187 47,149 6,153 1,707 731	13·2 14·03 	14·34 11·19 9·29 30·41
TotalLESS—Refunds	371,626 48,138	345,143 25,511		
Net Revenue	323,488	* 319,682		ŧ.

The following statement will exhibit the increases and decreases upon the Welland Canal and the classes of articles upon which they arose:—

	1889-90.	1890-91.	Increase.	Decrease.
	8	*	Per cent.	Per cent.
Vessels	19,295	15,907		17.56
Passengers	207	354	71.01	32.12
Produce of the forest	29,698 331	20,157 176		46·82
do animals	109,970	94,330		14·22
Manufactures and merchandise	56,291	56,407	······································	
Total tolls	215,792	187,331		
Fines and damages	4,367	1,255		
Total	220,159	188,586		
LESS—Refunds	47,251	24,914	1	
Net revenue	172,888	163,672		

The decrease in the amount of tolls refunded as shown above is due to the fact that no refunds of tolls on grain were made during the months of May and June, in consequence of an Order in Council of 18th May, 1891, authorizing such refunds to be made at the close of navigation and not during the season as heretofore.

The total quantity of freight transported on the several divisions of the canals and classified as under, is as follows:—

Canals.	Farm Stock.	Forest Produce of Wood.	Manu- factures.	Merchandise	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland		138,205	23,104	317,044	481,095	959,502
St. Lawrence		126,128	67,280	348,696	286,093	829,304
Chambly	234	98,868	3,218	118,830	3,914	225,064
Ottawa		622,329	844	11,483	5,155	640,978
Rideau		74,530	2,336	20,728	3,055	100,687
St. Peter's		2,619		19,232	7,668	29,519
Murray		4.124	1,659	4,205	3,572	13 585
Trent Valley		23,038	20	582	35	23,675

It will be seen by the following figures that the largest quantity of freight passed through the Welland Canal since 1867 was during the fiscal year of 1874, when the quantity was 1,540,081 tons.

The smallest quantity passed through in any one year was 1882, when the quantity decreased to 644,727 tons, in 1890 the quantity increased to 1,104,553 tons, and decreased in 1891 to 959,502 tons.

The largest tonnage passed through the Welland Canal between the United States ports for the same period was during the fiscal year 1871, the quantity being 747,756 tons; the quantity however decreased to 191,817 tons in 1882, but has since gradually increased to 563,856 tons in 1891.

The following statement shows the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the fiscal years ended 30th June, 1867 to 1891, inclusive:—

Years.	Total quantity transported on the Welland Canal, Tons.	Quantity from United States ports to United States ports, Tons.
1867	933,260	<b>458,386</b>
1868	1,161,821	641,711
1869	1,231,903	688,700
1870	1,311,956	747,756
1871	1,478,122	772,567
1872	1,319,996	638,039
1873	1,391,692	634,913
1874	1,540,081	703,185
1875	1,142,853	595,217
1876	1,121,802	524,197
1877	1,126,429	482,878
1878	1,091,898	448,413
1879	918,924	361,304
1880	896,122	248,944
1881	798,809	196,285
1882	644,727	191,817
1883	861,634	337,619
1884	965,830	417,972
1885	839,521	416,825
1886	934,862	443,961
1887	838 <b>,5</b> 87	387,109
1888	827,300	387,555
1889	938,254	464,415
1890	1,104,553	550,844
1891	959,502	563,856

The statements of the quantity of grain transhipped at Ports Colborne and Kingston, and comparative statements of the movement of traffic on the different routes competing for the carrying trade from the west to the sea-board will be given in the supplementary report for the season of navigation.

I have the honour to be, Sir,

Your obedient servant,

B. H. TEAKLES.

CANALS,
No. 1.—Collectors of Canals Tolls,

DR.

(For Details, see

Balances due by		Canal I	Revenue.		Total	Hydraulic Rents and Revenue		
Collectors, &c., 1st July, 1890.	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.	Canal Reve- nue Accrued.	from Public Works, Vide Statements Nos. 3 and 4.	Total.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1,232 41 100 13 161 60 0 50 60 32	126,409 73 59,246 37 340 82 18 76 706 36 554 57 54 95		1,147 38	81 59 20 00	126,415 73 59,246 37 340 82 18 76 787 95 1,721 95 54 95	112 08 193 21 497 67 293 00 2,670 76	127,760 22 59,539 71 1,000 09 19 26 1,141 27 4,392 71 57 49	
1,557 50	187,331 56		1,153 38	101 59	188,586 53	3,766 72	193,910 75	
296 51 172 55 116 97 291 87 877 90	790 28 17,652 66 773 65 2,940 74 25,982 04 14,133 40 62,272 77	21 36 4,655 85 4,677 21	105 55 5 00 5 00 4 00 297 50	1,588 83 10,963 62 12,552 45	895 83 17,657 66 778 65 4,554 93 41,899 01 14,133 40 79,919 48	3,852 50 790 00 575 00 	4,748 33 18,744 17 1,526 20 4,671 90 61,652 49 14,425 27	
187 76 57 92	6,424 36 13,268 05 487 83		4 00 2 75		6,428 36 13,268 05 490 58	70 00	6,686 12 13,268 05 548 50	
245 68	20,180 24		6 75		20,186 99	70 00	20,502 67	
594 08 28 80 91 34	27,510 23 18,212 83 180 40 1,237 29			8 00	27,510 23 18,212 83 188 40 1,237 29	5 00 20 00	27,510 23 18,811 91 237 20 1,329 63	
714 22	47,140 75		•••••••••	8 00	47,148 75	25 00	47,887 97	
	4,094 36 1,432 25 428 38	12 20	5 00	176 00 3 78	4,287 56 1,432 25 433 16	564 75 105 50 60 90	4,852 31 1,537 75 494 06	
	5,954 99	12 20	6 00	179 78	6,152 97	731 15	6,884 12	
203 10	1,528 85			177 91	1,706 76	<u></u>	1,909 86	
131 57	672 86	<b> </b>	38 16	    8	711 02		842 59	

1890-91.
in Account with Revenue.

Appendix A.)

Cr.

•		THE CREDIT OF ER GRNERAL.	Balances due by		
Collection Divisions.	On account of Canal Revenue.	On account of Hydraulic Rents and other Public Works.	Collectors, &c., 30th June, 1891.	Total.	
Welland Canal.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
Port Colborne. Port Dalhousie Dunnville. Port Maitland. Port Robinson. St. Catherines Chippawa.	127,263 87 59,346 50 307 37 19 26 755 62 1,721 95 46 46	105 56 193 21 574 34 293 00 2,670 76	390 79 118 38 92 65 11 03	127,760 22 59,539 71 1,000 09 19 26 1,141 27 4,392 71 57 49	
Totals	189,461 03	3,836 87	612 85	193,910 75	
St. Lawrence Canals.					
Beauharnois Cornwall Cardinal Lachine Montreal Kingston Totals	800 13 16,882 95 820 20 4,661 73 41,899 01 14,242 03 79,306 05	3,852 50 790 00 706 00 19,753 48 25,101 98	95 70 1,071 22 10 17 183 24 1,360 33	4,748 33 18,744 17 1,526 20 4,671 90 61,652 49 14,425 27	
Chambly Canal.					
ChamblySt. John'sSt. Ours	6,306 23 13,268 05 499 77 20,074 05	70 00	309 89 48 73 358 62	6,686 12 13,268 05 548 50 20,502 67	
Ottawa Canals.					
Ottawa	27,510 23 18,484 44 190 11 1,193 21	5 00 20 00	322 47 27 09 135 42	27,510 23 18,811 91 237 20 1,328 63	
Totals	47,377 99	25 00	484 98	47,887 97	
Rideau Canal.					
Ottawa. Kingston Mills. Smith's Falls.	4,287 56 1,432 25 433 16	564 75 105 50 60 90		4,852 31 1,537 75 494 06	
	6,152 97	731 15		6,884 12	
St. Peter's Canal	1,794 78		115 08	1,909 86	
Murray Canal—Brighton	. 796 52 9		46 07	842 59	

CANALS,

No. 1.—Collectors of Canals Tolls,

Dr.

(For Details, see

Balances due by	CANAL REVENUR.				Total	Hydraulic Rents and	•
Collectors, &c., 1st July, 1890.	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.	Canal Revenue Accrued.	Revenue from Public Works, Vide Statements Nos. 3 and 4.	Total.
\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.
18 00	59 51	 	 	 	59 51	 	77 51
50 73	341 96			50 00	391 96		442 69
2 39	34 96				34 96	50 00	87 35
1 50	28 70				28 70	180 00	210 20
38 09	163 23 52 75				163 23 52 75	6 00	207 32 52 75
110 71	681 11			50 00	731 11	236 00	1,077 82
3,840 68	325,763 13	4,689 41	1,621 34	13,069 73	345,143 61	29,799 85	· 378,784 14
					25,511 56		
					319,632 05		

1890-91.—Continued.

in Account with Revenue.

Appendix A.)

CR.

	DRPOSITE RE		THE CR			Balance				
Collection Divisions.	On accou Cana Reven	1	Hyd	raul ents othe	lic er	due by Collectors, 30th Jun 1891.	&c.,	To	otal.	
Trent Valley Canal.	8	cts.		\$	cts.	8	cts.		8	cts.
Burleigh Bobcaygeon. Fenelon Falls. Hastings Peterboro' Buckhorn.	39 3 2 17	8 75 1 06 5 10 5 95 9 35 2 00		180	00 00 00	51 2 4 21	76 63 25 25 97 75		442 87 210 207	35
Totals	72	2 21	-	236	00	119	61	1	,077	82
Grand total LESS—Refunds per Statement No. 5Net revenue.	345,68	\$5 60	30	,001	00	3,097	54	378	3,784	14

B. H. TEAKLES, Chief Clerk, Canals Revenue.

HYDRAULIC AND OTHER RENTS.

No. 2.—Summary Statement of Lessees' Account.

(For details, see Appendix A, No. 28.)

Balance due 1st July, 1890.	Accrued during the Year ended 30th June, 1891.	Total.	Name of Work.	Abate- ment Author- iezd.	Paid into hands of Collector, vide Statement No. 1.	Deposited to the credit of the Receiver General.	Ealance due 30th June, 1891.	Total.
cts.	. ets.	s ots.		e cts.	e cts.	e cts.	cts.	e cts.
23,346 92 6,626 62 7,925 62 18,393 86 7,059 70 226 90	7,324 40 1,118 90 815 90 2,558 90 24,559 96 1,220 90 1,250 90	30,671 32 7,744 62 1,607 50 6,216 50 42,982 92 381 84 8,279 90	Welland Canal Williamsburg Ganal Williamsburg Ganal Cornwall Gornwall Lachine Go Chambly Gibanbly Gibandry Ganals	50 00 10 00 20 00 51 25	3,725 58 675 00 790 00 3,882 50 19,752 48 731 15 262 00	25 60	26,895 74 7,169 62 807 50 2,363 80 23,180 44 311 84 7,472 50 89 00	30,671 82 7,744 62 1,607 50 6,215 50 42,959 92 8,279 90 8,279 90
354 18		354 18	Land Sales.	:			354 18	354 18
60,564 12	37,994 66	98,558 78	•	131 25	29,758 71	25 00	68,643 82	98,558 78
			Accrued Less refunded	<b>60</b>	37,994 66 32 00			
				••	37,962 66			

B. H. TEAKLES, Chief Clerk, Canals Revenue.

## No. 3.—MINOR PUBLIC WORKS, 1890-1891.

Balances due 1st July, 1890.	Accrued during Year ended 30th June, 1891.	Totals.	Works.	Deposited to the credit of the Receiver General, Vide State- ment No. 1.	Balances due 30th June, 1891.	Total.
\$ cts.	\$ cts.	\$ cts.	Harbours.	\$ cts.	<b>8</b> cts.	8 cts.
5 98	29 58	35 56	Port Colborne	35 56		35 56
•	11 5 <b>ć</b>	11 56	Port Dalhousie	11 56		11 56
5 98	41 14	47 12	Total	47 12		47 12

B. H. TEAKLES, Chief Clerk Canals Revenue.

Totals.	cts.		1,153 38		
Damages.	इंट	175 00 41 65 840 73 75 00	1,132 38	200 00	66 or 55 G
Fines.	* ce	* 10 00	21 00	8202401	2 00
Particulars.	Welland Canal.  For violating Canal Regulations, sec. 22.  Soow "Victoria" abandoned on bank of Welland Canal	Damages to Bridge 15. Lock tender fine. Damage to Locks No. 22 and 25. do Lock No. 18. do do 21.	Total, Welland Canal	P. Laplante.  P. Laplante.  E. Latour.  L. Latour.  H. Dobell & Co.  For unnecessary blowing her whistle.  For unnecessary blowing her whistle.  For violating sec. 25, Ganal Regulations.  For violating sec. 25, Canal Regulations.  For violating sec. 25, Canal Regulations.  For damages to masonry at Lock No. 24 without chapted to the control of the c	D. Lerouse
Name of Owner or other Person chargeable.	James Norris	v. Whitney as. Webster. spt. W. Hanson as. McKenzie. apt. James Hastings.		P. Laplante. H. Dokour. H. Dokour. J. Cowley Carbray & Rooth. N. Gamlin N. Gamlin P. Laplante. Codo do do Montreal Transportation Co	D. Lerouse N. K. and M. Connolly Montreal Transnortation Co.
Name of Vessel.	Tug "Norris"	Stm. Bge. "Marshall" do do hedo" do "Tecumseh" Bge. "Samoa" Str. "C. W. Whitmore"		Bge. "Fame". do "William". Str. "Eveline". do "Arial". do "Cholmley". Bge. "Beauport". Str. "Corinthian". Schooner "Prussia". Bge. "Quebec". do "J. Bright". do "J. Bright". do "J. Bright". Bge. "Jennie".	Bge. "Brodeur Demers". Dredge "St. Joseph" Boe. "Jennie".
 Date.	1890. Aug. 16 Nov. 4	Jan. — do — June 30 do do		July 18	May 2 June 17

					7
417 05	6 75	9	38 16	Revenue.	
285 55	2 00 2 00 0 75 4 72		38 16	ES,	
131 50	2 00	1 00 2 00 6 00		and Canal.  B. H. TEAKLES, Chief Clerk, Canals Revenue.	
Sept., 1890 Total, St. Lawrence Canals.	Chambly Canal.  Damage to Lock gate No. 7  do 2  For violating sec. 6 of Canal Regulations  For damages to lock.  Total, Chambly Canal.	Rideau Canal.  For fast driving over the iron bridge crossing the canal. For interfering with the machinery (under sec. 7, Canal Regulations)	Murray Canal.  Damages to boom at railway swing bridge, Oct. 19,1890  Total, Murray Canal	* These amounts were paid to the collector of canal tolls at St. Catharines, by Mr. Ellis, superintendent of the Welland Canal.  B. H. TARENT OF RAILWAYS AND CANALS,  OTTAWA, 30th Septembor, 1891.	
:	Capt. Arpin Capt. Lavallée Gédéon Lebrun. E. Lussier	Mr. Bulger	W. A. Geddes	ere paid to the collector of canal tolls at St. C ILWAYS AND CANALS, OTTAWA, 30th Septembor, 1891.	
do 1/ do 2408d18	Aug. 23 Bge. "W. Henry" do 23 do "St. Jean Baptiste" do 11 Str. "James" Sept. 8 Boat "St. Joseph"	1890. Aug. 11 Nov. 29 Str. "Minnie Bell"	Str. "Ocean'	* These amounts were paid to the collector of of DEPARTMENT OF RAIL WAYS AND CANALS, OTTAWA, 30th Septem	
	1890. Aug. 23 do 23 do 11 Sept. 8	1890. Aug. 11	Dec. 31	* These	

CANALS, No. 5.—Collectors of Canal Tolls (For Details, see

DR.

Amounts received from Department Deductions from Salaries for	Balances		
to meet Super- Expenditure. Super- annuation.	due to Collectors 30th June, 1891.	Total,	Collection Divisions.
\$ cts. \$ cts.	\$ cts.	\$ cts.	Welland Caaal.
3,383 99 65 00 2,180 97 38 00 770 25 15 00 600 00 10 00 737 41 14 40 196 00 4 00 128 75 2 00		3,448 99 2,218 97 785 25 610 00 751 81 200 00 130 75	Port Colborne. Port Dalhousie Dunnville Port Maitland Port Robinson. St. Catharines Chippawa
7,997 37 148 40		8,145 77	Total
			St. Lawrence Canals.
1,298 66 1,222 99 1,851 37 1,197 87 2,150 25 8,487 25 17 00 17 00 17 00 18 00		1,310 66 1,227 99 1,852 01 1,219 87 2,184 25 8,610 93	Beauharnois Cardinal Cornwall Kingston Lachine Montreal
16,203 39 202 32		16,405 71	Total
			Chambly Canal.
1,567 90 26 25 1,491 85 24 25 622 74		1,594 15 1,516 10 622 74	ChamblySt. John'sSt. Ours
3,682 49 50 50		3,732 99	Total
			Ottawa Canals.
823 32 1,167 11 1,543 51 16 00 20 00 6 25		839 32 1,187 11 1,549 76	Carillon Grenville St. Anne's Lock
3,533 94 42 25		3,576 19	Total
			Rideau Canal.
458 08 2,203 74 336 05 8 00 8 00		466 08 2,243 74 342 05	Kingston MillsOttawaSmith's Falls
2,997 87 54 00		3,051 87	
196 00 4 00 17 75 70 21		200 00 17 75 70 21	St. Peter's
2,357 99 36 00 845 82 214 37 2,757 52		2,393 99 845 82 • 214 37 2,757 52	Inspector of CanalsQueen's PrinterStationeryGeneral
40,874 72 537 47		41,412 19	Grand Totals

1890-91.
in Account with Expenditure.
Appendix B.)

CR.

Balances due to	E	xpenditure A	THORIZED BY	THE DEPARTMEN	T.	
Collectors 1st July, 1890.	Salaries.	Special Assistance.	Rent.	Travelling Expenses.	Sundries.	Total.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts
	3,250 00 1,900 00 750 00 500 00 720 00		192 00 25 00 100 00	150 00	6 99 143 97 35 25 10 00 29 91	3,448 99 2,218 97 785 25 610 00 751 81
	200 00 100 00		25 00		5 75	200 00 130 75
	7,420 00		342 00	151 90	231 87	8,145 77
	1,216 00 1,150 00 1,633 32 1,100 00 1,700 00 7,383 34	142 50	50 00 45 00 360 00 525 00	6 00 10 50	88 66 17 49 76 19 74 87 104 45 702 59	1,310 66 1,227 99 1,852 01 1,219 87 2,184 25 8,610 93
	14,182 66	142 50	980 00	36 30	1,064 25	16,405 71
	1,500 00 1,400 00 600 00 3,500 00			48 06	46 09 116 10 22 74	1,594 15 1,516 10 622 74
	3,000 00			48 06	184 93	3,732 99
	800 00 1,000 00 1,500 00		50 00		39 32 137 11 49 76	839 32 1,187 11 1,549 76
	3,300 00		50 00		226 19	3,576 19
••••••	400 00 2,000 00 300 00		• • • • • • • • • • • • • • • • • • • •	33 00 15 18 5 85	33 08 228 56 36 20	466 08 2,243 74 342 05
	2,700 00			54 03	297 84	3,051 87
	200 00	53 20		3 50	17 75 13 51	200 00 17 75 70 21
	1,800 00			521 10	72 89 845 82 214 37 2,757 52	2,393 99 845 82 214 37 2,757 52
	33,102 66	195 70	1,372 00	816 89	5,926 94	41,412 19

B. H. TEAKLES, Chief Clerk, Canals Revenue.

No. 6.—REFUNDS, 1890-91. CANAL TOLLS.

				-	T Character			
Canal.	To whom Paid.	Date.	Оббее.		Refunds of Tolls on	Under what Authority Refunded.	Amount.	Total.
		1890.	,	<u>                                     </u>			e cts.	es cts.
Welland	K. & M. Forwarding Co.	July 14	14 Port Colborne Grain	G	in	Refunded under Revised Statutes, chap. 29, sec. 8	216	
do	J. Malcolmson		op.	:	·	op -	107 46	
တို			<del>9</del> 4		0	9,-5	2.799 00	
9 5		do do	3-8	: :	op	op.	22 26	
ခု			do op			: op	176 40	-
:	:		မွ	-	op	: op ?	36	
:	:		о <del>р</del> -			:	100	
:	J. B. Fairgrieve & Son		9		αο	:	3 830 94	
:	Montreal Transport Co		8-7	_			425	
: : : : :	K. & M. Forwarding Co		g.			9.6	2	
: :	U. Mackay 8 Mulb		9-6	:		-	189	
	D. Mackay's Sons.						<b>5</b> 6	
: :-						·· op		
	Malcolmson		ф		с	· op	36 65 65 65	
٠ • • • • • • • • • • • • • • • • • • •			မှ	:		· op	717	
ор Ф	Son		පු.	<u>-</u>	0	· op	8 5	
	suc		පි.	<u> </u>		: ·	41.99	
op	do do		0		0	: : :	231 48	
 00 00 00 00 00 00 00 00 00 00 00 00	K. & M. Forwarding Co		8-E	:	op o	• • • • • • • • • • • • • • • • • • •	110 70	
			op			·· op	171 36	
op	Æ. D. Mackay's Sons.		do	<u>:</u>	0	op	8	
	18 Co		ор		0	· op	356 49	
op	:		op		0	· op	26.00	
	ns		စု်	<u>-</u> :	0	: do	001617	
ор •	ဗိ		op,	<u>.</u>	0	· op	4,122 10	
ان	F. H. Taylor		ob	<u>-</u>		·	1 5	
op op			පූ	<u>-</u>		· · · · · · · · · · · ·	212	
 Op	:		· 윤.	<u>.</u> :		30 ao	110 /0 552 69	
: 	K. & M. Forwarding Co.		8-5	:	00	: : 3-8	92 50	
3	3			_		•		

			24,953 72		425 84	==
2,410 74 108 00 1,828 98 1,828 98 1,828 98 103 32 305 64 2,211 12 673 74	73 08 174 96	29 80	33 94	25 25 25 25 25 25 25 25 25 25 25 25 25 2	& & & & & & & & & & & & & & & & & & &	
	::	:				
<del>-</del> 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	op G					: : : : : : : : : : : : : : : : : : : :
999999999999	op	Over payment on ice	do excursion	Excursion  Material for canal construction do do Over payment on R. R. Iron  Material for canal construction (frain	Overcharge of wharfage on pig irondo of tolls owing to difference in tonnage of vessel  Total refunds, St. Lawrence Canal Tolls twice paid	nused let-passes.
	9 op	20. Dalhousie	18. St. Catharines and Dalhousie	Williamsburg	2. Lachine	20. Ottawa & Grenville Unused let-passes.
%	1891. n. 8	1890. Nov. 20 1891.	55	888884		
A. D. Mackay's Sons   do   Gontreal Transport Co   Nov   Nov   Co   A. Malcolmson   do   Ook   Co   Co   Ook   Ook   Co   Ook   Ook   Co   Ook   Ook   Co   Ook   Co   Ook   Co   Ook   Ook   Co   Ook   Ook	do Jan.	Capt. J. ReadN	Capt. N. J. Wigle April	Rev. J. Metzler. Montreal Trans. Codo do do do Kingston & M. Ford. Co	දි	do do Nov.
<del>8</del> 8888888888	99 90	Welland	음 19	St. Lawrence do do do do do do	do	do ob

No. 6.—REFUNDS, 1890-91—Concluded.

Total.	cts.	22 12 25,511 56		32 00	
Ĕ		8	_	 	nuea
Amount.	\$ cts. 11 57 31 63 13 84				Can:tls Re
Under what Authority Refunded.					B. H. TEAKLES, Chief Clerk, Canals Revenue.
Refund of Tolls on	11 Ottawa & Grenville Unused let-passes	20 St. John's Unused let passes	HYDRAULIC RENTS REFUNDS.	3. Cardinal Overcharged rent, land taken by Dept	<b>e</b>
Оббов.	Ottawa & Grenville do do Ste. Anne's	St. John's	HYDRAULIC	Cardinal	; 1891.
Date.	June do do			]	sals, Septembo
To whom Paid.	D. Murphy & Co. do Geo. Harris	Chambly Bissett & Donaghy Nov.		St. Lawrence G. P. Anderson April	Department • Railways and Canals, Ottawa, 30th Septembor, 1891.
Canal.	: : : : : : : : සිපිපි	Chambly		St. Lawrence	Department

No. 6.—REFUNDS, 1890-91—RECAPITULATION—Continued.

	Total.	\$ cts. 24,913 98 89 74 24,953 72	425 84
	Amount.	5,237 10,538 11,538 11,538 12,538 11,538 12,538 13,538 14,	35 57 60 47
	Under what Authority Refunded.	Refunded under R. S., Cap. 29, Sec. 8. do do do do do do do do do do do do do	
CANAL TOLLS—Concluded.	Refund of Tolls on	colborne Grain  do do do do do do do do do do do do do d	Total refunds, St. Lawrence Canal  28. Grenville Tolls twice paid  Ottawa & Grenville Unused let passes
CANAL TO	Office.	Ă <u>XÃ \$ŮŮ Å</u>	Grenville Ottawa & Grenville
	Date.	1890-91. 1890. 1890. ept. 22. foo. 24. do 24. 1891. 1891.	1890. Aug. 28
	To whom Paid.	K. & M. Forwarding Co. J. Malcolmson. A. E. Hume. Montreal Trans. Co. A. E. D. Mackay's Sons. F. H. Taylor. J. B. Fairgrieve & Son Gapt. N. J. Wigle. Capt. N. J. Wigle. Capt. J. Metzler. Montreal Trans. Co. do do do do Capt. & M. Forwarding Co. Capt. & Gillespie.	D. Murphy & Co
	Canal.	Welland  do do do do do do do do do do do do do d	Ottawa do

No. 6.—REFUNDS, 1889-30—Concluded. CANAL TOLLS—Continued.

Canal.	• To whom Paid.	. Date.	О⊞ое.	Refund of Tolls on	Under what Authority Refunded.	Amount.	Total.
		1891.				s cts.	e cts.
Ottawa	OttawaGeo. Harris	June 11.	Ottawa&St. Anne's	June 11. Ottawa&St. Anne's Overpayment of tolls		13 84	
				Total refunds, Ottawa Canals			109 88
Chambly	Chambly Bissett & Donaghy	Nov. 20.	20 St. John	Unused let-passes		:	22 12
							25,511 56
22			HYDRAULIC	HYDRAULIC RENTS REFUNDS.			
St. Lawrence	St. Lawrence G. P. Anderson	April 3.	April 3. Cardinal	Overcharged rent, land taken by Department		:	32 00

B. H. TEAKLES, Chief Clerk, Canals Revenue.

9 <i>c</i> -				6	0											
$-2\frac{1}{2}$		Car	From Canadian	From Canadian	ian Iian	From United States	m States	From United States	om States	•						
	ARTICLES.		to Canadian Ports.	to United States Ports.	States 8.	to United States Ports.	States s.	to Canadian Ports.	dian ts.	Tons.	<b>s</b> i	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.	
		Up.	Down.	Up.	Down	Up.	Down.	Up.	Down.	Up.	Down.					
													e cts.	s cts.	\$ cts.	
	Ashes, pot and pearl		197	27	-				<b>8</b> :		용달	131	4 06	e e 6 8	69 69 9	
	Agricultural products not enumerated, vegetable	:	:	18	200	<u>-</u>	:	:	-	18	201	219	2 70	10 20	12 90	
2	Agricultural products not enumerated, animal	:	:	:	<del>:</del>	- <u>:</u>	:	:	14	:	14	71	:	2 80	23	
23	₫ .	: :5	: : : : : :	1,710	<u>.</u>		6,537			1,710	6,537	8,247	256 50 256 50	1,307 40	1,563 90	
	Bones	5-		To		· ·	•			<b>1</b> - 8	' :	7 8	889	:		
	Brimstone. Cement and water lime.				:10	413				814. 818.		\$ <del>2</del> 8	8 29 4 20 5	0 63	252 252 252 252 252 253 253 253 253 253	
	Coal.	<u>최</u> :	2 : 1 :			194,973	1,382	20,016	19,919	214,989	21,301	236,290	42,997 20		45,974 30	
	Corn	. 67		° ∶			#		04,040	9 69	4.TO, 01.	20,014	3	3 :	0	
	Crockery and earthenware	:10	: :							.10		: 10	0.10		0 10	
	Dye wood and dye stuffs.	::		::	<del>:</del>	170				170	:49	219	25.50	08.6	35 30	
	Flax and hemp.	::	5,171	::0		· : : •	10,373		210		15,754	15,754	- 5	2,245 92		
	Furniture: Gypsum, crude. Glass, all kinds.		1	° : 8	202	7 9	1		· -	: <b>:</b>	200	18 <u>8</u> 8	6 72	828	5 2 56 92 92	
	Hay, pressed	:		:												
	Horses	\$	10	ಣ		<u> </u>	-		က	88.5	<del>1</del> 1	322	S	7	20 20 30 30 30 30 30 30 30 30 30 30 30 30 30	
	Indees and skills, horns and hous			3,100		1,200				4,300		4,300	215 00		215 00	
	Iron, railway.	:::				<u> </u>										

No. 7. -General Statement showing the Quantity of each Article transported, &c. -Continuel.

ARTICLES.	Can Can Po	From Canadian to Canadian Ports.	From Canadian to to United States Ports.	n lisn States s.	From United States to United States Ports.	States States States ts.	From United Sto to Canadii Ports.	From ited States to Canadian Ports.	Tons.	<b>z</b>	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down	Up.	Down.	Up.	Down.	Up.	Down.				
Iron all other	17	494	222	:	587				<b>%</b> 8	46	1,320	\$ cts.	\$ cts.	\$ cts.
Iron ore Kryolite chemical ore and other ore.	÷		5,238	:	:		:	:	5,238	:	5,238	98 198		
except iron			. 23		: :	1,620	: :	1,474	. 63	3,094 109	8,0% 11.	08 0 :	<u>इ</u> ड	
Meal, all kinds.	7					25,939 16		233	16.2	26,231 16	86,28 32	0 8 8 4	5,246 3 20	5,246 50 5 60
Marble			1 :		4,931		:		4,931		4,931	739 65 17 10		739 65
Molasses					74	- <del></del>			12.5		5			
Nails	8	146	<b>26</b>		: :	28.490		: 65.	3	28,645	8 55 55		5,728 25	
Oil, in barrels.	2	:	63		:	:	47	96	28	90	300	2 31	8 - 3	
Oil cake Peare		330				14		3		₽ 2	40		⊋ 8 8	
•	16	:	216	:	:	<u> </u>	:	333	<b>8</b> 6	30.7	<u>8</u>	8 8 8 8	8 8 8 8	
Paint.	: <b>∞</b> :		100		165	:		3	176	;	176	8 8		88 88 88
Pitch and tar	:	:	998 800	:		:			£03	:	200	<del>9</del>		
Rye	337			: :			: ; : ; : ;		817		817	122 55		122 55
Kosin. Salt	7	1,102	105	: :	242		: :		361	1,102	1,463	52 58	220 40	272 98
Stone intended for cutting	. 5	380	:	:	:	:	:	6,517	195	6,897	6,897	3 66	1,379 40 40 40	1,379 40 44 06
do not suitable for cutting, un-	3			:		:		-						
wrought.	77	<b>3</b> 5		:::	6,662 18	130		-	6,93 18 18	131	149	2 P	3 7 8	2 S 2 S 3 S
Sheep	C	:	:			:		:	080		8		:	
Soda ash.	•				88				88		83	88		
	<u>e</u> 4	: 35	28.5		38	156		:16	80 80 80 80 80 80 80 80 80 80 80 80 80 8	270	12 50 50 50 50 50 50 50 50 50 50 50 50 50 5	117 53 3 64	. 47	117 53 57 64
Tobacco, raw	67	-	1		32			: 2	ကတ္ထ	<u>ار ب</u>	4.6	0 45 20 75	0 <u>5</u>	
Tadlow	<del>-</del>	-	<del>-</del> :::	-	ŝ	<del>-</del>	-	5	ż	5	1777		7	

Tin	<del>-</del>		:	:	:	:			-	:		0 02	:	0 00
Turpentine Wheat. White lead	2,369	27,135	: : <b>6</b>			32,817		88,605	2,369	148,557	150,926	44 48 0 45	29,566 10	29,610 58 0 45
Whiting Wool	<b>T</b>			: :		166			-	166	166	0 15		28 28 38
All other goods and merchandise not enumerated.	743	201	589	:	34,173	2,229		178	35,185	2,608	37,793	5,192 92	485 54	5,678 46
Barrels, empty Firewood, in vessels Lumber, sawn, in vessels	3,021	9,591 5,875 15	4 7	46	74	999,68		3,707	3,741 3,741 226	9,591 56,345	13,332 13,332 56,571	14 84 100 66 6 21	2 47 472 20 9,744 83	17 31 572 86 9,751 04 2 03
Masts, spars and telegraph poles, in		-								7	1			0 25
Masts, spars and telegraph poles, in rafts. Railway ties, in vessels	<b>8</b> 3 :	<b>8</b> 9		197					84	202	26 207	0 58	0 25 19 70	0 83 07 61
Saw logo	403	3,765		. 591					403	4,356	4,759	21 92	224 53	246 45
do West India								114		1114 88	114		21 31 6 75	21 31 6 75
Staves, saic parret. Shingles. Timber, square, in vessels do rafts.	::- %	10,649		14				52,100	32	62,749 62,749	62,750 54	0 15	9,519 83 2 61	9 60 9,519 98 5 92
Traverses Woodenware and wood partly manufactured				:	: : :			: 7	. 4	- <b>T</b>		1 60	04 0	2 00
Total freight paying tolls	8,122	65,453	12,373	8,355	246,977	315,364	20,063	256,524	287,535	645,696	933,231	51,563 16	119,507 46	171,070 62
Free Artibles having paid Full Tolls on the St. Lavorence Canals—														
Agricultural products, vegetable		: :	028.6		071				0.83		១នេះ			
Cement and water line Clay, lime and sand. Crockery and earthenware.	: 62.82		\$\$ 52 E						<u> </u>		**************************************			
Flass, all kinds. Tron religious			3-75						16 16		1 16			
do pig. do all other Lard and intd oil.	858		. 155 155 156		72				555 55 55 55 55 55 55 55 55 55 55 55 55		25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			
Meats, other than pork	:	- :::	=	:			: : : :		7		=		:	- : : : : : : : : : : : : : : : : : : :

-General. Statement showing the Quantity of each Article transported, &c.—Continued.

No. 7.—GEN	ENERA	L STAT	EMENT	showi	ng the	Quantit	ty of ca	ch Arti	icle tra	nsported	l, &c.—	ERAL STATEMENT showing the Quantity of each Article transported, &cContinued.	ľ.	
AB HOLES.	Car	From Canadian to Canadian Ports.	From Canadian to United States	m dian States	From United St to United St	From United States to United States Ports.	Fr United t Cana Por	From United States to Canadian Ports.	To	Tons.	Total'	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up	Down	Up.	Down.	Up.	Down.	Up.	Down.				
												cts.	es cts.	e cts.
Nails. Oil, in barrels Oil, in barrels Peint. Peint. Resin. Seeds, all kinds. Seeds, all kinds. Soda ash Sugar Sugar Turpentine. Whiten Bed Whiting Merchandise not enumerated Timber passed free from Welland to Port Robinson Grand total, freight	23,334	32 32	6   6   6   6   6   6   6   6   6   6	8,355 passed free	836 836 360 360 365 248,492 315, 248,492 315, 248,492 315, 366 366 376 376 376 376 376 376 376 376	315,364	20,063	256,524	25	32.86 3.27 3.27		7,784 45 172 27	8,122 94 181 28	15,907 39 353 55
		<b>೯</b> ರ	ines and ther rece	damage ipts.	Fines and damagesOther receiptsTotal rev	e e	xclusive c	of hydrau	lic rents.	Total revenue, exclusive of hydraulic rents		59,519 88	59,519 88 127,811 68	1,153 38 101 59 188,586 53
Dent Denteum OF RATE WAYS	da 4	a Tawa C								В. Н.	H. TEAKLES,	JES,	AKLES, Chief Clerk, Canals Revenue,	venue.

DEPARTMENT OF RAILWAYS AND CANALS.

OTTAWA, 30th September, 1891.

26

APPENDIX A—Continued—CANALS.

ARTICLES.	C C	From Canadian to Canadian Ports.	From Canadian to United States Ports.	n lian States	From United States to United States Ports.	States States States ts.	From United States to Canadian Ports.	From ted States to anadian Ports.	Tons.	38.	Total Tons.	Amount of Tolls, Up.	Amount of Tolls,	Total Amount of Tolls.
	Up.	Down.	Up.	Down	Up.	Down.	Up.	Down.	Up.	Down.		•		
												cts.	e cts.	S cts.
Ashes, pot and pearlApples.	<u>: :</u>	2-					:::	<b>88</b> :	27.	45	<b>42</b>	4	00 6	9 6 4 6 65
Agricultural products not enumerated, vegetable	:	:	18	:	:	:	:	<del>-</del>	18	_	19	2 70	0 20	2 90
rated, animal	: :	:	:	•	:	:		14	:	14	14	:	2 80	2 80
Barley.	: £5		1,710		62	6,537			1,710	6,537	8,247	256 50 24 90	1,307 40	1,563 90 24 80
Brimstone	:				089 +113				680 413		680	102 00		102 00
Ulay, lime and sand	: :		: m		194,973	1,382	20,010	19,919	214,983	21,301	236,284	42,996 60 0 45	2,977 10 49,662 40	45,973 70 49,662 85
Fish	<u> </u>	49			170		: :		170	49	219	25 50	08.6	35 30
Flax and nemp. Flour. Furniture.	:::		: :00		: : <b>-</b>	10,873		210		10,583	10,583	1.35	2,116 60	2,116 60
Glass, all kinds. Hay, pressed	:01		<b>%</b>		9			<u>ਜ</u>	88		Š	5 70	0.50	2 30
Hogs Horses Hides and skins, horns and hoofs. Lice. Iron, railway			3,100		1,200	· ·		· 69	4,300	-41	4,300	0 60 10 95 215 00		10 95 215 00
do pigdo all otherdo ore.		493	5,238		2892				2,886	493	1,302	121 35	- 96 - 86 	219 261 261 361

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Amount of Total :685200 **88** 828. 37.94 3.35.35 Amount of Tolls, 2888 888888 Down. **%**05 No. 8-GENERAL STATEMENT showing the Quantity of each Article transported, &c.-Continued --- 88 888 52 35 Amount 0087810 <del>준</del> 않 등 80 Total Tons. Down. Tons.  $\mathbf{Up}$ Down. From United States Up. Down. From United States United States Ports.  $\mathbf{u}_{\mathbf{p}}$ to United States Ports. Down From Canadian Up. Down. From Canadian to Canadian Porta ďď Kryolite chemical ore and other ore, Salt Stone intended for cutting ...... except iron. Seeds, all kinds. Manilla. Molasses.... Soda ash.... Steel..... Pitch and tar.. .. Potatoes.... obacco, raw... **Furpentine** 28

Wheat. White lead		24,681	က			32,817		88,174	.es	145,672	145,672	0 45	29,134 6 ::	
Wool All other goods and merchandise,	i		: 8			166		,	: ;	166			<u>:</u>	<b>8</b>
not enumerated	<u>:</u> S :	× :	R :		34,173	77 .		음 : :	₹ 30,4 10,0 10,0 10,0 10,0 10,0 10,0 10,0 1	2,332	98,98	081,0	478 40	: : :
Barreis, empty Boat knees	<u>: :</u> : :	<u>:</u> : :	<b>4</b> ' :	: ;	* :	<del></del>			<u>•</u> :		8	14 04	1 32	91 91
Fire wood, in vessels.		738								738	738		49 20	49 20
Hoope Hop poles		1		7007		990 66								
do rafts.  Masta, spars and telegraph poles, in	<u>:</u> : :	<u>: :                                   </u>		· · · · · · · · · · · · · · · · · · ·				5 : 5 :					07 107'6	
vessels Railway ties, in vessels.	::			:	: :	: :					::		: :	: :
Saw logs	::			: :	::									
pipe West India	: : .			<del></del>				114 88		114			21 31 6 75	21 31 6 75
CShingles. Shift mets and fence rails in vessels	<u>: :</u> : :	<u>: :</u> : :		:47						14	14		09.6	09 6
Timber, square, in vessels		10,649						52,100		62,749	62,749		9,519 83	9,519 83
Traverses.	<u>: :</u>	<u>: :</u> : :		<del>-:</del> -						: :				
ufactured.	:	:	:	i	4			1	4	1	2	1 60	0 40	2 00
Total freight paying tolls	510 3	39,315	11,653	7,111	246,977	315,364	20,010	256,068	279,150	617,858	897,008	51,338 89	117,670 47	169,009 36
Free articles having paid full tolls on the St. Lawrence Canals.														
Ashes, pot and pearl Agricultural products, vegetable Bricks Cement and water lime			58.5		149				0.83		0.88			
Clay, lime and sand. Crockery and earthenware.	61 28		<b>888</b>	· · · · · · · · · · · · · · · · · · ·	<b>x</b>				នទីន		82			
Flax and hemp Glass, all kinds Iron, railway	14,125		S- 42						14,186		16 16 14,186			:
pig	8	<del></del>	<u>18</u>						76		76			

GENERAL STATEMENT showing the Quantity of each Article transported. &c-Concluded.

Canadian   Canadian   Canadian   United States   Canadian   United States   Canadian	Canadian   From   From   From   From   From   From to to to to to to to to to to to to to			1		-										
Up   Down   Up   Up   Down   Up   Down   Up   Down   Up   Down   Up   Down   Up   Up   Down   Up   Down   Up   Down   Up   Up   Down   Up   Up   Up   Down   Up   Up   Up   Down   Up   Up   Up   Up   Up   Up   Up   U	Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.         Tob.         \$\$	ARTICLES.	S. S. S.	rom nadian to nadian orts.	Fro Canax to United	n lian States 8.	Fr United th United Por	States States States	Fr United Ka Cans	om States o dian rts.	To	ığ.		Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
Pork   47	551         155         72         706         707         857         857         857         857         857         857         858		ďp.	Down.	1	Down	Up.	Down.	Up.	Down.	Up.	Down.	:			
1907k   47	1 pork 47 410 722 706 706 706 706 706 706 706 706 706 706														s cts.	e cts.
42 10 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 48 90 90 90 90 90 90 90 90 90 90 90 90 90	enumerated 75 823 99,811 7,111 248,492 315,364 20,010 256,068 305,095 617,858 922,9	ian pork.  c c c tal, freight.	28.22.22.22.22.22.22.22.22.22.22.22.22.2	<u> </u>	, s		836 836 360 90 90 90 90		:::::::		• 1		76. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.			
	#3,891.75				Total	olls on do do	vessels passenge free good Tota	rs ls al throug	h tolls	l . ·			3,891.75	7,358 29 42 10  58,739 28	7,749 82 48 90 125,469 19	15,108 11

Orrawa, 30th September, 1891.

APPENDIX A—Continued—CANALS.

				, , , ,	9		Total Company during me the company of the company							.
ARTICES.	Can Can	From anadian to anadian Ports.	Fr. Cans ta United Pos	From Canadian to United States Ports.	Fr. United to United Pon	From United States to United States Ports.	From United States to Canadian Ports.	From nited States to Canadian Ports.	Tons.	÷ a	Total Tons.	Amount of Tolls, Up.	Amount Amount of of Tolls, Up. Tolls, Down.	Total Amount of
	пр	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up	Down.				TOIRS.
								<b>†</b>				cts.	e cts.	ets.
Ashes, pot and pearl		104:	: :	: :	: :	:	: :	:	: :	104	104		2 64	2 64
Agricultural products not enu- merated, vegetable Agricultural products not enu-			:	800			:	:	:	200	200	:	10 00	10 00
Agricultural implements	: :		: :					::			34			
Bricks	:4-			Q# :					:4-	<b>P</b> : :	34-	1 96	1	0 26
Brimstone. Cement and water lime				.10							. 00	:0	69 0	0;
Clay, lime and sand	<b>25</b> :	138		: ::			9		9		2 9 G	6 19 0 60	# :°	360 100
Corn	:	-81		: : : :	: :		: :	N :		N :	N 63	0.0	• <del>:</del> : :	•
Cotton (raw). Crockery and earthenware. Dva wood and dva stuffs									10		<b>G</b>	0 10		0 10
Fish Fish Figure 1														
Flour		5,171								5,171	າຕົ	, : : : : : : : : : : : : : : : : : : :	129 32 0 03	12
Gypsum Glass, all kinds		:::		2002					1	305	205	0.02	67	810
Hay, pressed	:			: :										
Horses Hides and skins, horns and		91			:	:	:	:	*	10	4	95 0	0 24	26 0
hoofs	•	: :	: :	:		:::				:				
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ARTICLES.	Fr Cans Cans Pon	Front Canadian to Canadian Ports.	Fr Cans to United Pon	From Canadian to United States Ports.	Fr United United Pol	From United States to United States Ports.	Fr United Cans Po	From United States to Canadian Ports.		Tons.	Total Tons.	Amount of Folls, Up.	Amount Amount of Tolls, Up. Tolls, Down.	Total Amount of
	Up.	Down.	.dD	Down.	Up.	Down.	Up.	Down.	Up.	Down.		\		
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do pigdo all other	- 1								17.	:::	: :		<b>20 0</b>	
Nails Oats. Oil, in barrels	3 <u>-</u>	146					47		3 :25	146	3 2 2	2 01	28 45	28 45 20 01
Oil cake Pease Potatoes	16								91			0 59		0.59
: :		: :	: :	: :	: :	: :		:	: oo "	: :	. oc : :	0 16		0.16
Rags														
Roein Salt		: :							12		12	.0		0 23
Stone intended for cutting	195								195		195	3 66		3 66
do not suitable for cutting, unwrought		<b>38</b>		:	<u>:</u>			•	27.1	88	369	14 26	1 22	15 48
Sheep									:81		÷1	0 0.4		70 0
Steel Sugar Sugar	:88°								82		- <b>8</b> 8 €	. 1 . 20 . 20		1 58
Spirits, user, ac. Tobasco, raw Tallow	•								::-			6 02		0 0
Turpentine	2,369	2,454				: :	: :	431	2,369	2,885	5,254	44	431 70	976 18
White lead	:	:	:		:	:	:							

dise not enumerated	651	193	:	:	:				651	216	298	. 12 82	7 14	19 96
Barrels, empty														
Floats Firewood, in vessels do rafts	3,021	8,853	7280						3,741	8,853	12,594	100 66	423 00	523 66
Hoops.  Hop poles Lunber, sawn, in vessels do rafts.  Master, spars and telegraph	226	5,156							226	5,156	5,382	6 21	537 57 2 08	54.5 2 08 2 08 5 08
Masta, spars and telegraph poles, in rafts.	88 :	<u> </u>		197					8	207	202	0 58	0 25 19 70	0 83 19 70
Saw logsStaves and headings, barreldo do nine	403	3,765		591						4,356	4,759	21 92	224 53	246 45
Vessels. Split posts and fence rails, in rafts. Timber square, in vessels Woodenware and wood partly manufactured	331	: :81							32	: : : <b>:</b> : : : : : : : : : : : : : : :		9 15	2 61	0 15 5 92
Total freight paying tolls Timber passed free from Welland to Port Robinson Grand total, freight	7,612	26,138 26,464	720	1,244				456	8,385	326	36,223	224 27	1,836 99	2,061 26
	_		_	Total	way tolle do do	Total way tolls on vessels do passeng	vessels	_			<b>\$</b> 16 26	426 16 130 17		262
						•	Total way tolls	tolls			:	780 60	2,342 49	3,123 09

APPENDIX A—Continued—CANALS.

No. (A) 10.—General State	TATEME	NT shov of Reve	ring th	e Quan	tity of e	ach Ar he Fisc	ticle tral	ansport ended	enr showing the Quantity of each Article transported on the St. La of Revenue collected during the Fiscal Year ended 30th June, 1891	ne St. I ne, 189	awrenc	EMENT showing the Quantity of each Article transported on the St. Lawrence Canals, and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1891.	, and the	Amoun
ARTICLES.	From Canadia to Canadia Ports.	From anadian to anadian Ports.	From Canadian to United States Ports.	lian States Es.	From United States to United States Ports.	States States States ts.	From United States to Canadian Ports.	m States Jian Es.	Tons.	zi.	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	· Total · Amount of Tolls.
	Up.	Down	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												e cts.	e cts.	e cts
Ashes, pot and pearl Apples.	2.23	64 2,487	10	:83	010		::		없육	2,509	2,555	8 4 4 46	12 80 360 19	16 18 364 65
Agricultural products not enu- merated, vegetable.	292	930	83	:	: :	:	:	:	315	939	1,254	42 20	101 27	143 47
Agneuitural products not enu-	140 90	564	:				31		171	264	735			71 9
Barley. Bricks.	15.2%	ર્જા	121		-				25 25 25 25 25 25 25 25 25 25 25 25 25 2	2,448 130	12,602 428	25 25 25 26 26 26	.æ æ æ	52 49 54 49 54 54
Bones			1 ::			:			100	112	113			14.9
Cement and water lime	2,42	:	203			:87	***************************************		2,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1	. 202	2,849	388		386
Clay, lime and sand	17,540	8,550 404 404				1.108	3,966	85.209	21,676	168,721	88. 88. 88. 88. 88. 88. 88.		3 5	1,353 2
	24				83	456		11,965	74.6	15,957	16,004	2 2 2	1,191 77	1,194.5
Cotton (raw).	2 2	• :							50	164	200	8 8		
Crockery and earthenware	216		125	:	:	:	900	:	341 940	23	385		4. 82	
Figh.	egg (	9	8				:		88	: <b>\$</b>	368		2 91	
Flax and hemp.	25 25 25 25 25 25 25 25 25 25 25 25 25 2	4				111	: :		88	4,118	5,041		607	
Furniture.	237	Ī				:	:	:	237	480 086	717		38°	
Glass (all kinds)	<b>49</b>	88;	11		: :8		. <b>x</b> :		514	₹ <b>&amp;</b> ;	325	. 8. 8 4 3	- 23 - 23	
Hay (pressed)	5 6 5 5 6 7 5 6 7				R :				‡ ° ;	34.5	8 4 9	38:	3 e 3	3 <b>6</b> 8
Hides and skins, horns and	121		:	:	:	N	:	:	721	803	9		os si	
	1	1,467	:::						<del></del>	1,467	1,467	<b>5</b> :	3 07 206 65	3 11 206 65

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7,443 3,398 9,922	: :=="	86.4		2,203 11,932 3,237 164	4 :1 6		<sub>ర</sub> జౖ≒జ	362	4,
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151 5 942	. 3882	<del>4488</del>	£3548	25. 11. 11. 11. 11. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13	3,935 143 143 183 143 143	188-u-82	112	3,507	38
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202, 276, 717,	: :55	9.98.888	.5-44	£ 425 425	9015 656 141	<u> </u>	8 28	304	8
77 55		Ø.		4.5	4	4	12	9 : :	4 4
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y	mical ore and iron. d oil			ed for cu	rought	28		rated	vesse
way	chemical ore and sept iron lard oil kinds her than pork.	rrels		anded for congression	surable inwrought kinds	eer, &craw	ad	merated nipty	, in vesse
railway. pig all other.	ite chemical ore and ite chemical ore and lard oil all kinds other than pork.	la ses. I barrels	ke oes	intended for co	not suitable for cuttin unwrought all kinds	s, beer, &c co, raw v	t s lead	enumerated	ood, in vesse
on, railway.	on ore yolite chemical ore and ore, except iron and lard oil all all kinds asts, other than pork.	arble. anilla olasses. ils. ta. ta. in barrels	l cake ase tatoes int	fresh was well with the second of the second	lo not surable unwrought eds, all kinds eep da ash	irits, beer, &c. hacco, raw llow n	heat hite lead hiting ool	not enumerated rk rrels, empty at knees.	rewood, in vesse
Iron, railway do pig do all other.	Arryolite chemical ore and other ore, except iron Lard and lard oil Meal, all kinds Meste, other than pork	Marble. Manilla Molasses. N°ils Oaki.	Oil cake Pease Potatoes Port Point	Racrs Rye Rosin C. Salt C. Skot intended for cutting do wrought	do not suitable for cutcing, unwrought Sheep, all kinds Soda ash Steel	Spirits beer, &c. Tobacco, raw Tallow Tinn	Wheat White lead Whiting Wool All other goods and merchandise	not enumerated.  Bark Barks, empty Barrels, empty Float knees.	Firewood, in vessels

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Total Amount <u>ಹ</u>ರ್ರ ನ ಚಿಳ್ಳ ಜ 33 32,184 43 Down. No. (A) 10.--General Statement showing the Quantity of each Article transported, &c.--Concluded. Amount of 12,371 95 8 얾 100 888 73 162,781102,610 Down. From United States to Canadian Ports. From United States to United States Down. United States Ports. From Canadian 10,877 Down. From Canadian to Canadian Ports.  $\mathbf{U}_{\mathbf{p}}$ Hop poles
Lumber, sawn, in vessels Masts, spars and telegraph poles in rafts. Railway ties, in vessels.... Total freight paying tolls.. manufactured Free Articles having paid full Tolls on the Wellund Canal. All other products, animal Flour. ....

Pease         390           Pork.         322           Seeds         1           Tallow         54           Tobacco.         108,468           Whistey and other spirits.         96           Merchandise.         156           Lumber sawn, in vessels do not in rafts.         2,392           Split posts, in rafts.         400           Timber, square, in rafts.         1,960           Woodenware.         1,502		:	:		5	5		
108,468 108,468 98 2,292 917 1,960 1,502					330	320 322 1		
2,292 2,292 2,17 4,00 1,960 1,502					54 1 108,468	54 1 108,468		
				202	103 158 2,292 917	103 158 2,292 917		
					1,960 1,502	400 1,960 1,502		
Articles Free per Order in Council.								
Cement and water lime GZ7 S36 Clay, lime and sand. 60,865 385 20 Coal. 2 Lumber, sawn, in vessels 64 74	***************************************	66	33,629	7.7 94,592	836 385 22 47	836 707 94,977 138		
• • • • •				450	1 1,470 360	1,470 360		
nal, free 917				:	917	216		
Grand Total Freight 202,832 459,604 10,897	2,819 836	2,133 4	44,029 106,154	154 258,594	570,710	829,304		
	Total tolls do do do Wharfage 8 Fines and C	Total tolls on vessels do passengers do free goods Wharfage and storage Fines and damages.	ressels		\$10,811 73	8,673 68	68 5,955 88 14 2,380 69	14,629 56 3,086 83 4,677 21 417 05 12,552 45
		Total rever	nue, exclusi	Total revenue, exclusive of Hydraulic Rents	ulic Rents.	:	:	79,919 48

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APPENDIX A—Continued—CANALS.

No. 11.—Statement showing the Quantity of each Article of Through Freight transported on the St. Lawrence Canals, and the No. 11.—Statement showing the Canals, and the Fiscal Year ended 30th June, 1891.	wing th	g the Quantity of each Article of Through Fre Amount of Revenue collected during the Fiscal	tity of Revenu	each A e collec	rticle o	f Thro	ngh Fr	eight tr Year e	ight transported Year ended 30th	od on tl	on the St. I June, 1891.	awrence	Canuls,	nd the
ARTICLES.	Can Can Can	From Canadian to Canadian Ports.	From Canadian to United States Ports.	From Canadian to nited States Ports.	From United States to United States	om States States ta.	From United States to Canadian Ports.	From iited States to Canadian Ports.	Tons.	z <u>i</u>	Total Tons.	Amount of Tolls Up.	Amount of Tolls Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												ee cts.	e cts.	s cts.
Ashes, pot and pearl		2,335	10	:23			::	: :	10	2,357	2,357	2 00	12 80 353 55	14 80 353 55
Agricultural products not en- umerated, vegetable	227	282	ន	:		:	:	:	250	282	837	37 50	88 05	125 55
Agricultural products not en- co umerated, animal of Agricultural implements. Barley Bricks	307	e e :	174						557	327 8 8 906	327 8 906 557	83 55	49 05 1 60 18 12	45 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Bones	:	88	:	:	:		: :	:		<b>8</b>	<b>8</b>		13 20	
brimstone Cenent and water line Clay, line and sand Coal	1,866	1,877 80,774 840						67,173	2,069	1,877 147,947 12,261	2.069 1,914 147,947 12,261	310 35 5 55	281 55 22,192 05 1,090 74	310 35 287 10 22,192 05 1,090 74
Cattle. Cotton, raw Crockery and earthenware.	138		125		: : :					8 : 24	82 ° 83		8 : 4 8 : 8	8 6 7 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Dye wood and dye stuffs. Fish.	116	: F 6	:8						136		137	28°0	0 15	280 383
Flour Furniture		3,986							166	3,986	3,987	13	597 90 81 40	598 05 94 60
Gypsum Glass, all kinds Hay pressed	398		Ħ							47	:. 100 100	:88 :88	9.40	91.20
Horses Horses Hides and skins, horns and hoofs	:	36 17 17							12	36 17	128	1.80	იიც <u>ჭ</u> ჭც	2 & 2 5 & 5 5 & 5
IceTurn mailurer	12 000	:	941				:		14,231		14,231	2.134 65		2.134 65

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188 10 6 90 36 00	000 3488								0.75	452 80	
12 60	0488 8888	494 80			1,355 55 0 15 0 15 0 60				32 13 28 28 28	892 60	
3,762	. 818 - 818	2,477	5,880	58 8 8 8	1,263 9,040 2,640	504 182	1,547 135 2,337 802	2 2 4 2 5 7 2 4 2 5 5 7 4 4 5 5 7 4 4 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	129 671 13	6,727	552
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	4.24.2	2,474 518	12	259	9,037	147	1,546 135 2,328 424		129 671 671 8	4,463	:
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nical ore a iron.	than pork				d for cutt	itable for ought	9			ods and umerated ty	Floats.
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	84 46 136 186 10 84 46 136 186 10 84 46 136 186 10 84 6 136 186 10	84 46 130 12 69 6 90 6 90 6 90 6 90 6 90 6 90 6 90	84     46     130     12 60     6 90       9     240     130     13 60     6 90       24     1     24     1     25     480     0 20       14     1     15     26     0     0     0       2,208     3     266     3     2,477     180     0     0       492     183     2,477     494     80     0     0       180     2,477     494     80     0     60       492     163     30     60     0       2,208     153     671     108     60     90	84     3,762     3,762     188 10       84     46     130     12 60     6 90       9     240     24     1 35     36 00       2 4     1     24     7     0 60     0 45       14     1     25     4 80     0 20       180     3     26     2,474     3     2,477     494 80     0 60       2 208     3     26     2,474     3     2,477     494 80     0 60       492     153     26     518     153     671     103 60     30 60       12     5,880     5,880     180     0 60     0 60	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	84     3,762     3,762     12,60     188 10       9     240     130     12,60     0,45       24     1     24     1     25     4,80     0,45       144     1     1     1     1     0,60     0,45       2,208     3     24     1     25     4,80     0,20       492     163     24     1     25     4,80     0,20       1,208     3     2,474     3     2,477     494     0     0       2,208     163     2     2     4,477     494     0     0     0       2,208     163     3     6     6     6     6     6       11     7     4     1     1     1     1     1     1       11     7     4     8     6     6     6     6       12     1     4     1     1     1     1     1     1     1       12     1     4     8     6     6     6     6     6       11     1     4     8     6     6     6     6     6       11     1     4     1     1     1     1	84         3,762         8,762         188 10           94         2,46         180         1           95         2,46         180         1           14         1         2,46         180         0           18         1         2         4         1         2         4         0	8.4         3,762         3,762         188 10           9.4         246         1         240         240         240         12 60         6 500           1.4         1         24         3         762         188 10         188 10         188 10           2.2         1         1         1         1         15         2 80         0	84, 3762         3762         3762         3762         188 10           9, 240         240         240         240         240         126         650           1,14         1         1         15         24         24         240         126         650           2,246         1         1         1         15         24         24         24         24         24         0.00         <	84         3762         3762         3762         31762         1188 10           84         246         246         130         12 60         16 90           8         246         1         1         1         15         240         1           184         1

ଛ Total Amount of Tolls. 23 34,738 8 ę, Tolls, Down. No. 11.—Statement showing the Quantity of each Article of Through Freight transported, &c.—Concluded. 98 7 23 cts. Amount 28 244,693 Total Tons. 198,416 Down. Tons. 51 Up. 83,804 Down. From United States to Canadian Ports. : Down. From United States to United States Down. to United States From Canadian Ports. Up. Down. 114,590 From Canadian to Canadian Ports. 36,081 51  $\mathbf{Up}$ Saw logs.
Staves and headings, barrel...
do do bipe
do do W. India Staves, salt barrel
Shingles
Split posts and fence raile, in Tables, square, in vessels ..... do rafts poles, in vessels.

Masts, spars and telegraph vessels Split ports and fence rails, in Traverses
Woodenware and wood partly Free Articles having paid full Tolls on the Wellund Canal. manufactured .... Total freight paying tolls. Agricultural products, animal. do vegetabl

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									8,815 0 1,997 7	45,550 92	enne.
									4,409 67 1,701 50	33,187 12	mals Re
									4,405 35 296 20	12,363 80	AKLES, Chief Clerk, Canals Revenue.
79,	233 233 233 233	39 C	2-2-	108,468 103 158	2,292 917	1,960	9,318	452,766	\$ 6,321 83	:	H. TEAKLES, Chief Cl
79,572 49 1,233	233 CO 3 L	80 ce 18	3-2-	108,468 103 158	2,292 917	1,960	917	397,171		:	
							9,318	55,595			B,
3,102				: :				86,948		<b>.</b>	·
									vessels passengers free goods	Total through tolls.	
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76		2000		108	2,232 917	-î-i	:	310,201			30th S
							9,298	45,379			ILWAYS TAWA,
	ard oil			Loudon Wheat Whiskey and other spirits Merchandiae		Timber, square do Woodenware	Coal, per Order in Council Kryolite	Grand total, freight			DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 30th September, 1891
Corn Fish. Flour Furniture.	Glass Horses Lard and lard oil Meal	Oil cake Oil Pease	Pork Sæds Tallow	Wheat Whiskey and Merchandise	Lumber, 880 do Split posts	Timber, sq. Woodenwas	Coal, per C	Grand			DEP

Total Amount of Tolls.		e cts	1 38 11 10	17 92						12 97 12 35 19 72	0 20 75 59 22 87 17 78	18 75 40 01	82.8	21.68
Amount of Tolls, Down.		e cts.	6 64	13 22						2 76	: :047	122	130	<u></u>
Amount of Tolls, Up.		ee cts.	H 44	4 70	123	#25°	8	57 813			0 28 g	17 14	01-0	10 04
Total Tons.		S cts.	12 198	417	<b>₹</b>	1,696 12,267	8 2	28,312	3,774 9,774 9,748	228 228 256	•			
ns.	Down.		152	352	237	1,542	:		20,774 3,696 469		:			
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om adian o I States rts.	Down.			<u>:</u>			: :	: :						
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ARTICLES.			Ashes, pot and pearl	Agricultural products not enu- merated, vegetable		Barley Bricks	Bones Brimstone	Cement and water lime	Coal Corn Corn Cattle	Cotton, raw Crockery and earthenware Dye wood and dye stuffs	Flan Flan and hemp Flour Furniture	Glass, all kinds Hay, pressed	Hogs Horses Hides and skins, hors nand hoofs	Ice. Iron, railway
	From Canadian Canadian to Canadian to Canadian Canadian Canadian Canadian Tous to Canadian Ports.  From Canadian to to to to to to Canadian Ports.  From From Canadian Canadian Canadian Ports.  From Canadian Canadian Canadian Prom Canadian Prom Canadian Ports.  From Canadian Canadian Canadian Canadian Prom Canadian Prom Canadian Ports.  Total Of Tolls, Down.	From Canadian CanadianFrom Canadian CanadianFrom Canadian To tal Ports.From Canadian to Canadian Ports.From Canadian To tal Ports.From Canadian To tal Ports.From Canadian Ports.Total Canadian Ports.Amount Amount of Tolls, of Tolls, Or Tolls, Or Tolls, Down.Up.Down.Up.Down.Up.Down.	From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       From Canadian Ports.       Total of Tolls, of Tolls, of Tolls, of Tolls, of Tolls, Down.       Total Of Tolls, Down.       Total Of Tolls, Down.       Total Tons.       Total Tons.       Total Tons.       Total Tons.       Total Tons.       Tolls, Down.       Tolls, Toll	From Canadian         From Canadian         United States         United S	From Canadian Ports.         From Canadian Ports.         Thom ted States Ports.         Thom Total Canadian Ports.         Thom Total Cana	From Canadian   Canadian   Canadian   United States   United	Promotion   Prom	Prom Canadian   Canadian   United States   United States   United States   United States   United States   United States   Canadian   Ports.   Po	Prom Canadian   Ports.   Ports.	Canadian   Canadian	Prom	Canadian   Canadian   Canadian   United States   United Stat	Activation   Canadian   rticles   Canadian	

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do pig do all other	Iron ore Kryolite chemical ore and other ore, except iron Lard and lard oil	Meal, all kinds			Oats Oil. in barrels		: :	:		:			Stone intended for cutting	not suitable for cutting,	unwrought	Sheep					:		: : : : :	:	All other goods and merchandise	not enumerated	: :	::	:
	Kryolite chemical ore at ore, except iron	Meal, all kinds Meats, other than porl		:			:	:	: :	:	: :	:	r cut	e for	nt .	:	•		:		:		:	:	id me	:	: :		Fire wood, in vessels.
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ig a	Kryolite chemica ore, except iror Lard and lard oil	al, al ats, o	Marble Manilla	Molasses	Oats Oil. in b	Oil cake	Fease Potatoes	Pork	Pitch and tar.	Rags	Rosin	Salt	ne in		ds. a	de)	98 Te	Sugar	Tobacco, raw	Tallow	Tin Turnentine	Wheat.	White lead	Whiting	othe	not enumerat Rark	Barrels, empty.	Boat knees Floats	0.¥.6
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		AMBILL SHOWING THE CHANNING OF GROUP ALL BILLION OF		h.		acu mi	noin of		angiai.	ri ana b	n ren' o	way rieight transported, ac.—concranea.	ranca.	
ARTICLES.	Can Can Can Pe	From Canadian to Canadian Ports.	Fr Can Unite	From Canadian to United States Ports.	From United St to United St Ports.	From United States to United States Ports.	Fr United	From United States to Canadian Ports.	To	Tons.	Total. Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down		`		
												es cts.	s cts.	e cts.
Hoops		:		:	-	:	:	:	-		7	0 10	:	0 10
Lumber, sawn, in vessels	22,910	13,888		269	: : : :				23,465	14,485	37,950	652 78	408 11	1,060 89
Masts, spars and telegraph		5	:	:	:				:	\$	5	:	3	
Masts, spars and telegraph	:	18 7.90	:	:	:		:	:	:	10 600	10 690	:	469 08	:
Railway ties, in vessels.	1,004				: :	: :			1,004	770,01	1,004	20 03	405 US	\$ \$ 8
Latter.		20,562					: :	: :		20,562	20,562		468 82	468 82
						: :		: :	: :	: :				
t barrel	: :8 : :8	. 62							: :8	: .e. <b>22</b>		6.74	0 17 4 13	0 17 10 87
vessels Split posts and fence rails, in		:			:	:			:		:	:		:
Timber, square, in vesselsdo	: :88 :88 :88	1,631							:88 28 28	1,631	1,719	1 36 18 25	22 44	: 8. \$ :8. \$
Traverses Woodenware and wood partly manufactured	: & : :					: :			: 83 /:	10,854	10,854			8 -
Total freight paying tolls.	104,674	142,320	192 -	1,197	298	2,133	10,202	18,806	116,504	164,456	280,960	4,709 70	5,108 48	9,818 18
Free Articles, having paid full Tolls on the Welland Canal.					-									
Corn		5,555	:			:		400	400	5,955	5,955			

Free Articles, per Order in Council.														
ement and water lime		988	:	:	: _:		:s	:		88		,		
na), mile and sand sal mber, sawn, in vessels	51,557	385 47			: <b>88</b> :		33,(		85,274 14.	385	85,659 138			
Merchandise. Iron, all other. Square timber, in vessels Stone, unwrought. Stone, for cutting.	450	360 1,470	300 300 1,470						934	360 1,470	360 1,470 450			
Grand total, freight 157,372 151,003	157,372	151,003	192	1,197	955	2,133	43,911	1	202,998	19,206 202,999 173,539	376,538			
				To	tal way t	olls on v	Total way tolls on vessels do passengers do free goods.	, , ,	vessels passengers ree goods	\$4,489 90	1,489 90	4,268 33 409 94	1,546 21 679 19	5,814 54 1,089 13
						1	Total	Total way tolls.			:	9,387 97	7,333 88	16,721 85

B. H. TEAKLES, Chief Clerk, Canals Revenue.

A. 1892

No. 13.—General Statement showing the Quantity of each Article transported on the Ottawa Canals, and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1891.

	7	concouranting and rescan	201			tour duran come a mich tour	, ,						
ARTICLES.	Fr Cans Cans Por	From Canadian to Canadian Ports.	Fr Cans t United Po	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports	Fr United	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tolls.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
Ashes, pot and pearl.  Applies Agricultural products not enumerated, vegetable of do animal.  Agricultural implements.  Barley Bricks Bricks	15	1,294 1,294 1,294 1,296 1,266						,	\$22 E	1,234 1,234 1,295 1,205	1,333 1,333 15 15 18 18 18 18 18 18 18 18 18 18 18 18 18	25 CF 23 CF 25 CF	· ·
Brimstone Cement and water lime Clay, lime and sand.		: xc							: :61	8,744	41 8,742	4 00 258 08	•
Com Coattle Cotton, raw		676		) : : : : : : : : :						929	9.29	43.85	
Crockery and earthenware.  Dye wood and dye stuffs.  Fish	• : : : :	- ;es :								T :69	* :e	 	
Flour Flour Furniture	6	47	. : ∞ . : . :						တေ : :	47	: : : : : : : : : : : : : : : : : : :	4 67 4 35	
Glass, all kinds. Hay, pressed. Hogs. Horses Hides and skins, horns and hoofs.	16	439 10 123 89							16		439 100 139 39	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
Iron, railway do pig do all other	12	21							<u> </u>	123	83	2 10	

Kyrolite, chemical ore and other ore, except iron Lard and lard oil. Meal, all kinds Meats, other than pork.	:014:01	2,250 10 18 26				: :014:01	2,250 10 18 26	2,250 120 222 282 283	112 50 0 82 1 79 2 60
Manilla Molasses. Nails Oati	:: :::::::::::::::::::::::::::::::::::	7. 12 831 6					12 831 6	<u> </u>	69 88 88 88 88 88
Oil cake. Pease Poratosa Pork.	: : : : : : : : : : : : : : : : : : :	1,179 754 13					1,179 754 13	1,179 779 43	88 59 59 1 161 28
Pitch and tar Rags. Rye Rosin Rosin Rosin	: : : : : : : : : : : : : : : : : : : :	3					17	17	0 44
Stone, intended for cutting do wrought do not suitable for cutting, unwrought Seeds, all kinds Sheep		:83 23					£ 825	. 83	0 57 2 75 24 78
Soda ash. Steel Sugar. Spirits, beer, &c.	:: :: :: :: :: :: :: :: :: :: :: :: ::	29				:- 8 :		<u>72</u> 8	0 05 4 58 1 43
Tobacco, raw. Tallow. Tallow. Turpentine. Wheat.		%: °°70:					30.00	30 - 12 23	
White lead Whiting Wool Wool Bark. Bark. Barrels, empty	** : : : : : : : : : : : : : : : : : :						38 8 15 8 8	475 15 86 86	0 15 0 30 0 30 0 83 0 47 1 47 10 73
Boat knees Floats. Firewood, in vessels do rafts. Hoops	105 4	12,540 42,038 246	1,1			195	12,540 43,181 480 246	12,540 43,286 480 246	
Hop poles Lumber, sawn, in vessels  Maste, spars and clegraph poles, in vessels	14 38	3.508 190 313	122,8	8		11:	511,333	511,347 190 313	39,149 10 10 12 12 13 14

No. 13,-General Statement showing the Quantity of each Article transported, &c.-Concluded.

Total Amount of Tons. Tolls.		s cts.	1,056 223 51		422 327 07	1,530	591,414	10,166 11,340 885	11,0	2,560 240	640,978
Tons.	Down.		1,065		2 420	1,530 1,370 200	590,875	10,166	11,025	2,560 2,560	640,339
ŭ 	Up.						20   20				83 
From United States to Canadian Ports.	Down.										
Fr United Cans Po	Up.										
From United States to United States Ports.	Down.		: :								
Fr United United Fo	Up.										
om dian States ts.	Down.		595		27.		124,590				124,590
From Canadian to United States Ports.	Up.						:   ∞			, ; ; ;	000
om disan disan ts.	Down.		470		393	1,530	466,285	10,166 11,340 785	11,025 13,328	2,560 2,560 240	515,749
From Canadian to Canadian Ports.	Up.						10				631
ARTICLES.			Masts, spars, telegraph poles, in raftsRailway ties, in vessels	do raits Saw-logs. Staves and headings, barrel.	do do pipe. do do West Indis. Staves, salt barrel.	Split posts and rence rain, in vessus of do do do Timber, square, in vessels.  Traverses	Woodenware and wood, partly manufactured Total freight paying tolls	Free, per Order in Council— Firewood Floats. Lumber, sawn	Masts and spars. Railway ties. Saw-logs.	Shingles. Split posts. Timber, square. Woodenware.	Grand total freight

oo victoria.		Ocssional	Tapers	(140.	<i>90.)</i>	л.	1032
4,214 66 166 15 8 00 47,148 75	enue.						
Total tolls on vessels do passengers do free goods.  Wharfage and storage. Fines and damages.  Other receipts  Total revenue, exclusive of hydraulic rents.	B. H. TEAKLES, Chief Clerk, Canals Revenue.						
		DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 30th September, 1891.					

A. 1892

	Total Amount of Tons. Tolls.		& cts.	420 420 37 74	2 2 0 20 146 496 28 21	213 241 22 44 147 147 28 35	K8 5,149 537 61 770 97,738 9,572 07 7 7 7 2 2 40	23 2 30 116 116 11 60	5 174 5 80 5 0 50	1 0 10 38 2,156 84 96	12 12 0 40 80 8,283 561 80	2 2 0 20
	Tons.	Down.		÷ ;	350	28 213 213	81 5,068 68 97,670 7		74	1 258 1,898	12	: :
,		Up.			: :6					: :61		: :
e, 1891.	From United States to Canadian Ports.	Down.		29		147	• 5,068 97,337	116	: : : :	: :	1,515	
th June	Fr United t Cam Po	Up.										
nded 30	From United States to United States Ports.	Down.										
Year e	Fr United United Po	Up.										
Fiscal	From Canadian to United States Ports.	Down.				213	130				5,955	
ng the	Fr. Cans t United Poi	Up.			350					155	403	
ed duri	From Canadian to Canadian Ports.	Down.		353	146		203	:83 :		1,898	12	
collect	From Canadian to Canadian Ports.	Up.				:81 :	88		174	103		
Revenue collected during the Fiscal Year ended 30th June, 1891	ARTICLES.			Apples, pot and pearl.  Apples Arricultural products not animarated vegetable	Agricultural implements  Barley	Bricks. Bones. Brimstone	Cement and water lime Clay, lime and sand. Coal Coal Corn Corn Corn	Cotton, raw Crockery and earthenware Drye wood and dye stuffs	First and hemp. Flour Furniture	Gypsum. Glass, all kinds Hay, pressed	Horses Horses Hides and skins, horns and hoofs Ten realway	do pig do all other

1,004,   1	604     256     46     48     71       604     26     26     26     26       64     187     141     141     116       88     187     16     16     16       89     10     10     10     10     10       8     10     10     10     10     10     10       8     10     10     10     10     10     10       114     114     14     14     14     14       114     14     14     14     14     10       115     12     24     14     14     10       115     12     12     24     14     14     10       115     12     12     24     14     14     10       115     12     12     24     14     14     10       115     12     12     24     14     14     10       115     12     12     24     14     10     10       115     12     12     24     14     14     10     10       115     12     12     24     14     10     10     10     10     10	ont. han pork. 3	.20						: 4		1.60
1,000   1,00	12, 054	n pork.			:	:	<u>·</u>	:		:	:
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15   15   15   15   15   15   15   15	10	0 1	908	: :		: :	3		3 :	3	3 :
The color of the	tr		: æne	:			137	က	<u>2</u> 2	141	2 2 2 2 3 2
The second color of the	T		æ, m m				<u>. :</u>   : :	<u>:</u> : : : :	<u>:</u>   ::	:	3 ::
12,064   1	tr (472		om	:	:	:	:	:t ::	33 °	æ -	<b>3</b> 5 8
merated 812 838 171	12, 12, 12, 12, 12, 12, 12, 12, 12, 12,		• • • • •	:	:	<u>:</u>	:	_	o 61	<u> </u>	86
### ### ### ### ### ### ### ### ### ##	14.1						: <u>0</u>		9	9	28
## 12.004   47.2   2.229   2.2	it 472 2.229						221	:	221	221	22 10
472   2,229   2,229   2,189	The color of the		:			:	:	:	: -: ;	- - :: ::	:
11 2,064 472 2,229 2,229 2,19 112,064 63 1,999 63 1,999 2,062 2,022 2,023 2,02	tr 472 2.229 2.229 2.129 2.139			:	:	:		<u>:</u> ::	:	-	
12,064 472 254 476 688 202 202 139 139 139 139 139 139 139 139 139 139	tr 472			:	:::::::::::::::::::::::::::::::::::::::	:	2,229		2,229	2,279	
14	12,064 63 1,999 2,062 202 202 103 139 139 139 139 139 139 139 139 139 13	•		:	:	:	200	472	294	992	
interacted     812     33     144     146     416	int     139     139     139     139     139     139     139     139     139     139     139     139     139     131     4     4     1     4     4     4     1     4     4     4     0     4     0     9 <td></td> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td>1,999</td> <td>8</td> <td>1,999</td> <td>2,062</td> <td></td>		:	:	:	:	1,999	8	1,999	2,062	
1 1 4 16 416 416 416 416 416 416 416 416	1     3     144     147     4       1     1     4     1     4     4     4       1     0     4     4     1     0       1     0     4     4     4     0     0       1     0     4     4     4     4     0     0       1     0     0     92     92     92     92     9       1     0     0     0     0     0     0     0       1     0     0     0     0     0     0     0     0       1     0     0     0     0     0     0     0     0     0       1     0     0     0     0     0     0     0     0     0     0       1     0		: -		:	:	139	:	139	139	
3     144     147     4       1     4     1     4     1       0     4     1     4     1     0       merated     812     833     171     983     2,510     3,493     268       3     12,054     73,446     8,630     70     86,570     5,038       4     12,054     50     70     86,570     5,038	3     144     14     1     4     1     0       1     4     1     4     1     0       1     4     4     1     4     4     0       1     4     4     1     4     4     0       1     4     4     4     0     9     9     9       1     4     4     4     4     0     9     9     9       1     4     4     1     4     4     0     9       1     2     92     92     9     9     9     9       1     2     177     983     2,510     3,493     258       1     2     123     8,683     8,833     308       1     12,054     50     70     85,570     70     85,570     508       1     12,054     50     70     85,570     508     4	e for cutting, unwrought		:		-	416	-:	416	416	
1   1   4   147   4   4   6   6   6   6   6   6   6   6	mnerated 812 833 171 2,654 680 770 85,500 770 85,570 5,088 edge of the color of the			::		-			:	:	:
Innerated 812 333 171 989 2,177 983 2,510 3,493 2,58 308 2,005 12,064 50 770 86,500 70 86,570 5,038	Immershed     812     833     171     983     2,510     3,493     256       92     92     92     92     92     92     92       93     93     2,510     3,493     2,56     92     92       93     123     8,680     8,710     112     8,833     308       94     12     8,680     70     86,570     503       94     12     8,655     6,503     4	60	144	-	:	:	:	က	14	147	4 96
innerated         812         833         171         983         2,177         983         2,510         3,493         2,58           30         123         8,680         70         85,500         70         85,570         5,038           4         4         4         4         4         4         4         0	1     1     4     4     1     4     4     4     0       1     9     92     92     92     92     92       1     9     92     92     92     92     92       1     9     9     9     9     9     9     9       1     9     9     9     9     9     9     9       1     9     9     9     9     9     9     9     9       1     1     9		:	:		-	· ::	:	<u>:</u> ::	:	:::::::::::::::::::::::::::::::::::::::
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Immerated     812     833     171     983     2,510     3,493     258       30     123     8,680     8,710     12,064     8,833     308       12,064     50     70     86,570     5,038       34     4     4     4     4     0       4     4     4     4     0     0       50     8,493     2,510     3,493     2,550       50     8,833     308       6     8,533     308       7     86,550     70     86,570     5,038       6     6     50     6     6     6       6     6     6     6     6     6     6       6     8     7     7     86,570     7     86,570     6       6     8     7     8     6     6     6     6     6       6     8     7     8     6 </td <td>merated     812     833     171     983     2.510     3,493     256       92     92     92     92     93     93     93     93       12,054     8680     8,680     8,833     308     8,833     308       12,054     50     85,500     70     85,570     5038       6ls     6ls     50     50     50     50</td> <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td>:</td> <td>:</td> <td>:</td> <td><u>:</u> ::</td> <td><u>:</u> :,</td> <td><u>:</u> : :</td> <td>:</td> <td></td>	merated     812     833     171     983     2.510     3,493     256       92     92     92     92     93     93     93     93       12,054     8680     8,680     8,833     308     8,833     308       12,054     50     85,500     70     85,570     5038       6ls     6ls     50     50     50     50		· · · · · · · · · · · · · · · · · · ·	:	:	:	<u>:</u> ::	<u>:</u> :,	<u>:</u> : :	:	
imerated 812 333 171 2,177 983 2,510 3,493 258 308 308 308 308 308 308 308 308 308 30	Innerated     812     333     171     983     2,177     983     2,510     3,493     258       30     123     8,680     8,710     123     8,833     308       6ds     50     70     85,500     70     85,570     5,038	1	:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	:			<u></u>		-	
Immerated     812     333     171     983     2,510     3,493     2,58       30     123     8,680     8,710     123     8,833     308       4     7,0446     7,0446     85,500     70     85,570     5,038	imerated         812         333         171         983         2,177         983         2,510         3,493         258           8         123         8,689         8,833         308           12,064         73,446         86,570         70         86,570         5,038           6ls         56         56         56         56         6,038			:		:	4	:	4	₹	
nmerated     812     333     171     983     2,510     3,493     258       so     12,064     77,064     65,500     70     86,570     5,038	merated     812     833     171     983     2,177     983     2,510     3,493     258       80     123     8,680     8,710     123     8,833     308       12,064     50     70     85,500     70     85,570     5038			:		- <del>:</del> -: -:	:	:	:	:	:
mmerated 812 333 171 2,177 983 2,510 3,493 2,58 308 308 123 8,680 70 85,500 70 85,570 5,038	12,064   50   73,446   50   73,446   50   70   86,500								<u>:</u> ::	<u>:</u> : :	
merated         812         333         171         983         2,550         3,493           30         123         8,680         8,710         123         8,833           40         12,064         70         85,500         70         85,570         50	imerated         812         333         171         983         2,510         3,493           8         12         8,680         8,710         123         8,833           12,054         50         73,446         86,570         50         66,500         70         86,570         50						: 33		<u>8</u> ;	8	
Inmerated         812         333         171         983         2,510         3,483           30         123         8,680         8,710         123         8,833           40         12,064         70         85,500         70         85,570         50	mmerated         812         333         171         983         2,177         983         2,510         3,493           93         123         8,680         8,710         123         8,833           12,054         73,446         73,446         85,570         5,60           6ls         50         60         50			:		:	<u> </u>	:	:	:	:::::::::::::::::::::::::::::::::::::::
Innerated         812         333         171         3,483         2,177         983         2,510         3,483           90         123         8,680         8,710         123         8,833           12,054         50         73,446         85,570         5,500	Innerated         812         333         171         883         2,510         3,493           30         123         8,680         8,710         123         8,833           40         12,064         73,446         85,570         5,60         70         85,570         5,60         5,60         6,60 <td< td=""><td></td><td></td><td>:</td><td></td><td></td><td><u>:</u> :::::::::::::::::::::::::::::::::::</td><td>:</td><td>:</td><td><u>:</u> ::</td><td></td></td<>			:			<u>:</u> :::::::::::::::::::::::::::::::::::	:	:	<u>:</u> ::	
mnerated         812         333         171         983         2,510         3,493           30         123         8,680         8,710         123         8,833           12,064         70         85,570         50           50         50         50	imerated         812         333         171         983         2,510         3,493           983         2,510         3,493         8,833         8,833         8,833         8,833         8,833         8,550         70         86,550         70         86,550         5,60         6,60			:	• • • • • • • • • • • • • • • • • • • •	:	:		:	:	
Innerated         812         333         171         3,483         3,483           30         123         8,680         8,710         123         8,833           40         12,064         70         85,500         70         85,570         50	Immerated         812         333         171         3483         2,510         3,483           30         123         8,680         8,710         123         8,833           483         73,446         73,446         85,570         5,600	: :	:	:			<u>:</u> ::	<u>:</u>	:	<u>:</u> :::::::::::::::::::::::::::::::::::	:
30     123     8,680     8,710     123     8,833     308       12,054     50     73,446     60,038	30     123     8,680     8,710     123     8,833     308       12,064     50     73,446     60     50     85,570     50     48	merated					2,177	88	2,510	3,493	258 13
30     123     8,680     8,710     123     8,833     308       12,054     0     73,446     60     85,500     70     85,500     5038	30     123     8,680     8,710     123     8,833     308       12,054     73,446     70     85,500     70     85,570     5,038								<u>:</u>	 : :	
30     123     8,680     8,710     128     8,833     308       12,064     70     86,500     70     86,570     5,038	308 123 8,680 8,710 123 8,833 308 12,064 50 73,446 50 73,446 50 50 50 4						<u>-</u>	-	<u>:</u>	<u>:</u> :::::::::::::::::::::::::::::::::::	
30     123     8,680     8,710     123     8,833     308       12,054     50     73,446     70     85,500     70     85,570     5,038	30     123     8,680     8,710     123     8,833     308       12,064     70     86,500     70     86,500     5038       els.     60     50     60     60     60							_			-
30     123     8,680     8,710     123     8,833     308       12,064     70     86,500     70     86,570     5,038       50     70     86,570     5038	30     123     8,680     8,710     123     8,833     308       12,064     73,446     70     85,500     70     85,570     5,038       sseels.     50     50     50     4     4		-	<u>-</u>				_		_	
12,064 50 73,446 50 85,570 5,038 50 4	30 12,054 50 73,446 50 70 85,500 70 85,50 50 50 88,50 4 48		:		:	-	-	0 770	192	8 888	208 87
12,064 73,446 70 85,500 70 85,570 5,038 60 4	12,064 50 73,446 50 70 85,500 70 85,500 5,038 8seeds.			:		:		0,110	16	30,0	5 000
12,064 73,446 70 85,500 70 85,570 5,038 50 4	12,064 73,446 50 73,446 50 50 85,500 70 85,500 4 88e8ls.		:	:		:	<u>-</u>	<u>:</u> :	<u>:</u> ::	<u>:</u> : :	:::::::::::::::::::::::::::::::::::::::
12,054	12,054 73,446 50 85,500 70 85,500 50 5,038 8seels.		• • • • • • • • • • • • • • • • • • • •	:	•••••	:::	<u>:</u> : :	<u>:</u>	:	:::::::::::::::::::::::::::::::::::::::	
12,054 73,446 70 85,570 70 85,570 5,038 5,000 70 85,570 5,00	12,054 70 85,500 70 85,500 70 85,500 70 85,500 70 85,500 50 85,500 4 88eels.			: : : : : : : : :	:	<u>:</u> ::	<u>:</u>	: : : : : : : : : : : : : : : : : : : :	:	: :::::::::::::::::::::::::::::::::::::	
4 02 02	8seels. 50 50 4	vessels12,054	73,44	9	: ::::	:::::::::::::::::::::::::::::::::::::::	2	85,500	9	85,570	5,038
		rafts	<u> </u>				- <del>:</del> :	-	28	23	8
	to the second manufacture of the second manu	tolograph roles in massels		-		_			_		

51

No. 14.—General Statement showing the Quantity of each Article transported, &c.—Continued.

ARTICLES.	Fr Cans t Cans Pol	From Canadian to Canadian Ports.	Fr Cans t United Po	From Canadian to United States Ports.	Fr United Po	From United States to United States Ports.	Fr United Can	From United States to Canadian Ports.	Tons.	ne.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railway ties, in vessels	2,641	189	1,393						4,034	189	4,223	\$ cts.
Staves and headings, barrel. Staves and headings, pipe do Die Met India Staves, salt barrel.									: : : : : : : : : : : : : : : : : : :			
Split posts and fence rails, in vessels.  Compared to the compared of the compared to the comp												
ctured.												
Total freight paying tolls	16,685	4,619	84,645	6,238				112,425	101,330	123,342	224,672 392	17,525 90
Grand total freight	17,077	4,619	84,645	6,298		:  -:	:	112,425	101,722	123,342	225,064	
			Ĕ Ā	Total tolls on vessels do passenge do free good Fines and damages	on vessels passengers free goods lamages	s ngers oods					\$33 64	2,598 16 56 18 6 75
					Total r	evenue, e	xclusive	Total revenue, exclusive of hydraulic rents	lic rents.		:	20,186 99

APPENDIX A-Continued-CANALS.

ARTICLES.	From Canadian to Canadian Ports.	From Canadian to Canadian Ports.	Fr Cans United	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports.	Fr United t Cans Po	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Toll.
•	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												ee GE
Ashes, pot and pearl. Apples Agricultural products not enumerated, vegetable	141	<b>222</b> 3							14.1 1001	K B B E	25 28 14	3 47 12 39 12 54 54
ents	35 E								35 101 88	:	101 104 104 104 104	12 2 1
Brimstone Ceinent and water lime Clay, lime and sand.	95	: CG 67							95 401	:	117	2008 248
Cont. Corn. Cattle.	· · · · · · · · · · · · · · · · · · ·	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,							:	88.0	16, 21 10 10	900
Cotton (raw). Crockery and earthenware Flay wood and dye stuffs.	35							•	35	88	73	8 45 0 18 2 73
Flax and hemp. Flour Fourniture	128 128	476 41							128 31	476 41	602	15 45 7 55
Gypeum. Glass (all kinds) Hay (pressed) Hoges.	61 887	4.0 -1.0							61 897 10		903 903 1 15	21 32 0 03 0 42
Hides and skins, horns and hoofs Los. Los railway do pig.	728	9							4 . 72.88	9	; ; 4 :38	06

No. 15.—General. Statement showing the Quantity of each Article transported, &c.—Continued..

Antices.	From Canadian to Canadian Ports.	m Jisn disn	From Canadian to United States Ports.	From Canadian to nited States Ports.	Fr United United	From United States to United States Ports.	From United St to Canadie Ports.	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tolls.
•	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												e cts.
Kryolite chemical ore and other ore, except iron Lard and lard oil. Meal, all kinds Meat, other than park	840 19 19 9	.2, .308 .308 .308							840 119 119 9	. 22: . 23: . 30: . 30: . 30:	3,148	157 06 0 81 0 77 0 77 0 37
Manila Molasses n Nails. Oats.	134 291 322 83	1 25							: 134 291 83		293 293 57 219	18 35 28 10 1 64 20 55
	2288228	955 m							: :2288408		35 x 35 25 25 35 35 35 35 35 35 35 35 35 35 35 35 35	0 4 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Ryen Salt. Stone intended for cutting.	1,005 1,24 1	113							1,005 1,005 1	 139 680 1	1,144 704 2	0880
do not suitable for cutting, unwrought Secels, all kinds. Sheep. Shods ash. Steel Sugar. Sugar. Tobacco (raw).	284 284 258 268 268 105								101 228 258 105 105		100 140 160 160	0 25 0 33 1 78 1 19 30 91 17 88 17 89 0 07
Tallow	19	: : : :							19		19	28 0 20 0 30 0

b, empty.  cod, in vessels.  cod, in vessels.  cod, in vessels.  cod, in vessels.  cod, in vessels.  cod, in vessels.  cod in rafts.  cod on in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do in rafts.  cod do do in rafts.  cod do do in rafts.  cod do do in rafts.  cod do do in rafts.  cod do do Cler in Council.  cod do do Crean Council.  cod do do Crean Council.  cod do do do do codo codo codo codo co	:	20     7,018     8,513     2,034     76       31     31,233     7,018     38,251     2,034     76       34     4,519     4,519     4,519     532     23       38     39     4,519     4,519     532     23       38     39     570     88     658     154     58     99       30     20     20     4,519     4,519     532     23       38     39     570     88     4,519     58     4,519       30     20     20     40     0,76       30     20     40     0,76     13       40     70     1,40     70     1,40       40     70     1,40     70     1,40	6         24,906         8,560         4,171         8,252         660         13,252         4,171           25,565         8,560         13,020         660         13,680         13,680         13,680	Total tolls on vessels.  do passengers.  do free coal, \$86.84; firewood, \$228.00.  Wharfage and storage. Frines and damages Other receipts.  Total revenue, exclusive of hydraulic rents.	B. H. TEAKLES, Chief Clerk, Canals Revenue.
	2 5 590 422 590 422 38 46 1,257 840 12,381 779	22, 726 4, 728 83, 4, 4 4, 519 82, 570 83, 83, 83, 83, 83, 83, 83, 83, 83, 83,	:		

APPENDIX A-Continued-CANALS.

No. 16.—General Statement showing the Quality of each Article transported on the St. Peter's Canal, and the Amount of Rowans Revenue Collected during the Fiscal Year ended 30th June, 1891.

Canadian Canadian Canadian Canadian to to Canadian United States Ports.  Up. Down. Up. Down.
115 722 722 1,117 928 1,421 280
4,583

B. H. TEAKLES, Chief Clerk, Canals Revenue.

APPENDIX A-Continued.

ARTICLES.	From Canadian to Canadian Ports.	From Janadian to Janadian Ports.	From Canadian to United Stat Ports.	From Canadian to United States Ports.	Fr United United Poi	From United States to United States Ports.	Fr United Cam	From United States to Canadian Ports.	To	Tons.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, not and pear											:	ee cts.
್ಕ್												
Agricultural implements							<u>:</u>					
Dariek 2 Bricks.		. 20	: :							. <b>≈</b> :	: SS	0
Brimstone.	: :	: :	: :	: :		: :	: <del>:</del> : :					
Cement and water lime.	: :	: :		: :	: :	: :	: :	: :	: :	: :		
:	:	:	:	:	:	:	:	:	:		:	:
		:										: : :
Cotton, raw Crockery and earthenware. Dye wood and dye stuffs.												
Fish. Flax and hemp.	:			: :		:						
Flour	<b>8</b>				:						***	: : :
Gypsum,												
Hay, pressed.		: :	: :				: :			: :		
:	:	:	:	:	:	:	:	:	:	:		:
			: :						: : : : : :			
:	:	:	:	:	:	:	:	:	:	:		
:::::::::::::::::::::::::::::::::::::::	:	:										

S.

Amount of Tolls. Total Tons. No. 17.—General Statement showing the Quantity of each Article transported, &c.—Continued. Down. Tons. Down. to Canadian Ports. to to United States Down. Up. Down. to United States Ports. From Canadian Down. From Canadian to Canadian Ports. Up. wrought....not suitable for cutting, unwrought Meats, other than pork ..... Manilla.... oda ash.... obacco, raw

273 26 327 87 79 38 50 00 731 11	3 3,552 23,675 2 f hydraulic rents 77	3,562	20,123 20,123 LES,	s, sipts	Total tolls on vessels do passenge do other rec	Total to		<u>  ;                                   </u>	3,552		122 1	Total freight paying tolls 29,1 DEPARTMENT OF RAILWAYS AND CANALS,
273 26	23,675	3,552	20,123		:	•	<u>;</u> ;	:	552		20,12	al freight paying tolls
3 00	- :   & :   :   :	4 :	24 :   				::1			<b>9</b> :	4 :	Traverses. Woodenware and wood partly manufactured
8 26	1,613	1,488						<u>. : : :</u> <u>: : : :</u>	· · · · · · · · · · · · · · · · · · ·			Spin posts and tence rais, in vessels.  G Timber, square, in vessels.  The do rafts
14 95	172	13	159			-		::::	: : : : : : : : : : : : : : : : : : :	20	112	do pipe do West India. Staves, salt barrel. Shingles.
6 20 8 28 19 07	239 239 2,199	200	163 220 1,990					<u>; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; </u>	200	220 999	91 1986; :	Railway ties, in vessels do rafts Saw logs. Staves and headings, barrel
4 65	429		429	<u>:</u>					-	20.5		graph poles, in vessels.
9 20	418	157							157	:: :::	261	Hoops Hop poles Lumber, sawn, in vessels.
5 60 166 64	457	417	15,702					<u>: : :</u> <u>: : :</u>	417		40 15,702	Boat knees Floats Floats Floats An vessels
			· - - :			: :	: : : : : :	<u>: :</u> :	: : : :	: : : :	_ : :	Bark. Barrels, empty

APPENDIX A—Continued—CANALS.

No. 18.—General Statement showing the Quantity of each Article transported on the Murray Canal, and the Amount of Rovenuc 1 38 .**\$** 288888 348824 Amount of Tolls. Total Tons. Down. Tons. Down. From United States to Canadian Ports. collected during the Fiscal Year ended 30th June, 1891 Up. Down. From United States to United States Up. Down. United States Ports. From Canadian Up. Down. Canadian Ports. From Canadian Up. vegetable... Barley.... Apples. Agricultural products not enumerated, Hides and skins, horns and hoofs Cement and water lime. ..... 9 Bricks Bones Crockery and earthenware. Agricultural implements. Dye wood and dye stuffs pig...all other.... Ashes, pot and pearl.. Hay, pressed..... Jorn. .... Flax and hemp.... Flour ... Furniture Gypsum Brimstone Ногвея...

65 65 49 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	655 499 655 890 650 288 890 655 499 655 655 655 655 655 655 655 655 655 6
	88 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
88 65 8.8 6 6 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	
8 :8 :8 :8 :8 :8 :8 :8 :8 :8 :8 :8 :8 :8	

No. 18.—General Statement showing the Quantity of each Article transported, &c.—Continued.	EMENT 6	howing	the Qu	antity	of each	Articl	e trans	ported,	&c.—C	ontinue.	d.	
ARTICLES.	From Canadian to Canadian Ports.	m dian dian	From Canadian to to United States Ports.		Fr United United Po	From United States to United States Ports.	1)	From United States to Canadian Ports.	T <sub>0</sub>	Tons.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	.dD	Down.	Up.	Down.		
			1						183		153	ee cts.
Railway ties, in vesselsdo rafts			ect	: :	: :	: :		: :			:	1
Saw logs. Staves and headings, barrel	: :		: :	: :				: :				
do pipe India	:	: :			: :	: :		::				
Staves, salt barrel			13						16		16	41.1
Split posts and fence rails, in vessels.	:		-		:	:	:	:		:		<b>8</b>
do do ratts. 7 Timber square, in vessels.	 1286	1,360							: 88	1,360	1,480	0 50 18 50
Traverses Woodenware and wood partly manufactured	7	7	: :		: :	: :	::		:4	-	42	08.0
Totol freight paying tolls	5,431	3,342	3,677	250			:   : _	882	9,108	4,477	13,585	231 56
	_	T <sub>o</sub>	Total tolls o	Total tolls on vessels do passenger	vessels.							285 61 155 69 38 16
				Tota	l revenu	Total revenue, exclusive of hydraulic rent	ve of hyc	Iraulic rei	nt			711 02

B. H. TEAKLES, Chirf Clerk, Canals Revenues.

## STATEMENT OF TRAFFIC.

APPENDIX A-

No. 19.—Statement of Traffic on the undermentioned Canals, and the

<b>A</b> =	Wellan	d Canal.	St. Lawre	nce Canals.	Chambl	y Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 1.		\$ cts.		\$ cts.		\$ cts.
Canadian vessels, steam	300,242	3,299 83	724,187	4,116 90	71,964	215 61
United States vessels, steam	438,224	6,577 78	24,906	181 45	2,408	28 59
Canadian vessels, sail	192,958 99,475	3,801 08 2,228 70	903,495 67,743	9,806 66 524 55	53,589 112,054	849 76 1,504 20
Total, Class No. 1	1,030,899	15,907 39	1,720,331	14,629 56	240,015	2,598 16
Class No. 2.	No.		No.		No.	
Passengers	24,089	353 55	61,614	3,086 83	3,360	56 18
Class No. 3.	Tons.		Tons.		Tons.	
Bricks	208	26 76	12,824	551 54	241	22 44
Brimstone	680	102 00	234	20 80	147	28 35
Cement and water lime	421 255	62 64 17 94	2,849 30,226	389 03 1,353 29	5,149	537 61
Fish	219	35 30	393	40 27	0,170	30, 01
Gypsum			839	17 78		
Iron, railway		· · · · · · ·	14,594 3,403	2,156 02 416 05		
do pig	1,320	220 63	10,864	714 83	2	0 20
Steel	226	33 90	161	21 70		
Salt Stone, for cutting	1,463 6,897	272 98 1,379 40	11,983 5,878	1,605 09 519 26	766 2,062	68 86 202 06
Apples	131	6 69	2,555	364 65	420	37 74
Barley	8,247	1,563 90	2,602	52 49	496	28 21
Corn	248,317	49,663 05	16,004	1,194 55 0 30	7	0 24
Flax and hemp			5	0 65		
Flour	15,754	2,245 92	5,041	673 64	174	5 80
Hay, pressed	26,233	5,246 50	859 1,008	55 01 72 19	2,156 48	84 96 1 60
Oil cake		0 40	1,000	0 16	100	1 00
Oats	28,645	5,728 25	2,823	107 36	507	16 93
Pease	404	80 80 2 59	24,375 92	489 91 7 82	89 10	2 99 0 80
Potatoes	29 817	122 55	1.908	38 22		
Seeds, all kinds	149	28 90	4,243	180 50		
Tobacco, raw	150.926	29,610 58	25,210	2 11 882 93	4	0 27
vegetable	219	12 90	1,254	143 47		
Bones	1	0 02	113	14 99	<u></u> -	
Cattle	2	0 04	522 48	39 20 6 25	75	2 40
Hides and skins, horns and hoofs.	73	10 95	28	3 11		
Horses	52	2 32	385	29 01	12	0 40
Lard and lard oil Meats, other than pork	111 32	22 10 5 60	323 34	31 63 3 14		
Pork		79 90	417	39 49	3	0 10
Sheep			149	11 41	147	4 90
Tallow		19 50 33 20	57 13	6 98 1 95		
Wool All other agricultural products,		00 20		1 30	• • • • • • • • • • • • • • • • • • • •	
animal		2 80	735	71 99		
		96,641 66			12,515	

Continued—CANALS.

Amount of Tolls collected during the Fiscal Year ended 30th June, 1891.

Murray	y Canal.	Ottawa	Canals.	Rideau	Canal.	St. Pete	r's Canal.	Trent Val	ley Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.				* cts.		\$ cts.		\$ cts.
				**					
105,676 85	234 63 0 50	171,093   26	691 55   0 <b>2</b> 5	66,857 956	633 35 16 55	8,360	167 20	27,065	204 72
12,421	47 20	189,832	2,763 84	68,548	905 14	53,323	1,066 46	28,958	123 15
254	3 28	32,574	<u>759 02</u>	7,649	106 23				
118,436	285 61	393,525	4,214 66	144,010	1,661 27	61,683	1,233 66	56,023	327 87
No.		No.		No.		No.		No.	
14,437	155 69	12,683	166 15	4,376	122 39	<b> </b>		8,001	79 98
TD.		m						m	
Tons.		Tons.		Tons.		Tons.		Tons.	
•••••		120	6 90	40	1 52			20	0 60
7	0 14	41	4 00	117	3 29				
27 22	0 50 0 43	8,744	258 08 0 30	403 112	9 44 2 73	649	6 49		
<b>28</b> 0	5 25		• • • • • • • •	60	1 78	<b> </b>			
85	1 60			89	2 22				
271	5 14	33	2 10	239	6 95 1 19				• · • • • • • • •
257	4 82	1 5	0 05 0 21	24 1,144	1 19 32 98	l			
182	3 42			704	32 83				
$\begin{array}{c} 977 \\ 1,008 \end{array}$	17 82 18 92	92 95	5 10 8 54	105 101	2 47 2 37		• • • • • • • • • • • • • • • • • • • •		• • • • • • • •
				23	0 63				
1	0 02	· · · · · · ·	••••						• • • • • • • • • •
72	1 38	56	4 67	602	15 45	1,162	11 62	35	0 35
1	0 02	439 22	40 79 1 79	903 28	21 32 0 77				
				3	0 10				
111	2 15	833 1,179	65 35 88 34	57 37	1 64 0 91			<b></b>	· · · · · · · · · · · · · · · · · · ·
114	2 10	7779	59 40	142	4 53				
325	6 11	17	1 18	35	1 14				· · · · · · · · · · · · · · · · · · ·
1 3	0 02	28	2 75	10	0 25				
1,020	12 90	39	3 83	306	8 63				
18	0 36	86	5 73	39	1 39	6,506	65 06		
•••••		30	2 74	42	1 60				
••••••		676	43 85 0 52	10	0 29				
·····2	0 04	39	3 45	4	0 12				<b>.</b>
25	0 52	139 12	9 24	15	0 42				
3	0 06	28	0 82 2 60	24 12	0 81 0 37				
5	0 10	43	1 61	136	3 59				
·····2	0 04	342	24 78 0 20	12	0 33				
6	0 12	3	0 30	7	0 22				
4	0 08	1,333	108 77	441	12 54				
4,718	82 02	15,269	757 99	6,028	176 92	8,317	83 17	.55	0 95

APPENDIX
No. 19.—STATEMENT of the Traffic on the undermentioned

	Wellan	d Canal.	St. Lawre	nce Canals.	Chamb	ly Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 4.		\$ cts.		\$ cts.		\$ cts.
Ashes, pot and pearl	45	9 00	86	16 18		••
Agricultural implements	5	0 10	101 365	14 26 70 37	2 23	0 20 2 30
Crockery and earthenware  Dye woods and dye stuffs		0.10	240	14 75	116	11 60
Furniture	29	5 18	717	117 47	5	0 50
Glass, all kinds	40 4,931	5 92 739 65	582 35	109 95 6 90	1	0 10
Marble	4,951	17 10	17	3 29		
Molasses	75	11 25	994	125 17	250	25 00
Nails	123 62	10 22	4,194	647 85 213 80	141	13 54
Oil, in barrels	176	3 51 25 36	1,564 548	80 85	10	1 00
Pitch and tar.	603	90 45	366	31 97	221	22 10
Rags	· · · · · · · · · · · ·		133	25 80 117 08	9 990	219 14
Rosin	980	146 74	2,322 1,690	117 03 322 87	2,229	219 14
Sugar	855	117 53	3,339	604 42		
Stone, wrought	397	44 06	165	8 85	139	13 90
Tin Turpentine	1	0 02	629 126	109 01 8 21	92	9 20
White lead.	3	0 45	171	31 13		
Whiting	1	0 15	684	136 39		0 04
Whiskey and all other spirits Merchandise, not enumerated	296 37,793	57 64 5,678 46	1,122 11,878	207 08 1,856 04	3,493	258 13
Total, Class No. 4	46,529	6,962 79	32,062	4,879 64	6,723	576 75
Class No. 5.						,
BarkBarrels, empty	131	17 31	390	45 15		
Boat knees	13,332	572 86	5,572 12,667	84 91 293 42	8,833	308 87
do rafts Lumber, sawn, in vessels	56,571	9,751 01	39,706	1,314 69	85,570	5,038 93
do rafts	15	2 03	134	6 00 0 10	50	4 00
Railway ties, in vessels do rafts	207	19 70	1,004	20 03	4,223	333 04
Masts, spars and telegraph poles,	_					
in vessels	1	0 25		· · · · · · · · · · · · · · · ·		· • • • • • • • • • • • • • • • • • • •
Masts, spars and telegraph poles, in rafts	26	0 83	18,522	463 05	<b> </b>	
Square timber, in vessels	62,750	9,519 98	1,719	23 80		
do rafts	54	5 92	9,262	234 80		
Woodenware and wood partly manufactured	5	2 00	100	31 00		
Shingles. Split posts and fence rails, in	14	9 60	49	10 87	192	29 08
vessels		<b></b>				
Split posts and fence rails, in rafts	4 750	946 4	20,562	100 00		
Staves and headings, barrel	4,759	246 45	20,002	468 82		
do pipe	114	21 31			<b>]</b>	
do West India.	36	6 75				
do salt barrel			10,854	0 17 28.25		
Traverses		1	10.00	201 241	1	

A—Continued.
Canals, and the Amount of Tolls collected, &c.—Continued.

Murra	y Canal.	Ottawa	Canals.	Rideau	Canal.	St. Pete	er's Canal.	Trent Val	ley Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
	0 20 0 16	18 15 4	3 42 2 31 0 34	27 153 73	3 47 16 12 8 45				
39 19 6	1 13 0 49 0 15	35 8	4 35 0 96	2 72 65	0 18 7 55 7 06				
333	0 26	24 31	2 33 2 92	147 293	13 35 28 10				
168 26	4 21 0 67 0 28	35 2 3	2 69 0 24	219 29 35	20 52 3 56 3 50				
	1 26 3 39	54	0 44	8 3 19 311	0 72 0 27 1 78 30 91				
8 34	0 22	3 12 1	0 57 0 79 0 05	19 19 17	0 27 1 88 0 09 1 62				
77 62 843	1 93 1 61 21 30	3 22 475	0 15 1 43 65 83	29 160 1,012	2 76 17 88 113 40	505	5 05	159	4 77
1,833	46 50	745	93 40	2,696	283 44	505	5 05	159	4 77
ii	0 35	15 86	1 47 10 73	31 84	1 45 6 36			17	0 65
1,506	12 58	12,540 43,286 480	127 42 1,744 75 25 47	1,597 13,160	28 18 263 64			457 16,416	5 60 166 64
845 9	9 86 0 19 1 53	511,347 190 246	39,149 37 10 29 28 90	38,251 92	2,034 76 9 53	2,619	26 19	418	6 50
153 28	0 18	313	223 51	4,519 782	532 23 83 03			163 239 429	6 50 8 29 4 65
 80 1,480	0 50 18 50	1,530 1,370	64 13 23 63	94 40	10 00 0 76 32 49			27	2 61
42 16	0 80 1 14	59 422	46 03 327 07	701 8 154	1 30 58 80			1,613	26 50 14 95
	0 33	. 1	1 76	28 1	4 31 0 13 15 29			8	0 53
•••••				658	1, 25			2,199	19 07
•••••		200	1 08	742	11 44			880	3 00
4,177	45 96	573,150	41,796 05	60,942	3,093 70	2,619	26 19	23,038	265 49

APPENDIX

No. 19.—Statement of Traffic on the undermentioned

4	Wellan	d Canal.	St. Lawre	ence Canals.	Chamb	ly Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Special Class.		\$ cts.		\$ cts.		\$ cts.
Coal Kryolite or chemical ore Iron ore Gypsum, crude	236,290 3,094 5,238 205	45,974 30 154 70 261 90 2 56	168,721 3,780	23,613 56 189 00	97,738 129	9,572 07 12 90
Stone, unwrought, not suitable for cutting	7,031 4,300	681 68 215 00	13,995 1,467	311 70 206 65	416 8,283	41 60 561 80
Total, Special Class	256,158	47,290 14	187,963	24,320 91	106,566	10,188 37
Total, freight and tolls Timber and other wood, free Wheat, corn, flour, iron, salt, coal,	933,231 326	187,331 56 16 26	525,653 7,569	62,272 77 746 33	224,672	20,180 24
&c., &c., free	25,945	3,891 75	296,082	10,065 40	392	33 64
Grand totals, passengers and ton- nage of vessels not included	959,502	191,239 57	829,304	73,084 50	225,064	20,213 88

## A-Continued.

Canals, and the amount of Tolls collected, &c.-Continued.

Murra	y Canal.	Ottawa	Canals.	Rideau	Canal.	St. Pet	er's Canal.	Trent Val	ley Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ ets.		\$ cts.
1,070	20 08	2,250	112 50	10,941 3,148	460 22 157 05	18,078	180 78	3	0 09
•••••									
512 1, <b>2</b> 75	5 12 31 88							420	1 96
2,857	57 08	2,250	112 50	14,089	617 27	18,078	180 78	423	2 05
13,585	672 86	591,414 49,564	47,140 75 631 31	83,755 13,680	5,954 99 228 00	29,519	1,528 85	23,675	681 11
• ••••				3,252	86 84				• • • • • • • • • • • • • • • • • • • •
13,585	672 86	640,978	47,772 06	100,687	6,269 83	<b>2</b> 9,519	1,528 85	23,675	681 11

B. H. TEAKLES, Chief Clerk, Canals Revenue.

## APPENDIX

No. 20.—Summary Statement of Traffic on the undermentioned Canals during the of Property passed through and the

	\$17.11	101	G. T		G1		
Articles.	W ellar	nd Canal.	St. Lawre	nce Canals.	Chamb	ly Canal.	
ABIIULEO	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	
		\$ cts.		\$ cts.		\$ ct	
Vessels of all kinds	1,030,899	15,907 39	1,720,331	14,629 56	240,015	2,598 16	
Passengers	No. 24,089	353 55	No. 61,614	3,086 83	No. 3,360	56 18	
Forest, Produce of Wood.	Tons.		Tons.		Tons,		
Bark		• • • • • • • • • •	Tous.		10115.		
Boat knees		• • • • • • • • • • • • • • • • • • • •	5,572	84 91			
do Free.	13,332	572 86	12,667	293 42	8,833	308 87	
Hoops and hop polesLumber, sawed	56,586	9,753 07	39,840 3,347	0 10 1,320 69	85,620	5,042 93	
Masts, spars, &c	27	1 08	18,522	463 05			
Railway ties Free.	207 25	19 70	1,004	20 03	4,223	333 0	
Saw-logs	4,759 301	246 45	20,562	468 82			
Staves, all kinds	150 14	28 06 9 60	9 49	0 17 10 87	192	29 0	
Split posts and rails		9,525 90	400 10.981	258 60		•••••	
doFree.			2,320 10,854	28 25		• • • • • • • • • • • • • • • • • • • •	
Total	138,205	20,156 72	126,128	2,948 91	98,868	5,713 9	
Farm Stock.							
Cattle		0 04	522	39 20	75	2 4	
Hogs	52	2 32	48 385	6 25 29 ·01	12	0 4	
doFree. Sheep	1		3 149	11 41	147	4 9	
Total	54	2 36	1,107	85 87	234	7 70	

A-Continued.

Fiscal Year ended 30th June, 1891, showing the Total Quantity of each Description Amount of Tolls collected thereon.

Tons.	Tolls. \$ cts. 285 61	Tons.	Tolls. \$ cts. 4,214 66	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
No.	285 61				9 -4-	•		i———	
No.			4,214 66		\$ cts.		\$ cts.	'	\$ cts.
	• 155 69			144,010	1,661 27	61,683	1,233 66	56,023	327 87
		No. • 12,683	166 15	No. 4,376	122 39	No.		No. 8,001	79 98
Tons.		Tons.	1 47	Tons. 31	1 45	Tons.		Tons.	0 65
		12,540	127 42	1,597	28 18			457	5 60
1,506	12 58	11,340 43,766	1,770 22	13,160	263 64			16,416	166 64
		10,166 246	28 90	13,680					
854	10 05	511,537 885	39,159 66	38,343	2,044 29	2,619	26 19	418	6 50
28	0 18	313 10	10 44	94	10 00			456	7 26
153	1 53	1,065 $11,025$	223 51	5,301	615 26			402	14 79
		13,328		658	15 29		••••	2,199	19 07
16	1 14 0 33	422	327 07 1 76	154 29	58 80 4 44		****	172	14 95 0 53
1,560	19 00	10 2,900					•••		
1,500	19 00	2,560	87 76	741	33 25			1,613	26 50
		200	1 08	742	11 44			880	3 .00
4,124	44 81	622,329	41,739 29	74,530	3,086 04	2,619	26 19	23,038	265 49
25	0 52	676 10 139	43 85 0 52 9 24	10 1 15	0 29 0 03 0 42				
		342	24 78	12	0 33				
25	0 52	1,167	78 39	38	1 07				

APPENDIX
No. 20.—Summary Statement of Traffic on the undermentioned

	Wellan	d Canal.	St. Lawre	nce Canals.	Chamb	ly Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Produce of Animals.		\$ cts.		\$ cts.		\$ ets.
Bones Horns and hoofs, hides and skins,	1	0 02	113	14 99		
raw Lard and lard oil	73 111	10 95 22 10	28 <b>323</b>	3 11 31 63		· · · · · · · · · · · · · · · · · · ·
doFree.	72 32		100			
Meats other than pork doFree.	1	5 60	34	3 14		
PorkFree.	400	79 90	417 322	39 49	3	0 10
Tallow	112	19 50	57 54	6 98		
Wool	166	33 20	13	1 95		
Agricultural products not enumerated, animal	14	2 80	735	71 99		
Agricultural products not enumerated, animal Free.	• • • • • • • •		14			
Total	982	174 07	2,210	173 28	3	0 10
Agricultural Products.						
Agricultural products not enumerated, vegetable	219	12 90	1,254	143 47		
Agricultural products not enumerated, vegetableFree.	23		1			
ApplesBarley	131 8,247	1,563 90	2,555 2,602	364 65 52 49 0 30	420 496	37 74 28 21
Cotton, raw	248,317	49,663 05	16,004	1,194 55	7	0 24
do Free. Flax and hemp			85,527 5	0 65		
do Free.	1 15,754	2,245 92	5,041	673 64	174	5 80
do Free.			1,233	55 01		
Hay, pressed  Meal, all kinds  doFree.	26,233	5,246 50	1,008 233	72 19	2,156 48	84 96 1 60
Manilla	114	17 10 5 799 25	17 2,823	3 29 107 36	507	16 09
OatsFree.	28,645	5,728 25	9		507	16 93
PeaseFree.	404	80 80	24,375 390	489 91	89	2 99
Potatoes	29 817	2 59 122 55	92 1,908	7 82 38 22	10	0 80
Seeds, flax, clover and grass	149	28 90	4,243	180 50		
do doFree.	100	0 65	1 22	2 11	4	0 27
doFree. Wheat	150,926	29,610 58	25,210	882 93		
doFree.			108,468			
Total	480,113	94,330 38	283,883	4,269 09	3,911	179 54
Manufactures.						
Ashes, pot and pearlFree.	45 10	9 00	86 45	16 18		
Agricultural implements Barrels, empty	131	17 31	101 390	14 26 45 15	2	0 20
Bricks	208			551 54	241	22 44

A—Continued.

Canals, and the amount of Tolls collected thereon, &c.—Continued.

Murray	Canals.	Ottawa	Canals.	Rideau	Canal.	St. Pete	r's Canals.	Trent Vall	ey Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
							<b>\$</b> ets.		\$ cts.
•••••		30	2 74	42	1 60		 		
2 3	0 04 0 06	39 12	3 45 0 82	4 24	0 12 0 81				
•••••		28	2 60	12	0 37			• • • • • • • • • • • • • • • • • • • •	
5	0 10	43	1 61	136	3 59				
2	0 04	2	0 20						
6	0 12	3	0 30	7	0 22				
4	0 08	1,333	108 77	441	12 54				
22	0 44	1,490	120 49	666	19 25				
18	0 36	86	5 73	39	1 39	6,506	65 06		• • • • • • • • • • • • • • • • • • • •
977	17 82	92	5 10	105	2 47				
1,008	18 92 0 02	95	8 54	101	2 37				
				23	0 63		}		
72	1 38	56	4 67	602	15 45	1,162	11 62	35	0 35
		439	40 79	903	21 32				
1	0 02	22	1 79	28	0 77				
10	0 26	833	65 35	57	1 64				
114	2 15	1,179	88 34	37	0 91				
• • • • • • • • • • • • • • • • • • • •		779	59 40	142	4 53				
325 1	6 11 0 02	17 28	1 18 2 75	35 . 10	1 14 0 25				
3	0 06			1	0 07				
	12 90	39	3 83	306					
1,020	12 90			300	8 63				
3,550	60 02	3,665	287 47	2,389	61 57	7,668	76 68	0 35	0 35
		18	3 42	27	3 47				
	0 20	1			1				
11	0 35	15 86 120	2 31 10 73 6 90	153 84 40	16 12 6 36 1 52			20	0 60

APPENDIX
No. 20.—Summary Statement of Traffic on the undermentioned

	Wellar	nd Canal.	St. Lawre	nce Canals.	Chambl	y Canals.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Manufactures—Concluded.		\$ cts.		\$ cts.		\$ cts.
Bricks Free.  Cement and water lime  do Free.  Crockery and earthenware	398 421 381 5	62 64	2,849 836 365	389 03 70 37	23	2 30
do doFree. Furniture	124 29	5 18	717 2	117 47	5	0 50
Glass, all kinds	40 16	5 92	582 1	109 95	1	0 10
Iron, railway	14,186		14,594 3,403	2,156 02 416 05		
do doFree. do all other	76 1,320	220 63	10,864	714 83	2	0 20
do doFree. Molasses Nails	706 75 123	11 25 10 22	994 4,194	125 17 647 85	250	25 00
doFree. Oil fo Free.	457 62 32	3 51	1,564	213 80	141	13 54
Oil cakeFree.	2	0 40	2 2	0 16		
PaintFree. Pitch and tarFree.	176 62 603	25 36 90 45	360	80 85	221	22 10
doFree. Rosin Free.	17		2,322	117 03	2,229	219 14
doFree.	980 523	146 74	1,690	322 87		
Spirits, whiskey, &cFree.  SteelFree.	296 232 226	57 64 33 90	1,122 103 161	207 08	1	0 04
SugarFree. Tin	855 175 1	117 53	3,339	604 42		
do Free. Turpentine	37		126	8 21	92	9 20
do Free. White lead Free. do Free.	1 3 11	0 45	171	31 13		
Whiting	52 5	0 15	684	136 39		
doFree.			1,502		0.010	017 70
Total	23,104	847 16	67,280	7,289 49	3,218	315 76
Brimstone, crude.,	680 255 23	102 00 17 94	234 30,226 707	20 80 1,353 29	147 5,149	28 38 537 61
do Free.	236,290	45,974 30	168,721 94,977	23,613 56	97,738 392	9,572 07
Dye woods and dye stuffs  Fish	219 20	35 30	240 393 49	14 75 40 27	116	11 60
GypsumOres, all kinds	205 8,332	2 56 416 60	839 3,780	17 78 189 00	129	12 90

A—Continued.

## Canals, and the Amount of Tolls collected thereon, &c .- Continued.

Murra	y Canal.	Ottawa	Canals.	Rideau	Canal.	St. Pete	er's Canal.	Trent Cai	Valley nals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
7	0 14	41	4 00	117	3 29				
6	0 16	4	0 34	73	8 45				
39	1 13	35	4 35	···· 72	7 55				
19	0 49	8	0 96	65	7 06				
280	5 <b>2</b> 5			60	1 78				
85	1 60			89	2 22				
271	5 14	33	2 10	239	6 95				
		24	2 33	147	13 35				
333	8 37	31	2 92	293	28 10				
168	4 21	35	2 69	219	20 52				
				3	0 10				
<b>26</b>	0 67	······································	0 24	29	3 56				
				35	3 50				
				3	0 27			 	
50	1 26			19	1 78				
	1 61		1 43	160	17 88				
<b>62</b>	1 01	22							
134	3 39	1 54	0 05 4 58	24 311	1 19 30 91				
8	0 22	12	0 79	19	1 88				
		·····i	0 05	1	0 09				
34	0 87			17	1 62				
77	1 93	3	0 15	29	2 76				
42	0 80	59	46 03	8	1 30				
		240							
1,659	37 79	844	96 37	2,336	193 58			20	0 60
•••••	0 50	8,744	258 08	403	9 44				
27	20 08	8,744	208 08		460 22	10.000	100 50		
1,070	20 08			10,941 3,252		18,078	180 78		
22	0 43	3	0 30	112	0 18 2 73	649	6 49		
						.	.]		
		2,250	112 50	3,148	157 05		.	3	0 09

APPENDIX

No. 20.—Summary Statement of Traffic on the undermentioned

	Wellan	d Canal.	St. Lawr	ence Canals.	Chambl	y Canals.	
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	
Merchandise—Concluded.		\$ ct	3.	\$ cts,		\$ cts.	
Marble.	4,931	739 65		6 90 25 80			
RagsSaltdo Free.	1,463	272 98	133 11,983	1,605 09	766	68 86	
Stone, all kindsFree.	7,220 14,325	2,105 14	20,038 1,920	839 81	2,617	257 56	
All other goods and merchandise, not enumerated do do Free	42,093 988	5,893 46	13,345 159	2,062 69	11,776	819 93	
Total	317,044	55,559 95	348,696	29,789 74	118,830	11,308 88	
Grand totals, passengers and ton- nage of vessels not included	959,502	187,331 56	829,304	62,272 77	225,064	20,180 24	

A—Continued.

Canals, and the Amount of Tolls collected thereon, &c .- Continued.

Murra	y Canal.	Ottawa	Canals.	Rideau	Canals.	St. Pete	er's Canal.	Trent Can	Valley als.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
$\begin{array}{c} 6 \\ 11 \\ 257 \end{array}$	0 15 0 28 4 82	3 5	0 44 0 21	8 1,144	0 72 32 98				
694	8 54	3	0 57	706	33 10			420	1 96
2,118	53 18	475	65 83	1,012	113 40	505	5 05	159	4 77
4,205	87 98	11,483	437 93	20,728	809 82	19,232	192 32	582	6 82
13,585	672 86	640,978	47,140 75	100,687	5,954 99	29,519	1,528 85	23,675	681711

B. H. TEAKLES, Chief Clerk, Canals Revenue.

APPENDIX A-Continued-CANALS.

			1890.	<b>.</b>				1891.	The second secon	
Canals and Offices.	July.	August.	September	October.	November December.	December.	April.	May.	June.	Total.
WELLAND CANAL,	e cts.	s cts.	e cts.	e cts.	e cts.	e cts.	e cts.	cts.	e cts.	e cts.
Chippawa Colborne. Dalhousie. Dunnville Maitland Shitsand St. Cacharines.	21,786 81 7,203 38 107 73 4 00 34 60 81 12	2 27 18,179 23 7,055 75 29 43 2 36 57 61 75 65	6 52 17,401 34 10,152 59 0 50 1 00 137 35	6 02 14,846 52 6,970 93 0 50 0 50 59 78	4 69 14,275 63 5,167 45 25 08 1 50 1 50 44 44	8 8 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3,746 67 2,620 79 8 75 49 46 64 32	22 11,286 11,465 20 20 105 80 80 80 80 80 80 80 80 80 80 80 80 80	11 03 18,931 79 8,606 53 118 38 71 7	54 95 128,409 73 59,246 37 340 82 18 76 706 36
Total, Welland Canal	29,219 82	25,402 30	27,792 97	21,998 15	19,676 69	15 12	6,489 99	28,942 10	27,794 42	187,331 56
ST. LAWRENCE CANALS.										
Beauharnois Cardinal. Cornwall. Kingston Lachine Montreal	2113 75 219 02 2,119 07 1,542 48 354 29 5,564 36	91 52 60 97 2,820 81 2,934 97 686 57 4,523 03	50 29 77 74 2,414 01 2,562 75 590 63 4,211 72	188 18 73 48 2,046 34 2,479 32 483 34 3,118 48	182 92 68 34 1,888 67 957 44 187 65 2,243 63	19 00	1 44 7 80 19 19 140 79	45 14 151 68 2,047 43 1,687 13 252 74 2,789 07	117 04 100 24 1,969 33 1,969 33 3,390 96	790 28 773 65 17,652 66 14,133 40 2,940 74 25,982 04
Total, St. Lawrence Canals	9,912 97	11,117 87	9,907 14	8,389 14	5,528 65	33 38	169 22	6,973 19	10,241 21	62,272 77
CHAMBLY CANAL. Chambly St. John's St. Ours	773 98 1,577 74 70 76	966 37 1,803 77 67 50	1,050 02 2,410 40 72,48	1,271 73 2,067 37 84 69	614 65 . 938 74 73 76			648 74 2,613 46 47 87	1,098 87 1,856 57 77 77	6,424 36 13,268 05 487 83
Total, Chambly Canal	2,422,48	2,837,64	2 539 Q	3 493 70	1 697 15			3 210 05	9 008 91	90 180 94

OTTAWA CANALS.								•			
Ottawa. Carillon Grenville. St. Anne's.	5,669 62 20 90 3,083 34 165 28	4,175 29 38 48 2,729 78 188 40	3,201 51 11 46 2,007 81 176 63	3,104 69 36 111 2,694 12 237 38	2,098 17 32 22 1,830 90 101 70		190 03 9 67 325 09 17 09	5,129 73 21 92 2,757 48 147 77	3,941 19 9 64 2,784 31 203 04	27,510 23 180 40 18,212 83 1,237 29	
Total, Ottawa Canals	8,939 14	7,131 95	5,397 41	6,072 30	4,062 99		541 88	8,056 90	6,938 18	47,140 75	
RIDRAU CANAL.											
Kingston Mills Ottawa Snith's Falls.	207 101 101 36 36 36	234 508 58 36 36 36 36	231 582 71 73 43	241 83 596 93 29 42	68 51 294 68 53 27		9 14	165 393 94 29 65 65	282 46 706 02 54 91	1,432 25 4,094 36 428 38	
Total, Rideau Canal	1,211 95	931 84	885 20	868 18	416 46		9 14	588 83	1,043 39	5,954 99	
St. Peter's Canal	203 26	203 18	262 93	301 75	217 51	43 65	& &	154 70	112 98	1,528 85	
TRENT VALLEY CANALS.											
Burleigh Boboaygeon Buckhorn Fenelon Falls Peterborough	218°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	1881 ∞ 4 % 5¥38 8 2	8 00 78 76 10 85 1 50 1 50 24 84	66 79 7 35 11 75 27 73	11 12 10 00 5 41 1 00 14 47		2 70	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	858248 885888	25 24 241 96 22 75 28 75 28 70 163 23	
Total, Trent Valley Canals								27 53			
MURRAY CANAL.											
Brighton	107 93	152 86	84 52	77 17	46 34	:	13 52	72 88	135 67	672 86	
Grand Total	52,142 51	47,910 54	47,986 52	41,244 10	31,617 79	92 15	7,255 34	48,108 17	49,406 01	325,763 13	
		-									

B. H. TEAKLES, Chief Clerk, Canals Revenue.

14,629 56

749,050 1,720,331

971,281

77,160

38,258

8,516

1,361

7,122

48,555

656,252

877,107

10,476

Grand Total, St. Lawrence Canals.....

APPENDIX A—Continued—CANALS.

No. 22,—General Statement	inr sho	wing the	AFFE Number Fisc	Tonna al Year	A—Congregated and ended	ntinuea- Nation 30th Ju	AFFENDIA A—Continued—CANALIS Imber, Tonnage and Nationality of Ve Fiscal Year ended 30th June, 1891.	T. Vessel	is passe	d throug	h all the	Canals d	APPENDIA A—Continuca—CANALIS. showing the Number, Tonnage and Nationality of Vessels passed through all the Canals during the Fiscal Year ended 30th June, 1891.
Vrssels.	Number.	From Canadian to Canadian Ports,	m dian dian	From Canadian to United States Ports,	om dian States ts.	From United States to United States	om States States ts.	From United States to Canadian Ports.	m States Jian Es.	Tons.	18.	Total Tons.	Amount of Tolls.
	Total	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
					-	-							e cts.
Welland Canal. Canadian Vessels, steam	1,020	81,062 41,760	79,545	61,991	1,329 3,227		262	5,872 8,776	70,161	148,915 95,045	151,327 97,913	300,242 192,958	3,299 83 3,801 08
Total Canadian	1,770	122,812	112,574	106,214	4,556	983	292	14,648	131,818	243,960	249,240	493,200	7,100 91
United States Vessels, steam	488 289	241	118	6,745	746	206,748	187,914 40,051	1,466	34,587 9,515	214,959 49,225	223,265 50,250	438,224	6,577 78 2,228 70
Total United States	777	241	88	10,376	1,410	251,330	227,965	2,237	44,102	264,184	273,515	537,699	8,806 48
Grand Total, Welland Canal	2,547	123,053	112,612	116,590	5,966	251,616	228,257	16,885	175,920	508,144	522,755	1,030,899	15,907 39
									:				
ST. LAWRENCE CANALS.  Canadian Vessels, steam	3,696	374,221	327,126 316,429	17,807 24.256	56 779	: :	67 15	581 119	4,329	392,609 525,569	331,578 377,926	724,187 903,495	4,116 90 9,806 66
Total Canadian	9,148	1	643,555				83	700	65,032	918,178	709,504	1,627,682	13,923 56
United States Vessels, steam	730	805	1,362	2,250	6,109	6,193	7,321	133 37,425	6,664 5,464	9,381	15,525 24,021	24,906 67,743	181 45 524 55
Total United States	1,328	1,692	12,697	6,492	6,287	7,361	8,434	37,558	12,128	53,103	39,546	92,649	200 00
	Ī						-		_	_			

	1.	00		100	_		1 00	100	l ee								1		
215 61 849 76	1,065 37	28 59 1,504 20	1,532 79	2,598 16		234 63 47 28	281 83	35 28 28 28	3 78	285 61		691 55 2,763 84	3,455 39	0 25 759 02	759 27	4,214 66		633 35 905 14	1,538 49
71,964	125,553	2,408 112,054	114,462	240,015		105,676 12,421	118,097	8.52	333	118,436		171,093 189,832	360,925	26 32,574	32,600	393,525		66,857 68,548	135,405
35,675 35,564	71,239	2,070 79,772	81,842	153,081		39,541 5,903	45,444	88	129	45,573		114,763 180,761	295,524	27,089	27,115	322,639		35,653 36,342	71,995
36,289 18,025	54,314	338 32,282	32,620	86,934		66,135 6,518	72,653	49	210	72,863		56,330 9,071	65,401	5,485	5,485	70,886		31,204	63,410
973 27,819	28,792	1,75 <del>4</del> 73,159	74,913	103,705		4,766 1,691	6,457	82	123	6,580		: :			:	:		: :	
				:		131	167	Cu:	2	172				27.6	276	376			:
													::						
	:					: : : : : :													
		4,197	4,197	4,197		177	177			177		1,961 24,289	26,250	26,797	26,797	53,047		::	
53 10,120	10,173	30,103	30,105	40,278		4,921 3,029	7,950	149	198	8,148				183	183	183		$\frac{70}{1,866}$	1,936
34,702 7,745	42,447	316 2,416	2,732	45,179		34,775 4,035	38,810	9	9	38,816		112,802 156,472	269,274	262	318	269,592		35,653 36,342	71,995
36,236 7,905	44,141	336 2,179	2,515	46,656		61,083 3,453	64,536	<u>.</u>	7	64,543		56,330 9,071	65,401	5,026	5,026	70,427		31,134 30,340	61,474
421 586	1,007	1,057	1,097	2,104		819 162	186	13.2	15	966		1,125	2,496	333	334	2,830		1,171	2,104
CHAMBLY CANAL.  Canadian Vessels, steamdo	Total Canadian	United States Vessels, steamdo	Total United States	Grand Total, Chambly Canal	MURRAY CANAL.	Canadian Vessels, steamdo	Total Canadian	United States Vessels, steam	Total United States	Grand Total, Murray Canal	OTTAWA CANALS.	Canadian Vessels, steamdo	Total Canadian	United States Vessels, steam	Total United States	Grand Total, Ottawa Canals	RIDEAU CANAL.	Canadian Vessels, steamdo	Total Canadian

No. 22.—General Statement showing the Number, Tonnage and Nationality, &c.—Continued.

				,									
VESSELS,	Number	From Canadian to Canadian Ports.	m dian dian ts.	From Canadia to United St Ports.	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports.	From United States to Canadian Ports.	States States dian ts.	Tons.	.8r	Total Tons.	Amount of Tolls.
	Готв	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
RIDRAU CANAL—Continued.		·····							<del></del>				e cts.
United States Vessels, steam	57	474	388	2,121						3,634	388 4,015	956 7,649	16 55 106 23
Total United States	148	1,987	4,403	2,215					:	4,202	4,403	8,605	122 78
Grand Total, Rideau Canal	2,252	63,461	76,398	4,151					:	67,612	76,398	144,010	1,661 27
ST. PETER'S CANAL.													
Canadian Vessels, steam,	1,121	3,357	5,003 25,964		: :					3,357	25,964	8,360 53,323	167 20 1,066 46
Grand Total, St. Peter's Canal.	1,154	30,716	30,967	:	:			:		30,716	30,967	61,683	1,233 66
TRENT VALLEY CANAL.  Canadian Vessels, steam.	732	13,998	13,067							13,998 15,067	13,067	27,065 28,958	204 72 123 15
Grand Total, Trent Valley	1,234	29,065	26,958							29,065	26,958	56,023	327 87

RECAPITULATION

7,100 91 13,923 56 1,065 37 281 83 3,465 38 1,538 49 1,538 49 1,233 66	28,927 08		8,806 48 706 00 1,532 79 3 78 759 27 122 78	11,931 10	40,858 18
483, 200 1, 627, 683 125, 563 118, 697 386, 925 118, 446 11, 683 56, 623	2,978,568		537, 699 92, 649 114, 462 33, 600 8, 606	786,354	3.764,922
249 769.22 769.22 785.44 71.956 71.956 76.957 76.958	1,500,871		273,515 39,546 81,842 129 27,115 4,403	426,550	1,927,421
243,966 918,178 54,314 65,401 63,416 29,065	1,477,697		264,184 53,103 32,620 210 5,485 4,202	359,804	1,837,501
131,818 65,032 28,792 6,457	232,099		44,102 12,128 74,913 123	131,266	363,365
14,648 700 167	15,515		2,237 37,558 276	40,076	55,591
888	374		8,434	236,399	236,773
982	286		251,330	258,691	258,977
4,556 835 177 26,250	31,818		1,410 6,287 4,197 26,797	38,691	70,509
106,214 42,063 10,173 7,950 1,936	168,336		10,376 6,492 30,105 198 183 2,215	49,569	217,906
112.574 643,565 42,447 28,310 28,314 71,996 71,996 71,996	1,236,580		38 12,697 2,732 6 6 318 4,403	20,194	1,256,774
122,812 875,415 44,1411 64,536 63,401 61,4716 39,716	1,293,560		241 1,692 2,515 7 7,026 1,987	11,468	1,305,028
9,170 1,007 1,007 1,007 1,154 1,154	19,894		1,328 1,097 15 334 148	3,699	23,593
CANADIAN VESBELS.  Steam and Sail.  Welland St. Lawrence Chambly Murray Ottawa Ruideau St. Peter's Trent Valley	Total Canadian	UNITED STATES VESSELS. Steam and Sail.	Welland St. Lawrence St. Lawrence Chambly Muray Ottawa. Rideau. St. Peter's	Total United States	Grand Total Canadian and United States

B. H. TEAKLES, Chief Clerk, Canals Revenue.

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No. 23.—Comparative Statement of the Total Movement of Property, Passengers and Vossels on the undermentioned Canals for the Canals for the Canals for the Canals for the Canals for the Canal Year and Canals for the C	TATEMENT the I	r of the T Fiscal Ye	otal Movar ar ended	ement of 30th Jur	f Propert 1e, 1891,	y, Passer and the t	gers and hree prec	MENT of the Total Movement of Property, Passengers and Vossels on the Fiscal Year ended 30th June, 1891, and the three preceding Years.	on the un ars.	derment	ioned Car	als for
GOODS, WARES AND		Welland Canal.	Canal.		·	St. Lawrence Canals.	ace Canals.			Chambly Canal.	7 Canal.	
MERCHANDISE.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.
Farm stock Forest Manufactures. Merchandise Vegetable food and other agri-	121,892 34,430 251,078	9 156,771 23,621 288,740	25 194,144 29,082 317,150	54 138,205 23,104 317,044	1,092 169,219 65,391 306,343	840 159,430 67,173 323,099	981 144,461 81,745 312,337	1,107 126,128 67,280 348,696	103,164 16,360 111,303	183 102,102 13,763 129,174	228 88,955 7,225 91,785	234 98,868 3,218 118,830
cultural products		469,113	564,152	481,095	333,170	292,674	370,577	286,093	6,988	5,423	4,594	3,914
©Passengers	5,464	3,071	9,599	24,089	58,079	48,242	910,101	61,614	3,419	3,713	192,785	3,360
Number of vessels of all kinds	2,729	2,839	3,057	2,547	9,744	9,358	11,188	10,476	2,311	2,305	2,018	2,104
Total tonnage of vessels of all kinds	807,434	939,035	1,144,117	1,030,899	1,682,879	1,575,938	1,750,414	1,720,331	247,766	249,367	224,562	240,015
		Welland Canal	l Canal.			St. Lawre	St. Lawrence Canals.			Chambly Canal.	' Canal.	
	Percentage of Decrease of 1891 compared with 1890, is	Percentage Decrease of 1891 compared with 1890, is	Percentage of Increase of 1891 compared with 1886, is	Percentage Increase of 1891 compared with 1888, is	Percentage of Decrease of 1891 compared with 1890, is	ntage se of 1891 ed with ), is	Percentage of Decrease of 1891 compared with 1885, is	rcentage rease of 1891 pared with 1888, is	Percentage of Increase of 1891 compared with 1890, is	ntage e of 1891 ed with	Percentage of Decrease of 1891 compared with 1888, is	tage e of 1891 d with
	13.	13.13	13	13.78		7.45	5.	5.53	14.34		5.75	.22

9,	GOODS, WARES AND		Murray Canal.	Canal.			Ottawa Canal.	Canal.			Rideau Canal.	Canal.		
:6	MERCHANDISE.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.	1888	1889.	1890.	1891.	
	Farm stock Forest Manufactures			6,832 28,832	25 4,124 1,659	1,220 668,105 484	1,294 687,353 425	1,028 698,978 360	1,167 622,329 844	36 75,860 2,461	23 91,693 2,566	25 105,237 2,424	38 74,530 2.336	
	MerchandiseVegetable food and other agri- cultural products			3,085	4,205	7,913	10,009	7,636	11,483	14,666	19,647	19,311	3,055	
	Total tons			10,594	13,585	685, 434	705,132	712,384	640,978	95,968	116,371	129,390	100,687	
. ,	Passengers			1,331	14,437	14,477	14,248	14,284	12,683	3,552	3,527	2,535	4,376	
• •	Number of vessels, all kinds			167	966	3,326	3,166	3,066	2,830	2,598	2,752	2,407	2,252	
85	Total tonnage of vessels of all kinds		:	22,102	118,436	431,289	430,698	410,534	393,525	163,967	184,575	159,559	144,510	
			Murray Canal	Canal.			Ottawa Canals.	Canals.			Rideau Canal.	Canal.		
				Percentage of Increase of 1891 compared with 1890, is	ntage se of 1891 d with ', is	Percentage of Decrease of 1891 compared with 1890, is	ntage se of 1891 d with	Percentage of Decrease of 1891 compared with 1888, is	ercentage rease of 1891 pared with 1888, is	Percentage of Decrease of 1891 compared with 1890, is	ntage se of 1891 sd with ), is	Percentage of Increase of 1891 compared with 1888, is	ntage e of 1891 d with , is	
•			N 00-	10.2%	10	86.93	88	11.	11:14	83	28.5	4.68	88	

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA,

APPENDIX A—Continued—CANALS.

No. 24.—Comparative Statement of the Tonnage of Vessels and Goods passed through the Canals during the Fiscal Years ended 30th June, 1889, 1890, 1891.	(ATEMENT	of the ?	Ponnage ended	of Vesse	e, 1888, 1	Resp. 189	88ed thr. 0, 1891.	ough the	Canals	during t	he Fiscal	Years
Decreesed Vaccours		Welland Canal.	Canal.			St. Lawrence Canals.	ce Canals.			Chambly Canal	· Canal.	
I RUFERII AND V ESSELS.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.
Tonnage of property, up down	273,484	296,090	315,726	313,480	272,405	280,075	299,357	258,594 570,710	106,740	91,226	91,668	101,722
Total tonnage of property, up and down	827,300	938,254	1,104,553	959,502	875,215	843,216	910,101	829,304	238,010	250,645	192,785	225,064
Tonnage of vessels, up	397,961	469,884	564,536	508,144	965,731	915,314	1,009,119	971,281	83,342	81,109	84,888	86,934
Total tonnage of vessels, up	807,434	939,035	1,144,117	1,030,899	1,682,879	1,575,938	1,750,414	1,720,331	247,766	249,367	224,562	240,015
perty and vessels, up and down	1,634,734	1,877,289	2,248,670	1,990,401	2,558,094	2,419,154	2,660,515	2,660,515 2,549,635	485,777	500,012	417,347	465,079

	Years
	Fiscal
	the
	during
	Canals
	the
APPENDIX A—Continued—CANALS.	o. 24.—Comparative Statement of the Tonnage of Vessels and Goods passed through the Canals during the Fiscal Years ended 30th June, 1889, 1890, 1891.

PROPERTY AND VESSELS.  PROPERTY AND VESSELS.  1888. 1889. 1890. 1891. 1888. 1889. 1890. 1891. 1891. 1888. 1899. 1890. 1891. 1991. 19	9c-				e nanua	aune uno	enaea 30th June, 1886, 1889, 1880, 1881	303, 103U <sub>1</sub>	1001.					
Total tonnage of vessels, up.  Total total tonnage of vessels, up.  Total total total tonnage of vessels, up.  Total total	$-6\frac{1}{2}$	į.		Murray	Canal.			Ottawa (	Canals.			Rideau (	Canal.	
Total tonnage of vessels, up.  Total tonnage of vessels, up.		FROPERTY AND VENSELS.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.	1888.	1889.	1890.	1891.
Total tonnage of property.  Total tonnage of vessels, up.  Total tonnage of vessels, up.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of vessels, up and down.  Total tonnage of property and vessels, up and down.  Total tonnage of vessels, up and down.  Total total tonnage of vessels, up and down.  Total total tonnage of vessels, up and down.  Total total total tonnage of vessels, up and down.  Total total total tonnage of vessels, up and down.  Total total total tonnage of vessels, up and total total total total total total total total total total to	. •	Tonnage of property, up			3,941		685,	172		639	79,996	86,245	114,513	75,122
Tonnage of vessels, up		Total tonnage of property, up and down			10,594	1.		705,132	1		95,968		129,390	100,687
22,102     118,436     431,289     430,638     410,534     383,525     163,967     184,575     116,559       116,723     1,116,723     1,112,918     1,034,503     259,935     300,946     288,949	87	Tonnage of vessels, up do			11,242		"	77,419	"	70,886	79,411	88,721	79,787	67,612
32,696     132,021     1,116,723     1,122,918     1,034,503     259,935     300,946     288,949		Total tonnage of vessels, up and down			22,102	ļ		430,698	410,534	1	163,967	184,575	159,559	144,010
		Grand total tonnage of property and vessels, up and down			32,696		<u>'                                     </u>	i	1	1	259,935	300,946	288,949	244,697

B. H. TEAKLES, Chief Clerk, Canals Revenue.

## APPENDIX A-Continued-CANALS.

No. 25.—Comparative Statement showing the Quantity of each Article transported on the Canals during the Fiscal Years ending 30th June, 1890 and 1891, and the Amount of Tolls collected thereon.

A	189	90.	18	91.
ARTICLES.	Tons.	Tolls.	Tons.	Tolls.
		\$ ets.	<u> </u>	\$ ets.
Ashes, pot and pearl	203	37 13	176	32 07
Apples	98 3,735 18,070	435 55 275 37	4,280 8,122	434 47 228 91
do do do Free do do animal	2,355	216 31	24 2,527	196 18
do doFree Agricultural implements	289	35 59	14 278	33 09
Barley Bricks do Free Bones Brimstone, crude	9,879 10,995 92 447 323	*986 19 488 29 	12,549 13,453 398 186 1,061	1,674 43 609 76 19 35 151 15
Cement and water lime	6,657 1,033 41,754	710 40	3,435 1,217 44,804	459 10 2,176 86
do   Free   Coal	876 480,881 103,670 365,575 188,160 998	73,104 81 71,356 08 69 67	730 532,838 98,621 264,351 85,527 1,285	79,821 01 50,858 47 85 78
Cotton, raw Crockery and earthenware doFree	276 64	48 02	3 476 124	0 32 81 72
Dye goods and dye stuffs	219	16 43	358	26 53
Fish do Free Flax and hemp	2,081 78 165	96 15	1,398 69 5	85 52 0 65
do Free Furniture. do Free foo free free free free free free fr	12,576 7,135 638 1	1,384 07	22,896 1,233 897 2	2,958 83 136 18
Gypsumdo crude	2,812 521 8	53 24 93 91	839 205 715 17	17 78 2 56 124 48
Hay, pressed. Hogs Horses do Free	3,792 51 662 4	204 62 6 30 42 12	4,357 59 628	202 08 6 80 41 91
do	65	7 00	3 146	17 67
Ice	24,646 18,521 18,813 5,784 124	1,335 69 2,729 98 842 97	15,325 14,934 14,186 3,577 76	1,015 33 2,163 05 419 87
Iron, all other	21,809 133 8	1,250 10 0 08	12,729 708 5,370	949 85 274 89

No. 25.—Comparative Statement showing the Quantity of each Article imported on the Canals, &c.—Continued.

	189	90.	189	91.
Articles.	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.	<del></del>	\$ ets.
Kryolite or chemical ore, and other ore except iron do Go Free	4,948 10	249 74	12,272 917	613 25
Lard and lard oil	134	16 55	473 172	55 42
Meal, all kinds	16,307 184	3,128 91	27,340 233	5,322 87
Meats, other than pork	119 29	12 30	106 1	11 71
Marble Manilla. Molasses do Free	4,545 57 5,757 56	679 60 8 85 555 84	4,972 141 1,490	746 70 20 65 177 10
Nails Free	3,715 690	597 02	4,974 457	697 46
Oats	40,882	7,135 95	<b>32,865</b> 9	5,919 53
Oil do Free	27432 11 828	273 74	2,189 38 7	258 27 0 66
do Free	798		2	• • • • • • • • • •
Pease do	24,810	571 67 25 33	26,198 390 1,052	665 10 75 14
Pork Free	1,983 1,051	288 51 160 00	1,004 322	124 79
Paint do Free Pitch and tar Free	448 52	61 86	791 62	111 68
do Free	1,593 12	135 29	1,219 17	148 02
Rags Rye	1,100 6,442 2,404	113 76 791 62	155 3,102	27 24 169 20
Rosin	2,761	204 06	4,554	336 44
Salt	10,001 4,284 20,803	1,310 12 2,511 54	15,618 7,220 15,723	1,984 94 2,136 97
do do Free do wrought	762 958	139 13	450 706	67 65
do do Free do not suitable for cutting, unwrought	2,561 9,531	735 29	22,374	1,042 06
do do Free do Free	9,456 7,695 2	333 86	1,470 4,431 101	212 42
Sheep	592 1,897	38 32 324 77	650 2,739	41 42 472 65
do Free	783 483	65 60	523 412	56 84
do	7,611 454	1,042 39	4,693 175	760 83
Spirits	1,594 318	286 49	1,663 335	285 68
Tobacco, rawFree	10 1	1 18	34 1	3 16

No. 25.—Comparative Statement showing the Quantity of each Article transported on the Canals, &c.—Continued.

	A	189	90.	189	91.
	Articles.	Tons.	Tolls.	Tons.	Tolls.
		,	\$ cts.		\$ cts.
Tallow		125	18 19	173	26 72
do	Free	596	97 01	54 669	111 92
	Free	94		37	
	Free	349 2	28 15	220 1	17 55
				_	20.510.07
	Free	170,485 78,561	26,660 67	177,501 108,468	30,518 87
	Times	112	20 10	225 11	34 07
	Free	410	75 29	794	141 38
	Free	52 419	81 92	52 195	35 79
	Free				
All other goods do	and merchandise, not enumerated do Free	46,825 1,615	6,588 56	56,158 1,147	8,002 98
		349 632	5 33 71 49	63 702	3 57 79 90
		19,472	260 62	20,166	246 11
		23,786 103,792	3,173 65	11,340 109,200	3,362 76
do	doFree	21,585		13,680	
	fts	222 4,410	2 41	480 10,166	25 47
		30 79	2 66 11 50	247	29 00
Lumber, sawn.	in vessels	855,412	68,388 25	735,327	57,831 34
do	doFree	5,896	00.91	2,430	
do do	rafts	657 1,874	22 31	490 1,802	32 04
		10 046	482 63	771	15 52
Masts, spars ar	id telegraph poles, in vessels	18,246		10	i
do	do rafts		102 33		476 49
do do	doFree. do rafts	3,982	102 33	18,669	476 49
do do	doFree. do rafts  n vessels do Free.	3,982 13,555	102 33 1,382 14		476 49 1,136 54
do do Railway ties, i	doFree. do rafts	3,982 13,555		18,669 11,334	
do do Railway ties, i do do do Saw logs	do Free do rafts	3,982 13,555 700 3,413 28,737	1,382 14	18,669 11,334 25 1,021 11,025 28,178	1,136 54
do do Railway ties, i do do do Saw logs	do Free do rafts	3,982 13,555 700 3,413 28,737 26,037 2222	1,382 14 55 31 640 26	18,669 11,334 25 1,021 11,025	1,136 54 91 32
do do  Railway ties, i do do do do  Saw logs do Staves and hea do	do Free do rafts	3,982 13,555 700 3,413 28,737 26,037 222 278	1,382 14 55 31 640 26 17 86 51 74	18,669 11,334 25 1,021 11,025 28,178 13,629	1,136 54 91 32 749 63
do do  Railway ties, i do do do  Saw logs do Staves and hea do do do	do Free do Free do Free do Free do Free do Free ding, barrel.	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18	1,382 14 55 31 640 26 17 86 51 74 72 88 1 10	18,669 11,334 25 1,021 11,025 28,178 13,629 	1,136 54 91 32 749 63 21 31 6 75 0 17
do do Railway ties, i do do do Saw logs	do Free do rafts  n vessels do Free rafts do Free ding, barrel pipe West India salt barrel	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18 749	1,382 14 55 31 640 26 17 86 51 74 72 88	18,669 11,334 25 1,021 11,025 28,178 13,629 	1,136 54 91 32 749 63 21 31 6 75 0 17
do do Railway ties, i do do do Saw logs do Staves and hes do do Shingles Split posts and	do Free do rafts  n vessels do Free fence raits free ding, barrel pipe West India free fence rails, in vessels Free fence rails, in vessels	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18 749 6 6 59	1,382 14 55 31 640 26 17 86 51 74 72 88 1 10 320 64 11 23	18,669 11,334 25 1,021 11,025 28,178 13,629	1,136 54  91 32  749 63  21 31 6 75 0 17 451 51
do do Railway ties, i do do do do Saw logs do Staves and hes do do Shingles Split posts and do	do Free do rafts	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18 749 6 59	1,382 14 55 31 640 26 17 86 51 74 72 88 1 10 320 64	18,669 11,334 25 1,021 11,025 28,178 13,629	1,136 54  91 32  749 63  21 31 6 75 0 17 451 51
do do Railway ties, i do do do Saw logs do do do Staves and hes do do Shingles Split posts and de do Timber, square	do Free do rafts	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18 749 6 59 19	1,382 14 55 31 640 26 17 86 51 74 72 88 1 10 320 64 11 23	18,669 11,334 25 1,021 11,025 28,178 13,629	1,136 54 91 32 749 63 21 31 6 75
do do Railway ties, i do do do Saw logs do do do Staves and hes do do Shingles Split posts and do do	do Free do Free raits Free West India salt barrel Free fence rails, in vessels do Free do do Free fence rails, in vessels do do Free free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence rails free fence fence fence free fence rails free fence fence free fence fence free free fence free free free free free free free fr	3,982 13,555 700 3,413 28,737 26,037 222 278 514 18 749 6 59 19	1,382 14 55 31 640 26 17 86 51 74 72 88 1 10 320 64 11 23 0 30	18,669 11,334 25 1,021 11,025 28,178 13,629 114 36 9 1,019 44 1 410	1,136 54 91 32 749 63 21 31 6 75 0 17 451 51 6 93 0 13

No. 25.—Comparative Statement showing the Quantity of each Article transported on the Canals, &c.—Concluded.

	189	90.	18	91.
Articles.	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.		\$ cts.
Traverses	14,402 283	60 86 80 60	12,676 214 1,742	43 77 81 13
Total tonnage freight paying tolls	2,616,694 515,937	303,278 57	2,425,504 396,810	280,884 18
Grand total—freight	3,132,631		2,822,314	
Passengers—total numberVessels—tonnage	90,924 3,836,541	3,195 85 45,943 54	128,560 3,764,922	4,020 73 40,858 18
Total tolls collected		352,417 96 19,478 80		325,763 09 15,699 53
Gross total tolls		371,896 76		341,462 62

B. H. TEAKLES, Chief Clerk, Canals Revenue.

APPENDIX A.

	Fr	From	From	8:	From	8	From	gá						
ARTICLES.	Canadian to Canadian Ports.	nadian to nadian Ports.	Canadian to United States Ports.	lian States	United States to United States Ports.	States States	United States to United States Ports.	States States ts.	Tons.	zi.	Total Tons.	Amount of Tolls	of Tolls.	Total Amount of Tolls.
	U.i.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Up.	Down.	
				   								e cts.	e cts.	e cts.
Ashes, pot and pearl		20 20	<u></u>					89	-18 83 17	118	150	0 15 8	14 00 2 99	14 15 7 79
Agricultural products not enumerated, vegetable.			8	80				1	18	202	220	2 70	10 23	12 93
Agricultural products not enumerated, animal.			:	:				14	:	14	14	:	2 80	2 80
Agricultural implements Barley	: :8	: :4	4,311			6,519			4,311	6,519	10,830	646 65 21 58	1,303 80	1,950 4
Bones	1	:			736	:			736		1 736			0 0 110 4
Cement and water lime.		664	83		22				\$ €	422	87 472		44 25	11 8 11 8
Coal.	8 : '				161,616	615 180,842	17,280	22,781 146,552	178,988	23,396 327,394	327,394	35,795	2,427 10 65,478 60	38,222 60 65,478 60
Cotton, raw. Crockery and earthenware	-		: :=						<del>1                                    </del>			0.15		0 15
Dye wood and dye stuffs.		15	. 63		170				172	51	223		98.6	35 65
Flax and hempFlour.		4,854	::00			9,204		403	· : : : : : : : : : : : : : : : : : : :	14,461	14,461	1 20		2,042 79
Gypsum. Glass, all kinds.	:67		17	305	9			-	8	, F	28 S	3 75	88	200 700
Hogs. Horses	: :ଖ : :	101	· ·		-	; <del></del> -		e	#	17	48	1 33	1 05	2 38
Hides and skins, horns and hoofs		450	15,143		9,475		: :	: :	55 24,618	450	25,068	8 25 1,230 90	2 82	8 25 1,233 72

do pig do all other	8 8	.4	888		203				717	20	% LT 23	261 261 261 361 361 361	0.45	201 205 204 204 204 204 204
						1,620		1,280	G	2,900	2,900		145	145 00
	: <del></del> : :		N <del>4</del>	: : : :		20,482		ិជ្ជ	4 ro	20,73	20,708	9 5 5	4	4,141 39
Marble					4,437	3 : :			4,437	3 : :	4,437			
					116				11.8		117	17.		111
Oats. Oil, in barrels.	9	219				27,030	77	674 6	:88	27,728 6	27,728 83 80	2 75	5,533	స్త స్టోస్ట్ల కుట్లం
Pease. Potatoes	: :m					- 41		9	: en	444	14.4	90 0		*&&
		: :2	2962		34	æ 😁 : :		0#2	818	<b>8</b> 0 3	<u> </u>	5 10 122 70	300 100 100 100 100 100 100 100 100 100	85 0 21 8 2 2 8 8 2 8
Rye	428		: : : : : :				: :	1,121	<b>4</b> 28	1,121	1,549	64 20	224 20	288 40
Kosin Salt WStone intended for cutting.	14:	701	501		308			4,790	326	701	1,027	47	140 20	187 53
do wrought. do not suitable for cutting,	196	1.51			70.02	18			195	657	852	3 66	131	
					<b>8</b> 2 .	135		63	<b>2</b> :	137	155	2 70	27 40	30 10
	. :				33 : 6 35 : 6					:::	26 : 8 26 : 8	148 90		
Spirits, beer, &c.	220		500 m		§ :	<b>8</b>		:83	11.0	25.2	28 52 rc	2 10		
Tallow Tin	٧ :		· · · · · · · · · · · · · · · · · · ·		<b>38</b> :			\$ .	· · ·	<u>z</u> :	28.	55 88 88	10 80	200
Lurpentine Wheat. White lead	3,078	12,527				31,527		70,870	3,078	114,924	118,002	92 29	22,830 44 0 20	22,895 94 0 20
Whiting. Wool All other goods and merchan-	-								-			0 15		0
	787	203		:	29,322	1,822	-	189	30,313	2,214	32,527	4,454 00	406 42	4,860 44
			· ,	· Si :	12	l			12	901	<b>183</b>	14 63	3 79	18 42
Floats	3 964	10.600		:	:	:	:	:		10.500	14 170		90 702	20 000

88 8 8385 38 ន 175,773 38 28 Total
Amount
of
Tolls.  $\frac{11,073}{2,651}$ Ħ No. (A) 7.—General Statement showing the Quantity of each Article of Through Freight transported, &c.—Concluded. 3 :8885 131,103 47 ध्रञ्ज 12 8 cts. Down. 11,073 ( 2,651 7 Amount of Tolls. ag to as to 0 15: 10 40 44,669 91 8 3,844 218 187 36 88 984,014 3,794 218 187 187 86 Tons. 267,338 331,799 Down. From United States to Canadian Ports. 318,259 Down. From United States to United States Ports. 214,183 Up. Down. United States From Canadian Ports. 26,238 56,335 Down. From Canadian to Canadian Ports. 9,559 Traverses... Woodenware and wood partly Hop poles ..... Lumber, sawn, in vessels .... Staves, salt barrel.
Shingles
Split posts and fence rails, in Split posts and fence rails, in Total freight paying tolls Articles having paid full Tolls on the St. Lawrence Canals, Free. Ashee, pot and pearl...... Bricks ..... Cement and water line..... Clay, lime and sand...... Masts, spars and telegraph Railway ties, in vessels .... ratts.
Timber, square, in vessels...
do in rafts..... Saw logs. Staves and headings, barrel manufactured.... 94

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, 27th February, 1891.

APPENDIX A-Continued.

No. (A) 8.—Statement showing the Quantity of each Article of Through Freight transported on the Welland Canal, and the Amount of Tolls collected thereon, during the Season of Navigation in 1890.

Ashes, pot and pearl.  Apples.  Agricultural products not enumerated, animal.  Agricultural implements.  Barley Ba	ARTICLES.	Fr Cans Cans Po	From anadian to to anadian Ports.	From Canadian to United States Ports.	om dian States ts.	From United States to United States Ports.	m States States	From United State to Canadian Ports.	From United States to Canadian Ports.	Tons.	zi.	Total Tons.	Amount of Tolls.	of Tolls.	Total Amount of Tolls.
2     32       18     1       18     14       50     6,519       17     736       60     17,280       11     161,616       11     180,842       12     146,550       13     146,550       14     11       15     170       16     11       17     11       18     12       19     12       11     11       11     11		Up.	Down.	Up.	Down.		Down.	Up.	Down.	Vp.	Down.		Up.	Down.	
50     32       18     18       18     14       50     4,311       70     6,519       70     4,31       736     4       80     10,56       10     11,78       11     11,78       12     22       14     403       15     170       16     11       17     6       18     1       19     1       10     1       11     1       12     2       13     1       11     1													e cts.	es cts.	e cts.
50     4,311       736     6,519       80     17       736     615       17     52,781       18     161,616       11     17,280       22,781     1785       11     170       12     146,560       12     146,560       13     1       14     1       15     1       16     1       17     1       18     1       19     1       10     1       11     1	Ashes, pot and pearl		81		::		: : : :	: :	88 : :	32	70	32	0 15	14 00	14 15 4 80
50     4,311       79     6,519       80     22,781       17     736       161,616     615       17     161,616       180,842     17,280       22     170       22     22       23     22       24     403       25     24       44     403       24     44       33	Agricultural products not enumerated, vegetable.	:	:	18	:	:	:	:	7	<b>8</b> 1	-	19	2 70	0 20	2 90
unptements	Agricultural products not en- umerated, animal		:	:	:	:	:	:	14	:	14	14	:	2 80	2 80
water lime	Agricultural implements.  Barley.  Bricks.			4,311		79	6,519	::1		4,311	6,519	10,830	646 65	1,303 80	1,950 45
and sand.     80     161,616     615     17,280     22,781     1785       d carthenware     1     1     1     146,550       mp     2     170     2     2       mds     8     221     2       d     4     4     403       akins, horns and     4     4     1	Bones. Brimstone Cement and water line			17.		736				736		736	110 40		110 40 10 35
md dye stuffs. 49 2 170	Clay, hme and sand	: <b>8</b> :				161,616	615	17,280	22,781	178,976	23,396	202,372	35,795 20	2,427 10 65,478 40	38,222 30 65,478 40
mp 9,204 408 mp 1,70 9,204 408 mds 2 1,7 6 6 1 1 mkins, horns and	Cattle Cotton, raw Crockery and earthenware			: F	: : :							:: <b>F</b>	0 15		0 15
mds 8 9,204 403 403 403 404 403 404 404 404 404 4	Dye wood and dye stuffs.		49	:		170				172	. 67	221		08.6	35 60
d d d d d d d d d d d d d d d d d d d	Flax and hemp. Flour Furniture.			. ∞			9,204		403	· · · · · · · · · · · · · · · · · · ·	9,607	9,607	1.20	1,921 40	1,921 40
skins, horns and	Gypsum Glass, all kinds Hav, pressed	63		17		9					<del></del>	: <b>%</b>	3.75	0.20	3 95
hoofs. 55	skins, horns			4		<u>1</u> 2	<b>H</b>		e :		.4.		0.775	08.0	1 55 8 25 82 55

96 062,	261 90 261 90			516, 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			30 10		456 60 0 20 0 15	18 95
<del>-</del> :	- <del>8</del> :	888	····	38388 	:  88	•	<del>.</del> .	:		S . SS .
		145 7 4,140		5,516 0 2	::	<u> </u>	27.	26 21	22, 456 0	399
1,230 90	261 261 261 261 261	0.30			5 10 122 70 64 39		508 40		0 15	4,440 00
24,618	30 697 5,238	2,900 37 20,708	15 4,437 162 117 6	27,582 6 2 14	328 37 818 	1,015 1,015 5,761 657	5,084	786 268 268 122	112,283	31,596
:	: FT :	2,900 35 20,703		27,582 6 22 14	88 :-	5,761 567 567	137		112,283	1,996
24,618	: 5,238	. 64 70	4,437 162 117 6			314	5,084	786 14 5 68		29,600
<u>:</u>		1,280 5 221		479	240	4,730		: : : : : : : : : : : : : : : : : : : :	70,439	166
:										
: : :		1,620	::::	27,030		. : : :	135		31,527	1,822
9,475	502		4,437 162 116		. <b>2</b>		5,084			29,322
:										
15,148		614		`	2962					203
				73		107			10,317	œ : :
:	<b>.</b>	:								42
	Iron, rauway. do pig do all other.	Kryolithe, chemical ore and other ore, except iron.  Lard and lard oil.  Meal, all kinds.	Mests, other than pork. Marble Manilla Manilla N. 31.	Date. Oat, in barrels Oil cake.	Forkers Pork Paint Paint Pitch and tar Rags	Kye GRosin ASalt Skone intended for cutting. do wrought	do not suitable for cutting, unwrought Seeds, all kinds Sheep.	Soda seh Steel. Sugar. Spirits, ben, &c. Tobacco, raw.		All other goods and merchandise not enumerated.  Bark. Barels, empty Bosts knees.
Iœ.	do pig. do all o Iron ore.	Kryolithe, other or Lard and Meal, all	Meats, oth Marble Manilla. Molasses	Oats. Oil, in bal Oil cake. Pease.	Fork. Pork. Paint Pitch and tar. Rags.	Kye GRosin ASalt Stone inte do wro	do not Seeds, all Sheep.	Sods seh Steel. Sugar Spirits, beer, &c. Tobacco, raw.	Turpentine Wheat White lead Whiting	All other good dise not en Bark Barrels, emp Bosts knees.

No. (A) 8.—General Statement showing the Quantity of each Article of Through Freight transported, &c.—Concluded.

	E	From	From		<u> </u>	E.	E E	, a		-				
Articles.	Cani Cani Po	Canadian to Canadian Ports.	Canadian to United States Ports.	disn States	United States United States Ports.	States States ts.	United t Cans Pos	United States to Canadian Ports.	To	Tons.	Total Tons.	Amount	Amount of Tolls.	Total Amount of Tolls.
	· Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Up.	Down.	
Firewood, in vessels		1,398				:				1,338	1,398	e cts.	93 20	93 20
Hoope Hop poles. Lumber, sawn, in vessels.		1,942		9,560		38,030		5,020		54,552	54,552		9,811.94	9,811.94
do rafts. Masts, spars and telegraph poles, in vessels.	• •										: :			
waste, spars and velegraph of poles, in rafts	: :	: :	: :		:::	: :	::						: :: :: ::	
Saw logs Staves and headings, barrel.														
do pipe do W.India.							: :	85 88		8 28	187 88		34 80 6 75	8 3 8 5 7 5
Shingles Split posts and fence rails, in		::		17.						14	14		09.6 `	09.6
Splits posts and fence rails, in	·	:	:			:	:	:		:		:		:
Timber, square, in vessels do rafts		12,269						60,843 15,963		73,112	73,112		11,073 67 2,651 46	11,073 67 2,651 46
Traverses. Woodenware and wood partly manufactured.				: :		: =		: 7	: %	- 61	: <b>8</b> 8	10 40	08 	11 20
Total freight paying tolls.	728	29,450	25,923	9,574	214,183	318,259	17,281	331,343	258,115	688,626	946,741	44,435 83	44,435 83 129,323 44	173,759 27
Articles having paid full tolls on the St. Lawrence Canals. free:														
Ashes, pot and pearl,			10		:	:	:		10	<u>:</u>	10	:	:	

	190,925 34	TEAKLES, Chief Clerk, Canals Revenue.	52,948 29   KLES, f Clerk, C	3. H. TEA	, B		Total Through Tolls.	tal Thro	T <sub>0</sub>						
	17,073 52 92 55	8,603 06	8,470 46	.\$4,792 65		Vessels. Passengers. Free gnods.		gers	n Vessels Passengers. Free goods.	Total Tolls on Vessels. do Passenge do Free goo	Tot				
,				978,692	989,626	290,066	331,342	17,281	318,259	215,698	9,574	35,644	29,451	21,443	Grand total, freight
	:	:		1,180	:	1,180	•	:		8.	:	1,044	:	46	All other goods and mer- chandise, not enumerated
`				# EE		*2	: :	: :				13		<b>.</b>	Whiting
				61.6	: :	200	: :	: :			::	-=		<b>-</b> ∞	Turpentine White lead
•				1 4		- 4	: :	: :				1 04			Tobacco, raw Tin
				350 350		350						33.55		∷ ∷ ∷	Sugar Spirits, beer, &c.
			: :	25.		5 <u>7</u> .	: :	: :		360		<u>8</u> .			Seeds, all kinds
				7,440		7,440				88		6,486		118	Salt. Stone, for cutting
									: :			121			Pitch and tar
				183		= 8 =		::	: :	: :		<u> </u>		ا: <b>ت</b> : :	Oil, in barrels Pork
				<u> </u>		7.55	: : : :	::	: :	72	: :	411	: :		Lard and lard oil
				. 25. 15 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	: :	8.8	: :				: :	96	: :	88	do pigdo all other
				8 8 8 8		20,003	: : : :					2 19		19,948	Grass, all Krads Iron, railway
				3 <del>2</del> 8		 3 <b>3</b> 8 %		; ; ; ;			: :	<b>€ ₹</b> 8		: :°	Flour
			·	) 11.8		`==%				: oc	-	ေကမွ		1	Crockery and earthenware
				83 ∝		83×		: · : : : :		F :		320		:00 c	Cement and water lime
	D	-		252		952	_	_		140		103		_	900

99

APPENDIX A-Continued.

		C					c			c	·			
Articles.	Fr Can Can	From anadian to to anadian Ports.	From Canadia to to United St Ports.	From Canadian to United States Ports.	Fr United United Po	From United States to United States Ports.	From United St to Canadia Ports.	From United States to Canadian Ports.	To	Tons.	Total Tons.	Amount of Tolls, U.P.	Amount of Tolls,	Total, Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Λp.	Down.	Up.	Down.			:	
												es cts.	ee Cts.	e cts.
Ashes, pot and pearl		118						: :		118	118	: :	2 99	2 99
Agricultural products, not Agricultural products, not		-		300	:		:	:		201	201		10 03	10 03
O Agricultural implements					::	: :		: :				:::		
Bricks Bones	: :88: :88:	144							58	144	202	   	13 05	15 28
Brimstone Cement and water lime Clay, lime and sand Coal		£23 : : : : : : : : : : : : : : : : : : :	15						:: ::: :::::::::::::::::::::::::::::::	422	18 472 12	1 47 0 94 0 30	: 1	1 47 45 19 0 30
Cotton, raw.	:-							8 : :		8		0 0	0 : : 0 : :	:
Dye woods and dye stuffs		: : : : : : : : : : : : : : : : : : :											0 05	
dr.		4,854		205						4,854 4 205	4,854 4 205		121 39 0 30 2 56	121 39 0 30 2 56
Hogs Horses Hides and skins, horns and	23	: :01 : :								10	 	89 0	0.25	0 83
hoofs		450								450	450		2 82	2 82

	186	4	: : : : : : : : : : : : : : : : : : :						9 <b>I</b>	₹	98	0 0 642	0.25	00
Kryolite, chemical ore and other ore, except iron.					: :			:						
Meal, all kinds						: : : : : :	: :							: : :
Marble								<u>: :</u> : : : : : : : : : : : : : : : : :						
							::							
Osts Oil in barrels	5 °C	146							5 : 82	146	34.	2 77	17 40	142
•							7		} : : :			:		
Potatoe							<u>:</u> :		<u>ج</u>			0.0	: :	
: :	9				: :		<u>: :</u>	: :						
	:	45		:	:	:	: :	: : :	:	45	40	:	1 13	
Rye			: :											
Koein Salt	123					: :			12		12	0.23		:
Stone intended for cutting														
wrought not suitable for cutting,	<u> </u>				:	<u>:</u>	:	:	95		OST S	<b>S</b> 9	•	
unwrougut	:	121				: :	<u>: :</u>	: :		121	00#	9 :	- :	•
Sheep.					: :	7								
	Ş								140		140	89.6		
Spirits, beer, &c.	:				:				:			:		` .
					: :	: :	<u>: : : : : : : : : : : : : : : : : : : </u>							
	=	:	:		:	:	<u>:</u>	:	-		_		:	0 03
Wheat.	8,078	2,210					: : : : : :	431	3,078	2,641	6,719	65 50	373 84	439 34
									: :					
WoolAll other goods and mer-		:		:	:	:	:	:	:	<u>:</u>		<u>:</u>	:	
	713	195	:		:	:	:	: :	713	218	931	14 00	7 24	2
Barrels, empty				. S		<u>:</u> :				66			2 47	es Es
DOML KINGS	· · · · · · · · · · · · · · · · · · ·		,											
Fire wood, in vessels.	3.264	9.210	900			:	:			6		90 90		2

No. (A) 9.—Statement showing the Quantity of each Article of Way Freight transported, &c.—Concluded.

Tons. Total Amount of Tons. Total Of Tolls Up. Tolls Up. Tolls Up.	Up. Down. Up. Down.	e cta.	760 5,071 5,831 18 22 540 86 559 08 15 15 15 20 86 569 08	0 25	57 57 57 1 69 1 69 1 69 1 69 1 69 1 69 1 69 1 6	60         3,784         2 10         204 28         206 38           218         218         218         17 40         17 40				1 0 15 0 15 0 15 0 15 0 25 0 55 0 50		77 456 9,223 28,050 37,273 234 08 1,780 03 2,014 11	200 200	00000
		•		•	10	202	:		:			-	-	
Amount of Tolls Up.		e cts	18											
Total Tons.			5,831	-	218	3,844	:		:	===		37,273	200	27 473
s.	Down.	:	5,071	H	57	3,784			:			28,050	300	28.950
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Fr United Can	Up.						:		<u>:</u>		: :	77		77
From United States to United States Ports.	Down.				: :		:							
Fr United	Up.				::		:		<u>:</u>				:	
From Canadian to United States Ports.	Вожв.				47	158	<u>:</u>		<u>:</u>		: :	602		78
Can Can United	ď								<u>:</u>			315		818
From Canadian to Canadian Ports.	Down.		5,071		103	3,626	:		:		: :	26,885	200	97 085
Cans Cans Cans Po	Up		760		<b>83</b> :	:8 : :	<u>:</u>		•	:9		8,831	: :	8 881
ARTICLES.		Fire wood, in rafts	Hoops. Hop poles. Lumber, sawn, in vessels rafts	Masta, spars, and telegraph poles, in vessels	nasce, spars, and coograph poles, in rafes	Saw logs	Staves and headings, West	Staves, salt barrel Shingles Split poets and fence rails, in	Split posts and fence rails, in	Timber, square, in vessels	Traverses Woodenware and wood partly manufactured	Total freight paying tolls.	land to Port Robinson	Grand Total fraight

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			DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1891.			
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APPENDIX A.—Continued.

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No. (A) 10.—Grenzal Statement showing the Quantity of each	of Revenue collected during

Total Amount of Tolls.		e cts.	14 60 368 85	179 67	55 16	88 82 82	¥ 23	373 1,208	21,830 366	42	♣ ₹	88	6 487	116	91 12 12 13 14	46		8	1 23
Amount of Tolls, Down.		e cts.	11 60 364 39	100 99		28 28 28 28 28 28 28 28 28 28 28 28 28 2			21,830 57 363 41		<u>10</u> -	160	6 417	82		38	9 9	22	1 23
Amount of Tolls,		ee cts.	8 4 9 9	78 08	10 88	3 76 476 34		350 09 789 87			38 69	38°	o 8 8 4	98 88 98	10 12	17 48	90 08	8 75	
Total Tons.			2,583	2,330		1,569		2,802 28,451	157,183 16,815	292	283	408	3 200	658	606	997 798	; <b>15</b>	416	14
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ARTICLES.			Ashes, pot and pearl	:	Agricultural products, not enumerated, animal.	Agricultura, implements Barley. Bricks	Bones	Cement and water lime	Clay, lime and sand	Cattle	Cotton, rawCrockery and earthenware	Dye wood and dye stuffs	Flax and hemp.	Flour	Gypsum	Glass, all kinds	Hay, pressed	Horses	Hides and skins, horns and

Kryolite, chemical ore and other ore, except iron.         160           Lard and lard oil         110           Meat, all kinds.         20           Marble.         20           Marble.         21           Marble.         21           Marble.         29           Molasses.         29           Oil, in barrels.         2,915           Oil, oake.         1,034           Oil, oake.         1,034           Oil, oake.         2,215           Pease.         1,034           Pork.         26           Pick.         26           Pick.         26           Pick.         36           Pick.         37           Pick.         36           Pick.         36           Pick.         37 <th>25, 54, 28, 21, 27, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28</th> <th>88 41 88 12 12 12 12 12 12 12 12 12 12 12 12 12</th> <th></th> <th></th> <th>8</th> <th>785</th> <th>200 110 110 200 1,220 3,095 1,220 1,220 1,220 1,220 1,241 1,</th> <th>3,554 1,279 25,03 3,458 10 10 10 10 10 10 10 10 10 10 10 10 10</th> <th>3,542 2,446 4,066 4,066 27,161 27,161 8,246 8,372 12,161 3,72 3,72 3,72 3,73 3,73 3,73 3,73 3,73</th> <th>25 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8</th> <th>177 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</th> <th>7.22 + 4.23 + 2.25 + 2.</th> <th></th>	25, 54, 28, 21, 27, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28	88 41 88 12 12 12 12 12 12 12 12 12 12 12 12 12			8	785	200 110 110 200 1,220 3,095 1,220 1,220 1,220 1,220 1,241 1,	3,554 1,279 25,03 3,458 10 10 10 10 10 10 10 10 10 10 10 10 10	3,542 2,446 4,066 4,066 27,161 27,161 8,246 8,372 12,161 3,72 3,72 3,72 3,73 3,73 3,73 3,73 3,73	25 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	177 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.22 + 4.23 + 2.25 + 2.	
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	Total Amount of Tolls.		cts.	281 17	0 10	1,266 29	427 20 38 49	473 90 9 01	28 28 28 28 28 28 28 28 28 28 28 28 28 2	41 00	42,718 46			====
nued.	Amount of Tolls, Down.		ots.	172 42		695 70 7 88	427 20	472 90	18 19 244 25 26 95	00 9	29,101 99			
&c.—Continued.	Amount of Tolls, Up.		cts.	108 75	0 10	570 59	38 49	1 00	0 25 25 50	35 00	13,616 47			
oorted,	Total Tons.			12,877	,-	39,544 176	17,088 1,929	20,757	1,452 10,657 10,354	132	524,571		77	932 144,905
Article transported,	Tons.	Down.		7,045		18,440	17,088	20,715	1,254 9,646 10,354	27	349,803		7-1	932 144,905
Article	To	Up.		5,832	-	21,104	1,929	:48	10 198 1,011	105	174,768			
showing the Quantity of each	From United States to Canadian Ports.	Down.		114							97,023	•		5,232
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owing	United United Po	Up.									1,035			
	From Canadian to United States Ports.	Down.		9		2,197					3,253			
Statement	F. Can United Po	Up.		: :		742					11,032		: :	
ENERÁL	From Canadian to Canadian Ports.	Down.		6,331		16,243	17,088	20,715	1,254	•	247,462			932 139,673
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No. (A) 10.—G	ARTICLES.			d, in	Hoope	Hop poles Lumber, sawn, in vessels do rafts Masts, spars and telegraph	n vesses pars al n rafts. ties, in	do raftaSaw-logs Shingles Split poets and fence rails, in	Split posts and fence rails, in rafts Timber, square, in vessels To do rafts	Woodenware and wood partly manufactured	Total freight paying tolls.	Free Articles having paid Full Tolls on Welland Canal:—	All other products, animal do vegetable.	Ashes Cement and water lime Corn

1,120   1,12	1,120   1,12	Flour		3,065		: : : : : : : : : : : : : : : : : : :			::			3,065	3,065			
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Sign   Sign	Sign   Sign	do in rafts		20.4								20.4	204			
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11,520   1,5	Signature   1,350   1,162   3,253   1,115   2,065   41,351   102,264   270,075   583,778   853,863   11,62   4,361   14,897   1	one, unwrought, tree, per		5								,	,			
total tolls on vessels.    1,115	tal tolls on vessels.  total tolls on vessels.  Total revenue, exclusive of bydraulic rents.  B. H. TEAKLES,  Satisfy State of St	Order in Council	:	1,320	•	:::::::::::::::::::::::::::::::::::::::	: ::	:::::::::::::::::::::::::::::::::::::::	<del>-</del>		:	1,320	1,380		-	
1,052   3,253   1,115   2,065   41,351   102,264   270,075   583,778   853,853   8,947   10,600   17,14,897     do passengers.	1,052   3,253   1,115   2,065   41,351   102,264   270,075   583,778   853,863   8,847   90   6,050   7   14,897     do passengers.	ryolite, tree, having paid		-					_	-				_		
tal tolls on vessels.  total tolls on vessels.  Total revenue, exclusive of hydraulic rents.  B. H. TEAKLES,  Chief Clerk, Canals Revenue,	1,052   3,253   1,115   2,065   41,351   102,264   270,075   583,778   853,853   1,115   1,1351   1,115   1,	full tolls on Rideau Canal		817	:			:	<u>·</u> · · · ·	:	:	817	817			
type 3, 253	type 3, 253		_	00,000	1		1			100		1	1000			
otal tolls on vessels.    14,897   14,8	14,897   1	Grand fotal, ireight		410,150	70),11		1		41,301	102,204	2/0,0/2	983,778	808,808			
tal tolls on vessels.  do passengers.  do passengers.  do passengers.  do passengers.  do passengers.  sind damages.  Total revenue, exclusive of hydraulic rents.  B. H. TEAKLES.  Chief Clerk. Canals Revenue.	14,897   1											-				
do   passengera.   do   free goods   do   free goods   do   free goods   do   free goods   do   free goods   do   free goods   do   free goods   do   free goods   do   do   do   do   do   do   do	do   Instendent   Passengers   State				Total t	olls on ve	sesels	:	:	:		:	:	8,847 00		14,897 17
do   Irree goods   386   4,711   11,622   11,025   23,179 32   37,540 98   77,230   11,622	1,055 63   386   4,711   1,522   1,524   38   1,540   3				•		ssengers.	•	: : :		:			715 85		3,104 67
15.540   1.5	11,022   1				į	±	ee goods.	: :: ::		:			11,068 63			
Therese and Storage.   4,711	1,522   1,523   1,523   1,523   1,523   1,524   1,523   1,524   1,524   1,525   1,524   1,525   1,524   1,525   1,524   1,52				Fines s	and dama	ges	:	:	: : :	:		:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	-:::	200
11,622   11,622   11,622   11,623   17,230   1	11,622   11,622   11,622   11,623   17,290   17,290   17,290   1,003   1,003   1,003   1,003   1,004				Wharf	age and S	torage					:				4.711 50
Total revenue, exclusive of bydraulic renta	Total revenue, exclusive of hydraulic rents				Other 1	eceipts		:	:				:	:		11,522 36
Total revenue, exclusive of bydraulic rents	Total revenue, exclusive of bydraulic rents								,							
В. Н.	В. Н.						Total re	venue, ex	clusive of	pydrauli pydrauli	ic rents.		:	28,179 32	37,540 98	77,290 66
В. Н.	В. Н.		:										_			
<b>d d</b>	ъ. н.				٠.	-								17 F 13C		
	1 1001			i			ž							, Carra		
	1 1801	DEPARTMENT OF KAILW	AYB AN	D CANA	LS,								Chie	Clerk. C	anals Ke	enue.

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1891.

APPENDIX A-Continued.

No. (A) 11.—Statement showing the Quantity of each Article of Through Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1890.

ARTICLES.	Kr. Cans Cans Po	From Sanadian to Sanadian Ports.	From Canadian to United States Ports.	dian dian States ts.	From United States to United States Ports.	Om States States	From United Stat to Canadian Ports.	From United States to Canadian Ports.	Tons.		Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
												es cts.	e cts.	ee Cfs
nd pearl		2,363	10	:81		: :			01 :::	2,385	2,385	2 00	11 60 357 75	13 60 357 75
products i, vegetable.	222	929	:		:	:	:		222	576	798	33 30	86 40	119 70
Agricultural products not		231		:	:	:	:	:	:	83 21	EK X	:	¥.	34 65
Barley.	938	16 ···							421	916	916 421	63 15	6 <u>1</u>	19 62 63 15 9 75
Brimatone										}	3			
Cement and water lime Clay, lime and sand. Coal.	1,855	<u>:</u>	4.					61,131	1,900	1,213 135,168	1,910 1,229 135,168	286 2 2 5	0 15 181 95 20,275 20	286 50 184 35 20,275 20
Dorn. Cattle		38 88 38					: :	12,225		12,910 28	12,910		258 4 88	
Cookery and earthenware	131	8	· es						132 61	8	160		5 20	 82 83 83 83 83 83 83 83 83 83 83 83 83 83
Figh.	116	G	8						142	<b>—</b> 6	143		0 15	22.45
Flour.		2,711	<b>4</b> :						<del>4</del> 8	2,71, 423	2,76 483	7 35 12 00	. 52 . 53 . 53 . 53	414 96 98 98
Glass, all kinds.	422	74	200	- · · · · · · · · · · · · · · · · · · ·					4	74	514	98	14.80	102 80
	: <b>;</b>	88							: : <b>:</b>	88		1 65	55 55 55 55 55 55	: : 55 : 56 : 56 : 56 : 56 : 56 : 56 : 5
hoofs.	:	-10								10	10		0 75	0 75

-	_	20	88							3,003 2,337	57	8, 2, 80, 8,	450 19 350 55	8 55	268 268
Kryolite, chemical ore and other ore, except iron	:	3.463				:	:			<del>:</del>	. 83	3,463		173	<u> </u>
Lard and lard oil  Meal, all kinds	<u>&amp;</u>	8 g		::		::	::			ထို့အ		352	11 70	51.0	
Marble Manila	:88 :	<del></del>					<u> </u>			:88 :	r 65	'តន			344
Molasses	 282 7,320	·	180		: <u>:</u> : <u>:</u>	::	: :	<u>: :</u> : :	: :	13,52	:- <u>;</u>	2,531		:	
Oil, in barrels	543	\$ £	67	<u>:</u> :	<u>:</u> :	<u>: :</u> :	<u>:</u> :	<u>:</u> :::	<u>.</u> 8 :	545	3.23 3.23	766	109 00		
	:	5,317				<u> </u>	<u>: :</u> : :	<u>: :</u> : :	<u>. :</u> . :	· : :	5,317	5,317		106	<u>:</u>
Pork	28 e	- <b>2</b>		: :	<u> </u>	: :	: <u>:</u> : :	: :		್ಕ	134	192	5 % 3 %	888	
Paint.	- 286 286 286 286 286 286 286 286 286 286	9	2	:	<u>:</u>	:	<u>:</u> :	:	<del>-</del>	243	<b>3</b> 3	908 808		13	
: :	300	112	2							500	112	114		28 28 38	
Rosin Staft	2,595	:00	6,056			: : :				8,651	:60	8,654	0.40 1,297.65		1,290
intended for cutting	<u>%</u> 4	88. 1			<u>: :</u> :	::	<u>: :</u> <u>: :</u>	:	2,668	<del>8</del> 4	3,007	3,031		451 05	<u> </u>
not suitable for cutting, unwrought	:	619	:		:	<u>:</u> -:		<u>:</u>	<u>:</u>	:	619	619		120	
Seeds, all kinds	94	\$ €		:	:	: :	:	:	<del>.</del> :	146	\$€	189	21.	6 - 5 -	
Soda ash	509	7-	:	: :	: <u>:</u>	: : : :	<u>: :</u> : :	<u>:                                    </u>		.1, 53,5	<del>H</del>	1,426	284 99 45	10	
Sugar Spirits, beer, &c.	3,308 179		255					<u>: : :</u>		3,563	. 865 	3,571	95.25 95.55 95.55	1 60	148
Tobacco, raw	: :6:				:	:	<u>:</u> :	: :		<del>-</del> 8		1	0 5 5 86	•	
Tin	337	37			: :		: :			347	સ			2	
Turpentine	<u>.</u>	3,437	:			: :	<u>: :</u> : :	<u>: :</u> <u>:</u> :	<u>-</u> -	•	3,437	3,437	<b>3</b>	68 74	
White lead	21.83 22.83	<del></del>				: : :-	:	<u>: :</u>	: :	687	<del></del>	131	137 137 138 138	•	
ءِ : وَ	2	٠.				:	:	:	:	22	ıc.	98		0 7	10
dise not enumerated	3,923	2,565	886	<u>:</u>	<u>:</u>	<u>:</u>	<u>:</u> :	<u>:</u>	67	4,912	2,568	7,480	982 35	<u>15</u>	1,495
Barrels, empty	: 128	19		: :		<u>:</u> :	<u>:                                    </u>	<u>: :</u> : :	<u>.</u>	: :		74	:88 ::	9	

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	From Canadian	dian	From Canadian	disn	Fr. United	From United States	Fn	From United States		, and				
ARTICIES.	to Canadian Ports.	to nadian orts.	United States	States ts.	United Pol	United States Ports.	Cana Por	Canadian Ports.	3	á	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	J. J.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	-			
										·		s cts.	S cts.	e cts.
n vessels	::		: :											
Hoops Hop poles Lumber, sawn, in vessels	: : <b>8</b>	: :8 : :		1,600					310	1,625	1,935	27 60	242.25	269 85
Masts, spars and telegraph	:	: .	:	:		:	:							
Masta, spars and telegraph													:	
Railway ties, in vessels						:	; ; ; ;		•	: :				
Saw logs						: :								
wipe								: :	: : : :					
arrel	:	:	:	:	:	:	:	:	: :	:	:		: : :	:
vessels Split posts and fence rails, in	:	: : :	:	<u>:</u>			: : :							
					: :									
											:	:	:	: : :
Woodenware and wood partly manufactured	8	7			:	:		:	99	1.0	73	27 20	2 00	29 20
Total freight paying tolls.	43,907	102,918	9,785	1,622	:			76,812	53,692	181,352	235,044	8,846 30	23,675 67	32,521 97
Free Articles having paid full tolls on the Welland Canal:														
Agricul, products, animal		14	:			:	:	:	:	77	77	:	:	:

84,966 3,065 3,065 3,065 3,106	134,166   134,146	Ashes	:	98	<u>-</u>	•	:			4	-	202	70		::	-	=
3,045 3,045 3,045 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 3,145 4,145 4,451 4,451 4,457 4,	3,965 3,065 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 3,186 4,181 3,186 3,186 3,186 4,181 3,186 3,186 3,186 4,181 3,186 3,186 3,186 4,181 3,186 3,			134,966	: :		-	:		4,832	:	139,738	139,738	:	:		-
3,065  3,105  4,487  4,	3,065 3,065 3,065 3,106	_		49	:	:	:	:		:::::::::::::::::::::::::::::::::::::::	:	5	45		: :::		=
3.196 3.84 3.84 3.84 3.84 3.84 3.84 3.84 3.84	1   1   1   1   1   1   1   1   1   1		•••••	3,065				:	:		:	3,000	3,065	:::::::::::::::::::::::::::::::::::::::	:		-
3,196 228 228 228 228 228 228 228 228 228 22	3,196 222 142 222 142 222 142 223 142 224 142 225 142 225 142 226 142 227 22 22 23 142 232 24 142 232 24 143 25 26 142 25 27 26 26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	ture			:		:				-: ::	<del>-</del>	1	: : : :	:	: :::	=
3,196 3,196	3,196 3,196						-			:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	7	=		:	-	-
3,196 3,196	3,196 3,196			673	-		-	:	-	-	-	ಣ	8	:	:		=
1	384     384 <td></td> <td></td> <td>3.195</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>3,195</td> <td>3.195</td> <td></td> <td>_</td> <td></td> <td>=</td>			3.195					-		-	3,195	3.195		_		=
142   143   142   143   142   143	142   142   143			200	 : :						<del>-</del>	384	284				_
1,120	122   143   142   143   142   143	_	:	58	:		:	:	:	:	:	6	300	:	:		-
1,120   1,12	1420		•••••	7777	:::::		:::::	:	:		:	77	777	:	:		-
1,120	1,220	:	• • • • • • • • • • • • • • • • • • • •	142	:	::	:	:		-:-		142	142			-	<del>-</del>
221 1,120 1,	23, 255			479	-:	•	:	:			:	479	479	:	-		=
1,120	1,120	94		•							-	67	2		-	-	
1,120	1,120	- bounds	:	1 4	:	:	: : :_		:		-	ď	1 44				_
1,120	1,120	n Derreits.		0 7	· · · · · · · · · · · · · · · · · · ·		:	:	:	:	:	5 8	2	:::::::::::::::::::::::::::::::::::::::	<u>:</u>	:	÷
1,120	1,120			77	<u> </u>		:	::::				777	777		:	:	-
1   20   6,558   1,622   1,622   1,622   1,622   1,623   1,623   1,623   1,717 96   2,018   13,623   1,717 96   2,018   13,623   1,717 96   2,018   13,624   13,623   1,717 96   1,504   13,624   13,624   1,504   13,624   1,504	1   20   6,558   1,622   23,265   1,622   24,487 80   2,013			1.120		:	:	:		:	:	1,120	1,120				-
1   20   6,558   1,622   23,285   9,805   1,622   1,622   1,622   1,622   1,622   1,622   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,623   1,717   1,96   2,013   1,963   1,717   1,96   1,717   1,96   1,717   1,96   1,504   1,904	1   20   6,556   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,623   1,623   1,717   1,705   1,717   1,905   1,717   1,905   1,717   1,905   1,717   1,905   1,717   1,905   1,905   1,717   1,905   1,905   1,905   1,717   1,905   1,9	all kinds	-	2	-	•		:	-		-	63	বে	:		_	=
1   20   25,515   26   26   26   26   26   26   26   2	1   20   6,556   1,622   1,622   1,622   1,622   1,717 96   1,717 96   1,717 96   1,717 96   1,717 96   1,504   1,622   1,622   1,663   1,663   1,663   1,663   1,663   1,663   1,663   1,663   1,663   1,717 96   1,717 96   1,717 96   1,6481 37   1,6481 42		•	7	-				-			7	Z				=
1   20   6,558   1   6,558   1   1   20   817   817   817   818	1   20   6,558   1   6,568   28   1   6,568   23,385   1   6,568			75 515	:			: : -	:		:	75.515	75.515				=
1   20   6,558   1   6,568	1   20   6,558   1   6,558   1   6,558   1   6,558   1   23,285   1,622   1,622   1,622   1,623   1,717 96		:	20,01	:	:		:	:	. X	<del>:</del> :	36	2		: : :	: :	=
1   20   6,568   1   6,568   1   6,568   23,265   1,622   23,265   29,805   1,622   29,265   20,250   20,250   206,540   206,790   20,250   20,13	817	.ey, &c	- :: ::	4.	:		:	:		•	:	3	3		-	:	=
Style   1,622   1,622   1,622   1,622   1,622   1,622   1,622   1,623   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,653   1,717   1,96   1,717   1,96   1,717   1,96   1,504   1,904	Signature   Sign	Shware		<u> </u>			:	:	•			-	- 0		•		-
23.265 9,805 1,622	23,265 9,805 1,622	ree, per Order in Council	6,538		3			:	-	-	2000	::::	9000	: : : : :	:	:	<del>-</del>
23,265 9,805 1,622	23,285 9,805 1,622	te, having paid full toll							•		_						_
Total through tolls on vessels.   Total through tolls.   Total thr	Total through tolls on vessels do free goods.  Total through tolls free goods.  Total through tolls.	he Rideau Canal, free	:::::		<u>-</u> ::::		:		:	: : :	:	817	817	: : : : : : : : : : : : : : : : : : : :	:	:	÷
F0,446 323,266 9,806 1,622	Total through tolls on vessels.  Total through tolls.  Total through tolls.  S1,653 60,250 406,540 466,790  4,481 37 4,487 80 8,969  4,487 80 8,969  2,013  4,487 80 8,969  2,013  Total through tolls.				Ī							1					_
4,481 37 4,487 80 8,969 3,285 50 1,717 96 2,013 hrough tolls. 13,623 17 29,881 42 43,504	4,481 37 4,487 80 8,969 2,013 8. 86,318 99 86,318 99 13,623 17 29,881 42 43,504	Grand total, freight	50,445	323,265	9,805 9,805	1,622		:	:		60,250	406,540	466,790				
8. 4.481 37 4.487 80 8.508 8. 2.013 8. 3. 3. 3. 3. 4.487 80 8.508 8. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	#6,318 99									-	-	-					
86,318 99 1,717 90 2,013 hrough tolls. 13,623 17 29,881 42 43,504	86,318 99 hrough tolls.				Total ti	rough t	olls on ve	seels.	: : :	•	: : : :		::::		4,487	696,6	=
hrough tolls. 13,623 17 29,881 42 43,504	hrough tolls. 13,623 17 29,881 42 43,504					8-	3.	ssengers.	: : : : :	:::::::::::::::::::::::::::::::::::::::	:		00 010 00		1,717	2,013	_
13,623 17 29,881 42 43,504	13,623 17 29,881 42 43,504					9	E	snoog s	:	:	:		S 010'04				_
10,060 11 60,000 11 60,001 TO	100,007   at 100,004   11 00,001							Thetal th	Hot decimal	2			·	19 609 17	100 00	10 801	_
								TOMPT PER	rough wi	· · · · · · · · · · · · · · · · · · ·			:	10,000 11	400'co	10°01	
																	1

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, 27th February, 1891.

APPENDIX A—Continued.

No. (A) 12.—Statement showing the Quantity of each Article of Way Freight transported on the Amount of Tolls collected during the Season of Navigation, 1890.	vr shov	ving th Amo	e Quant unt of	ity of Folls co	agh Ar llected	ticle of during	Way F the Sea	reight son of	transpor Navigat	ted on ion, 18	the St. 90.	St. Lawrence Canals, and the	Canale,	and the
Articlos.	Fr Cans Cans Po	From Canadian to Canadian Ports.	Fr Cans t United Po	From Canadisn to United States Ports.	From United States to United States Ports.	From United States to United States Ports.	From United States to Canadian Ports.	om States dian	Tons.	<b>થ</b> ્	Total Tons.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
V												e cts.	s cts.	s cts.
Ashes, pot and pearl	43	152			010				51.34	152	108	1 00 4 46	6 64	1 00 11 10
Agricultural products, not en- umerated, vegetable	1,144	388	:	:	:	:	•		1,144	88	1,532	44 78	14 59	59 37
Agricultural products, not en- unierated, animal	117	240	: :		: :		& :		197	042	377	10 88	9 28	
Barley Bricks Fones	~ .	8.58 8.15.58	720		202		161		10,899	85 188 188	11,230		. 8. 4 . 8. 4	
Brimstone Cement and water lime	000	•					88 :		888	. 242	8888	885 847		
Clay, lime and sand	17,281	2,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2	148		: : : : : : : : : : : : : : : : : : :	1,017	3,541	19,440 544	20,970	3,850	3,905 3,905 3,905		1,555 or 105 or	1,023 38 1,555 37 108 52
Cotton, raw	: 3 : <u>5</u>	: 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3							<del>3</del> : €	¥ :	<b>3</b> .			
Dye wood and dye stuffs	26 g						203			::4	262 25 265 25 26	121	2 99	
Flour	88			: :		128		: :	88	<u> </u>	1,040	0 25 5	11 31	
Furniture Gypsum Glass, all kinds.	<u> </u>						13		109	1991	808 117	122	ເລ 0 5 0 6	
Hay, pressedHogs.	412	25 01 02 03 03 03 03 03 03 03 03 03 03 03 03 03			88	6			\$ 60 E	459 10	897 12	17 48 0 08 10 08	25 0 13 1 13 1 13 1 13	\$ - £
id skins, horns and		'n			•					1,467	1,467	•	0 48 206 65	

20 32 20 27 486 63			21 28 25 25 25 25 25 25 25 25 25 25 25 25 25			25 0 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
11 33 0 19 103 77	38 31 38 44 0 66	0 95 48 15 72 87 19 50			206 11 8 8 11 0 2 15 4 6			76 37 172 42
8 38 382 86			10 22 12 25 0 1 25 25 25 25 25 25 25 25 25 25 25 25 25 2			24 24 25 25 25 25 25 25 25 25 25 25 25 25 25		1 40 106 75
331 246 11,940	79 163 1,037	1,528 1,528 2,778	21,84 73 455 185 348	1,427 2,828 2,061 196 196	10,386 1,895 155 173	, \$2, \$2, \$2, \$2, \$2, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3, \$3	5,483	5.164
151 5 2,675		•	20,676 55 157 134		10,326 232 154 154 222	74 18 18 269	1,875	7,984
180 241 9,265	101	6599 1.1 6390 1.1 6390 1.1	298 298 298 241	2, 26, 36, 36, 36, 36, 36, 36, 36, 36, 36, 3	1,669	22, 200 21, 21, 200 104 104	: : :	
		<del></del>						114
22			. : : :	2,153 2,122 2,122 4,7	51.	144	1	
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2,675	719 933 17	19 1963 963 2,179	20,676 55 149 134	1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	01 88 82 82 83 83 83 83 83 83 83 83 83 83 83 83 83	269 269 269		4, 9, 8, 8,
180 241 9,193	3 5 8 F		<b>H</b>	2,897 523 149	98.1 151.8	<u> </u>		5,832
on, railway  " pig  " all other on ore.	<b>€</b> ○ : :-#	martur Mainila Molasses Naile. Oste Oli, in burrels.	Oil cake. Pease Potatoes Pork. Paint Paint Par.	Rags Rye Rosin Solin Solic CSkone, intended for cutting wrought	not suitable for cutting. Seeds, all kinds. Soda ash Steel.	Spirits, beer, &c. Tolacco, raw Tallow Tin Tin Whest	Whiting. Wool All other goods and merchandise not enumerated. Bark. Barks, empty Boat knees	Floats Firewood, in vessels
on, railway big all other Iron ore.	Kryolite chemical of other ore, except in Lard and lard oil	Manilla Molasses Natie Oate Oil, in burrels	Oil cake. Pease. Potatoes Potatoes Pork. Paint	Rags Rye Rosin Colone, intend	Seeds, all kinds. Sheep. Sods ash	Spirits, beer, &c. Tobacco, raw Tallow. Tin Threatine. White lead	Whiting. Wool All other goods chandise not et Bark. Barrels, empty Boat knees	Floats Firewood, in

No. (A) 12.—Statement showing the Quantity of each Article of Way Freight transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.	om dian dian	From Canadian to United States Ports.	dian States	From United States to United States Ports.	Office States States ta.	From United States to Canadian Ports.	Om States dian	Tons.	.gr	Total Tons.	Amount of Tolls Up.	Amount of Tolls	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	d D	Down.				
				İ								e ots.	cts.	es cts.
Firewood, in rafts.					-			: :				0 10		0 10
Hop poles. Lumber, sawn, in vessels rafts	20,475	16,218	319	297	;;;				20,794	16,815	87,609 176	542 99	453 45 7 88	996 44 7 88
Masts, spars and telegraph poles, in vessels	:	17 088	:	:	:					17,088	17,088		427 20	427 20
Railway ties, in vessels	1,929	3							1,929	::	1,929	88		88 88 
Saw logs.	<u>থ</u>	20,715							<b>₹</b>	20,715	20,757	1 00	472 90	473 90
" pipe						: :							: :	
rrel.	8	:24			, -				:&i	. 42	4		4 13	0.6
Vessels Split poets and fence rails, in rafts Timber, square, in vessels	198	1,254							10 1,011	1,254 9,646	10,452 10,665	o.4.8 8883	18 19 244 25	- 28 88 8 28 58
Traverses. Woodenware and wood partly manufactured	: <b>8</b>	10,354							. 8			08 2	8 <del>4</del>	
Total freight paying tolls.	107,765	144,544	1,247	1,631	1,035	2,065	11,029	20,211	121,076	168,451	289,527	4,777,77	5,424 72	10,196 49
Free articles having paid full tolls on the Welland Cunal:														
Corn.	:	4,707	:	•	:	:		9		5,107	5,107	:	•	

		5,928 00 1,091 22	17,215 71	oenue.
		1,562 37 670 87	7,657 96	AKLES, Ohief Clerk, Canals Revenue.
		4,365 63 420 35	9,557 75	BS, Clerk, Cd
932 582 582 1,926 380 900 900	387,063	\$4,739 64	:	H. TEAKLES
932 385 386 1,926 74	177,238			В. Н. 7
900	209,825		:	
	20,611		Total way tolls.	
	41,351	Total way tolls on vessels do passengers do free goods	Total w	
	2,066	lls on ves		
	1,115	al way to		y, 1891
	1,631	Tota		Pebruar
	1,247			Ottawa, 27th February, 1891.
932 386 386 1,926 360 744	152,931			S AND (
	166,112			AILWAY
truction, per Order in Council, 1884:— Council, 1884:— Cond.	Freight-grand total			Department of Railways and Canals, Optawa, 27th F

### APPENDIX A-Continued.

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Ashes, pot and pear!  Apples.  Agricultural implements do animal.  Agricultural implements do animal.  Agricultural implements do animal.  Agricultural implements do animal.  Agricultural implements do animal.  Britakone.	ARTICLES.	From Canadian to Canadian Ports.	From Canadian to Canadian Ports.	From Canadian to United States Ports.	From anadian to ted States Ports.	Fr United United Po	From United States to United States Ports,	Fr United	From United States to Canadian Ports.	Tons.	ns.	Total Tons.	Amount of Tolls.
ed, vegetable. 16 78 11 15 78 18 18 18 18 18 18 18 18 18 18 18 18 18		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
7,652     7,652       1     648       3     7       4     3       4     3       4     3       4     3       4     3       4     3       4     3       4     4       12     10       12     167       15     167       27     27	Ashes, pot and pearl.  Apples. Agricultural products not enumerated, vegetable. do do animal.  Barley. Bricks. Bones.	31.50	1,2							31 13 13 13 13 13 13 13 13 13 13 13 13 1	<u> </u>	138.57.82.11	cts 2 00 2 00 2 00 105 12 1 05 12 1 05 12 2 04 2 04
3     7       3     7       4     4       4     3       4     3       4     3       4     3       4     3       4     3       4     3       4     4       15     17       167     27	Ermatone. Clay, lime and sand.		7,652								62 7,652 40		203 99
3     7       4     4       4     3       4     3       4     3       4     3       4     3       15     10       15     10       167     167       27     27	Cotton. raw	: FI : (	648							: :		9	42 02
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Crockery and earthenware  Dye wood and dye stuffs Fish	69 : : : : : :	- 4							*** : :		Ä . `	.: 1 48
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Fland and nomp. Flour. Furniture.	6	:28 : :								200		24 24 36
	Glass, all kinds Hay, pressed. Hogs. Hogs. Horse. Horses. Horses. Horses and skins, horns and hoofs Toe.	15	413 120 167 167							4 : 12		14.18.2	38 01 38 01 0 72 10 97 2 55

all other	12	83	<u>:</u>	:	 :	 12	য়	8	
emical ore and other ore, except ironrd oil nds.		:8~89 19				. : 61 44 61	1,505	1,505 9 17	75 25 0 53 1 80 1 02
Manilla Molassee Nais, Own, Oil, in barrels	17 19 19 22 29 1,8	1,376 5				30 E 11:	1,376	8282	102 57 2 52 2 52 2 57
	::10g-r	855 g H				:::::::::::::::::::::::::::::::::::::::	1, 96, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1,363	99 45 51 62 11 90 <b>2</b>
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Realt Soute, intended for cutting do wrought.	140	: : : : : : :				;*G : :		10 m	
do not suitable for cutting, unwrought.  Seeds, all kinds Soda sah  Bread  Bugar  Sugar  Sugar  Sugar	-88	28 139				::::188	322	355 11 12 12 12 13 13 13 13 13 13 13 13 13 13 13 13 13	23 27 29 20 0 19 0 0 19 0 0 0 0 0 0 0 0 0 0 0 0 0
Longoco, raw The llow Turpentine Whest White lead	.s. — ∞	-ne :4				: o - : :		<b>ह</b>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Wool. All other goods and merchandise not enumerated. Barrels, empty	: 83 : 3	419 15 91				. 8	419 15 91	512 15 91	71 76 1 47 11 50
Boat knees Floats Floats Firewood, in vessels. Hoops Hoops	20 9,1 105 45,8	170 895 32				8.6			
rn, in voscels	14 416,4	495 801	112,286		· · ·	 <b>X</b> :	2 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	536,775 301	40,126 91 5 03

Articles.	From Canadian to Canadian Ports.	From Canadian to Canadian Ports.	Fr Can t United	From Canadian to United States Ports.	From United St. to United St. Ports.	From United States to United States Ports.	Fr United t Can	From United States to Canadian Ports.	70	Tons.	Total Tons.	Amount of Tolls.
:	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Waste areas and telegraph volus in vessels		321								321	321	\$ cts.
Railway ties, in vessels.		995		595						1,590	1,590	337 63
Saw logs Cartes Staves and headings, barrel												
do pipe do West India	::											
Shingles Split pote and fence rails in vessels	C4	367		49					61 : : : :	416	418	299 41 1 76
Timber, square, in vessels  Traverses  Woodenware and wood partly manufactured	9	1,370 200 49							: : : <b>9</b>	1,370 200 49	290 1,370 200 55	23 63 1 88 1 88 45 49
Total freight paying tolls	257	494,581	<b>o</b>	113,567					535	608,148	608,683	43,791 37
Free per Order in Council. Firewood		10,150 11,126					: :			10,150	10,150 11,126	
Lumber, sawn, in rafts. Masts and spars. Railway ties, in rafts. Saw lows		1,273 10 3,525 13,872								1,2/3 10 3,525 13,872	1,2/3 10 3,525 13,872	
• • •		2,460 2,460 240								2,460 240 240	2,460 2,460 240	
Grand total freight	527	537,253	8	113,567					55   55   55   55   55   55   55   55	650,820	651,355	

4,262 48 172 51 8 00 18 00 18 00 48,252 36	nue.		
Total toils on vessels  do passengers  Total free goods.  Wharfage and storage. Fines and damages Other receipts.  Total revenue, exclusive of hydraulic rents.	B. H. TEAKLES,  Operation of Railways and Canals,  Option (1891.		

A. 1892

# APPENDIX A-Continued.

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Articles.	From Canadian to Canadian Ports.	dian dian dian	From Canadian to United States Ports.	dian dian States	. From United States to United States Ports.	United States to United States Ports.	From United St. to Canadia Ports.	From United States to Canadian Ports.	Tons.	ž	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												cts.
Apples, pot and pearl.		353						67		430	420	87 74
	8	146	350					157	: 22 8	146		
Brinstone Brimstone Cements and water line								1188 105 4,941	: : : <b>%</b>	188 105 4,941	188 105 4,997	33 62 10 50 518 14
Cont. Com Cattle	<b>%</b> : :	8.7.88		130				81,567	35	81,900 7	81,932 7 80	8,035 0,035 0,035 8,035 8,035
Cotton, raw Crockery and earthenware.  Dye wood and dye stuffs		10						95		28	10	1 00 00 00 00 00 00 00 00 00 00 00 00 00
Figur Flour Furniture	2002								202		207	06.9
Grees, all kinds  Glass, pressed.  Hogs	218	1,438	156						373	1,438	1,811	77 75
Horses Hides and skins, horns and hoofs Ice		410	403	5,965				1,515	403	7,880	8.283 8.283 8.283	

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Articles,	From Canadian to Canadian Ports.		From Canadian to United States Ports.	From Canadian to nited States Ports.	Fr United t United Po	From United States to United States Ports.	Tr United Can Po	From United States to Canadian Ports.		Tons.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												es cts.
Masts, spars and telegraph poles, in vessels.  Railway ties, in vessels.  rafts.	910	• • • • • • • • • • • • • • • • • • •	648						1,558		1,558	124 32
Staves and headings, barrels  """ """ """ """ """ "" "" "" "" ""												
Staves, salt barrel	: <b>%</b>		47						135		135	35 44
Total freight paying tolls	7,680	4,118	85,113	6,085				98,867	92, <b>7</b> 93 544	109,070	201,863 544	15,703 90
Grand total, freight	8,224	4,118	84,113	6,085				98,867	93,337	109,070	202,407	
		J. E.	Total tolls on vessels ,, passen ii, free go Fines and damages.	Total tolls on vessels passengers free goods Fines and damages	yers ods						\$48 84	2,406 79 60 31 13 75
					Tota	l revenue	, exclusiv	re of hydr	aulic ren	ts	Total revenue, exclusive of hydraulic rents	18,184 75

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1891.

APPENDIX A-Continued.

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Canal,	•
Rideau	
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on	.=
STATEMENT Showing the Quantity of each Article transported on the Rideau Canal, and the Amount	Revenue collected during the Season of Navigation in 1890.
Article	Season of
each	the !
o.	ring
Quantity	cted du
pe C	colle
showing t	Revenue
STATEMENT	
15—GENERAI	
<b>(</b>	,
No. (A)	

			,			0						
ARTICLES.	From Canadia to Canadia Ports.	From Canadian to Canadian Ports.	From Canadia to United St Ports.	From Canadian to United States Ports.	Fr United United Poi	From United States to United States Ports.	From United Stat to Canadian Ports.	From United States to Canadian Ports.	T <sub>0</sub>	Tons.	Total Tons.	Amount of Tolls
	Up.	Down.	Up.	<b>Down.</b>	Up.	Down.	Up.	Боwп.	Up.	Down.		
												es cts.
umersted,	148								-48	8388	100 100 100 100 100 100 100 100 100 100	e e4 − ¢
Agricultural implements. CEBarley Bricks. Bones.	<u> </u>	138							#25 <b>%</b>		189 101 148 188	11285
Brimstone. Cenmert and water lime Clay, lime and sand Coal. Coal.	419 419	10,916 34							88 419 113	10,916 7	102 421 12,916 35 11	86.0 8.0 10.8 8.0 10.8 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0
Cotton, raw Crockery and earthenware. Dye wood and dye stuffs.	31	:8 <sup>1</sup>							31		51 113	4 93 0 09 2 76
Flour. Flour. Furniture		408 408							.628		487	13 22 6 56 56
Glass, all kinds Hay, pressed. Hogs. Horses	497	21011							46	אהמה	48 502 1 17	411 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Hides and skins, horns and hoofs Ioe Iron, railway do pig	8 ::8								8 : :8		8	0 00

28223482

88248882858

Amount of Tolls. Total Tons. No. (A) 15-General Statement showing the Quantity of each Article Transported, &c.-Concluded. Down. Tons.  $\mathbf{U}_{\mathbf{p}}$ Down. From United States to Canadian Ports. Up. United States Ports. Down. From United States to United States Ports. Down. From Canadian Up. Down. From Canadian to Canadian Ports. Up. Pork
Paint
Pitch and tar
Rags
Rags
Rye
Rosin
Salt
Soone, intented for cutting do wrought do not suitable for cutting, unwrought .... Iron ore Kryolite, chemical ore and other ore, except iron Lard and lard oil Turpentine...... Seeds, all kinds Sheep. Molasses Soda ash.... Meats, other than pork ARTICLES Pease. Potatoes Steel

6,288 77	<del></del>		ydraulic	Inages. S.  Total revenue, exclusive of hydraulic rents.	nue, excl	nages	Fines and damages. Other receipts.	i	Fines Other	Fines Other	Fines Other
1,676 89 111 34 115 78 6 50	\$418 75			firewood	versels  seeingers  ree coal, \$116.76; firewood  storage.	Total tolls on vessels do passengers do free coal, 4 Wharfage and storage. Wher receives	Total tolls on vessels do passeng do free cos Wharfage and storag Rhes and damages.	Total d d Whai			
	113,574	26,289	87,286		:		:	:	:	990'9	990'9 6'086
4,356 98	84,076 4,373 25,125	3,000	60,787 4,373 22,125						:::)	990'9	8,000
0 0 13 28 75 0 88 0 88 8 88	1,206 1,206	88 :2	20 500 1,205						:::::		22.29
623 67 128 63 8 61 8 61 4 61	5,399 1,211 366 315 30	167	5,399 1,211 167 80						:::::		167 39
2,147 40 9 53	. 38,559 92	6,206	32,353 88						::::	6,027	6,206 6,027
43 93 207 88	2,478	704	2,118								360
0 2 2 1 8 6 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8	927 85	<b>8</b> ₹	74.9					: : :			40

DEPARTMENT OF RAILWAY AND CANALS,
OTTAWA, 27th February, 1891.

APPENDIX A-Continued.

No. (A) 16—General Statement showing the Quantity of each Article transported on the St. Peter's Canal, and the Amount of Revenue collected during the Season of Navigation in 1890.

From Canadian   Cana	TOLONT	trottomen component and management of the component and the compon		٥	2	200	0							
Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.         Up.         Down.           1,126         674         814         <	Articles.	From Canadi to Canadi Ports	lan an	Fre Cana to United Por	om dian States rts.	Fr United United Po	om States States rts.	Fr United t Cans Po	om States o dian rts.	Tol	ns.	Total Tons.	Amount of Tolls.	
140 674 814   140 674 814 814   140 674 814 814   140 674 814   140 674 814   140 674 814 814   140 674 814 814   140 674 814 814   140 674 814 814   140 674 814 814   140 674 814 814   140 674 814 814   140 674 814 814 814 814 814 814 814 814 814 81		Up. I	Jown.		Down.	Up.	Down.	Up.	Down.	Up.	Down.	į		
5,889   26,342   22,231   22,231   22,231   22,231   22,231   22,231   23,231   24,342   25,342   25,342   25,342   25,242   25		1,126 1,126 1,181 1,086 1,816	674 503 17,172 1,481 6,187 325							1,126 1,126 1,181 1,086 1,816 540				
	ls	5,889			:					5,889	1	32,23	322 31	
			•	•	Tolle	on vesse r receipts	lls.	nue					1,419 70 177 91 1,919 92	

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, 27th Fobruary, 1891.

## APPENDIX A-Continued.

No. (A) 17.—General Statement showing the Quantity of each Article transported on the Tront Valley Canals, and the Amount of Revenue collected during the Season of Navigation in 1890.

		,		1				Marie Marie Control of the Control o	And in contrast of the last of			
Articles.	Fr Cans t Cans Pool	From Canadian to Canadian Ports.	Fr Cans t United Po	From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.	To	Tons.	Total Tons.	Amount of Table
	Up.	Down.	$\mathbf{U}_{\mathbf{p}}$	Боwп.		Божв.	Up.	Лоwп.	Up.	Down.		1010
												s cts.
Ashes, pot and pearl. Apples												
do do animal Agricultural implements												
Barley. Bricks		27						: :		12		92.0
Brimstone						:::						
Cement and water lime						: :				: :		
Coal	:	:		:			:		:	:	:	
Cattle												
Cotton, raw	: :	: :		: :	: :	; :						
Dye wood and dye stuffs	:	:		:	•	:	:	:	<i>i</i>	:	:	
Flax and hemp Flour	: : : : : : : : : : : : : : : : : : : :	: :00							: : : : :	: :00		0.43
Furniture	•	•		:		:	:			:	:	
Orbenia Hass, all kinds Has passed												
Hogs	: :											
Horses. Hides and skins, horns and hoofs		::							: :			
Ice Iron, railway	: :		: :						: :	: :		
do pig				:				<del>-</del> : :		-	-	

cts. Amount of Tolls. Total Tons. No. (A) 17.—General Statement showing the Quantity of each Article transported, &c.—Concluded. Down. Tons.  $\mathbf{U}_{\mathbf{p}}$ Down. to Canadian Ports. Up. United States Ports. Down. From United States  $\mathbf{Up}$ Down. to United States Ports. From Canadian Up. Down. From Canadian to Canadian Ports. Up. ryolite, chemical ore and other ore, except iron.... wrought not suitable for cutting, unwrought.... Stone intended for cutting ron, all other..... Z Molasses Sonails

2,382 24,679 281	22,297 2,			:	: : : :	2,382	22,297 2,	Total freight paying tolls
00#	300 :     000 :     000 :					200	200	ware and wood partly manufactured
575 1,960 21	1,875	::		: : : : : :	: :	575	1,375	equare, in vesselsdo rafts
	1G :					D : :	2 ic	Explination. Split posts and fence rails, in vessels do do do do
M FG	: :8			::				do West India
			: :			: : : : :		nd headings, barrel.
202 226 9	28 18 18 18 18 18 18 18 18 18 18 18 18 18							Leatively ties, III vessells
	38				:	:	<b>3</b> 5	do rafte
:	434	:			: :	-	484	do rafts.
163 347 5	184					163	184	Licops Hop poles Lumber, sawn, in vessels
867 17,853 180 13	16,986					867	16,986	From Figure 1 Transfer do Fafts.
	• • •			::		: : {	: :	Barrels, empty. Boat knees.
95 168 5	22					: :::	5.2	Wool All other goods and merchandise not enumerated
	:	:	: : : : : : : : : : : : : : : : : : : :	:	:		: : :	Whiting
		<del>-</del> : : : : : : : : : : : : : : : : : : :		_		: :	_	

B. H. TEAKLES, Chief Clerk, Canals Revenue.

> Department of Railways and Canals, Ottawa, 27th February, 1891.

APPENDIX A-Continued.

ARTICLES.	From Canadian to Canadian Ports.	om Jisan Jisan ts.	From Canadian to United States Ports.	om dian States ts.	Fr United United Po	From United States to United States Ports.	Fr United United Po	From United States to United States Ports.	Tons.	ż	Total Tons	Amount of
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Tolls.
												e cts.
Ashes, pot and pearl	20 00	100	596			:	:	:	20 05	:	5	0 15
Agricultural products not enumerated, vegetable	310	=	:						30.	•	16	
do do animal	4 87%		669	:		:			1.070		1.070	8 8 8 8
13 Cement and water lime.	9	ě	1						96	A.e.	96	
Cotton, raw	N :	3-							1	3-	77	88
Crockery and earthenware.	တင္ရ	:	:	:	:	:	:	က	9	က	9	0 0 2 4
Flour	0	52							00	22	8	12
Furniture	12	61	4			:	:	79	17	7 -	18	- 0 8 9
Horses.	17	9	17					67	**	90	3	98
Hides and skins, horns and hoofs		en 2	4 909	: :	:		:	:	4 903	8 G	4 953	0 S 2 S
Iron, railway		38	37,4						Z, 400	8	<u> </u>	
do pig.	₹;	:	:	:		:	:		200	: •	40.5	1 28
do all other	9,-	0						-1 YC	1	- 10	3 99	0 12
Meal, all kinds.	• —								<b>—</b>	:	-	0 02
Marble	₹ (		:	:	:	:	:	:	40		4.0	010
Manilla	3	:	:	:		:	:	:	20.00	:	200	2 6
Oil in harrels	5-	€	12					73	38	153	182	38
Pease	: :	38	49					:	4	<b>3</b>	114	2 15
Pork	-8	က	:	:	:	:	:	:	- 8	ee	4.8	98
Rack	8	9							9	9	90	0 15
Bye	9	2							004	72	454	8 47
	2	<del>-</del> ::::		:	:	- - - -	:		3		73	70 4

Sodds, all kinds Sodds ash. Sudash. Sugar. Sugar. Sugar. Tibacco, raw Tibacco, raw		122 122	122	2282
	60		<u> </u>	3888
32		32 384	38E	
merated 586 92	: 07	631	725	0 12 0 22 0 25 0 25 0 25
Firewood, in vessels.  Lumber, sawn, in vessels.  64 116 441		939 505 116	939	5 7 9 3 2 8
asts, spars and telegraph poles, in vessels.		8	88	0.18
Railway ties, in vessels.		153	153	1 53
Saw logs. Staves and headings, barrel				
do West India				0 15
Staves, sait barred. Shingles. Shift prote and fonce wile in recent.		25	28	1 93
do do ratte and tento tanto, ili vescula.		7	1	0.33
do rafts.		40 6,500	6,540	81 75
Woodenware and wood partly manufactured.		: <del>-</del>	ਜ਼- - -	90.0
Total freight paying tolls	91	10,798 7,985	18,783	327 08
Total tolls on vesselsdo passengers Damages	8 99°F8			245 98 133 97 38 16
Total revenu	Total revenue, exclusive of hydraulic rents	sulic rents	: : :	745 19

APPENI)IX
No. (A) 19.—Statement of Traffic on the undermentioned Canals, and

Articles.	Welland	d Canal.	St. Lawre	nce Canal.	Chambly	y Canal.
At sides.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 1.		<b>\$</b> cts.		\$ cts.		\$ cts.
Canadian vessels, steam. United States vessels, steam. Canadian vessels, sail. United States vessels, sail.	340,703 401,406 275,118 105,242	4,041 47 6,024 17 5,530 18 2,358 68	731,967 20,017 926,601 62,862	4,184 96 140 35 10,118 61 453 25	77,722 1,973 56,776 95,276	234 57 25 93 930 23 1,216 06
Total, Class No. 1		17,954 50	1,741,447	14,897 17	231,747	2,406 79
Class No. 2.	No.		No.		No.	
Passengers	23,704	361 65	61,707	3,104 67	3,598	60 31
Class No. 3.	Tons.		Tons.		Tons.	
Bricks Brimstone Cement and water lime Clay, lime and sand. Fish Gypsum. Iron, railway do pig. do all other Salt.	36 717	35 43 110 40 11 82 45 19 35 65 	11,651 288 2,802 28,451 408 809 20,378 3,249 14,334 11,715	499 64 22 83 373 81 1,208 33 41 80 16 19 3,027 37 470 46 845 73 1,555 16	185 188 105 4,997	16 84 33 62 10 50 518 14
Steel. Stone for cutting. Apples. Barley. Corn. Cotton, raw	5,761 150 10,830 327,394	1,152 20 7 79 1,950 45 65,478 <b>6</b> 0	169 5,676 2,583	22 59 554 27 368 85 33 28 366 72	2,179 420 496 7	213 76 37 74 28 21 0 24
Flax and hemp. Flour Hay, pressed Meals, all kinds Oil cake. Oata Pease. Potatoes Rye. Seeds, all kinds. Tobacco, raw Wheat.	20,708 20,708 27,728 14 4 1,549 155 5 118,002	2,042 79 4,141 35 0 40 5,533 80 2 80 0 26 288 40 30 10 0 75 22,895 94	93 3,256 2,084 25	6 65 487 39 46 66 97 06 97 06 545 37 8 17 65 30 100 69 2 29 518 77	207 1,811 48 632 89 5	6 90 77 75 1 60 21 11 2 99 0 30
All other agricultural products, vegetable.  Bones. Cattle Hogs. Hides and skins, horns and hoofs. Horses. Lard and lard oil Meats, other than pork. Pork. Sheep. Tallow. Wool All other agricultural products, animal.	220 1 1 1 	12 93 0 02 0 02 8 25 2 38 7 30 65 60 21 00	254 562 51 14 416 244 41 650 165 108 26 608	179 07 34 01 42 66 6 70 1 23 30 59 23 23 2 99 63 28 13 20 14 58 3 90 55 33	23 156	2 58 0 83 5 20
Total, Class No. 3	531,237	104,185 06	195,180	11,877 56	12,380	1,046 66

A—Continued.

the Amount of Tolls collected during the Season of Navigation in 1890.

Murray	Canal.	Ottawa	Canals.	Rideau	Canal.	St. Peter	r's Canal.	Trent Val	ley Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts		<b>\$</b> ct	3.	\$ cts.		\$ cts.		\$ cts.
88,288	202 4				591 52	10,454	209 08	24,419	202 00
85 12,877	0 5 39 7				17 51 1,009 32	60,531	1,210 62	27,381	144 10
. 254	3 2	8 28,257		9 4,737	58 54				
101,504	245 9	8 400,239	4,262	140,678	1,676 89	70,985	1,419 70	51,800	346 10
No.		No.		No.		No.		No.	
12,589	133 9	7 13,298	172 5	3,921	111 34			8,318	81 08
Tons.		Tons.		Tons.		Tons.		Tons.	
		. 120	6 9	0 41	1 51	1		27	0 76
6	···			6 102	3 01				
$\begin{array}{c} 27 \\ 22 \end{array}$	0 5 0 4		203 9	9 421 0 113	9 96 2 76		8 14		
							ļ		
280 84	$\begin{smallmatrix}5&2\\1&5\end{smallmatrix}$	8	)	. 92					
253 257	4748	8 35			10 24 31 14		•••		
		. 1		5 <sup>1</sup> 28	1 49				
131 977	3 4 17 8		5 5	94	4 42 2 50			• • • • • • • • •	· · · · · · · • • •
1,070	20 0			2 101	2 37			• • • • • • • • • • • • • • • • • • • •	
·····i	0 0	2		. 35	1 08				••••
60	1 1	1 446			13 22 11 89	1,629	16 29	43	0 43
1	0 0			10 48	1 38				
		1,378	102	. 5 91	0 13 2 81				
114	2 1	5 1,363	8 99 4	9 76	1 83				
454	8 4	7 666	) 14	8 107	3 15 2 64				
1	0 0	<b>2</b> ] 19		6 14	0 38		· · · · · · · · · · · · ·		
3 384	0 0		4 5	. 191	0 07 4 69				
16	0 3	2 74	4 7	2 57	1 84	8,003	80 03		
		1			1 27	0,000			
		. 649			0 33				
·····2	0 0	4 27	2 8	5 3					
42 6	0.8	6 182	10 9		0 50			<b></b>	· • • • • • • • • • • • • • • • • • • •
	0 1	. 12	2 10	2 20	0 82 0 55				
4	0 0	8 36 325	1 0 23 2	0 172	4 72 0 20			• • • • • • • • • • • • • • • • • • • •	•••••••
		. 1			0 06		•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •
6 4	0 1 0 0		105 1	2 479	0 14 13 96				• • • • • • • •
		_	.	_		10.440	104.40		
4,255	73 2	6 14,666	731 1	9 5,006	139 27	10,446	104 46	70	1 19

### No. (A) 19.—Statement of Traffic on the undermentioned

	Welland	Canal.	St. Lawren	ce Canals.	Chambly	Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Class No. 4.		\$ cts.		<b>\$</b> cts.		\$ cts.
Ashes, pot and pearl	71	14 15	78	14 60		
Agricultural implements		0.15	113	16 32	2	0 20
Crockery and earthenwareDye woods and dye stuffs	1	0 15	233 241	43 89 15 85	10 95	1 00 9 50
Furniture	35	6 10	658			
Flass, all kinds	. 26	3 95	631	121 23		
Marble	4,437	665 55				
	162	24 30		4 70		
Molasses	117 60	17 55 1 95		153 12 648 92	645	64 50
Oil, in barrels	89	3 95	1,692	235 50	168	15 37
Paint	37	5 70	493	73 96	16	1 60
Pitch and tar	863	123 83		<b>26 68</b>	257	25 70
Rags			124	23 45		
Rosin.		140.05	2,284	114 99	2,226	220 34
Soda ash	993 926	148 95 120 58		299 97 931 17	1 009	120 30
Stone, wrought	852	135 06		10 80	1,203 $139$	13 9
Pin	1	0 02		98 71		100
Turpentine			129	7 78		10 3
White lead	1	0 20		28 69		
Whiting	268	0 15 52 90		139 69		
Whiskey and all other spirits Merchandise, not enumerated	32,527	4,860 44		198 71 2,056 97	3,969	0 04 312 2
Total, Class No. 4	41,467	6,185 48	·	5,388 97	8,834	794 97
Class No. 5.						
Bark						
Barrels, empty	183	18 42	354	36 10		
Root knees			304	20 10		
LOW KHOCK		10 12	304			
loats			5,164	77 77		
Floats			5,164			
Floats			5,164	77 77 281 17	5,153	185 8
Floats.  Firewood, in vessels do rafts  Lumber, sawn, in vessels	14,172 60,383	602 25 10,371 02	5,164 12,877 39,544	77 77 281 17 1,266 29	5,153 83,133	185 8 4,875 6
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoods	14,172 60,383 15	602 25 10,371 02 2 03	5,164 12,877 39,544 176	77 77 281 17	5,153 83,133 50	185 8 4,875 6
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops. Railway ties, in vessels	14,172 60,383 15	602 25 10,371 02 2 03	5,164 12,877 39,544 176	77 77 281 17 1,266 29 7 88	5,153 83,133 50	185 8° 4,875 6 4 0°
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts	14,172 60,383 15	602 25 10,371 02 2 03	5,164 12,877 39,544 176	77 77 281 17 1,266 29 7 88 0 10	5,153 83,133 50	185 8 4,875 6 4 0
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in	14,172 60,383 15	602 25 10,371 02 2 03 1 69	5,164 12,877 39,544 176 1 1,929	77 77 281 17 1,266 29 7 88 0 10	5,153 83,133 50 1,558	185 8 4,875 6 4 0
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts masts, spars and telegraph poles, in vessels.	14,172 60,383 15	602 25 10,371 02 2 03	5,164 12,877 39,544 176 1 1,929	77 77 281 17 1,266 29 7 88 0 10	5,153 83,133 50 1,558	185 8 4,875 6 4 0
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in	14,172 60,383 15	602 25 10,371 02 2 03 1 69 25 0 83	5,164 12,877 39,544 176 1 1,929	77 77 281 17 1,266 29 7 88 0 10 38 49	5,153 83,133 50 1,558	185 8' 4,875 6 4 0  124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts.	14,172 60,383 15 57 1 26 73,113	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82	5,164 12,877 39,544 176 1 1,929	77 77 281 17 1,266 29 7 88 0 10	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts	14,172 60,383 15 57	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82	5,164 12,877 39,544 176 1 1,929	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55	5,153 83,133 50 1,558	185 8' 4,875 6 4 0  124 3
Floats  Firewood, in vessels  do rafts  Lumber, sawn, in vessels  do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels.  Masts, spars and telegraph poles, in rafts.  Square timber, in vessels  do rafts  Woodenware and wood, partly manu-	14,172 60,383 15 57 1 26 73,113 17,694	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96	5,164 12,877 39,544 176 1,929 17,088 1,452 10,657	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55 269 75	5,153 83,133 50 1,558	185 8' 4,875 6 4 0  124 3
Floats  Froewood, in vessels  do rafts  Lumber, sawn, in vessels  do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels  Masts, spars and telegraph poles, in rafts.  Square timber, in vessels  do rafts  Woodenware and wood, partly manufactured	14,172 60,383 15 57 1 26 73,113 17,694 28	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96	5,164 12,877 39,544 176 1 1,929 17,088 1,452 10,657	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00	5,153 83,133 50 1,558	185 8' 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles.	14,172 60,383 15 57 1 26 73,113 17,694	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96	5,164 12,877 39,544 176 1 1,929 17,088 1,452 10,657	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55 269 75	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles Split posts and fence rails, in vessels. do do rafts.	14,172 60,383 15 57 1 26 73,113 17,694 28 14	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 9 60	5,164 12,877 39,544 176 1,929 17,088 1,452 10,657 132 44	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00 9 01 0 25	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels.  Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles. Split posts and fence rails, in vessels do rafts.	14,172 60,383 15 57 1 26 73,113 17,694 28 14	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 11 20 9 60	17,088 1,452 10,657 12,929 17,088 1,452 10,657 132 44	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55 269 75 41 00 9 01	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles. Split posts and fence rails, in vessels do do rafts. Saw-logs. Staves and headings, barrels.	14,172 60,383 15 57 1 26 73,113 17,694 28 14	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 9 60 206 38 17 40	17,088 1,452 10,657 132 144 17,929 17,088 1,452 10,657 132 44	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00 9 01 0 25	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles Split posts and fence rails, in vessels do do rafts. Saw-logs Staves and headings, barrels.	14,172 60,383 15 57 	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 9 60 206 36 17 46 34 80	17,088 1,452 10,657 12,076 11,929 17,088 1,452 10,657 132 44 10 20,757	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00 9 01 0 25	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats: Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels.  Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles. Split posts and fence rails, in vessels do do rafts. Staves and headings, barrels. do pipe. db West India	14,172 60,383 15 57 1 26 73,113 17,694 28 14 218 8187 36	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 11 20 9 60	17,088 1,452 10,657 12,076 11,929 17,088 1,452 10,657 132 44 10 20,757	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00 9 01 0 25	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Floats  foo rafts  Lumber, sawn, in vessels  do rafts  Hoops  Railway ties, in vessels  do rafts  Masts, spars and telegraph poles, in vessels.  Masts, spars and telegraph poles, in rafts.  Square timber, in vessels  do rafts  Woodenware and wood, partly manufactured  Shingles.  Split posts and fence rails, in vessels  do do rafts.  Staves and headings, barrels.  do pipe  db West India  Staves, salt barrel	14,172 60,383 15 57 	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 9 60 206 36 17 46 34 80	17,088 1,452 10,657 132 44	77 77 281 17 1,266 29 7 88 0 10 38 49 49 427 20 22 55 269 75 41 00 9 01 0 25	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels do rafts Hoops Railway ties, in vessels do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels do rafts Woodenware and wood, partly manufactured Shingles Split posts and fence rails, in vessels do do rafts. Saw-logs Staves and headings, barrels.	14,172 60,383 15 57 1 26 73,113 17,694 28 14 218 8187 36	002 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 9 60 206 36 17 46 34 80	17,088 1,452 10,657 12,076 11,929 17,088 1,452 10,657 132 44 10 20,757	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55 269 75 41 00 9 01 0 25 473 90	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3
Floats Firewood, in vessels do rafts Lumber, sawn, in vessels. do rafts Hoops Railway ties, in vessels. do rafts Masts, spars and telegraph poles, in vessels. Masts, spars and telegraph poles, in rafts. Square timber, in vessels. do rafts Woodenware and wood, partly manufactured. Split posts and fence rails, in vessels. do do rafts. Split posts and fence rails, in vessels. do do rafts. Stavelogs. Stavelogs. Staves and headings, barrels. do pipe db West India Staves, salt barrel Traverses	14,172 60,383 15 57 1 26 73,113 17,694 28 14 218 8187 36	602 25 10,371 02 2 03 1 69 25 0 83 11,073 82 2,651 96 11 20 9 60 206 38 17 40 34 80 6 75	17,088 1,452 10,657 10,354	77 77 281 17 1,266 29 7 88 0 10 38 49 427 20 22 55 269 75 41 00 9 01 0 25 473 90	5,153 83,133 50 1,558	185 8 4,875 6 4 0 124 3

### Canals and the Amount of Tolls collected, &c .- Continued.

Murray	Canal.	Ottawa (	Canals.	Rideau	Canal.	St. Peter'	s Canal.	Trent Vall	ey Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.	·	\$ cts.		\$ cts.
5 9	0 15	11 18 10	2 09 2 74 1 48	21 189 51	3 03 20 18 4 93				
37 18	1 08 0 46	28 7	3 64 0 77	1 66 48	0 09 6 56 4 43				• • • • • • • • • • • • • • • • • • • •
4 3	0 10 0 08	25	2 52	129	11 42		•••••		• • • • • • • • • • • • • • • • • • • •
304 182 26	7 63 4 56 0 67	31 34 2	2 92 2 92 2 50 0 24	295 219 22	26 62 19 92 2 24				
6	0 07	· · · · · · 3		26 7 1	2 28 0 81 0 09				
50 122	1 26 3 07	1 53 3	0 19 4 39 0 57	25 321 2	2 31 31 66 0 27				
8 32	0 22	12 1	0 79 0 05	19 1 19	1 79 0 09 1 80				
77 58 725	1 93	3 22 512	0 15 1 43 71 76	28 156 927	2 67 17 26 98 48		8 65	168	5 0
1,666	42 20	776		2,573	258 93	l	8 65		5 00
	,	15	1 47					34	1 3
6	0 25	15 91	11 50	85	6 21				
939	7 84	9,190 46,567 480	1,899 16	2,478 12,224	43 93 207 88			260 17,853	3 1 180 1
621	6 95		40,126 91 5 03	38,559 92	2,147 40 9 53		25 67		5 9
153	1 53	1,590		5,399 1,211	623 67 128 62	1		113 250	4 5 9 3
28	0 18	321	10 71					434	[
6,540	81 75	290 1,370		94 40 520	0.70	3		. 1,950	1
1 25			299 41	5 215	0 80 93 18	3		215	18 7
7	0 33		1 76	30 1 366	0 13	B		2,126	1
······· ·······	0 15								
• • • • • • • • • • • • • • • • • • •		200	1 08	1,205	28 2	2		400	2 (
8,328	100 96	591,696	42,884 13	62,524	3,342 3	2,567	25 6	7 24,021	273 8

### No. (A) 19.—STATEMENT OF TRAFFIC in the undermentioned

Articles.	Welland	l Canal.	St. Lawren	ce Canals.	Chambl	y Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Special Class.		\$ cts.		<b>\$</b> cts.		\$ ets.
Coal Kryolite or chemical ore Gypsum	202,384 2,900 205	145 00	3,542	21,830 57 177 10		8,035 69
Iron ore Stone, unwrought, not suitable for cutting Ice.	5,238 5,544 25,068	261 90 528 66	11,005		129 276	27 60
Total, special class	241,339	40,394 44	173,197	22,473 52	90,620	8,637 99
Total freight and tolls	984,014 200	194,089 53 10 50		60,720 30 369 78		,
Free	31,951	4,792 65	325,204	10,688 85	544	48 84
Grand Totals, passengers and ton- age of vessels and included	1,016,165	198,892 68	853,853	71,778 93	202,407	18,219 84

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1891,

Canals, and the Amount of Tolls collected, &c .- Continued.

Murray	Canal.	Ottawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Val	ley Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
••••	\$ ets.	40							
•••••		1,505	75 25	• • • • • • • • • • • • • • • • • • • •					
181 4,353	1 81							420	1 96
4,534	110 66	1,545	77 25	13,973	616 48	18,353	183 53	420	1 96
18,783	707 03	608,683 42,672		84,076 25,125		32,231		24,679	708 94
····				4,373	116 76	····			· · · · · · · · · · · · · · · · · · ·
18,783	707 03	651,355	48,958 91	113,574	6,880 72	32,231	1,742 01	24,679	708 94

B. H. TEAKLES, Chief Clerk, Canals Revenue.

### APPENDIX

No. (A) 20.—Summary Statement of Traffic on the undermentioned Canals during of each description of Property passed through

	Welland	Canal.	St. Lawren	ce Canals.	Chambly	Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Vessels of all kinds	1,122,469	\$ ets. 17,954 50	1,741,447	\$ cts. 14,897 17	231,747	\$ cts. 2,406 79
Passengers,	No. 23,704	361 65	No. 61,707	3,104 67	No. 3,598	60 31
Forest—Produce of Wood.	Tons.		Tons.		Tons.	
Boat Knees. Floats		••••	5,164	77 77		
Free	14,172	602 25	12,877	281 17	5,153	185 87
Hoops and hop polesLumber, sawed	60,398	10,373 03		1,274 17	83,183	4,879 65
Free Masts, spars, &c. Free	27	1 08	3,717 17,088	427 20		· · · · · · · · · · · · · · · · · · ·
Railway ties	57 3,844	206 38	.	38 49 473 90	1,558	124 32
Free	441	58 98	5		105	
Shingles	14	9 60	10	9 01 25	135	34 44
Free. Timber, square. Free	90,807	13,725 78	12,109 360	292 30		
Traverses			10,354	26 95		
Total	169,360	24,978 7	8 124,130	2,901 31	90,029	5,224 28
Farm Stock.						
Cattle	48	1	. 51	6 70		
Free Sheep			. 3			
Total	49	2 4	0 1,197	93 15	259	8 6
Produce of Animals.						
Bones	.\ 37	8 2 7 3	5 14	1 23	3	
Free	. 328	5 3 0 65 6	650	63 28		
TallowFree	33		221 106 54	14 58	3	

### A-Continued.

the Season of Navigation ended 31st December, 1890, showing the Total Quantity and the Amount of Tolls collected thereon.

	Canal.	Ottawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Val	ey Canals.
Tons.	Tolls.	Tons.	Tolis.	Tons,	Tolls.	Tons.	Tolls.	Tons.	Tolls.
101 504	\$ cts.	400 990	\$ cts.	140.079	\$ cts. 1,676 89	70.005	\$ cts. 1,419 70	£1 900	\$ cts.
101,504	245 98	400,239	4,262 48	140,678	1,070 89	70,985	1,419 70	51,800	346 10
No. 12,589	133 97	No. 13,298	172 51	No. 3,921	111 34	No.		No. 8,318	81 08
Tons.		Tons.	1 47	Tons.		Tons.		Tons.	1 31
		9,190	84 16	2,478	43 93			260	3 13
939	7 84	11,126 47,047 10,150	1,924 63	12,224 25,125	207 88			17,853	180 13
621	6 95	531,076	2 87 40,131 94	38,651	2,156 93	2,567	25 67	347	5 93
28	0 18	1,273 321	10 71	36,001 94	10 00	2,001	20 04	468	8 51
153	1 53	10 1,590	337 63	6,610	752 29			363	13 84
		3,525		366	8 61			2,126	18 41
		13,872						2,120	
8 <b>2</b> 5	0 15 1 93	418	299 41	215	93 18			215	18 70
···········	0 33	6	1 76	31	4 74			5	0 88
6,540	81 75	10 1,660	31 48	560	29 51			1,950	21 25
• • • • • • • • • • • • • • • • • • •		2,460 200	1 08	1,205	28 22			400	2 00
8,321	100 66	633,982	42,827 14	87,559	3,335 29	2,567	25 67	24,021	273 58
		,							
		649 12	42 02 0 72	11 1	0 33 0 03				
42	0 86	182	10 97	17	0 50				
		325	23 27	7	0 20				
42	0 86	1,168	76 98	36	1 06				
		23	2 04	33	1 27	 			
<b>2</b> 6	0 04 0 12	23 27 9	2 55 0 53	3 25	0 09 0 82				
٠,	[					<b></b>	ļ		
• • • • • • • •		12	) 1 (172)	7711					
4	0 08	12 36		20 172		·····•			

No. (A) 20.—Summary Statement of Traffic on the undermentioned Canals

4.45.1	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
		* cts.		\$ cts.		\$ cts.
Vool	13		26	3 90		• • • • • • • • • • • • • • • • • • • •
animalFree	14	2 80	608 14	55 33	1	• • • • • • • • • •
Total	690	107 97	2,234	198 55		
Agricultural Products.						
Agricultural products not enumerated, vegetable	220	12 93	2,330	179 07		
Free Apples Barley Jotton, raw	150 10,830	7 79 1,950 45		368 85 33 28	420 496	
Corn. Free	327,394	65,478 60	16,815 144,905	366 72	7	0 24
Flax and hemp Flour Free	14,461 48	2,042 79	168	6 65 487 39		6 90
Hay, pressed Meals, all kinds Free	20,708	4,141 35	897	46 66 97 06		1 60
Manilla. Dats	162 27,728	24 30 5,533 80		4 70 120 66		21 11
PeasePotatoesRye	14 4 1,549	2 80 0 26 288 40	93	545 37 8 17 65 30		0.36
Free Seeds—Flax, clover and grass	155	30 10	1,120 2,084			
Free	100		25 25	2 29	4	0 2
Free	118,002	22,895 94			1	
Total	521,531	102,410 20	317,436	2,951 6	3,764	178 6
$m{M}$ anu $f$ actu $m{r}$ es.						
Ashes, pot and pearl	71 10		78 70			
Agricultural Implements			113	16 39	2 2	0 2
BricksFree	335 252	35 4				16 8
Cement and water lime	87 62	11 8	2,802 932		100	1
Crockery and earthenware	1	0 1		43 89	10	1 1 1
Furniture	35		658	116 4		
Glass, all kinds	26 23		1	121 2	3	
Iron, railway Free		1	20,378	3,027 3	۲ <b></b>	
Iron, pigFree	36	4 6	3,249	470 4	6	.
Iron, all other	717	105 4	9 14,334	845 7		
Molasses	117		5 1,239	153 1	2 645	64 5

### during the Season of Navigation ended 31st December, 1890, &c.—Continued.

Murray Cana		Ottawa Canals.		Rideau Canal.		St. Peter's Canal		Trent Valley Canals.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.				\$ cts.		\$ cts.		\$ cts.
6	0 12			4	0 14				
4	0 08	1,286	105 12	479	13 96				
							••••		
	0 44	1,394	112 36	738	21 61				
16	0 32	74	4 72	57	1 84	8,003	80 03		
977	17 82	93	5 20	106	······································	••••			
1,070 1	20 08 0 02	119	10 22	101	2 37				
				35	1 08				
60	1 15	19	1 04	487	13 22	1,629	16 29	43	0 4
		413		502	11 89				
1	0 02	17	1 30	48	1 38				
3	0 08	1,378		91	2 81				
114	2 15	1,363		76					
454	 8 47	666	51 62	112		<b>.</b>			
		20		107	0 38				
1	0 02	19		14					
3 384	0 06 0 97	44	1	1 191	0 07 4 69				
		••••		• • • • • • • • • • • • • • • • • • • •					
3,084	51 16	4,225	321 83	1,928	49 85	9,632	96 32	43	0 43
5	0 15	11	2 09	21	3 03				
	0 25	18 91		189					
•••••		120		85 41	1 51			27	0.7
6	0 12	62	6 06	102	3 01		• • • • • • • • • • • • • • • • • • • •		
9	0 24	10	1 48	51	4 93				
37	1 08	28	3 64	66	6 56				
i8	0 46	7	0 77	48	4 43				
<b>28</b> 0	5 25								
 84	1 58			92					
253	4 78	35		340					
• • • • • • • • •					î .	1		· [	

No. (A) 20.—Summary Statement of Traffic on the undermentioned Canals

	Welland	Canal.	St. Lawren	ce Canals.	Chambly	Canal.
Articles.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
		\$ cts		\$ cts.		\$ cts.
Vails	60	1 99	4,059	648 92		
doFree.	453 89	3 9	1,692	235 50	168	15 3
do Free.	11		.) 6			
oil cake	2	0 4	8 2	0 75		
Paint	37 24	5 7	493	73 96	16	1 6
do Free.	863	123 8	372	26 68	257	25 7
do Free.	13	• • • • • • • • • • • • • • • • • • • •	2,284	114 99	2,226	220 3
doFree.	1					
doFree.	993 554	148 9	1,599	299 97	••••	. • • • • • •
Spirits, whiskey, &c	268	52 9		198 71	1	0 0
doFree.	3:0	• • • • • • •	26 169	22 59	• • • • • • • • •	
doFree.	1	100 5	. <b> </b>		1 000	100.0
doFree.	926 551	120 5		931 17	1,203	120 3
Fin	1 40	0 0	2 563	98 71	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
lo Free.	40		129	7 78	103	10 3
do Free	$^2$		140	28 69		
do Free.	19	0.2	.			
VhitingFree.	1 34	0 1	5 701	139 69		
Woodenware	28	11 2		41 00		
do			. 1			
Total	27,895	687 5	76,185	8,587 79	4,921	486 6
Merchandise.						
Brimstone, crude	736	110 4		22 83	188	33 6
Clay, lime and sandFree.	472 8	45 1	9 <b>28,451</b> 582	1,208 33	4,997	518 1
Coal	202,384	38,222 6		21,830 57	81,932	8,035 6
doFree. Dye woods and dye stuffs			. 94,143 . 241	15 85	544 95	9 8
Fish	223 26	35 6	5 408 . 49	41 80		
vpsum.	205	2 5		16 19		
Ores, all kinds	8,138	406 9	0 3,542 820	177 10	129	12 9
Marble	4,437	665 5		6 86		
Rags	1,027	187 5	124 3 11,715	23 45 1,555 16	703	66 8
doFree.	7,440			1,000 10	l	
Stone, all kindsFree.	12,157 12	1,815 9	2 16,882 2,826	824 27	2,594	255 2
All other goods and merchandise, not			_			
enumerated do doFree.	57,595 1,180		· · · · ·		12,252	874 (
Total	296,040		-\	27,986 03	103,434	
				21,000 00	100, 201	
Grand totals, passengers and tonnage of vessels not included	1,016,165	194,089 5	1	1	1	   18,171 (

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA. 27th February, 1891.

# during the Season of Navigation ended 31st December, 1890, &c.—Continued.

Murray	Canal.	Ottawa	Canals.	Rideau	Canal.	St. Peter	's Canal.	Trent Val	ley Canals.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
304	7 63	31	2 92	295	26 62				· • • · • • • • •
182	4 56	34	2 50	219	19 92				• • • • • • • •
				5	0 13				
26	0 67	······ 2	0 24	22					· • · · • · · • • • •
		···· -		26		[			• • • • • • • • • • • • • • • • • • • •
					2 28		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
		• • • • • • • • • • •		1	0 09		· • • • • • •		• • • • • • • • • • • • • • • • • • • •
50	1 26	1	0 19	25	2 31				
58	1 50	22	1 43	156	17 26	,	· · · · · · · · · · · · · · · · · · ·		• • • • • • • •
		1	0 05	<u>28</u>	1 49				• • • • • •
					• • • • • • • •				
122	3 07	53	4 39	321	31 66	1			
8	0 22	12	0 79	19	1 79		• • • • • • • • • • • • • • • • • • • •		
		·····i	0 05	····i	0 09				
32	0 81		• • • • • • •	19	1 80				
						.[			
77	1 93	3	0 15	28	2 67	/			
1	0 05	55	45 49	5	0 80				
		240		<u> </u>				· · · · · · · · · · · · · · · · · · ·	
1,558	35 61	862	98 31	2,334	184 9	3			0 76
27	0 50	7,652	203 99	421	9 9				
		7,002	203 99		·	1			
		40	2 00	10,916 4,373	463 9	18,353	183 53		
				1	0 0	9			
22	0 43	4	0 40	113	2 7	814	8 14		
		1 505	75 05	9.057	150 5				<b></b> .
	••••••	1,505	75 25	3,057	152 5				
6	0 10 0 15	3	0 57		0.8	<sub>i</sub> }·····	· · · · · · · · · · · · · · · · · · ·		
257	4 82	. 5	0 21	1,068	31 1				
362	5 21	3	0 57	96	4 4	9		420	1 9
• • • • • • • • • • • • • • • • • • • •	· · · · · · ·	• • • • • • • • • • • • • • • • • • • •						<b></b>	
5,078	127 14	512	71 76	927	98 4	865	8 65	168	5 0
		• • • • • • • • • • • • • • • • • • • •							
5,756	138 35	9,724	354 75	20,979	764 2	20,032	200 32	588	6 9
18,783	707 03	651,355	48,226 36	113,574	6,145 2	1 32,231	1,742 01	24,679	708 9

B. H. TEAKLES, Chief Clerk, Canals Revenue.

APPENDIX A.—Continued.

n, ended	
Navigation,	
of	
Season	
Lhe	
during the Season	)
month	
each	1800
ATEMENT showing the Amount of Tolls accrued each month	21st December
Amount	
the	
showing	
21.—STATEMENT	
$\overline{\mathbf{A}}$	
No. (	

Canale and Offices.	January.	April.	Мау.	June.	July.	August.	September	October.	November	November December	Total.
WELLAND CANAL	e cts.	•	e cts.					es cts.	* cts.	es cts.	
Colforme Colforme Dalhousie. Dunnville Mattlande FRobinson		11,269 10 5,828 84 31 39 8 43 76 52 77 59	22,120, 25, 120, 25, 120, 25, 1585, 97, 15, 58, 17, 18, 18, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19	18,985 56 5,536 57 7,536 57 9,4 93 0 50 8,4 23 8,4 23	21,786 81 7,203 38 107 73 4 00 34 60 81 12	18,179 23 7,055 75 29 43 2 36 57 61 75 65	17,401 34 10,152 59 0 50 1 00 137 35 93 67	14,846 52 6,970 93 6,970 93 0 50 84 89 59 78	14,275 63 5,167 45 25 08 1 50 157 90 44 44	3 23 23 23 23 23 23 23 23 23 23 23 23 23	138,869 24 53,504 71 324 15 41 46 705 47
Total Welland Canal		17,294 68	27,935 15	24,754 65	29,219 82	25,402 30	27,792 97	21,998 15	19,676 69	15 12	194,089 53
Beauharnois Cardinal. Cornwall Kingston Lachine Montreal		5 90 5 90 154 48 139 15 37 03 216 06	40 21 72 87 1,841 04 926 59 237 55 3,721 21	42 08 79 68 2,363 08 1,626 49 270 78 4,051 05	113 75 219 02 2,119 07 1,542 48 354 29 5,564 36	91 52 60 97 2,820 81 2,934 97 686 57 4,523 03	50 29 77 74 2,414 01 2,562 75 590 63 4,211 72	188 18 73 48 2,046 34 2,479 32 483 34 3,118 48	182 92 68 34 1,888 67 957 44 187 65 2,243 63	14.38	714 85 672 38 15,666 50 13,169 19 2,847 84 27,649 54
Total St. Lawrence Canals		558 52	6,839 47	8,433 16	9,912 97	11,117 87	9,907 14	8,389 14	5,528 65	33 38	60,720 30
CHAMBLY CANAL. Chambly St. John's. St. Ours		7 45	531 23 550 60 58 47	699 97 2,421 40 57 92	773 98 1,577 74 70 76	966 37 1,803 77 67 50	1,050 02 2,410 40 72 48	1,271 73 2,067 37 84 69	614 65 938 74 73 76		5,907 95 11,770 02 493 03
Total Chambly Canal		7 45	1,140 30	3,179 29	2,422 48	2,837 64	3,532 90	3,423 79	1,627 15		18,171 00

28,374 88 194 41 18,442 09 1,214 98	48,226 36	1,414 04 4,289 51 441 66	6,145 21	1,742 01	7.28888 7.8888			330,510 38
				43 65				92 15
2,098 17 32 22 1,830 90 101 70	4,062 99	68 51 294 68 53 27	416 46	217 51	10 12 - 5 40 60 60 60 60 60 60 60 60 60 60 60 60 60	14 47	46 34	31,617 79
3,104 69 36 11 2,694 12 237 38	6,072 30	241 83 596 93 29 42	868 18	301 75	66 79			41,244 10
3,201 51 11 46 2,007 81 176 63	5,397 41	231 54 582 23 71 43	885 20	262 93	8 00 78 76 10 35			47,986 52
4,175 29 38 48 2,729 78 183 40	7,131 96	234 53 608 96 88 35	931 84	203 18	16 63 13 8 8 8 8 8 8 8 8 8 8 8 8 8			47,910 54
5,669 62 20 90 3,083 34 165 28	8,939 14	207 44 902 56 101 95	1,211 95	203 26	6888 0 4 888888			52,142 51
4,483 84 33 19 2,716.59 168 69	7,402 31	206 93 766 31 66 06	1,039 30	170 40	18 00 50 73 2 39			46,221 02
5,640 52 13 82 2,845 04 158 88	8,658 26	223 26 537 84 31 18	792 28	275 37	26 53 0 75 4 46			45,798 53
1 24 8 23 534 51 18 02	562 00			60 17	0 25	10 36		18,493 43
				3 79	: : : : : : : : : : : : : : : : : : :			3 79
Ottawa Canals. Ottawa. Carillon Grenville St. Anne's.	Total Ottawa Canals	RIDEAU CANAL. Kingston Mills Ottawa. Smith's Falls	Total Rideau Canal	St. Peter's Canal. St. Peter's	TRENT VALLEY CANALS.  Buleigh Bobcaygeon Buckhorn Fenlon Falls	Peterborough	Mubray Canal.	Grand Total

B. H. TEAKLES, Chief Clerk, Canals Revenue.

> DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1892.

APPENDIX A-Continued.

No. (A) 22.—General Statement showing the Number, Tonnage and Nationality of Vessels passed through all the Canals during the Season of Navigation ended the 31st December, 1890, and the amount of Tolls collected thereon.

the Season of Inspi	Navigation ended the 318t December, 1030, and the amount of	anged u	1810 91	Decem	oer, 100	o, send	rile aim	mile Of	OGINT	200010	Tolls collected allel coll.		
Vеневів,	mber.	From Canadian to Canadian Ports.	n dian dian es.	Front Canadian to United States Ports.	ni lian States ts.	From United States to United States Ports.	om States States ts.	From United States to Canadian Ports.	m States lian Es.	Tons.	gi	Total Tons.	Amount of Tolls.
	mN latoT	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	·	
Welland Canal.								<del></del>					e cts.
Canadian ve do	1,139	84,941 49,851	75,480 35,581	78,564 80,036	2,356 3,666	626	569	5,277	93,156 98,162	169,711	170,992 137,678	340,703 275,118	4,041 47 5,530 18
Total Canadian	2,135	134,792	111,061	158,600	6,022	929	569	12,830	191,318	307,151	308,676	615,821	9,571 65
United States vessels, steamdo	436	241	18	3,096	1,184	191,099 49,610	184,658 42,250	2,521 1,824	18,830 8,331	196,716 53,997	204,690 51,245	401,406	6,024 17 2,358 68
Total United States	748	241	18	5,418	1,848	240,709	226,908	4,345	27,161	250,713	255,935	506,648	8,382 85
Grand total, Welland Canal	2,883	135,033	111,079	164,018	7,870	241,638	227,177	17,175	218,479	557,864	564,605	1,122,469	17,954 50
Qm T. MD Private Canara								·					
Canadian vessels, steam.	3,849	380,486 520,851	329,688 316,317	15,694 29,375	56 779		.67	581 119	5,395 59,145	396,761 550,345	335,206 376,256	731,967	4,184 96 10,118 61
Total Canadian	9,322	901,337	646,005	45,069	88		88	700	64,540	947,106	711,462	1,658,568	14,303 57
United States vessels, steam do do sail	483	645	549 10,974	1,416	123 6,549	6,650	6,921 899	34,981	3,623	8,801 40,803	11,216 22,059	20,017 62,862	140 35 453 25
Total United States	1,176	1,398	11,523	5,426	6,672	7,709	7,820	35,071	7,260	49,604	33,275	82,879	593 60
Grand total, St Lawrence Canals	10,498	902,735	657,528	50,495	7,507	7,709	7,902	35,771	71,800	996,710	744,737	1.741,447	14,897 17
												-	

	CHAMBLY CANAL				-										
Car	Canadian vessels, steam do sail	438 662	35,719 6,858	40,878 6,948	63 11,825				::	1,062 31,145	35,782 18,683	41,940 38,093	77,722 56,776	234 57 930 23	
	Total Canadian	1,100	42,577	47.826	11,888					32,207	54,465	80,033	134,498	1,164 80	
Un	United States vessels, steam do sail	981	39 2,044	1,918	26,228	4,197			: :	1,833 60,889	28,272	1,932	1,973 95,276	25 93 1,216 06	
	Total United States	1,008	2,083	2,017	26,230	4,197				62,722	28,313	68,936	97,249	1,241 99	
	Grand total, Chambly Canal	2,108	44,660	49,843	38,118	4,197			:	94,929	82,778	148,969	231,747	2,406 79	
	MURRAY CANAL.												,		
Can	Canadian vessels, steamdo	715	42,259 1,998	31,739 4,533	7,051		: :		131 342	7,108	49,441 6,839	38,847 6,038	88,288 12,877	202 44 39 76	
	Total Canadian	200	44,257	36,272	11,550	2			473	8,611	56,280	44,885	101,165	242 20	
Un	United States vessels, steamdo	253		9	149		: :			888	161	88	85	3 28 28	
14	Total United States	12	7	9	198	:			20	133	210	129	833	3 78	
7	Grand total, Murray Canal	865	44,264	36,278	11,748	2			478	8,734	56,490	45,014	101,504	245 98	
	OTTAWA CANALS.				•										
Can	Canadian vessels, steam do sail	1,145	56,482 9,856	114,823 164,540		23,907					9,856	116,966 188,447	173,448 198,303	698 14 2,897 98	
	Total Canadian	2,534	66,338	279,363		26,050		:			66,338	305,413	371,751	3,596 12	
Un	United States vessels, steam.	291	4,118	# :	183	23,680			276		187	23,680	231 28,257	2 37 663 99	-
	Total United States	202	4,305	2	188	23,680			276		4,764	23,724	28,488	96 999	
	Grand total, Ottawa Canal	2,829	70,643	279,407	183	49,730	:		276		71,102	329,137	400,239	4,262 48	
	RIDRAU CANAL.														
Can.	Canadian vessels, steam do sail	1,151	30,362 31,871	31,659	129		: :	: :			30,491 34,113	31,659 38,621	62,150 72,734	591 52 1,009 32	
	Total Canadian	2,116	62,233	70,280	2,371					     	64,604	70,280	134,884	1,600 84	

55 Victoria.

No. (A) 22.—General Statement showing the Quantity of each Article transported, &c.—Concluded.

				,									
Vessels,	Number.	From Canadian to Canadian Ports.	m dian dian dian 68.	Fr Cans t United Po	From Canadian to United States Ports.	From United States to United States Ports.	From United States to United States Ports.	Fr United to Cana Pon	From United States to Canadian Ports.	Tons.	75.	Total Tons.	Amount of Tolls.
	[atoT	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Dówn.	Up.	Down.		
RIDRAU CANAL-Continued.													e cts.
United States vessels, steamdo	35.42	443 1,913	2,217	2607			: :			537 2,520	520 2,217	1,067	17 51 58 54
Total United States	122	2,356	2,737	707	1 :	:		:		3,057	2,737	5,794	20 92
Grand total, Rideau Canal	2,238	64,589	73,017	3,072						67,661	73,017	140,678	1,676 89
St. Prier's Canal.	,												
Canadian vessels, steamdo	1,250	4,398 31,208	6,056						: :	4,398 31,208	6,056 29,323	10,454 60,531	209 08 1,210 62
Grand total, St. Peter's Canal	1,294	35,606	35,379							35,606	35,379	70,985	1,419 70
TRENT VALLEY CANALS.								-					
Canadian vessels, steam do sail	739 565	12,738 14,249	11,681 13,132							12,738 14,249	11,681 13,132	24,419 27,381	202 00 144 10
Total Canadian.	1,304	26,987	24,813			:			: :	26,987	24,813	51,800	346 10
Grand total, Trent Valley Canals.	1,304	26,987	24,813							26,987	24,813	51,800	346 10

A. 1892

No. (A) 22.—General Statement showing the Number, Tonnage and Nationality of Vessels, &c.—Concluded. APPENDIX A-Continued.

		0		REC	APITULA	ULAI	TION.		•				
Vessels,	Mumber.	From Canadian to Canadian Ports.	m dian dian ts.	From Canadian to United States Ports.	m dian States	From United States to United States Ports.	m States States rts.	From United States to Canadian Ports.	m States lian ts.	Tons.	ns.	Total Tons.	Amount of Tolls.
	oT .	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
CANADIAN VESSELS.							,						cts.
Steam and Sail.							-						
Welland St. Lawrence. Chambly	2,135 9,322 1,100	134,792 901,337 42,577	111,061 646,005 47,826	158,600 45,069 11,888	6,022	929	269	12,830	191,318 64,540 32,207	307,151 947,106 54,465	308,670 711,462 80,033	615,821 1,658,568 134,498	9,571 65 14,303 57 1,164 80
Murray Ottawa Rideau	2,534 2,116				26,050			473	8,611	56,38 66,38 604			8 28 8 20 6 21 8 21 8
St. Peter's Trent Valley Canals	1.1.1. 20.00.			: :						35,606 26,987			1,419 70 346 10
Total, Canadian	20,655	1,314,127	1,250,999	229,478	32,909	626	351	14,003	296,676	1,558,537	1,580,935	3,139,472	32,244 98
UNITED STATES VESSELS.													
Steam and Sail Vessels.						-							
Welland St. Lawrence	1,176	1,398	11,523	5,418	1,848	240,709	226,908 7,820	4,345	27,161 7,260	250,713 49,604	255,935 33,275		
Chambly Murray Ottawa	1,008		2,017 6 44		4, 197			276	62,723 123 123 123	28,313 210 4,764		97,249 339 28,488	666 36 3 78 3 78
Kideau Total, United States	3,364	-	2,73/	86	36,397	248,418	234,728	39,697	97,266	336,661	1 "	721,397	
Grand Total, Canadian and United States	24,019	1,324,517	1,267,344	267,634	69,306	249,347	235,079	53,700	393,942	1,895,198	1,965,671	3,860,869	43,209 61
DEPARTMENT OF RAILWAYS AND OTTAWA, 27th	WAYS A	AND CANALS, 27th February, 1891.	Ls, uary, 18	91.					В. Н.	TEAKLES, Onief Ole	LES, Clerk, C	SAKLES, Ohief Olerk, Canals Revenue.	enue.

9*c*—10

SUPPLEMENTARY APPENDIX A-Continued.

No. (A) 22½.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals, during the Seasons of Navigation of 1889 and 1890, and the Amount of Tolls collected on the same, including Tolls on Vessels and Passengers.

,	Amount of Tolls.		\$ cts. \$ cts. \$ cts. 215,685 88 22,914 97 29,708 113 29,919 67 492 28 194,089 53 69,1720 39 1,742 01 1,742 01 1,742 01 1,742 01 1,742 01
	Total Tons.		1,085,27 919,97 919,97 113,09,87 113,09 113,71 1,016,16 83,88,88 83,88,89 80,90 113,77
	'Su	Down.	758, 560 (520, 921 128, 142 24, 110 (64, 200 32, 263 164, 200 164, 200 166, 200 26, 200 26, 200 26, 200 26, 200 26, 200 26, 200 26, 200 26, 200 26, 200 26, 200 27, 20
	Tons.	Up.	27,592         57,752         16,888         20,381         286,231         297,353         16,502         383,074         326,713         758,560         1,085,273           222,956         221,704         10,389         700         993         2,838         64,613         98,679         288,951         680,921         99,187           8,975         24,177         12,354         177,416         17,416         124,558         89,009         24,117         113,126           23,180         32,233         16         23,180         32,636         10,283         11,15         2,066         41,351         106,470           24,966         11,062         3,253         11,115         2,065         41,351         102,264         27,966         164,771           216,557         476,196         11,062         3,253         1,115         2,065         41,351         102,204         27,966         106,166           22,297         281         282         283         2,665         41,351         102,204         27,976         583,639           23,287         6,180         318,269         1,115         2,065         41,351         102,204         27,076         583,778         83,235
	From United States to Canadian Ports.	Down.	<u>.                                    </u>
	Fr United Can	Up.	
	From United States to United States Ports.	Down.	· · · · · · · · · · · · · · · · · · ·
	Fr United United	Up.	<u> </u>
	From Canadian to United States Ports.	Down.	l
	Fr Can t United Po	Up.	:::
	From Canadian to Canadian Ports.	Down.	
	Cans Cans Po	Up.	22,592 22,956 8,975 76,665 24,48 23,180 24,966 16,557 81,219 81,219 81,219 82,837 82,837 84,606
	Ì		

B. H. TEAKLES,

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 27th February, 1891.

# APPENDIX A-Continued.

No. 23.—Statement of the Number and Tonnage of all kinds of Vessels passed through the Canals, during the Season of Navigation in 1890.

WELLAND AND ST. LAWRENCE CANALS.

8 31 248 29 232 13 104 5 4 4 100 12 101 12 120 14 140 6 6 60 2 4 4 100 12 11 120 11 11 220 10 10 200 7 144 2 4 140 1 1 11 11 11 11 11 11 11 11 11 11 11 1	•		Canadian.				United	States.	
Number   Tonnage   Number   To	s	team Vesse	ls.	Sailing	Vessels.	Steam	Vessels.	Sailing	Vessels.
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	onnage.	Number.		Number.		Number.		Number.	Total Tonnage.
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									40
200									20
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								1 2	16 40
35         17         595         4         140         4         140         1         33         120         2         86           45         6         270         6         1,000         3         120         2         86           50         6         300         14         700         3         135	25								
40         11         440         25         1,000         3         120         2         86           50         6         300         14         700         2         100             55         2         110         2         110 <td></td> <td></td> <td>570</td> <td></td> <td></td> <td></td> <td>30</td> <td></td> <td>30</td>			570				30		30
45         6         270         6         270         3         135            55         2         110         2         110             60         3         180         5         300             65         2         130         5         325          2         136           70         2         140         5         350          2         158           70         2         140         5         350          2         158           80         2         160         9         720          2         168           80         2         160         9         720          2         168           90         3         270         10         900          16         1,448           95         4         380         15         1,445          48         4,56           100         1         100         41         4,00         1         100         64         6,40           105         6         630									
50         6         300         14         700         2         100           60         3         180         5         300           65         2         110         2         110           66         2         130         5         3925         2         13           70         2         140         5         350         9         765         2         15           77         2         150         7         525         2         2         16           80         2         160         9         765         160         160         160         160         140         160 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1 1</td> <td></td>								1 1	
60         3         180         5         300         2         130         70         2         140         5         325         2         130         70         2         140         5         350         2         150         75         2         150         75         2         150         75         2         150         85         4         350         9         765         9         766         760         9         760	50	6	300	14	700				
65         2         130         5         325         2         13           75         2         150         7         525         2         156           80         2         180         9         720         2         156           80         2         180         9         700         2         166           80         3         270         10         900         16         1,445         16         1445         16         1445         16         1445         16         1,445         16         1445         16         1445         16         1445         16         1445         16         1445         16         1445         16         1445         16         1445         16         16         1445         16         16         1446         16         16         1446         16         16         1446         16		2				<b></b>		•	• • • • • • • • • • • • • • • • • • •
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3 9					· · · · · · · · · · · · · · · ·		120
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		2							100
85         4         350         9         765         9         765           90         3         270         10         900         16         1,444           95         4         380         15         1,445          48         4,560           100         1         100         41         4,100         1         100         64         6,400           110         2         2220         10         1,100         4         440         15         1,99           110         2         2220         10         1,100         4         440         15         1,65           115         1         115         9         960         4         440         15         1,65           120         1         120         8         960         4         449         125         3         375         11         1,375         2         25         135         1         135         8         1,080         4         52         135         1         135         8         1,080         4         52         135         1         135         8         1,080         4         4 <td></td> <td>2</td> <td></td> <td>7</td> <td></td> <td></td> <td></td> <td></td> <td>150</td>		2		7					150
90         3         270         10         900         16         1,445           95         4         380         15         1,445         48         4,560           100         1         100         41         4,100         1         100         64         6,40           105         6         630         18         1,890         19         1,99           110         2         2200         10         1,100         4         440         15         1,65           115         1         115         9         1,035         8         92         120         1         120         8         960         4         440         15         1,65         1,65         1,65         2         25         130         2         260         6         780         4         4         44         44         44         44         44         52         135         1         135         8         1,890         4         52         25         130         1         1,450         1         1,450         1         1,450         1         1,450         1         1,450         1         1,450         1 <t< td=""><td></td><td>2</td><td></td><td></td><td></td><td> </td><td>••••••</td><td></td><td></td></t<>		2					••••••		
95         4         380         15         1,445									
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	95	4	380	15	1,445			48	4,560
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						1	100		6,400
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							440		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						1	***		920
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	120	1 1	120		960				480
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3			1,375				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		ĩ							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					840				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1 1							· · · · · · · ·
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				32					• • • • • • • • •
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	160	3	480					2	320
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1	165						
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		3	875	6 7	1,020			• • • • • • • • • • • • • • • • • • • •	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				2		1		1	180
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				9				1	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1	106	2 7	380				104
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				5	1,000			_	190
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	205			1	205				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				2	420		·		• • • • • • • • • • • • • • • • • • •
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				·····i	220	.			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	225			3	675				
240     245       245     2 490       250     2 510       255     1 260       260     1 260       3 780     2 52       265     1 205       2 530     3 79       270     2 540       3 810     1 27       275     4 1,100     4 1,50       220     1 280     3 84		;						1	230
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1	230				1· · · · · · · · ·	••••	• • • • • • • • •
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						1	1	2	490
265         1         285         2         530         3         79           270         2         540         3         810         1         27           275	<b>250</b>			<u>.</u> .					. <b></b>
265         1         285         2         530         3         79           270         2         540         3         810         1         27           275	255		ലെ	2	510			1	250
270     2     540     3     810     1     270       275	260 965	1 1	270U 9:65	3 2	780 590			2 2	
275		2	540	3	810	1		1	270
280 1 280 3   84	275	1			1,100			4	1,500
285 5 1,425 7 1,99		1 1	280	5	1,425			3 7	846 1,995

# APPENDIX A-Continued.

No. 23.—Statement of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—Continued.

WELLAND AND ST. LAWRENCE CANALS-Continued.

		Canadian	۲.			United	STATES.	
s	team Vesse	els.	Sailing	g Vessels.	Steam	ı Vessels.	Sailing	y Vessels.
Connage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage
290	1	290	2	580	]. <b>.</b>		3	870
295 300	1	300	3 9	295 900			1	29
305	3	915	9	2,745			5   3	1,50
310	ľ	310	ä	930	1		1	91
315			3 3 8 7 6	945			6	31 1,89
320	1	320	8	2,560			i	32
325	1	325	7	2,275			3	97
330	2	660	6	1,980				l
335			. 5	1.675	1	335	1	33
340	<u>1</u>		4	1,360		[	1	34
345	1	345	1 3	345				l
350	• • • • • • • • · · ·	• • • • • • • • • • •	3	1,050	1	350	1	35 71
355	1	360	1 3	355	1	355	2	71
360 <b>365</b>	1	300	4	1,080 1,460				
370	• • • • • • • •		i	370	•••		• • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
375			$\hat{3}$	1,125				
380				l <b>.</b> . <b></b>				
385	2	770	1	385				
390	2 1	770 390						
395	ī	395	. <b></b>					
400							1	40
405	1	405					<b></b>	
410	2	820	1 1	410				
415 420	• • • • • • • •	· • • • • • • • • • • • • • • • • • • •	1	415				
425					· · · · · · · · · · · · · · · · · · ·	425	••••	
430	1	430			i	1		• • • • • • • • •
435			2	870			2	87
440	···· · · · · · · · · · · · · · · · · ·	880	1	440				
445		. <b></b>	1	445			2	. 89
450			1 2 1	450				
<b>4</b> 55	1	455	2	910				
460		• • • • • • • • • • • •	1	460 465				
465 470			_	400	1	470	1	46
470 475			1	475	· ·	470	1 1	47 47
480				<b> </b> .			1	48
485	1	485	1	485	l	1	î	48
490			<i></i> .	<i></i>	1	490		10
495								
500	1	500	1	500			1	50
505		1 500	- • • • · · · •		1	505		
510	3	1,530	1	515				
515 520		· · · · · · · · · · · · · · · ·	$\frac{1}{2}$	1,040		•••••	1	51
525	• • • • • •			1,010			1 1	52 52
530	·····i	530	. <b></b> .	1		• • • • • • • • • • • • • • • • • • • •	1	92
535			l <b></b> .	1	1			
540	1	540	1	540	1	540	···· i	54
<b>54</b> 5		. <b></b>	1	545	ī	545	l	
550						l	l	l
555								
560					· · · · · · · · · · · · · · · · · · ·			
565		• • • • • • • • • • • • • • • • • • •			•••••	····		
570		• • • • • • • • • • • • • • • • • • •	1	570 152	1	l	1	57

# APPENDIX A-Continued-CANALS.

No. 23.—Statement of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—Continued.

WELLAND AND ST LAWRENCE CANALS-Concluded.

Total Tonnage.  575 1,160 590 595 600	Number.	Total Tonnage.	Steam Number.	Vessels.  Total Tonnage.	Number.	Total Tonnage. 585
Tonnage.  575 1,160  590 595 600  615	2	1,170	1	Tonnage	1	Tonnage.
1,160 590 595 600 615					2	
1,160 590 595 600 615					2	
595 600 615					2	
595 600 615	i	698			[	1,200
615	1	698			[	1,200
	1	698	·····2		····;··	
	1	698	·····2		, ,	
	1	698	\ Z	1 000	1 -	610
	1	698		1,230		
	1	628				
		020				
	1				1	640
			2	1,310		
660 675			• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •
1.380						
715					1	715
743			1	743	1	743
1,538		• • • • • • • • • • • • • • • • • • • •	· • • • · • • • • • • • • • • • • • • •			
. 836			1	1 920	í · · · · · · · · · · · · · · · · · · ·	915
1 858		• ••••	. 2	1,000	1	315
1,000			4	3.780		
	1	1,001		1	]	
		· · · · · · · · · · · · · · · · · · ·	4	4,096		• • • • • • • • • • • • • • • • • • • •
: • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	2	2,070		
• • • • • • • • • • • • • • • • • • • •	1	1 041	2	2,014		
		1.105			[	
1,160	1					
1,172			1	1,172		• • • • • • • •
		••••	1	1,203		
			1 1	1,420		
			5	7,775		
			ĭ	2,005		
39,130	564	88,942	91	39,104	289	48,193
	743 1,538 1,538 2 1,858 1,858 1,160 1,172	743 1,538 1 836 2 1,858 1 1 1 1 1 1,160 1 1,172	743 1,538 836 2 1,858 1 1,001 1 1,001 1 1,041 1 1,160 1 1,172 1 39,130 564 88,942	1     743     1       1,538     1     2       2     1,858     4       1     1,001     4       2     2     2       1     1,041     1       1     1,105     1       1     1,172     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       2     1     1       39,130     564     88,942     91	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1     743     1     743     1       1     1,538     1     836     1       2     1,858     2     1,830     1       3     1     1,001     4     4,996       4     2     2,070     2       2,074     2     2,074       1     1,160     1     1,105       1     1,172     1     1,203       1     1,425     1     1,425       1     1,441     5     7,775       1     2,005     1     2,005

# APPENDIX A-Continued-CANALS.

No. 23.—Statement of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—Concluded.

RIDEAU, OTTAWA AND CHAMBLY CANALS-Concluded.

	Canadian.					United States.				
s	team Vessels. Sailing Vessels.			Vessels.	Steam Vessels. Sailing			Vessels.		
onnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.		
70	. 1	70	5	350	} 			· • • • • • • • • • • • • • • • • • • •		
75	2	150	7	525			4	300		
80	] <u></u> ]		7	560	<i>.</i>	• • • • • • • • • • • •	4	320		
85	2	170	10	850	· · · · · · · · • • • •		18 25	1,530		
90 95	3	90 285	14 28	1,260 2,660	• • • • • • • • • • • • • • • • • • • •	••••••	111	2,050 10,545		
100	1	100	25	2,500			116	11,600		
105	l î l	105	19	1,995	••• • ••••	• • • • • • • • •	50	5,250		
110	l	100	8	880			26	2,860		
115	1	115	14	1,610			16	1,840		
120	$\bar{1}$	120	5	600			11	1,320		
125	1	125	12	1,500			2	250		
130			6	780			2	260		
135	1	135	. 6	810						
140			10	1,400						
145	1	145	12	1,740			- • • • • • • • • •	· · · · · · · • • • •		
150			23	3,450	• • • • • • • • •	•••••		• • • • • • • • • • • • • • • • • • • •		
155	1	155	39	5,545	• • • • • • • • • • • • • • • • • • • •			· · · · · · • • • •		
160 165	1	165	9 10	1,440	••••	· · · · · · · · · · · · · · ·	1	165		
170	1	100	4	1,650 680			1	100		
175			2	350						
180			ī	180						
185	2	370	5	925						
190	2	190								
195			1	195						
200	1	\						<i></i>		
205			3	615						
210	· · · · · · · · · · · · · · · · · · ·							• • • • • • • •		
215	1	215			• • • • • • • • • • • • • • • • • • • •			••••		
220 225				•• ••		· · · · · · · · ·		••••		
230	1	230	1	230				• • • • • • • • • • • • • • • • • • • •		
235	1	200	1	200				•		
240			i	240						
245			1 1	245						
250			1		]	1	. <b></b>			
255								] <i>.</i>		
260	\			<u></u>						
265	1		1	265	· · · · · · · · · · · · · · · · · · ·	·   · · · · · · · · · · · · · ·				
270										
275		005								
325	1	325								
335.	1 1	335 345	1	·····	1	942				
345 397	2	794	1		1	345				
99(										
otal	. 133	6,684	462	39,013	23	631	395	38,445		

B. H. TEAKLES, Chief Clerk, Canals Revenue.

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 30th September, 1891.

APPENDIX A—Continued=CANALS.

No. 24.—Statement showing the Classified Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1890.

		Tonnage.	27,098 720 695 12,215 2,645 260 48,193
		No.	73 116 116 14 14 289
1		Śailing Vessels.	250 to 915 tons 200 to 249 " 150 to 199 " 100 to 149 " 50 to 99 " Under 50 "
	ATES.		C C C C C C C C C C C C C C C C C C C
	<b>5</b> 5.	Class.	
	United States.	Tonnage.	37,600 540 100 864 39,104
•		N.	6
WELLAND AND ST. LAWRENCE CANALS.		Steam Vessels.	250 to 2,005 tons 200 to 249 " 150 to 139 " 100 to 149 " 60 to 99 " Under 50 "
Marian		Class.	100400
ND ST. LA		Tonnage.	42,050 4,415 19,405 14,610 6,140 2,322 88,942
KD AJ		No.	113 20 113 127 104 104
WELLAN		Sailing Vessels.	250 to 1,105 tons 200 to 249 " 150 to 199 " 100 to 149 " 50 to 99 " Under 50 " Total
	IAN	Class.	H00400
CANADIAN	CANAD	Tonnage.	28,172 1,080 2,330 2,330 2,170 2,988 39,130
		No.	254 132 252 254 254 254 254 254 254 254 254 25
	·	Steam Vessels.	250 to 1,172 tons 200 to 249 " 150 to 199 " 50 to 99 " Under 50 " Total
		Class.	155

RIDEAU, OTTAWA AND CHAMBLY.

165	23,380 14,810 90	38,445
: :	£ £ £ £ £	395
250 to 300 tons 200 to 249 " 150 to 199 "	100 to 149 " 50 to 99 " Under 50 "	Total
	4100	
345		631
1	83	R
Suos "	100 to 149 " 50 to 99 " Under 50 "	Total
-000	4.v.o	
265 1,330 14,415	13,815 7,220 1,968	39,013
94	117 89 155	462
250 to 265 tons 200 to 249 " 150 to 199 "	100 to 149 " 50 to 99 " Under 50 "	Totall
	400	
1,799 445 880	845 1,390 1,325	6,684
	~8¥	133
250 to 397 tons 200 to 249 " 150 to 199 "	:::	Total

-- 01 00 **4** 50 50

B. H. TEAKLES, Chief Clerk, Canals Revenue.

> DEPARTMENT OF RAILWAYS AND CANALS, OTTAVA, 30th September, 1891.

No. 25.—Rates of Tolls on the Canals WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA AND CHAMBLY CANALS (O. C., April 18, 1873.)

The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Rideau Canal, each way.	Ottawa Canals and St. Ann's Lock, each way.	Ottawa to St. John's, each way.
Class No. 1.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	cts.	\$ cts.
Vessels, steamper ton do sail and other do	0 01 <del>1</del> 0 024	0 01 <del>1</del> 0 02 <del>1</del>	0 02 <del>1</del> 0 03 <del>1</del>	$\begin{array}{c} 0 & 00\frac{3}{4} \\ 0 & 01\frac{1}{2} \end{array}$	0 00 <del>3</del> 0 01 <u>4</u>	0 01½ 0 02½	0 00§ 0 01	0 01½ 0 02§
Class No. 2.						•		1
Passengers, 21 years of age and upwards	0 10 0 05	0 10 0 05	0 20 0 10	0 10 0 05	0 05 0 02	0 08 0 04	0 <b>02</b> 1 0 <b>01</b> 1	0 09 <del>8</del> 0 04½
Class No. 3.								,
Bricks, cement and water lime Clay, lime and sand Brimstone. Corn. Fflour. Iron, railway. do pig do all other, including steel (O. C., Feb. 1, 1888). Plaster, gypsum. Salt. Salt meats or fish, in barrels or otherwise. Agricultural products, vegetable, not enumerated. Agricultural products, animals, not enumerated tone, for cutting.	0 15	0 20	0 20	0 15	0 10	0 07	0 06	0 19%
Class No. 4.								ļ ļ
All of her articles, not enumerated.	0 15	0 20	0 20	0 20	0 10	0 26	0 14	0 29

of the Dominion of Canada, 1890-91.

TRENT VALLEY CANAL (O. C., JULY 25, 1888.)

1st Section.	2nd Section.	3rd Section.	4TH SECTION.	Тнвоисн.	****
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	Whitlaw's to Hastings.
Tolls chargeable at Fenelon Falls.	Tolls chargeable at Bobcaygeon.	Tolls chargeable at Buckhorn.	Tolls chargeable at Burleigh.	Tolls chargeable at Fenelon Falls.	Tolls chargeable at Whitlaw's.
\$ cts.	\$ cts.	\$ ets.	\$ ets.	\$ cts.	\$ cts.
$0.00\frac{3}{16}$ $0.00\frac{3}{4}$	$0.00\frac{3}{16}$ $0.00\frac{1}{2}$	$\begin{array}{c} 0.00\frac{3}{16} \\ 0.00\frac{1}{4} \end{array}$	$0.00^{3}_{18} \ 0.00^{4}_{4}$	$0.00\frac{3}{4}$ $0.01$	0.00 <del>48</del> . 0.00 <del>1</del>
0.01 0.00½	0 01 0.00½	0.01 0.00½	0 01 0.00½	0.04 0.02	0.01 0.00½
0.01	0.01	0.01	0.01	0.04	0.01
0.03	0.03	0.03	0.03	0.12	0.03

No. 25.—Rates of Tolls on the Canals Welland, St. Lawrence, Rideau, Ottawa and Chambly Canals.

The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Rideau Canal, each way.	Ottawa Canals and St. Anne's Lock, each way.	Ottawa to St. John's, each way.
Class No. 5.	\$ cts.							
Bark Barrels, empty, each Boat knees, each Floats, per 1,000 lineal feet Firewood, per cord, in vessels do do rafts Hoops	0 20 0 02 0 05 1 40 0 20 0 25 0 25	0 20 0 02 0 05 1 40 0 20 0 25 0 25	0 20 0 02 0 05 1 40 0 20 0 25 0 25	0 15 0 02 0 02 1 40 0 20 0 25 0 20	0 10 0 02 0 02 1 20 0 10 0 15 0 15	0 07 0 02 0 02 1 05 0 15 0 19 0 15	0 06 0 01 0 01 0 50 0 08 0 09 0 10	0 19½ 0 03½ 0 03½ 2 05 0 23 0 30½ 0 30
Masts and spars, telegraph poles, per ton of 40 cubic feet, in vessels Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts Railway ties, in vessels, each	0 15 0 20 0 01	,0 15 0 20 0 01	0 15 0 20 0 01	0 05 0 10 0 00½	0 05 0 10 0 00 <del>1</del>	0 08 0 15 0 00 <del>3</del>	0 07 0 10 0 00 <del>3</del>	0 13½ 0 22½ 0 01§
do rafts, each Sawed stuff, boards, plank, scant- ling and sawed timber, per M. feet, board measure, in vessels	0 02	0 02	0 02	0 01	0 012	0 02	0 01 0 063	0 02‡ 0¥20
Sawed stuff, boards, plank, scant- ling and sawed timber, per M. feet, board measure, in rafts Square timber, per M. cubic feet,	0 60	0 60	0 60	0 30	0 20	0 19	0 09	0 36½
in vessels Square timber, per M. cubic feet, in rafts Waggon stuff, woodenware and	3 00 4 50	3 00 4 50	3 00 4 50	1 00 2 00	1 00 2 00	0 56 1 12	0 44 0 63	1 69 3 13
wood, partly manufactured, per ton of 40 cubic feet	0 40 0 06	0 40 0 06	0 40 0 06	0 40 0 06	0 25 0 04 0 20	0 30 0 04½	0 20 0 02½	0 55 0 08
in vessels.  Split posts and fence rails, per M., in rafts.  Saw-logs, each standard log	0 40 0 80 0 08	0 40 0 05	0 23 0 38 0 06	0 12 0 17 0 06	0 42 0 77 0 13			
Staves and headings, brl., per M do do pipe do do do W.India, p. M do do salt barrel,	0 40 1 50 0 75	0 40 1 50 0 75	0 40 1 50 0 75	0 20 1 00 0 60	0 15 1 00 0 25	0 15 0 75 0 45	0 10 0 50 0 25	0 30 1 75 0 65
sawn or cut, per M.  Traverses, per 100 pieces.  Hop poles, per 1,000 pieces	0 08 0 50 2 00	0 08 0 50 2 00	0 08 0 50 2 00	0 04 0 50 2 00	0 03 0 40 1 50	0 03 0 38 1 50	0 02 0 15 0 65	0 06 0 671 2 65
Special Class.								
Gypsum, crude (per O. C., 28th Oct., 1882)	0 15	0 05 0 20	0 20	0 05 0 15	West 0 10	ward. 0 08	0 05	0 172
Stone, unwrought, corded and not suitable for cutting, per cord Kryolite, iron ore or chemical ore Ice	0 75 0 05 0 05	0 75 0 05 0 05	0 75 0 05 0 05	0 60 0 05	0 37½ 0 05	0 28 0 05	0 24 0 05	0 77½ 0 05

of the Dominion-Continued.

TRENT VALLEY CANAL.

		IRENI VAI	LLEY CANAL.		
1st Section.	2nd Section.	3rd Section.	4th Section.	Тнвоисн.	
Fenelon Falls	Bobcageon	Buckhorn	Burleigh to	Fenelon Falls	Whitlaw's to Hastings.
Bobcageon.	Buckhorn.	Burleigh.	Lakefield.	Lakefield.	
Tolls Charge-	Tolls Charge- able to	Tolls Charge-	Tolls Charge- able at	Tolls Charge- able at	Tolls Charge- able to
able at Fenelon Falls.	able to Bobcageon.	able to Buckhorn.	able at Burleigh.	Fenelon Falls.	able to Whitlaw's.
\$ cts.	8 cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.
0.01	0:01	0.01	0.01	0.04	0.01
0.001	0.001	0.001	0.01 0.00 <del>1</del>	0.01	0·01 0·00 <del>1</del>
$0.00\frac{7}{4}$	0.00 <del>1</del> 0.00 <del>1</del>	0.004	0.00 <del>1</del> 0.00 <del>1</del>	0.01	$0.00\frac{7}{0.00\frac{1}{7}}$
0.13	0.13	0.13	0.13	0.52	0·13 <sup>4</sup> 0·03
0:03	0.03	0.03	0.03	0.10	0.03
0·04 0·02	0.04	0.04 0.02	0 04 0 02	0·14 0·08	0·04 0·02
0.02	0.02	0.02	0 02	0.08	0.02
•	Į.				
0.01	0.01	0.01	0.01	0.04	0.01
$0.00\frac{4}{9}$	0.007	0.007	0.007	0.00 <del>1</del> 0.01	0.00 <del>1</del> 0.00 <del>1</del>
0 004	0 004	0 004	0 004	0 01	0 004
0.03	0.03	0.03	0.03	0.10	0.03
0.04	0.04	0.04	0.04	0.14	0.04
0.07	0.07	0.07	0.07	0.28	0.07
0.14	0.14	0 14	0.14	0.56	0.14
0.04	0.04	0.04	0.04	0.16	0.04
0.004	0.004	0.03	0.003	0.03	0.00\$
0.03	0.03	0.03	0.03	0.12	0.03
0.02	0.05	0.05	0.05	0.20	0.05
$0.00\frac{2}{3}$	0.003 0.02	0.008	0.00 <del>1</del> 0.02	0.03	0·003 0·02
0 02	0.02	0.02	0.02	0.08	0.02
0.10	0.10	0.10	0·10 0·05½	0.40	0.10
$0.02^{\frac{1}{2}}$	0.027	0.057	1	0.22	0.057
$0.00\frac{1}{2}$	0.003	$0.00\frac{7}{2}$	$0.00\frac{5}{1}$	0.02	0.007
0·05 0·20	0.05	0.05	0·05 0·20	0.20	0.05 0.20
0 20	20	0.50	0 20	0.80	0 20
Free.	Free.	Free.	Free.	Free.	Free.
0.01	0.01	0.01	0.01	0.04	0.01
$0.03\frac{1}{2}$	0.037	0 031 0 003	0·03 <del>1</del> 0·00 <del>3</del>	0.14	0.00 <del>1</del> 0.03 <del>1</del>
0.004 Free.	0·00\frac{3}{4} Free.	0.00 <del>1</del> Free.	0.003	0·03 Free.	Free.
r ree.	r rec.	r ree.	Free.	r ree.	1 100.

Sec. 76.—Standard for estimating weight, for canal tolls.

	Tons.		Tons.
2,000 lbs. avoirdupois. Per M. is per thousand feet. Per Mille is per thousand pieces. Green fruit, 9 barrels are. Ashes, 3 barrels are. Bark, 4 cords. Beef, 7 barrels. Biscuit and crackers, 9 barrels. Bricks, common, 1,000 Butter, 22 kegs or 7 barrels. Cattle, 3. Cement and water lime, 7 barrels. Fire bricks, 1,000. Fish, 7 barrels. Flour, 9 barrels. Gypsum and manganese, 6 barrels. Horses, 2 Lard and tallow, 7 barrels or 22 kegs Liquors and spirits, 215 gallons. Liquors, all others, 215 gallons. Nuts, 9 barrels. Oysters, 6 barrels. Pork, 7 barrels. Salt, 7 barrels. Salt, 7 barrels. Seeds, 9 barrels. Sheep, 20.	111111111111111111111111111111111111111	Stone, 12 cubic feet Stone, 1 cord Whiskey, 4 barrels or 215 gallons Empty barrels, 10 Barrel hoops, 10 Mille Board and other sawed lumber, 600 feet board measure. Boat knees, 4 Firewood, 1 cord Hop poles, 60 or 40 cubic feet Shingles, 12 M. or bundles Split posts and fence rails, 1 Mille do W. India, 1 Mille do Barrel, 1 Mille do Salt barrel, 1 Mille . Saw-logs, standard, 1 Square timber, 50 cubic feet Masts and spars, 40 cubic feet Masts and spars, 40 cubic feet All other woodenware, or partly manufactured wood, 40 cubic feet as per tariff. Traverses, 40 cubic feet, or 5 pieces. Floats, 50 lineal feet.	71 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Note.—By the Weights and Measures Act, Chapter 104 of the Revised Statutes of Canada, Section 14, all the above named articles are to be estimated by the cental of 100 lbs.

# WAY RATES.

Sec. 77. The following way rates are to be levied on vessels and property passing the several subdivisions of the canals:—

Welland Canal.	Rate.
1. From Port Maitland, Dunnville and Port Colborne to Port Robinson or Allanburg, not passing the lock, each way.  2. From Chippawa Cut, or any part thereof, to Dunnville, Port Maitland or Port Colborne.  3. From Dunnville to Port Colborne.  4. From Thorold to St. Catharines or Port Dalhousie.  5. From Maitland, Dunnville, Colborne or Port Robinson to Marshville and intermediate places.  6. From Marshville or intermediate places to Port Maitland, Dunnville, Port Colborne and Port Robinson.  7. From Port Robinson to Allanburg or Thorold  8. From Port Robinson to St. Catharines or Port Dalhousie  9. From St. Catharines to Port Dalhousie  10. From Dunnville to Maitland.  11. From Port Robinson through the Lock and Chippawa Cut  12. From Port Colborne to Port Maitland.  13. From Chippawa Cut through Lock to Port Robinson  14. From Colborne, Dunnville, Maitland and Marshville to Thorold  15. From Colborne, Dunnville, Maitland and Marshville to St. Catharines.  16. Through the Chippawa Cut only  17. Through the Port Robinson Lock only	- Section - Sect
St. Lawrence Canals.	
Sec. 78. The navigation is divided into four sections, viz., Cardinal, Cornwall, Bea uharnois and Lachine. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.	
CHAMBLY CANAL.	<b>.</b>
Sec. 79. Vessels and property passing from Sorel to Chambly, to pay	Rate.

#### OTTAWA CANALS.

Sec. 89. The navigation is divided into three sections, viz.: Grenville, Carillon and St. Ann's. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

## RIDEAU CANAL.

Sec. 81. The navigation of this canal is divided into three sections, viz.: Ottawa, Smith's Falls and Kingston Mills. Vessels and freight passing one section are to be charged one-third; two sections, two-thirds.

#### GENERAL.

- Sec. 82. (a.) Any fraction of a ton freight is to be charged one ton, and portions of sections are to be charged as a whole section on all the above canals.
- (b.) The passing of sawlogs or other lumber through any of the canals, or sections thereof, shall be at all times governed by the regulations for their management.

SPECIAL REGULATIONS RELATING TO TOLLS ON SOME OF THE CANALS.

- Sec. 83. Coal may pass up all canals, except the Welland Canal, free of toll. O. C., June 7, 1869.
- Sec. 84. Logs, lumber or other produce may pass free of toll down the Chippawa Creek, between the Aqueduct and Port Robinson. O. C., May 18, 1863.

#### NOTE.

O. C. 27th June, 1890.

That the following words be added to Section 84 :-

- (1.) "Save in cases for which special permission may be given, the Grenville "Canal is closed to the passage of rafts or any portion of a raft of any kind what"ever, as provided by the Order in Council of the 9th July, 1888.
- (2.) "Rafts may be passed through the Carillon Canal free of tolls, as provided "by the Order in Council of the 9th July, 1888."
- Sec. 85. Iron ore, kryolite or chemical ore, may pass through one section, or through all the canal sections aforesaid, for 5 cents per ton.
- Sec. 96. (a.) All goods having paid full toll through the whole line of the St. Lawrence Canals, or through the Lachine Canal, St. Ann's Lock, or Ottawa and Rideau Canals, shall be allowed to pass free through the Welland Canal: and if tolls have been paid at the Chambly Canal such tolls shall be refunded at Montreal or Kingston Mills; and having paid full tolls through the Welland Canal, they shall be allowed to pass free through the St. Lawrence Canals, or through the Ottawa and Rideau Canals, St. Ann's Locks, the Lachine Canal and the Chambly Canal, provided always:—That the articles to be entitled to the above exemptions shall go downwards through the whole length of the canal to Montreal, or pass upward from Montreal through the whole length of the St. Lawrence Canals, or the Ottawa and Rideau Canal, to Lake Ontario.
  - (b.) All articles, goods or merchandise, not enumerated above, shall be charged to Class No. 4.
- (c.) No let-passes shall be issued to steam tugs or other small vessels for less than 25 cents, as a minimum charge; but such vessels, not carrying freight or passengers, can obtain, on payment of \$30, a season "Let-Pass," which will pass them up and down the canals as often as desired. O. C., April 18, 1873.
- Sec. 87. Goods shipped to any port west of the St. Lawrence Canals, tolls upon which have already been paid for passage through such canals, may be re-shipped from such ports and be passed through the Welland Canal free of tolls, in the same way as if they had been shipped through direct in the first instance; and goods going eastward, having paid Welland Canal tolls, may be transhipped at any port on Lake Ontario, and thereafter pass free through the St. Lawrence Canals, as if they had been shipped through direct in the first instance. O. C., June 23, 1883.
- Sec. 88. During the season of navigation for 1889, the rate of toll for the passage of wheat, Indian corn, pease, barley and rye, when shipped for Montreal or for any port east of Montreal shall be two cents per ton, such toll covering the Welland and the St. Lawrence Canals; and during the said period if the ordinary full tolls for passage of the said food products through the Welland Canal have been paid the said products shall be exempted from payment of any further toll for passage through any portion of the St. Lawrence Canal system, though not traversing the whole distance to Montreal. O. C., March 18, 1889.

## HARBOUR DUES.

Sec. 89. Vessels receiving or discharging freight at the premises of the Welland Railway, at Ports Colborne or Dalhousie, are to be free from harbour dues; but all other vessels discharging or receiving cargo at Port Dalhousie, Port Colborne or Port Maitland, shall pay on every ton of freight so received or discharged, two cents.

161

#### TOLLS AT SHEDS AT LACHINE CANAL BASIN.

Sec. 90. The following tolls shall be levied upon property stored at the sheds at the Lachine Canal Basin:-

		Cents.
Wheat and other grain, per week,	per bushel	. 1
Meal do	per barrel	. 4
Pork, beef, butter and lard do	do	
Muscovado sugar do	per hhd., 10 cents; per brl	. 5
T: { do	per pipe, 15 cents; per pun	. 12
Liquors { do do	per hhd., 10 cents; per qr. cask	
Iron (bars) do	per ton	
Iron, pig do	do	
Salt, except at the St.		
Gabriel Sheds do	per 100 minots'	. 36
Salt at the St. Gabriel	•	
Sheds, Montreal, after		
the first 48 hours do	per bag	. 1
Bales, crates, cases, &c. do	per bagper ton weight or measurement	24
Coals do	per chaldron	

Sec. 91. (a.) No charge shall be made for property stored in the sheds of the Lachine Canal basin for the first forty-eight hours, after which period, except in the case of flour, the foregoing rate of storage for the use of the sheds are to be raised, levied and collected.

(b.) Articles unenumerated are to be charged according to the above rates as nearly as the same can be

computed.

(c.) All property stored in the sheds remaining after the first forty-eight hours will be liable to one week's storage, although it should only have been stored for a portion of the same, and so on for each succeeding week.

(d.) The labour of receiving property into the sheds and delivering the same shall be at the expense of and be furnished by the owners of the property or their agents.

(e.) All property stored in these sheds shall be at the risk of the proprietor from damage by fire or

otherwise (f.) All dues for storage shall be paid before the removal of the property. O. C., Aug. 21, 1846, Oct. 28, 1846.

#### Flour.

Sec. 92. (a.) Flour shall be allowed to remain in the sheds for two whole days free of charge.

(b.) If kept there beyond two days or 48 hours, such flour shall be liable to a charge of one cent per day per barrel for the first four days after the expiration of the 48 hours of exemption.

(c.) Should the flour be kept in the sheds beyond four days at one cent per day per barrel, it shall be

liable to pay two cents per day per barrel for every day subsequent to the expiration of such four days.

(d.) Any part of a day shall be considered as one day. O. C., May 31, 1856.

Tolls on Vessels trading to Lower Ports and entering the Lachine Canal at Montreal Harbour.

Sec. 98. The following rates of tolls shall be levied upon vessels trading to lower ports, and entering the Lachine Canal from the Harbour of Montreal, and on certain goods herein mentioned; said vessels to be allowed forty-eight hours for discharge of cargo before the following be incurred; and said discharge to be made below the St. Gabriel Lock.

· · · · · · · · · · · · · · · · · · ·	VIIII8.
Steamboats measuring 50 tons or upwards, per ton register, per day of twenty-four	
hours	8
All other vessels measuring 50 tons or upwards, per ton register, per day of 24 hours	4
	Cents.
Steamboats measuring under 50 tons register, each day of 24 hours	
All other vessels measuring from 25 to 50 tons register, per day of 24 hours	20
All vessels measuring less than 25 tons register, per day of 24 hours.	
Coal, per chaldron	
Salt, per 100 minots	15
Iron of all kinds, per ton weight	15
Merchandise as in Class No. 6 of the tariff of tolls on Dominion canals	10

Provided always that the above tolls be levied only on goods for consumption in Montreal, and on vessels trading with that port. O. C., June 8, 1860.

CHARGES FOR WHARFAGE ON FIREWOOD ON WHARVES AND BANKS OF LACHINE CANAL.

Sec. 94. The following rates of tolls shall be collected as herein mentioned, that is to say :-

Sec. 94. The following rates of toils shall be collected as herein mentioned, that is to say:—
(a.) Firewood landed on wharves or banks of the Lachine Canal, or in boats, barges or other crafts occupying any of the basins between Wellington Street bridge and Lock No. 3, four cents per cord, and for every day the wood is allowed to remain in either the canal or basin, or on the wharves or banks, after the first five days, an additional charge of four cents per cord. O. C., Aug. 7, 1860.
(b.) The clause next preceding shall not only apply to the rates of toil to be collected on firewood on wharves at Lachine and the Lachine Canal and basin, but are also extended and made applicable to the banks and grounds at Côte St. Paul and at Lachine. O. C., Jan 27, 1862.

#### CANAL BASINS IN MONTREAL PART OF MONTREAL HARBOUR.

Sec. 95. Whereas under existing regulations for the collection of canal tolls, Eastern bound vessels having paid the charges one way in full through the Welland Canal are chargeable one section canal toll if re-entering the Lachine Canal:

And whereas vessels loaded with grain destined for the Montreal harbour frequently unload only part of their cargoes on board sea-going vessels in that harbour, and re-enter the Lachine Canal for the purpose

of their cargoes on board sea-going vessels in that harbour, and re-enter the Lachine Canal for the purpose of unloading the balance of their cargoes either in elevators or mills located along the canal basins;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal harbour, in so far only as regards the collection of tolls on the class of vessels above referred to, which re-enter that portion of the canal for the purpose of unloading the balance of their cargoes, but that the same shall not apply any further, as in the event of vessels returning to the harbour to take cargo, in which case the usual toll shall be charged against them on passing out of the canal a second time into the harbour. into the harbour. O.C. Aug. 8, 1878.

### PHOSPHATES.

Sec. 96, Whereas vessels laden with grain for delivery in Montreal harbour frequently carry also deck loads of phosphates, and being compelled to proceed at once to the harbour for the discharge of the grain, they pay tolls through to that point, subsequently re-entering the Lachine Canal for the storage of the phosphates, and in accordance with the existing regulations, paying canal dues a second time for such re-entry;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal harbour, for the purposes of the unloading of phosphates carried by vessels in addition to their grain cargoes as described in this section; it being, however, provided that in the event of their returning to the harbour to take cargo, the usual tolls shall be charged against such vessels on their passing out of the canal a second time. O. C. July 12, 1881.

# CHARGES ON VESSELS WINTERING IN LACHINE CANAL.

Sec. 97. The following rates per ton shall be charged for wintering vessels in the Lachine Canal.

For each boat, barge, scow or other vessel of ten tons measurement or under, seventy cents per vessel for the entire winter; and every ten tons above the first ten, an additional rate of eight cents. O. C. Aug. 22, 1879.

# Dues on Vessels in the New Basin, Lachine Canal.

Sec. 98. The Montreal Harbour Commissioners shall be allowed to retain the right of levying dues in respect of the old lower basin of the Lachine Canal, but the Government shall retain full control of the new works and basins of said canal and of the revenue that may be derived from their use, and the rates shall be levied by the Government on vessels loading or unloading in the new basins equal and similar to those levied by the Commissionnrs in respect to the old basin. O. C. Jan. 26, 1883.

DUES IN THE HARBOUR OF MONTREAL UNDER ACTS 40 VIC., CHAP. 53, AND 42 VIC., CHAP. 28.

# Sec. 99. - Tonnage Dues.

On steamboats, for each day of twenty-four hours, or part of a day they remain in the harbour, reckoned from the hour of their arrival to that of their departure On all other vessels, per day, as aforesaid	1 cent.
Sec. 100 Wharfage Dues.	

Sec. 200. What juge Buch.	
All goods, wares and merchandise, not elsewhere specified	Per ton. 25 cents. 20 do
Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep, swine	15 do
Ballast, clay, fire-bricks, gypsum, lime, marble, phosphates, sand, salt	10 do
Coal and coke, grain and seeds of all kinds	7⅓ do
Special.—Bricks, 10 cents per 1,000; cordwood, 5 cents per cord; lumber, 10 cents per 1,000 feet, board measure.	
Bullion specie	Free.

# Note.

- Sec. 101 (a). On all goods, wares and merchandise whatsoever, the quantity of which, by weight, measurement or other mode of estimate provided for in the tariff of the next preceding section can not be conveniently ascertained, it shall be lawful for the Harbour Commissioners to levy a rate of ‡ of 1 per cent on the value thereof.
  - (b). Each entry shall pay not less than 5 cents.
  - (c). All property landed on the wharves for re-shipment shall only pay one wharfage.
- (d). The ton mentioned in the tariff of wharfage dues shall be 2,000 lbs. weight or 40 cubic feet measurement, according to the bill of lading.

# Sec. 102.—Standard for Estimating Weights.

Ashes, pot or pearl	
Apples, flour, meal, potatoes	9 do 1 do
Fish, meat, pitch, tar	7 do 1 do
Horses	2 to 1 ton.
Neat cattle	3 to 1 do
Sheep	15 to 1 do
Swine	10 to 1 do

O. C. April 1st, 1881.

TOLLS ON FLOATED TIMBER, &c., ENTERING THE BASIN AT LACHINE.

Sec. 103. The following rates of tolls shall be collected on floated timber, lumber and firewood entering the basin at Lachine and Lachine Canal:-

Kinds of Timber.	For receiving Timber, &c., to include use of basin and wharf for one month.	For each succeeding month during season of navigation.	For Wintering, in basin or on wharf.
	Cents.	Cents.	Cents.
Timber, square or round, of all kinds, above 12×12, per M cubic feet	25	20	35
Timber, round or flatted, of all kinds, under 12×12, per M lineal feet	20	15	30
board measure	3	2	3
Saw-logs, 12 feet long, if longer in same proportion per log	1	1 2 5 5	2
Floats, per 100			10
Traverses, per 100	10	5	10
Fence posts and rails, per M	10	5	10
		4	8 8
do Pipe do		4	8
do West India, per M Firewood on bank of canal between Lock No. 3 and Lock No. 5, and also on		-	۱ °
wharves in canal basin at Lachine	3	3	3

#### NOTE.

O C. 27th June, 1890. 3. That the following words be added to Section 103:—"The monthly charge "of 3 cents per cord on firewood is cancelled, as provided by Order in Council "of the 4th February, 1880."

# Note.

Sec. 104 (a). No allowance shall be made for fractional parts of a month or winter season.
(b). The firewood shall be corded across the bank while being delivered from the boat in such manner and at such points as the superintendent may direct.

(c). The rates on timber to take effect upon the completion of the booms in Lachine Canal. O. C. June 8, 1860.

# CHARGES FOR WINTERING VESSELS IN RIDEAU CANAL.

Sec. 105. The winterage dues for vessels wintering in the canal basin at Ottawa, or other points along the line of the Rideau Canal, shall be as follows:-

In Canal Basin,				l	\$ 8 00
do	do	Barges,	do		4 00
Inside Locks	do	Steamers			
do oth	er station	ns do			

If the Minister of Railways and Canals deems it advisable, he is authorized to take security from parties wintering their vessels in locks against damage to Government property by fire. O. C. March 19, 1887.

# CHARGES FOR REPAIRING VESSELS ON THE BANKS OF CANALS.

Sec. 106 (a). Persons using the banks of the Lachine Canal as a site for the repair of their vessels shall be subject to a charge of four dollars, payable in advance, for each vessel; the period during which such site may be occupied under any one payment being limited to six months, and permission for repairing being first obtained from the proper officer, in conformity with the existing Canal Regulations.

(b). In the event of failure to remove vessels so occupying the banks at the expiration of the period named, no fresh permits having been obtained, such vessels may be sold under the 16th section of the Canal Regulations.

O. C. March 5, 1880.

Sec. 107. Rules with respect to the repairing of vessels on the banks of the Lachine Canal, the Beauharnois and the Chambly:-

(a.) Repairs shall only be executed at such points as may be indicated and approved by the superin-

tendent.

(b.) For each vessel hauled up or beached for repairs, a charge of one dollar, over and above all other charges, shall be made, carrying the privilege of remaining one month, a further sum of one dollar being charged for each additional month or fraction of a month the vessel may remain.

(c.) In cases, however, where a vessel hauled up for repairs upon the canal bank remains there throughout the winter, a charge of four dollars only shall be made (in addition to the ordinary winterage dues), the period covered being from the 1st November to the 1st June, inclusive.

(d.) Any vessel remaining on the canal bank after having wintered thereon shall be charged at the rate

- of one dollar a month or fraction of a month of her subsequent stay.

  (e.) Any vessel remaining more than one year on the bank of the canal shall for such time as she may remain in excess of that period pay at the rate of two dollars a month or fraction of a month throughout
- the whole year.

  (f.) All charges shall be payable at the collector's office in advance on the first day of each month.

  (g.) These rules shall be understood as applying to all cases where the canal bank is used in a manner for the repairs of vessels, whether such vessels are actually hauled up or not. O. C. August 6, 1881.

#### St. Peter's Canal.

Sec. 100. On each and every vessel passing through the said canal, two cents per ton on vessel and one cent per ton on the freight, each way. O. C. June 23, 1883.

#### ORDER IN COUNCIL.

12th December, 1889.

On a memorandum dated 10th of December, 1889, from the Minister of Railways and Canals, representing that in certain instances it has been the practice to tie up vessels for the winter alongside of canal piers, but not inside the gates, and that consequently such vessels thereby, to some extent advantaged, do not receive there the protection from the rise and fall of water which they would obtain inside, that nevertheless they have been charged winterage dues.

The Minister recommends that henceforward, including the winter now current, but not otherwise

retroactive, no charges be made for vessels so wintering outside the locks of any Government Canal.

The Committee submit the above recommendation for your Excellency's approval.

#### AT THE GOVERNMENT HOUSE AT OTTAWA.

Wednesday, 26th day of February, 1890.

#### PRESENT:

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

WHEREAS it is considered expedient that the special rate of toll, for passage through the Welland and St. Lawrence Canals of certain easterly bound food products, in force during the last season of

and St. Lawrence Canals of certain easterly bound food products, in force during the last season of navigation, should be continued during the forthcoming season.

His Excellency the Governor General, in pursuance of the powers vested in him by Chapter 37 of the Revised Statutes, intituded "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the special rate of toll of two (2) cents per ton, in force last year for the passage through the Welland Canal and the St. Lawrence Canals of certain cereals, wheat, Indian corn, pease, barley and rye, when shipped for Montreal, or for any port east of Montreal, be continued during the forthcoming season of navigation and no longer, such toll covering the Welland and the St. Lawrence Canals.

His Excellency has been further pleased to order by and with the advice of the Queen's Prive Canada.

His Excellency has been further pleased to order, by and with the advice of the Queen's Privy Council for Canada, the continuance for the same period only, of the arrangement under which the said food products, if they had paid the ordinary full tolls for passage through the Welland Canal, shall be entitled to exemption from payment of any further toll for passage through any portion of the St. Lawrence Canal

system, even if not traversing the whole distance to Montreal.

O. C. 5th May, 1890.

His Excellency, in pursuance of the powers vested in him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order, that oats, when shipped for export, shall be, and the same are hereby added to the list of cereals specified in the Order in Council of the 26th February, 1890, authorizing the continuance during the season of 1890 of the special rate of tolls of two (2) cents per ton, for the passage of such cereals through the Welland Canal and St. Lawrence Canals, when shipped for Montreal, or for any other port east of Montreal.

In carrying out the provisions of the above Order in Council the Collector of Canal Tolls, on the Welland Canal, will continue to charge the full rate of tolls, and the reduction will be paid by the Department as a refund upon evidence being furnished by the shippers that the conditions required by the Order

in Council have been complied with.

O. C. 11th April, 1890.

His Excellency, in virtue of the powers vested in him by Chapter 37 of the Revised Statutes of Canada, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that for the forthcoming season of navigation only, the tolls for the passage of soft coal eastwards through the Welland Canal, shall be and the same are hereby reduced from 20 cents to 10 cents per ton.

## O. C. 16th May, 1890.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the rules and regulations for the management, maintenance, proper use and protection of the Canals of the Dominion of Canada, made and established by the Order in Council of the 26th day of October, 1889 (Consolidated Orders in Council of 1889), together with any amendments thereof or additions thereto, shall be, and the same are hereby made applicable to the Murray Canal, with the exception of such sections or provisions as relate especially and only to other works named therein only to other works named therein.

#### O. C. 20th May, 1890.

His Excellency, in pursuance of the provisions of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the rates of toll to be imposed and collected on the Murray Canal, now open for regular traffic, shall be and the same are hereby fixed at the rate of one-eighth of those charged for passage through the St. Lawrence Canals.

## O. C. 22nd May, 1890.

His Excellency, in virtue of the powers vested in him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Order in Council of the 1st day of June, 1888, whereby steamers specially chartered for the conveyance of excursion parties going and returning in the same boat the same day, were charged for that season only one-half of the usual passenger tolls for passage through the Lachine Canal and Ste. Anne's Lock, shall be, and the same are hereby continued in force for the present season of 1890 only.

#### O. C. 30th June, 1890.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Order in Council of the 22nd May, 1890, under which steamers specially chartered for the conveyance of excursion parties going and returning in the same boat the same day, are charged one-half the usual rates of passenger tolls through the Lachine Canal, and Ste. Anne's Lock for the current season, shall be, and they are hereby extended to the Welland Canal for the season of 1890 only, namely, on excursion parties leaving Toronto or Hamilton for St. Catharines, and returning the same day.

## ORDER IN COUNCIL.

27th September, 1890.

On a memorandum dated 25th September, 1890, from the Minister of Railways and Canals representing that under date the 20th August, 1890, an Order in Council was passed prohibiting the use of horses for towing purposes between the lower entrance of the Cornwall Canal and Lock No. 20, during the progress of the works of Canal enlargement.

The Minister recommends, as this prohibition has entailed the use of tugs and consequently expense to the parties concerned and upon the advice of the deputy head of the Department of Railways and Canals, that all tugs, used solely for the purpose of towing on the section in question, be permitted to pass free of toll, up and down the Canal between the lower entrance of the Canal and Lock No. 20 until the completion of the enlargement works on that section.

The Committee submit the above recommendation for your Excellency's approval.

#### ORDER IN COUNCIL.

27th day of September, 1890.

#### PRESENT:

# HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to declare the now completed Tay Canal to be a part of the Rideau Canal, and that the rules and regulations for the management, maintenance, proper use and protection of the Canals of the Dominion of Canada, made and established by the Order in Council of the 26th of October, 1889 (Consolidated Orders in Council of 1889, chapter 115), together with any amendments thereof or additions thereto, shall be applicable to the said Tay Canal, and the same are hereby made applicable to the Tay Canal accordingly, with the exception of such sections or provisions as relate specially and only to works other than the Rideau Canal named therein and only to works other than the Rideau Canal named therein.

and only to works other than the Rideau Canal named therein.

And His Excellency is further pleased, under the authority of the above cited Act, and by and with the advice of the Queen's Privy Council for Canada, to impose and authorize the collection of the following rates of toll upon the said Tay Branch of the Rideau Canal system, now open for regular traffic, namely:

From Perth to Smith's Falls, 1 section, or \( \frac{1}{2} \) of Rideau Canal rates.

From Perth to Kingston, 2 sections, or \( \frac{2}{3} \) Rideau Canal rates.

From Perth to Ottawa Basin, 2 sections, or \( \frac{2}{3} \) Rideau Canal rates.

From Perth to River Ottawa, 3 sections, or full Rideau Canal rates.

A portion of a section to be charged as a whole section.

A portion of a section to be charged as a whole section.

#### O. C. 31st October, 1890.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to impose an lauthorize the collection of the following tolls and dues for the use of the dry dock at Bolcaygeon, and of any of the Locks on the Trent Valley Canal, during the winter or other shorter period.

For Vessels.	Wintering.	Per day.	Per week.
Over 15 tons	\$	\$	\$
	30	4	12
	20	3	10

## AT THE GOVERNMENT HOUSE AT OTTAWA.

WEDNESDAY, the 25th day of March, 1891.

#### PRESENT:

#### HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, having had under consideration the Tariff of Tolls on the Canals of the Dominion, and His Excellency, naving had under consideration the Tariff of Tolls on the Canals of the Dominion, and the several Orders in Council under which a special rate has, from time to time, been established temporarily on certain food products passing through the Welland Canal and through the St. Lawrence Canals for shipment at Montreal and ports east of Montreal, is pleased to order in virtue of the powers vested in him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, that the following amendments shall be and the same are hereby made to the Tariff of Tolls in force on the said Canals,

A refund shall be made on the tolls collected on wheat, Indian corn, pease, barley, rye, and (if for export) oats, which may be carried through the Welland Canal and the St. Lawrence Canals to Montreal, or any port east of Montreal.

The refund shall be such as to reduce the tolls to two cents per ton of the said products or any of

them, and the conditions of such refund shall be the following:—

1. The products aforesaid, on which the refund may be claimed, shall be shown to have been originally shipped from Montreal or some port east of Montreal before entering the Welland Canal, and
2. Shall be shown to have been actually carried to Montreal or some port east of Montreal.
3. Transhipment, if at a Canadian intermediate port, shall not prevent the refund aforesaid being

made.

This Order in Council shall remain in force only for the present year, 1891.

(Signed)

JOHN J. MoGEE,

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

# AT THE GOVERNMENT HOUSE AT OTTAWA.

WEDNESDAY, the 29th day of April, 1891.

#### PRESENT:

# HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Order in Council of the 25th day of March, 1891, authorizing the reduction of toll to two cents (2 cts.) per ton for the passage through the Welland and St. Lawrence Canals of certain agricultural products therein named, shall be understood to apply to any portions of such cargoes lightered at Port Colborne and re-shipped at Port Dalhousie, and also that the provisions of the said Order be made applicable to the therein named products when shipped from Canadian Lake Ontario ports.

(Signed)

JOHN J. McGEE,

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

167

# AT THE GOVERNMENT HOUSE, AT OTTAWA.

WEDNESDAY, the 29th day of April, 1891.

#### PRESENT :

# HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the provisions of Chapter 37 of the Revised Statutes, intituled: "An Act His Excellency, in virtue of the provisions of Chapter 37 of the Revised Statutes, initialed: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the provisions of the Orders in Council dated respectively the 22nd day of May, 1890, and the 30th day of June, 1890, under which, in the case of steamers specially chartered for the conveyance of excursion parties going and returning in the same boat on the same day, one-half only of the usual rates of passenger tolls were charged for passage through the Lachine Canal and the Ste. Anne Lock, and for passage through the Welland Canal, in the case of excursion parties leaving Toronto or Hamilton for St. Catharines, be continued in force for the forthcoming season of navigation only adding to the said provisions, become for the forthcoming season of navigation only, adding to the said provisions, however, for the forthcoming season, that this conditionally reduced rate shall apply to excursion parties leaving St. Catharines for Toronto or Hamilton.

(Signed)

JOHN J. McGEE.

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

Certified Copy of a Report of a Committee of the Honourable the Privy Council, approved by His Excellency the Governor General in Council, on the 18th May, 1891.

The Committee, on the recommendation of the Minister of Railways and Canals, advise with reference to the Orders in Council dated respectively the 25th of March and the 29th of April last, authorizing the reduction of canal tolls on certain food products, the provisions of which Orders are carried out by way of refund of the excess tolls paid, that such refunds be made at the close of the present season, on or about the 1st day of December, and not during the season as heretofore.

(Signed)

JOHN J. McGEE.

Clerk, Privy Council.

The Right Honourable
The Minister of Railways and Canals.

# AT THE GOVERNMENT HOUSE, AT OTTAWA.

MONDAY, the 18th day of May, 1891.

# PRESENT:

## HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the powers vested in him by Section 13 of Chapter 37 of the Revised Statutes, intituted: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that all Government dredges and scows shall be permitted to pass through the canals free of tolls, but that such dredges and scows shall not be sopassed as to interfere with the passage of other vessels of any kind whatever.

(Signed)

JOHN J. McGEE,

Clerk, Privy Council.

The Right Honourable The Minister of Railways and Canals.

O. C. 18th May, 1891.

Whereas, in consequence of the operations of the contractors for the enlargement of the Cornwall

Whereas, in consequence of the operations of the contractors for the enlargement of the Cornwall Canal, access to the river wharf opposite the town of Cornwall is temporarily prevented for the steamers of the Richelieu and Ontario Navigation Company, such steamers being obliged in place of stopping at such wharf to pass through the two locks at the lower entrance of the canal to another wharf in the town; His Excellency, under the authority conferred upon him by Section 13 of Chapter 37 of the Revised Statutes, intituled: "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that during the current season the steamers of the said Richelieu and Ontario Navigation Company shall be allowed passage free of toll through the said two locks at the lower entrance of the Cornwall Canal.

(Signed)

JOHN J. McGEE,

Clerk, Privy Council.

# HYDRAULIC AND OTHER RENTS.

# APPENDIX

DR.

No. 26.-HYDRAULIC and other Rents, &c.-

Da.			110.	20HIDRAULIC and	other itents, &c.—
Salance due on 1st July, 1890.	Accrued Year ended 30th June, 1891.	Total	Name of Work.	Present Occupant.	Original Lessee.
\$ ets.	\$ cts.	\$ cts.			
280 95 1,080 00 90 00 1,050 00	187 30 240 00 20 00 176 00	468 25 1 1,320 00 2 110 00 3 176 00 4 1,050 00 5	do	Wood & Green S. Neelan. do Andrews & Son.	R. & J. Laurie
1,270 50 200 00 910 00 375 00	100 00 260 00 150 00	1,270 50 6 300 00 7 1,170 00 8 525 00 9	do do do	Tuttle, Date & Rodden S. Neelan.	Ross do Wm. Hutchison
100 00 167 66 280 00 250 00	40 00 167 66 140 00 500 00	140 00 10 335 32 11 420 00 12 750 00 13	do	Norris & Neelan Whitman & Barnes Ma- nufacturing Co. J. B. Smith.	do R. Collier Thos. Towers. St. Catharines Water
750 00 35 00		20 00 14 825 00 15 35 00 16	do		Power Co. St. Catharines and Welland Gas-light Co J. C. & J. Gillespie St. Catharines Street Ry.
100 50		100 50 17	do		John F. Rees.
10.00	75 00	75 00 18			Whitman & Barnes Manufacturing Co
540 00 240 00	10 00 216 00 240 00	20 00 19 756 00 20 480 00 21	do	McLeary & McLean Lybster Cotton Co	H. Jarvis
120 00 100 00 206 00	240 00 200 00 400 00	360 00 22 300 00 23 600 00 24	do do	Merritton Cotton Co	John Riordon
400 00 150 00	60 00	800 00 25 210 00 26	do		Corporation of Village of Merritton
100 00		150 00 27 95 40 28	1	Cotton Co	Wm. Beatty
50 00 580 00 2 00	1 00	100 00 29 726 00 30 3 00 31	do do		W. H. Ward do St. Catharines & Niagara Central Ry. Co
50 00 160 00		50 00 32 240 00 33			John Battledo
111 00 65 00 40 00 55 00	222 00 130 00 80 00	333 00 34 195 00 35 120 00 36 165 00 37 5 00 38	do do do	Howland, Jones & Co. James Norris. Arch. Dobbie C. J. Jones	P. Howland Brown & Ross Welland Canal Loan Co. McPherson & Wier Corporation of Thorold.
5,007 46 60 00	120 00 183 50	180 00 39 183 50 40 5,007 46 41 80 00 42	do do do		John Battle
940 00 86 00	[	940 00 43 172 00 44	do	J. & J. Abbey	McFarland & Lemon John Hill

A .- Continued.

Lessees Accounts, 1890-91.

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Description of Propert	ty.	Number.	Date to which the	Account is made up.	Abatement Author-ized.	Paid during Fiscal Year.	Balance due 30th June, 1891.	Total.
					\$ cts.	\$ cts.	\$ cts.	\$ cts.
Grist mill, waste weir No. 1, Port			June	30, '9	1	93 65		468 25
Mill lot do Lot near do	do		do do	30, '9 30, '9	1		1,320 00	1,320 00 110 00
Docks near do	do		do	30, '9	i		110 00 88 00	176 00
Dry dock, part of lock No. 1 Saw mill, waste wier No. 1 Wharf lot, east end east pier Union mill, near lock No. 2, St. C. Merchants red mill Wharf at lock No. 4	do do do	5 6 7 8 9	Jan. do June do do	1, '8' 1, '8' 30, '9' 30, '9'	2 2 1 1 1 1		1,050 00 1,270 50 300 00 1,170 00	1,050 00 1,270 50 300 00 1,170 00 525 00 140 00
Saw mill at lock No. 5 Grist mill at new lock No. 10	do	11 12	do do		l		167 66 420 00	335 32 420 00
Water power, from locks 3 to 11	do	13	do	30, '9	ι	500 00	250 00	750 00
Wharf lot at lock No. 4 Lot near lock No. 5	do			1, '99 1. '9	2	20 00	825 00	20 00 825 00
Privilege of placing bridge over v Catharines		16	do	•	ß	1	35 00	35 00
St. Catharines		17	Mar.	1, '8	5		100 50	100 50
Old lock-house at lock No. 6, St. Ca Part of lot 16, con. 4, ground for	r sail loft, St.	ļ	Oct.	-	·			75 00
Catharines	Merritton do do do	20	do do do	30, '9' 30, '9' 30, '9' 30, '9'	2 	240 00 200 00	756 00 480 00 120 00 100 00	20 00 756 00 480 00 360 00 300 00 600 00
Lot between lock No. 25 and guard Water supply at Merritton Part of lots 11 and 12, con. 10		26	do do Feb.	30, '9	L L L 2	120 00	800 00 90 00 150 00	800 00 210 00 150 00
Tannery at lock No. 22, Thorold Factory do 23 do Saw mill at lock 23, Thorold		29	oh l	30. '91	1		31 80 100 00 726 00	95 40 100 00. 726 00
Tracks through the towns of Thorold Wharf and right of way over racew	d and Merriton ay at lock No.	31	Oct.	1, '9	·		3 00	3 00
25, Thorold.  Plaster mills at lock No. 25, Thoro	, Thorold	32 34 35 36 37 38	June do do do do Oct.	30, '9: 30, '9: 30, '9: 30, '9: 1, '9: 30, '9:		130 00	240 00 222 00	50 00. 240 00. 333 00. 195 00 120 00 165 00 5 00 180 00
Lock house, Merritton		140	do	30, '9	11	183 50		183 50
Grist mill, Allanburg Storehouse do	•••	41	Jan.	1. '8	21		5,007 46	5,007 46
Saw mill. Port Robinson		43	Feb.	'7	B		80 00 940 00	80 00 940 00
Grist mill do		44	June	30, '9	í	43 00	129 00	172 00 710 00

# APPENDIX

DR.

# No. 26.-HYDRAULIC and other Rents, &c .-

Balance due on 1st July, 1890.	Accrued, year ended 30th June, 1890.	Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ ets.	S cts.	\$ ets.				
141 15 151 30 300 00			47 48	do do	do	Eli Mead
	1 00 1 00	1 00 1 00		do do		Grand Trunk Railway Corporation of County of
90 00	45 00	135 00		<b>d</b> o		Welland Phelp Bros
80 G0 4 00	20 00 1 00 120 00 120 00	100 00 5 00 120 00 120 00	53 54 55 56	do do do		James Bridges.  H. A. Rose. C. J. Page & Co Corporation of Town o Welland Coleb Swayze.
12 50 12 50	5 00 25 00 20 00 25 00 1 00	5 00 37 50 20 00 37 50 1 00	58 59 60		J. & F. Conlin.	A. K. Schofield
719 86 50 00 986 97 570 00 613 94 315 61 809 72 230 00 1,051 50 60 00 230 00	208 00 115 00 360 00	24 00 879 86 60 00 1,129 97 750 00 743 94 395 61 922 72 383 34 1,259 50 70 00 60 00 345 00	63 64 65 66 67 68 69 70 71 72 73	do do do do do do do do	A. McDonald R. Chambers S. & J. Haney S. Walthe & Co S. & J. Haney Wm. Schofield M. A. Smith	Wm. Melanby H. & N. Davis S. Darling L. J. Weatherly Brown & Merritt L. Brocklebank Chisholm & Miner John Taylor Geo. Wallace Rolston & Haskins
23,346 92 4,800 00 1,492 62 45 00 70 00 70 00 80 00 24 00 35 00	246 00 160 00 210 00 5 00 12 00 5 00 140 00 140 00 20 00 24 00 70 00 10 00 70 00	5 00 210 00 210 00 100 00 48 00 105 00 1 00 20 00 70 00	1 2 3 4 5 6 7 8 9 10 11 11 11 11 11 11 11 11 11 11 11 11	do	Edwardsburg Starch Factory. P. O'Keef  E. E. Gilbert.  Cameron & McInnis.	Benson & Aspden. P. Carmen J. C. Irvine W. T. Benson. Wm. Clegg
6,626 62	1,118 00	7,744 62	2 .	-1		
	1	•	'	17	2	•

A.—Continued.

Lessees' Accounts, 1890-91-Continued.

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Description of Property.	Number.	Date to which the	Account is made up.	Abatement authorized.	Paid during Fiscal Year.	Balance due 30th June, 1891.	Total.
Wharf lot, Welland.	46 47 48	do	30 77	3 3		\$ ets.  141 15 151 30 300 00	\$ cts. 141 15 151 30 300 00
Lot for pasture, Welland  Water supply, through a 10 inch pipe, Welland  do to court house do	51	1		2		40 00 1 00 1 00	40 00 1 00 1 00
Surplus water, in winter only, near acqueduct, Welland Lot on west main street, Welland Lot for building purposes do Water power for town of do	52 53 54	Aug. Mar.	1, '9 1, '9	2		90 00 100 00 5 00	135 00 100 00 5 00 120 00
do for pump house, &c., Welland	57 58 59	July June Jan.	1, '9: 30, '9 1, '9	1	5 00 20 00	40 00 37 50	120 00 5 00 37 50 20 00 37 50
Roadway across canal lands to G. T. R. crossing, Port Colborne. Lots for factory at village of Petersburg. Grist mill, Marshville. Part of lots 18 and 19, con. 4, Wainfleet, Marshville Saw mill, Broad Creek	61 62 63 64 65	Mar. June July June	1, '9 30, '9 1, '9 30, '9	2	24 00 497 67	382 19 60 00 1,129 97	1 00 24 00 879 86 60 00 1,129 97
Grist and saw mill, Dunnville.  Grist mill do Carding mill do Plaster mill do Grist-mill do Saw mill do Wharf lot do Lot for tannery do Water power for electric light, Dunnville	C	1	20 20	1		743 94 395 61 922 72 383 34	750 00 743 94 395 61 922 72 383 34 1,259 50
Wharf lot do Lot for tannery do Water power for electric light, Dunnville Water lot, Dunnville	. 72 73 . 74 . 75	Jan. Mar. Jan. do	1, '8 1, '8 1, '9 1, '9	2 4 2 1		70 00 60 00 345 00 360 00	70 00 60 00 345 00 360 00
Grist mill, Mill street, Cardinal	. 1	June	30, '9		3,725 58 123 00		246 00
Starch factory, Edwardsburg. Tannery do Part of lot 6, con. 1 do Pasture grounds, Galops Canal do do	. 3 4 . 5	do do July Mar. Aug.	30, '9 1, '9 1, '9	1	12 00	1,702 62	4,960 00 1,702 62 50 00 12 00 5 00
Lot near do Grist mill at Matilda Lock	. 7 8 9 . 10	do June do Aug.	1, '9 30, '9 30, '9 30, '9	2 1 1 1	5 00 140 00 140 00	70 00 70 00 100 00 48 00	5 00 210 00 210 00 100 00 48 00
Water lot and surplus water for pumping engine. Lot for school purposes, No. 4, Matilda	. 12 13 14	June May do	30, '9 1, '9 1, '9	1 2 2 	70 00 10 00	1 00 10 00	105 00 1 00 20 00
Water lot and water power to drive pumping machine	. 18		1, '9	2	70 00 575 00		70 00
	1	73		•		,	•

# APPENDIX

DR.

No. 26.—Hydraulic and other Rents, &c.—

Balance due on 1st July, 1890.	Accrued, year ended 30th June, 1891.	Total.	Name of Work.	Present Occupant.	Original Lessee.
\$ ets.	\$ cts.	\$ cts.			
120 00 75 00  10 00 270 00 60 00	240 00 150 00 135 00 120 00 25 00 	360 00 1 225 00 2 135 00 3 120 00 4 25 00 5 10 00 6 120 00 7 15 00 9 80 00 10	do do do do do do	Permanent Loan Co	Andrew Hodge A. F. Gault Geo. Stephen Stormont Cotton Co. Flack Bros. Loney & Campbell Toronto Paper Co do W. D. & G. C. Wood Henry Harrison
$\begin{array}{r} 247 \ 50 \\ \hline 792 \ 50 \\ \hline \end{array}$	815 00	$-\frac{247}{1,607} \frac{50}{50}$	do		J. & C. H. Wood
60 00		60 00 1	Beauharnois Canal		St. Amour & Co
100 00 60 00 40 00 418 50 500 00	20 00 20 00 20 00	$\begin{array}{c} 100 \ 00 \ 2 \\ 80 \ 00 \ 3 \\ 60 \ 00 \ 4 \\ 418 \ 50 \ 5 \\ 1,500 \ 00 \ 6 \end{array}$	do do do	N. Papineau	D. P. Pease J. Denners & Co M. Julien A. Buntin do
20 00	20 00	40 00 7	do		do
60 00 120 00 1,200 00 20 00	20 00 40 00	180 00 8 240 00 9 1,600 00 10 40 00 11 40 00 12 70 00 13	do do do	T. & N. Bolduc J. Wattie	Montreal Cotton Co do Jas. T. Anderson Lake St. Francis Navi-
23 00 69 00 80 00 120 00 60 00 	23 00 20 00 40 00 20 00 10 00 20 00 15 00 14 00 40 00	46 00 14 92 00 15 100 00 16 160 00 17 80 00 18 40 00 22 15 00 21 14 00 22 80 00 25	do do do do do do do do do do do	E. Dion Jas. T. Anderson	O. Trempe J. Cardinal. O. Longtin. O. P. Dennie Estate A. Hodge Alex. Cockburn. Robt. Steele.
20 00		30 00 24 40 00 25 40 00 26 40 00 27	do		
45 00 20 00 60 00 15 00 105 00 40 00	15 00 10 00 20 00 20 00 15 00 105 00 105 00 20 00	60 00 22 30 00 23 80 00 33 20 00 33 30 00 32 210 00 33 105 00 3- 60 00 33	do do do do do do do do do do do	F. X. Barbeau  Estate Jas. McDonald.	Col. McPhee J. Larocque Jas. Wattie Jas. McDonald Estate Jas. McDonald Corp. Town of Salisbury. Valleyfield Electric Co.

A—Continued.

Lessees' Accounts, 1890-91-Continued.

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Description of Property.	er.	. સે.	Account is made up.	Abatement authorized.	Paid during Fiscal Year.	e, 1891.	Total.
	Number	Date		Abate	Paid Yea	Balance June,	والمحيوبة مورانا شرواك
				\$ cts.	\$ cts.	S ets.	\$ cts.
Flour and grist mill, lots 3 and 4  Hydraulic lot No. 6, south side	2	June do	30, '91		150 00	75 00	360 00 225 00
do No. 7		Jan. do	1, '91 1, '91		135 00 120 00		135 00 120 00
Lot on south side Water street for coal yard		July	1, '91				25 00
Tract of land south limit of Water street, Cornwall		April	1, '91				10 00
Surplus water for paper mill at lock No. 18 Pipe under canal above lock 18	8	Jan. April	1, '91 1, '92		120 00	15 00	120 00 15 00
Hydraulic lots Nos. 1 and 2, north side	9	June	30, '78			270 00	270 00
Wharf lot, Moulinette do near lock No. 20.			1, '92			80 00	80 00
do hear fock two. 20	1	June	50, 61			247 50	247 50
		1		10 00	790 00	807 50	1,607 50
							,
Wharf lot, St. Cecile Valleyfield, old balance, lease No. 2618		July	1 768	 		60 00	60 00
Wharf lot, St. Timothy, Valleyfield, old balance		Jan.					100 00
do St. Cecile do		May	1, '91			80 00	80 00
Lot for shed above St. Timothy bridge, Valleyfield Paper mill, lots 1, 2 and 3, Valleyfield, old lease		June do	1, '92 30, '89			60 00	60 00 418 50
Lots Nos. 1, 2, 3, 4 and 5, below lower dam, Valley-				ł	ł	1 1	
Lot on corner of St. Timothy and lower dam road,		Jan.	1, '91		1,500 00		1,500 00
Valleyfield	7	May	1, '92		20 00		40 00
Saw mill, lot 1, building lot, Valleyfield		June do	30, '91				180 00 240 00
Lots at head of canal do	10	do	30. '91		1,200 00		1,600 00
Cadastral lot 845 for public park do do 846, Grande Isle do		Jan. July	1, '92 1, '91		20 00	20 00 40 00	40 00 40 00
	l.,		•				
Wharf and shed above guard lock do Wharf and storehouse do do		May Aug.				35 00 46 00	70 00 46 00
do do do			30, '90			92 00	92 00
do do			1, '91			100 00	100 00
Part of lot 830 do Lot 101 and 116 do		Sept. June	1, '91 1, '92			160 00 60 00	160 00 80 00
Reserve guard lock, Valleyfield	19	Dec.	1, '91		10 00		10 00
do do do do do do			1, '91 1, '91			20 00 15 00	40 00 15 00
do do do			1, 291				14 00
Lot above do do	23	May	1, '92		40 00		80 00
Lot for ship yard above guard lock, Valleyfield Part of lot 1 for piling ground, above guard lock	24	Sept.	1, '91		30 00	1	30 00
Valleyfield	25 26	do Oct.	1, '91 1, '91			40 00 40 00	40 00 40 00
levfield	27	July	1, '91		40 00	J	40 00
Wharf lot, south side canal, guard lock, Valleyfield	J28	Nov.	15, '91			60 00	60 00
		Sept. July	1, '91 1, '91			30 00 80 00	30 00 80 00
Portion of lot 830 for grist mill do	31	do	1, '91		20 00		20 00
do 830 for yard, &c., to mill do	32	Oct.	1, '91			30 00	30 <b>0</b> 0
do 830 and privilege to construct a flume to Grand Isle		June	30, '91	 	105 00	105 00	210 00
do 920 Vallavfield	24	Ton	1. '91			105 00	105 00
Wharf and lot above guard lock, Valleyfield	36 36	July	1, '91 1, '92			60 00 40 00	60 00 40 00
original distribution and a second original distribution of the second original distribution of the second original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original distribution original di	,55		-, 02		<b></b>	5 501	20 00

# APPENDIX

Dr.

No. 26.—HYDRAULIC and other Rents, &c.--

Balance due on 1st July, 1890. Accrued, year ended 30th June, 1891.		Total.	Name of W	ork.	Present Occupant.	Original Lessee.		
\$ cts.	\$ cts.	\$ cts.						
30 00	10 00		  Beauharnois	Canal	} 	A. D. Doust		
20 00	10 00	30 00 38	do			A. L'Espérance.		
1 00	1 00	2 00 39				Can. Mutual Tel. Co		
••••	5 00	5 00 40		•••		A. Crevier		
4 00 120 00	4 00 120 00	8 00 41 240 00 42		• •	S Vienn	Wm. Hood		
40 00		40 00 43				E. Bergin		
3,627 50	2,588 00	6,215 50						
	20.00	90.00	T - 1 in - Com	-1		Beech amaia Navigation		
	30 00			ai		Beauharnois Navigation		
	60 00 75 00	60 00 2 75 00 3	do do	• • • • •		Jas. Wilson, jr		
	752 50	752 50 4				Montreal Harbour Com.		
196 00	392 00	588 00 5				Frothingham & Workman		
132 00 564 00	264 00 1,128 00	396 00 6 1,692 00 7			H. McLennan Maltby & King			
322 50	645 00	967 50 8			Wm. Johnson & Co			
322 50	645 00	967 50 9	do		Peck, Benny & Co	do		
	430 00	430 00 10   1,080 00 11		••••	1	Peck, Benny & Co		
	1,080 00 1,296 00	1,296 00 12				Ira Gould & Sons		
430 00	860 00	1,290 00 13	do do			Pillow, Hersey & Co		
215 00	430 00	645 00 14		• • •	oliani F. G.	do		
430 00	860 00 1 00	1,290 00 13			Ogilvie & Co	Mont. Warehousing Co Corp. Montreal		
6,000 00	1,000 00				1	G. & W. Tait		
	25 00	25 00 18		• • • •		G. E. Jacque & Co		
• • • • • • • • • • • • • • • • • • • •	10 00 80 00			••••		A. W. Ogilvie		
• • • • • • • • • • • • • • • • • • • •	00 00	00 00 2						
• • • • • • • •	100 00					Royal Electric Co		
•••••	800 00 100 00							
	1 00	1 00 2	4 do			Mont. Street Ry. Co		
	1 00			• • • •	• • • • • • • • • • • • • • • • • • • •	. Corp. Montreal		
• • • • • • • • • • • • • • • • • • • •	$\begin{array}{c c} 1 & 00 \\ 1 & 00 \end{array}$					1		
	375 00					Mont. Warehousing Co		
	120 00	120 00 2	9 do			. Grand Trunk Railway		
• • • • • • • • • • • • • • • • • • • •	500 00			• • • •		Hurteau Bros Dobell, Beckett & Co		
	1,066 66 800 00	800 00 3	2 do			J. Burstall & Co		
	150 00	150 00 3	3 do			. Acer & Kennedy		
• • • • • • • • • •	600 00					C. M. Acer		
2,205 86	380 92 1,102 93		5 do . 6 do .			P. Poulin H. Bulmer, jr., & Bros.		
	420 75	420 75 3	7 do			. O. Dufresne & Bros		
1,368 88	684 44	2,053 32 3	8 do			Bourgoin & Thibault		
3,831 18	1,277 06	5,108 24 3	9 <sub>i</sub> do	• • • •	••••••••••••	Henderson Lumber Co		
	174 40	174 40 4	o do	176		P. McRory		

176

A .- Continued.

Lessees' Accounts, 1890-91-Continued.

CR.

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Description of Property.	Number.	Date to which the	Account is made up.	Abatement author-	Paid during Fiscal Year.	Balance due, 30th June, 1891.	Total.
Lot for store and wharf above St. Timothy bridge Valleyfield.  Lot for store and wharf below St. Timothy bridge, Valleyfield.  Privilege of placing poles on canal bank.  Lot for public scales above St. Timothy bridge, Valleyfield.  Lot on Grand Isle, east end of dam, Valleyfield.  Lot at lock 7, Melocheville  Lot near Timothy bridge, Valleyfield.	37 38 39 40 41 42	do Oct. do April June	1, '9 1, '9 1, '9 1, '9 30, '9	0	120 00	40 00	\$ cts.  40 00  30 00 2 00  5 00 8 00 240 00 40 00  6,215 50
Paint mill, lot 17.  Flour and mill, lots 18 and 19.  Lots on S.W. side, waste weir  Dry dock, shipyard and mill, Basin No. 2  Lot for office, Colborne street, Montreal.  Strip on N.W. side Mill street, Basin No. 2.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	do Dec. June do June do do May Apr. do June do do June do June June June June	1, '9 1, '9 30, '9 30, '9 30, '9 30, '9 30, '9 1, '9 1, '9 30, '9 30, '9 1, '9 30, '9 1, '9 30, '9 1, '9 30, '9 1, '9	1	60 00 75 00 752 50 392 00 264 00 1,128 00 645 00 430 00 1,296 00 860 00 490 00 860 00 1,000 00	196 00 132 00 564 00 322 50 322 50 	30 00 60 00 75 00 752 50 588 00 396 00 967 50 967 50 430 00 1,296 00 1,296 00 1,290 00 1,290 00 1,290 00 7,000 00 25 00
Water supply through 4 inch pipe to factory, Wellington street.  Water supply through 10 inch pipe, Basin No. 2. Part lot 384 north, Wellington basin.  Lot for shed, west do Double track over Wellington street bridge. Floating bath near Wellington bridge. Park lot do do 2 inch pipe under canal.  Land at Basin No. 4 Siding west side Wellington bridge.  Lots 1, 2 and 3, West Basin, for piling lumber.  Lots 4, 5, 6 and 7 do do  Lot for a cattle yard, Point St. Charles  Lot 5, 6 and 7 do  Lots 1 and 2, West, St. Gabriel Basin No. 4.  Lots 3, 4, 5, 6 and 7 do  Lots 3, 4, 5, 6 and 7 do  Lots 3, 4, 5, 6 and 7 do  Lots 12, west, and 15 and 16 do  3.	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	Nov. Oct. Jan. July Sept. July do Aug. May do feb. Dec. Jan. May do	1, '9 1, '9 1, '9 1, '9 1, '9 1, '9	1	100 00 800 00 100 00 1 00 1 00 1 00 1 00	800 00 3,308 79 420 75	80 00 100 00 800 00 100 00 1 00 1 00 1 0
Lots 19 and 22 do and 13	39  40	do do 77	1, '9 1, '9		174 40	5,108 24	5,108 24 174 40

APPENDIX

Dr.

No. 26.—HYDRAULIC and other Rents, &c.—

1st	7			1	
18					
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	Accrued, year ended 30th June, 1891.	1	-		ì
<b>u</b> o	<u> </u>	Ì			
Balance due July, 1890.	68 a				
£86 ∤	× A	Total.	Name of Work.	Present Occupant.	Original Lessee.
0	J.	10000	Traine of Work.	1 resent occupant.	Original Lessee.
§ <u>₹</u>	e d	umber.	No.		
<u> </u>	£ \$	. 18	i		
ેકુ \ 	၁ က	Z			 
		1			
\$ cts.	\$ cts	\$ cts.			
• • • • • • • • • • • • • • • • • • • •	<b>\$</b> 000.	<b>C</b> Cos.			
	100 00	100,00 41	Lachine Canal		Waren Scarf Asphalt
	200 00	200		1	Paving Co
	253 68	253 68 42	do		D. Pariseau
	1 00	1 00 43			A. Cantin
	100 001	100 00 4			Montreal Transport. Co.
	180 00	180 00 4		P. McRory.	N. Paradis
	300 00	300 00 40			Henderson Bros
10 00	10 00	20 00 4			
725 44	362 72	1,088 16 48			H. Bulmer, jun., & Bros.
	700 00	700 00 49			Dobell, Beckett & Co
	40 00	40 00 50			B. Ethier.
	1 00	1 00 5			S. Delisle
	200 00	200 00 5			
	100 00	100 00 5			
	25 00	25 00 5			Dominion Abbatoir Co.
	10 00	10 00 5			E. V. Moseley & Co
840 00	1,680 00	2,520 00 50			Ira. Gould & Son
800 00	1,601 00	2,401 50 5			Est. J. Frothingham
000 00	10 00	10 00 58		1	Albert Fox
• • • • • • • • • • • • • • • • • • • •	50 00	50 00 59			Dominion Bridge Co
	30 00	30 00 6			E. Ouellette & Co
••••	10 00	10 00 6			
	20 00	20 00 6			Canada Pacific Railway. Wm. Davis & Son
	40 00	40 00 6			Dominion Barb Wire Co.
	10 00	10 00 6			P. Lamothe
• • • • • • • • • • • • • • • • • • • •	10 00	10 00 0	g ao		1. Lamoure
	5 00	5 00 6	do		J. McIntyre
		- 0 00	, uo		o. McIntyle
18,393 86	24,559 06	42,952 92			
	21,000 00		<u> </u>	•	
1					}
7 50	-	7 50	Chambly Canal		J. A. Maurice
, 00	60 00	60 00			South Eastern Railway.
10 00	10 00	20 00		H. Riendeau	Catelli Bros
19 34	20 00	19 34		II. Itiongova.	
50 00	75 00	125 00	do		Bissett & Donaghy
50 00	75 00	125 00			Simard & Godin
	25 00	25 00			Jas. O'Cain
		20 00			ono. O Cam
136 84	245 00	381 84			1
ŀ					
	40 00	40 90	Rideau Canal		G. Sterling.
2 00	1 00	3 00		1	Ottawa Canoe Club
2 50	80 00	80 00			Thos. McKay
180 00	60 00	240 00			G. W. McCullough
80 00	80 00	160 00			J. G. Butterworth
50 50	80 00	80 00			
120 00	20 00	120 00			J. W. McRae & Bros
1 00	1 00	2 00			
1 30	1 00	2 00	1		Corporation of the City
250 00	•	250 00	do	<u> </u>	of Ottawa
31 25		31 25 1		•••••••	
or 20	• • • • • • • • • • • • • • • • • • • •	01 20 1	, uo		Rideau Skating and Curl-
4 00	1 00	5 00 1	do	Robt Hastor	ing Club.
12 00	$\begin{array}{c} 1 & 00 \\ 2 & 00 \end{array}$	14 00 1		Robt. Hastey	John Heney
12 00					County Neville
••••••	1 00	1 00 1	, uo	*********	Corporation of the City
			1100	) }	of Ottawa
			178	,	

A-Continued.

Lessees' Accounts, 1890-91—Continued.

CR.

Description of Property.	N.	Number.	Date to which the			Abatement authorized.	Paid during Fiscal Year.	Balance due 30th June, 1891.	Total.
						\$ cts.	\$ cts.	\$ cts.	\$ cts.
Lot at St. Gabriel, near Atwater Ave., Monti Lot 17 east, St. Gabriel Basin	briel.  treal.  No. 1.  nri.  ne.	42 43 44 45 46 47 48 49 50 51 55 56 57 58 60 61 62 64	May April July Jan. Nov. Sept. May June May Aug. Jan. Nov. July do do Sept. June	1, 1, 1, 1, 1, 1, 1, 1, 30, 30, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	92 '91 '92 '91 '92 '92 '93 '93 '93 '93 '93 '93 '93 '93	20 00	100 00 180 00 150 00 	253 68 150 00 1,088 16 840 00 800 50	100 00 253 68 1 00 100 00 180 00 300 00 20 00 1,088 16 700 00 100 00 25 00 2,520 00 2,401 50 10 00 25 00 30 00 10 00 2,520 00 2,401 50 10 00 2,520 00 2,401 50 10 00 50 00 30 00 10 00 40 00
Two lots of land, Chambly Wharf lot at St. Joseph Lot in village, Chambly. Wharf at St. John's. Part of canal wharf at St. John's do do do do		2 3 4		1, 19, 30, 30,	'91 '92 '81 '91 '91		60 00 10 00	10 00 19 34 125 00 125 00 25 00	7 50 60 00 20 00 19 34 125 00 125 00 25 00
Water lot, foot of Major's Hill, Ottawado Green Island, above Rideau Falls, Ottawa Lot for coal shed, Canal Basin do Lots 1 and 2, coal shed, Canal Basin do do 4, 5, 6 and 7, boat house, E. C. Basin, Ot Lot 1, S. E. Canal Basin, Ottawa	ttawa	2 3 4 5 6	Jan. June Jan. June do May April	1, 1, 30, 1,	'92 '91 '92 '92 '92		80.00	3 00 240 00 80 00	40 00 3 00 80 00 240 00 160 00 80 00 120 00
do for a weigh house, W. C. C. Basin, Otta do for a dwelling, S. side Deep Cut do		8 9	May April	1, 1,	'92 '90			2 00 250 00	2 00 250 00
Reserve for club house do do do do do do in front of his property, Deep Cut do	o	11	Sept. Jan.	 1, 1,	 '91 '92	31 25		5 00 14 00	31 25 5 00 14 00
Strip of reserve at Exhibition Grounds do	o	13	do		92	Į	ļ	1 00	
		1'	79						

# APPENDIX

Dr.

No. 26.—HYDRAULIC and other Rents, &c.—

1st	g					
i i	Accrued, year ended 30th June, 1891.				•	
<b>n</b>	88					
i	ra,	1				
Balance due July, 1890.	ne ke	Total.	Name of	Work	Present Occupant.	Original Lessee.
522	L'u			WOIK.	Tresent Occupant.	Original Lessee.
, y	P E	N	3			
<u>55</u>	55	1	1			
ا ھي ا	ာ့ ေ					
		_	1			
\$ cts.	\$ cts.	\$ cts.				
	100 00	100 001	1 Pidoon Co	mol	 	Bronson & Weston
•••••	1 00	1 00 1				
• • • • • • • • •	2 00	2 00 1			l .	Andrew Hickey
	13 50	13 50 1				
	1 00	1 00 1				
	2 00	2 00 1			<i> </i>	Thos. Kingston
	2 00	2 00 2				W. D. Morris
12 00	2 00	14 00 2			arraman bian	Robt. McCloy
•••	1 00	1 00 2	2 do	• • • • •	Canada Atlantic Railway	
l	10 00	10 00 2	3 do		Company	H. Jackson Temporal Committee St.
•••••	10 00	10 00 2	u0	• • • • • •		Andrew's Church
13 00	13 00	26 00 2	4 do		<b> </b>	
	9 50	9 50 2				
27 00	9 00	36 00 2	6 do			Jas. Marks
1 00	1 00	2 00 2	7 do			Henry Hartney
ļ			,			TDI
	1 00	1 00 2		• • • • •		
2 00	2 00 2 00	4 00 2 2 00 3		• • • •		Wm. Miller George May
20 00	5 00	25 00 3		•• ••		St. L. & O. Ry. Co
20 00	3 00	20 00	1		Canadian I denie Idan way	St. 12. to 3. 1ty. co
96 00	12 00	108 00 3	2 do			
54 <b>2</b> 5	8 25	62 50 3				
20 00	2 00	22 00 3				
27 00	3 00	30 00 3				
27 00	3 00	30 00 3				do
••••••	25 00 2 00	25 (10) 3 22 (10) 3		• • • • •		
20 00 18 00	3 00	21 00 3				
10 00	3 75	3 75 4				Geo. Rickey
180 00	22 50	202 50 4			1	W. Dawson
157 50	11 25	168 75 4				
146 25	11 25	157 50 4	3 do			
29 25	9 75	39 00 4				Geo. Morris
41 25	8 25	49 50 4				
24 75	8 25	33 00 4				
69 75	7 50 7 50	77 25 4 15 00 4		• • • • •		Daniel Delaney Denis Bergin
7 50	3 00	3 00 4				
20 25	2 25	22 50 5				
4 00	4 00	8 00 5				T. and P. Collins
100 00	50 00	150 00 5	2 do			London & Can. Loan Co.
40 00	10 00	50 00 5		• • • • •		
•••••	4 50	4 50 5				
20 00	5 00	25 00 5 10 00 5		• • • • •	••••	
5 00	5 00 10 00	20 00 5		• • • • •	• • • • • • • • • • • • • • • • • • • •	Alfred Chester
10 00	10 00	1 00 5		•••••		Josiah Payne.
12 00	12 00	24 00 5		• • • •		
35 00	5 00	40 00 6				
4,620 00	120 00	4,740 00 6		• • • • •	Estate R. Ward	. Joshua Bates
0 20	0 20	0 40 6				A. Wood
2 00		2 00 6		• • • • •		. Smith's Falls Cur. Club.
· · · · · · · · · · · · · · · · · · ·	2 00	2 00 6		• • • • •		Wm. Lavender
3 00	3 00	6 00 6		• • • • •		N. W. Berford, sr J. B. and B. Tett
• • • • • • • • • • • • • • • • • • • •			- uo	••••		. p. D. and D. 1600
	10 00	10 00	7 do			. W. H. Whealey
				180		•

A.—Continued.

Lessees' Accounts, 1890-91-Continued.

Cr.

Description of Property.	Number.	Date to which the	3	Abatement authorized.	Paid during Fiscal Year.	Balance due 30th June, 1891.	Total.
				\$ cts.	\$ cts.	\$ cts.	\$ cts.
Lots for piling grounds, Stewarton, Ottawa			30, '91		100 00		100 00
		Jan. Dec.	1, '92 1, '91		1 00	2 00	1 00 2 00
do S. ½ lot G, con. C do		Jan.	1, '92		13 50		13 50
do $N. \frac{1}{2} lot G$ , con. C do			1, '92	\· ····••	1 00		1 00
		Nov. Aug.	1, '91 30, '91		2 00	2 00	2 00 2 00
		Nov.	ĭ, '9ī			14 00	14 00
do lot B, con. C do	22	Jan.	1, '92		••••	1 00	1 00
·	23	do	1, '92		10 00	}	10 00
Reserve on lot E. con. D do	24	May	1, '92		13 00		26 00
do lot E, con. D do	$\frac{25}{2}$	do	1, '92		9 50		9 50
do in front of lot No. 1, con. B do	26	do	1, '92	1	• • • • • • •	36 00	36 00
con. B. Nepean	27	do	1, '92		1 00		2 00
	28 20	do	1, '92 1, '92		1 00		1 00
do in front of sub-lot No. 5, con. B, Nepean. Warf privileges on sub-lots 29 and 30, con. B do	29 30	do do	1, '92 1, '92		4 00 2 00		4 00 2 00
Right of way over lots 8 and 9 (Dow's Swamp)			•		<b>,</b>	1	
	31	do Jan.	1, '92 1, '91		5 00	1	25 00
Reserve on lots Nt lot 8, con. 1. Nepean		Jan.	1, '92			108 00 62 50	108 00 62 50
do part 40, con. 1, O.F., do	34	do	1, '91	L		22 00	22 00
do do 40 do 1 do do	35 36	Nov. do	1, '91 1, '91		· · · · · · ·	30 00 30 00	30 00 30 00
		Sept.	1, '91		25 00		25 00
do do 40 do 1 do do	38	July	1, '91			22 00	22 00
		June Jan.	1, '92 1, '92		3 75	21 00	21 00 3 75
	41		1, '9			202 50	202 50
do N1 4 do 2 do	42	do	1, '92			168 75	168 75
	43 44		1, '9; 1, '9;			157 50 39 00	157 50 39 00
		Dec.	1, '9			49 50	49 50
do 8 6 do 2 do		Jan.	1, '9			33 00	33 00
		Dec. Jan.	1, '9: 1, '9:		15 00	77 25	77 25 15 00
	49		1, 9		3 00		3 00
do N1 do 22 do do	50		1, '9			. 22 50	22 50
		June Jan.	1, '9: 1, '9:		100 0	. 8 00 50 00	8 00 150 00
Reserve in front of lot No. 40, con. 1, Oxford	53	July	1, '9	1	}	. 50 00	50 00
		June	1, '9: 1, '9:		4 5		4 50 25 00
do on $W_{\frac{1}{2}}$ lot No. 27 do 1, Marlboro do B, Wolford		Jan. July	1, '9' 1, '9'		10 0	. 25 00 0	10 <b>0</b> 0
do do 2 do B do	57	do	1, '9	2	10 0	0 10 00	20 00
Portion of lot No. 9, con. A., Wolford, Merrickville Lot above old lock, Merrickville	58	April	1, '9 1, '9	2	12 0		1 00 24 00
Reserve near swing bridge, Merrickville	60	June	1, '9	2		. 40 00	40 00
Lote A and B. old Siv's	(61	Mav	1. '9'	]		4,740 00	4,740 00
Part reserve on lot 1, con. 4, at Smith's Falls do do 1, do 4 do	6	Nov.	30, '9 1, '9	0	20		0 40 2 00
do do 1. do 4. Elmsly	164	I.Ian.	1, '9	1 [	20	0j	2 00
Part of lot 21, con. 5, S. Elmsly, at Oliver's Ferry	6	May	1, '9	2	3 0	0 3 00	6 00
Strip of land and warehouse, near Isthmus lock, Sta. Newboro	64	do	1, '9	2	J		
	67						

# APPENDIX

DR.

# No. 26.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1890.	Accrued Year ended 30th June, 1891.		Total.		Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ cts.	\$	ets.	\$ (	cts.				
2 00 5 00 152 00 262 50 53 00 40 00	5 76 105 105		10 228 367 158	00 00 50	69 70 71 72	do do do		
7,059 70	1,220	20	8,279	90				
3 00	10 10	00 00 00	10 10 3	00 00 00 00 00 00	2 3 4 5	Carillon Canal do St. Anne's Lock do	Great North-Western	John Brophy Delphus Lebeau Canada Mutual Tel. Co.
50 00 1 00	50	00 00	100	00	7 8	Trent River Work	Telegraph Co	Dominion Telegraph Co Francis Sandford R. C. Smith
160 00		00 00 00 00	5 3 3	00 00 00 00 00	10 11 12	do . do . do .		Jas. Cummings, Estate of Bell Telephone Co Lakefield Lumber Co John Hull.
2 0 226 0	-	00		00	-	Cape Breton	,	Neil McNeill

# A.—Continued.

Lessees' Accounts, 1890-91.—Concluded.

CR.

Description of Property.	Number.	ich	Account is made up.		Abatement Authorized.	Paid during Fiscal	Year.	Balance due 30th	June, 1891.	Tota	al.
Part of lot 21, con. 5, North Crosby, Newboro' Water lot at Chaffy's Lock. Water power at Brewer's upper mills, old lease do do lower mills do on lot 48, con. 1, Kingston Reserve on lots 35 and 36, con. 1 do	69 70 71 72	June Jan. do July	1, 30, 1, 1, 1,	'91 '91		10	cts. 2 00 5 00 05 50	2: 3:	ets. 1 00 5 00 28 00 67 50 52 50 50 00 72 50	10 228 367 158	cts.
House and ground on lot No. 8	2 3 4 5 6 7 8 9 10 11 12	June do Sept. July May Dec. Jan. June Jan. do	30, 30, 1, 1, 1, 1, 30,	'92 '92 '90 '84 '92 '91 '92 '91 '91		18	5 00 10 00 10 00  1 00 50 00  3 00 3 00		5 00 3 00 1 00 2 00 2 00 5 00 5 00 5 00	100 33 41 1100 22 200 5 33 33	000000000000000000000000000000000000000

APPENDIX

DR.

No. 26.—HYDRAULIC and other Rents, &c.—

Balance due on Pur- chase, 1st July, 1890.	Accrued Year ended 30th June, 1891.	Total.	Number.	Name of Work.	Name of Proprietor.
\$ cts.	\$ cts.	\$ cts.			
54 38	•••••	54 <b>3</b> 8	1	Intercolonial Ry	John & William Sproule
		50 59	Z	do l	Llohn Kerguson
59 15	· • • • • • · • • •	59 15		uo	JOSEDN CTRANAM
	• • • • • • • • • • • • •	13 06		do	Paul Foster
	• • • • • • • • • • • • • • • • • • • •	14 21	5	<b>ძ</b> ი	Paul Foster. Donald McArthur.
4 00	• • • • • • • • • • • •	4 00		do	Cornelius Dver
33 59 0 35	• • • • • • • • •	33 59 0 35		αο	LIONN FOSTER
96 66		0 35 96 66		ao	William & John I. Ives
4 90		4 90		ao   do	Christie family
23 29		23 29		do	A. W. Tanner
354 18		354 18			

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 30th September, 1891.

A.—Concl	uded. es, 1890–91.					Cr.
	Description of Property.	Number.	Abstement Authorized.	Paid during Fiscal Year,	Balance due 30th June, 1891.	Total.
1 1 acres of 3 for do 2 for do 4 for do	do do do do do do do do do do do do do d	1 2 3 4 5 6 7 8 9 10	\$ cts.	\$ cts.	\$ cts.  54 38 50 59 59 15 13 06 14 21 4 00 33 59 0 35 96 66 4 90 23 29  354 18	\$ cts.  54 38 50 59 59 15 13 06 14 21 4 00 33 59 6 66 4 90 23 29

C. E. CHUBBUCK,
Accountant, Hydraulic Rents.

# APPENDIX B.

No. 1.—Collection of Revenue—Canals—Details of Expenditure.

Canals.	Names of Employés.	Deduction for Superannuation.	Net Salary.	Gross Salaries.	Total.	
Welland Canal.	·	\$ cts.	\$ cts.	\$ cts.	\$ ets.	
do do	McFarland, D. E	28 00 16 00 11 00 10 00	1,372 00 784 00 539 00 490 00	1,400 00 800 00 550 00 500 00		
	ContingenciesSunday labour			3,250 00 198 99 81 60	9 59A 5A	
Port Dalhousie	Clark, W. B	22 00 16 00	1,078 00 784 00	1,100 00 800 00	3,530 59	
	Contingencies			1,900 00 318 97 86 40	2,305 37	
Dunnville	Tipton, T. L. M	15 00	735 00	750 00 35 25	•	
Port Maitland	Galbraith, T. J	10 00	490 00	500 00 110 00	785 25	
Port Bobinson	Coulter, RobertContingencies	14 40	705 60	720 00 31 81	610 00	
St. Catharines	Collier, H. H	4 00	196 00	200 00	751 81	
Chippawa	Sunday labour Harvey, T. B	2 00	98 00	100 00	261 20	
	Contingencies			30 75	130 75	
	Total, Welland Canal	. <b></b>			8,374 97	
St. Lawrence Canals.						
Beauharnois	Danis, A. D	17 00	833 00 366 00	850 00 366 00		
	Contingencies			1,216 00 94 66 78 00	1 900 GG	
Cornwall	Flanagan, R Mulhern, M. M. O'Callaghan, T.	0 64	1,000 00 32 68 600 00	1,000 00 33 33 600 00	1,388 66	
y	Contingencies			1,633 32 218 69 82 80	1,934 81	
	Carried forward 186	ļ				

# APPENDIX B-Continued.

# No. 1.—Collection of Revenue—Canals—Details, &c.—Continued.

Canals.	Names of Employés.	Deduction for Superannuation.	Net Salary.	Gross Salary.	Total.	
St. Lawrence Canals.	Brought forward	\$ ets.	\$ cts.	\$ cts.	\$ cts.	
Cardinal	Reid, George	5 00	750 00 395 00	750 00 400 00		
	Contingencies			1,150 00 77 99 57 60	1 ook to	
Lachine	Paré, L Deschamps, J. B	20 00 14 00	980 00 686 00	1,000 00 700 00	1,285 59	
	Contingencies			1,700 00 484 25 81 60	0.00* 0*	
Montreal	O'Neill, J McNally, T Bussières, F St. Louis, J Arahill, J Giroux, A. P Pelletier, P Villeneuve, Jacques	10 50 19 68	1,960 00 1,200 00 514 50 963 66 784 00 784 00 686 00 367 50	2,000 00 1,200 00 525 00 983 33 800 00 800 00 700 00 375 00	2,265 85	
	ContingenciesSunday labour		·····	7,383 34 1,227 59 75 00	8,685 93	
Kingston	Burrows, Wm. Fahey, Ed Contingencies	10 00	588 00 490 90	1,100 00 119 87		
	Total, St. Lawrence Canals				1,219 87	
Chambly Canal.	Town, St. Lawrence Canals				16,780 71	
Chambly	Martel, M. D. S Durecher, C	20 00 6 25	980 00 49 <b>3</b> 75	1,000 00 500 00		
	Contingencies			1,500 00 94 15	1,594 15	
St. John's	Quesnel, J Fournier, J. A	18 00 6 25	882 00 493 75	900 00 500 00	1,054 10	
	Contingencies			1,400 00 116 10	1,516 10	
St. Ours Lock	Matthieu, P		600 00	600 00 22 74	622 74	
	Total, Chambly Canal				3,732 99	

# APPENDIX D-Continued.

No. 1.—Collection of Revenue—Canals—Details, &c.—Continued.

Canals.	Names of Employés.	Deduction for Superannuation.	Net Salary.	Gross Salary.	Total.
Ottawa Canals.	Brought forward	\$ cts.	\$ ets.	\$ ets.	\$ cts.
	Murphy, D	16 00	784 00	800 00 39 32	•
Grenville	Pridham, AContingencies	20 00	980 00	1,000 00 187 11	839 32
Ste. Anne's Lock	Barrett, J		1,000 00 493 75	1,000 00 500 00	1,187 11
	Contingencies			1,500 00 49 76	1,549 76
	Total, Ottawa Canals				3,576 19
Rideau Canal.	·	1		1	
Kingston Mills	Dean, JContingencies	8 00	392 00	400 00 66 08	466 DO
Ottawa	Farley, J. F		1,176 00 784 00	1,200 00 800 00	466 08
	Contingencies	ļ	••••	2,000 00 243 74	2,243 74
Smith's Falls	Richey, W. M	6 00	294 00	300 00 42 05	342 05
	Total, Rideau Canals			• • • • • • • • • • • • • • • • • • • •	3,051 87
St. Peter's Canal Murray Canal	Kavanagh, W. M	4 00	196 00	200 00 17 75	200 00 17 75
Trent Valley Canals.					
Fenelon Falls Bobcaygeon Peterboro' Hastings	McArthur, Wm. Bottom, Elijah. Brownscomb, Wm. Coughlin, T., jun			10 00 18 20 15 00 10 00	
	Contingencies	ļ		53 20 17 01	
	Total, Trent Valley Canals				70 21
Inspector of canals	Witton, H. B Contingencies	36 00	1,764 00	1,800 00 593 99	2,393 99

# APPENDIX B-Concluded.

# No. 1.—Details of Canal Expenditure, 1890-91.—Concluded.

To Whom Paid.	Service.	Amount.	Total.	
Fortier, J. E. Jolivet, M. Bourret, E. Baine, L. Teakles, B. H. O'Connor, D. Owens, T. P.	Temporary clerk  do do do do Travelling expenses Professional service Reporting Acting Collector at St. Ours Stationary Printing  Total Iless—Sunday labour.  Total Salaries and Contingencies	38 45 74 32 19 50 100 00 214 37 845 82	\$ cts. 42,016 39 604 20 41,412 19	

# LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS, OTTAWA, 30th September, 1891.

## DEPARTMENT OF RAILWAYS AND CANALS—CANALS REVENUE BRANCH.

OFFICE OF INSPECTOR OF CANALS REVENUE, Hamilton, 7th October, 1891.

Sir,-I have the honour to report that during the fiscal year 1890-91, I inspected all the offices for collection of tolls on the Dominion Canals

Detailed returns, showing particulars of tolls received, and other canal revenue collected at each office of the eight canal systems in operation in the Dominion, were submitted to the Department at the date of each inspection.

The aggregate receipts on account of canal revenue for the fiscal year ending

30th June, 1891, are \$345,143.61.

For hydraulic and other rents the receipts for the fiscal year are \$29,799.85. Tabulated by districts and offices, and classified under subdivisions of canal revenue and hydraulic rents, the exhibit is as follows:-

#### WELLAND CANAL.

Collection Divisions.		Canal F	REVENUE.		Total Canal	Hydraulic
Collection Divisions.	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.	Revenue.	and other Rents
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Port Colborne	126,409 73 59,246 37 340 82 18 76 706 36 554 57 54 95		1,147 38	81 59 20 00	126,415 73 59,246 37 340 82 18 76 787 95 1,721 95 54 95	112 08 193 21 497 67 293 00 2,670 76
Totals	187,331 56		1,153 38	101 59	188,586 53	3,766 72
Beauharnois Cornwall Cardinal Lachine Montreal	790 28 17,652 66 773 65 2,940 74 25,982 04	21 36 4,655 85	105 55 5 00 5 00 4 00 297 50	1,588 83 10,963 62	895 83 17,657 66 778 65 4,554 93 41,899 01	3,852 50 790 00 575 00 19,753 48
Kingston	14,133 40 62,272 77	4,677 21	417 05	12,552 45	79,919 48	24,970 98
		CHAMBLY	CANAL.		1	
Chambly	6,424 36 13,268 05 487 83		4 00		6,428 36 13,268 05 490 58	70 00
St. Ours	20, 00	1	1	I	1	1

#### OTTAWA CANALS.

Collection Divisions.		CANAL R	tevenue.		Total Canal	Hydraulic and
Conection Divisions.	Tolls,	Wharfage and Storege.	Fines and Damages.	Other Receipts.	Revenue.	Other Rents
Ottawa	\$ ct 27,510 23 18,212 83 180 40 1,237 23		\$ cts.	\$ cts.	\$ cts. 27,510 23 18,212 83 188 40 1,237 29	\$ cts 5 00 20 00
Totals	47,140 75	5		8 00	47,148 75	25 00
		RIDEAU	CANAL.			
Ottawa	4,094 30 1,432 23 428 38	5	5 00	176 00	4,287 56 1,432 25 433 16	564 75 105 50 60 90
Totals	5,954 9	9 12 20	6 00	179 78	6,152 97	731 15
<u> </u>		ST. PETER	'S CANAL.		<u></u>	
St. Peter's	1,528 8	5		177 91	1,706 76	ļ
		MURRAY	CANAL.			
Brighton.	672 8	6	38 16		711 02	
	1	TRENT VAL	LEY CANA	L.		
Burleigh Bobcaygeon Fenelon Falls Hastings Peterborough Buckhorn	59 5 341 9 34 9 28 7 163 2 52 7	6   6   0   3		50 00	59 51 391 96 34 96 28 70 163 23 52 75	50 00 180 00 6 00
Totals	681 1	1		50 00	731 11	236 0
Grand Totals	325,763 1	3 4,689 41	1,621 34	13,069 73	345,143 61	29,799 8

The receipts, as above, are balanced by bank deposits in favour of the Receiver-General.

Relevant particulars concerning collection of canal revenue at the several canal offices were presented to the Department after each inspection.

I have the honour to be, Sir,

Your obedient servant,

H. B. WITTON,

Inspector of Canals.

T. TRUDEAU, Esq.,
Deputy Minister, Railways and Canals.

# INDEX

TO

# CANALS REVENUE AND STATISTICS.

		~= U		PAC	173
Abbey, J. & J.	Lessees	310	Canada Meat Packing	Lessees	
Abbott, Francis	do	180	Co.	LICENCES	.,0
Acer & Kennedy	do		Canada Mutual Tele-	do176, 1	82
Acer, C. M.	do		graph Co.	40	
Anderson, James	do			do`	180
Anderson, J. T.	do		way Co.	uo	.00
Andrews & Sons				Details of	28
	do				8
Anglin, Wm. Appendix A	uo ,				16
Arahill, J.	Salary				23
	Fines.			1	
Arpin, Capt. Auger, J. B., & Co.	Lessees.	212		Lessee	
Bain, L.	Salary	199		Fines.	
Barbeau, F. X.	Lessee	174		Lessee	
Barrett, J.	Contingencies and salary	188	Cardinal Canal Office	Contingencies and salaries	
	Lessee	176	Carillon do	do	
Bartley, W. P. Bates, Joshua	do			Lessee	
Battle, John	do				172
Datele, John	Salary			do	
Battle, T.	Lessee			do	
Baxter, R. W.	do			do	
Beach, M. T.	do		Chumbly Canal Office	Contingencies and salary.	
Beaty, Wm. Beauharnois Cana	Contingencies and salary.	186	Chester Alfred	Lessee	
Office.	Contingencies and salary.	100	Chinnews Canal Office	Contingencies and salary.	
	Lessee	176	Chisholm & Minor	Lessees	
Nav. Co.	Lessee	110	Christie Family	Purchasers	
Bell Telephone Co.	do	182	Clark, W. B.	Contingencies and salary.	
Den Telephone Co.	do		Clark, Wm.	Lessee	
Benson, W. T. Benson & Aspden	do		Clegg, Wm.	Lessee	
Berford, W. W.	do		Cockburn, Alex.	do	
Pomin D	do		Collier, H. H.	Contingencies and salary.	
Bergin, D. Bergin, E.	do		Collier, R.	Lessee	
Binet, D.	Refund		Collins, T. & P.	do	
Bissett & Donaghy	Lessees		Conlon, J. & F.	Lessees	
Daldna T & W	do		M. K. Connolly	Fines	
Bolduc, T. & W. Booth, J. R.	do		Corbeil, M.		177
Bourgoin & Thibault	do			Contingencies and salaries	
Bourret, E.	Salary		Corporation of—	Contingencies and salarics	100
Brannigan, John	Lessee		County Welland	Lessees	172
Bridges, James	do		Montreal		176
Brocklebank, L.	do		Ottawa	do	
Brodeur, S. A.	do		Port Colborne	do	
Bronson & Weston	do		Town Salaberry	do	
Brophy, John	do		Welland	do	
Brown & Merritt	do		Thorold	do	
Brown & Ross	do		Village of Merriton	do	
Brownscomb, Win.	Salary		do Morrisburg		172
Bulger, M.	Fines	15	Coughlin T	Salary	
Bulmer H ir & Bros	. Lessees	-178	Cowley J	Fines	
Buntin, A.	do		Coulter, R.	Contingencies and salary.	
Burrows, W.	Contingencies and salary.	187		Lessee.	
Burstall, J., & Co.	Lessees			Salary	
Bussières, F.	Salary	187	Cummings J Estate		182
Butterworth, J. G.	Lessee	178	of		
Cameron, D.	do			Contingencies and salary.	186
Cameron & McInnis	do			Lessee	
Canada Atlantic Rail	- Lessees			do	
way Co.		_00	Davey, J., jun.		170
9c—14			,,,, o., juii.		0
JU-14					

			11	
	P	AGE.		PAG
Davis, H. & N.	Lessee	172	Harrison, Henry	Lessee
Davis, Win. & Son	do	$-\bar{1}\bar{7}\bar{8}$	Hartney, H.	do 18
Dawson, W.	do	180	Harvey, J. B.	Contingencies and salary. 18
Deane, J.	. Contingencies and salary.	188	Hastey, Robert	Lessee 17
Delaney, D.	Lessee	180	Haun, J. R.	Salary 18
Delisle, Silfrid	do	178	Hendershot, Bros.	Lessee 17
Demers, J., & Co	do	174	Henderson, Bros.	do 172, 17
Dennie, O. P.	do	174	Henderson Lumber Co	. do 17
Deschamps, J. B.	Salary	187	Heney, John	do 17
Dey Bros.	Lessees	178	Hickey, Andrew	do18
Dion, E.	do	174	Hill, John	do 17
Dobie, Arch Dobell, Beckett & Co.	do	170	Hodge, Andrew	do 17
	do 176	-178	Hodgins, J. & C.	do 17
Dobell, H. & Co.	Fines	14	Hood, W.	do 17
	Lessees	178	Howland, Jones & Co.	
do Barb Wire Co	. do	178	Howland, Peleg	do 17
do Bridge Co.	do	178	Howlett, Widow A.	do 18
do Land Co.	do	176	Hull, John	do 18
do Telegraph Co.				Refund 18, 1
Donaldson, Andrews &	: do	170		Lessees 17
Ross	_		Hutchison, William	Lessee
Doran, Wm. M.	do	172	Hydraulic and other re	ents—Appendix A 17
	k Refund	19	do do	Lessees' accounts 17
Co.	-		dodo	Revenue 1
Dufresne, Q., jr., & Bro	Lessee			Contingencies and salary. 18
Duhamel, L.	_ do	150	Irvine, J. C.	Lessee 17
Durocher, C.	SalaryContingencies and salaries	187	Ives, Wm. & J. T.	Purchasers 18
Dunnville Canal Office	Contingencies and salaries	186	Jackson, Henry	Lessee
Dyer, Cornelius	Purchaser	184	Jacques, G. E., & Co.	Lessees
Easton, Hiram	Lessee	180	Jarvis, H.	Lessee 17
Edwardsburg Starcl	h do	172		do 17
Co.			Jolivet, M.	Salary 18
Ethier, B.	do	178	Jones, C. J.	Lessee 17
Expenditure—Canada	p. 172. Details of	17	Julien, Moïse	do 17
Fahey, Edward	Salary	187	Kavanagh, W. M.	Salary 18
Fairgrieve, J. B., & Sor	Refund	_18	Keily, Michael	Lessee 18
Farley, Jas. F.	Contingencies and salary.	188	Kennedy, Philip	do 18
Ferguson, John	Purchaser	184	Kilroe, Michael	do 18
Flack Bros.	Lessees	174	King & Dolan	do 17
Flanagan R.	Contingencies and salary.	186	Kingston & Montrea	
Fortier, J. E.	Salary	189	Forwarding Co.	Refunds 18, 1
Foster, John	Purchaser	184	Kingston Canal Office	Salaries and contingencies 18
Foster, Paul	_ do	184	Kingston Mills Canal	do do 18
Foster, M. J.	Lessee		Office	_
Fournier, J. A.	Salary	187	Kingston, Thomas	Lessee 18
Fox, Albert	Lessee	178	Lachine Canal Office	Salaries and contingencies 18
French, Eusèbe				-Lessees 17
Frothingham, Estat	e do	178	gation Co.	_
of J.	•		Lakefield Lumber Co.	do 18
Frothingham & Worl	k- do	176	Laplank, P.	Fines 1
man		400	Latour, L.	_do 1
Galbraith, T. J.	Contingencies and salary.	186	Lamothe, P.	Lessee
Gault, A. F.	Lessee	174	Larocque, J.	do <u>17</u>
Geddes, W. A. Gibson, Wm.	Fines	15	Lattimore, A.	do 17
Cibert F F	Læssee	1/2	Lattimore, K. F.	do 17
Gilbert, E. E.	do			do 17
Gillespie, Capt. O.	Refund			do 17
Gillespie, J. C. & J.	Lessee			do 17
Giroux, A. P.	Salary	107	Lavender, W.	do 18
Gordon, John	Lessee			Fines
Gordon & McKay	do	1/0	Leoeau, D.	Lessee 18
Gould, Ira, & Son	do 176,	178	Lebœut, J.	Salary 18
Graham, John	do	180	Leprun, G.	Fines 1
Graham, Joseph	Purchaser	184	Leduc, Louis	Lessee
Grand Trunk Railway	Lessee 172,	176	Lee, Edward	do 17
Graybiel, John	do	172	Letebyre, H.	Salary 18
G. N. W. Tele. Co.	C	182	Leggett, J. E.	_ do 18
Grenville Canal Office	Contingencies and salary.	188	Lesperance, Auguste	Lessee 17
Grier, A. J.	Lessee	182	Lerouse D	Fines 1
Haney, S. & J.	Lessees	172	Little, Wm.	Lessee
Hanson, Capt. W.	Fines	14	London and Canadian	1
Hastings, Capt. J. Harbour Commission-	do	14	Loan Co.	do 18
	_		Loney & Campbell	do 17
ers, Montreal	Lessees	176	Longtin, Onésime	do 17
Hardy, R. E.	Lessee	180	Lussier, E.	Fines 1
Harris, G. A.	Refund	20	Lybster Cotton Co.	Lessee 17

	PA	GE.		PA	GE.
Malcolmson, John	Refunds 18,	19	O'Donnell Patrick	Lessee	180
Malthy & King	Lessees	1761	O'Gilvie & Co., A. W.	do	176
Marks James	Lessee	180	O'Keefe. P.	_ do	172
Martel, M. D. S.	Contingencies and salary	187	O'Neill, John	Contingencies and salary.	187
Masson, H. E.	Lessee	182	Ottawa Canal Office	do do	178
Mathieu, P.	Salary Lessee	178	do Canoe Club	do	
Maurice, J. A. May, G.	do	180	Owens, T. P.	Salary	
May, Thomas	do	180	Page & Co., C. J.	Lessee	
May, Thomas Mead, Eli	do	172	Paget, Thos.	do	181
Melamby, Wm.	do	172	Papineau, N.	do	
Meloche, J.	do	176		$\mathbf{z}^{\mathbf{do}}$	178
Merchants' Manufac-	1	170	Paré, Louis	Contingencies and salary.	
turing Co.	do do	1/0	Pariseau, D.	do	
Merrifield, S. Merrick, Henry	do	180	Payne Josiah	do	
Merritton Cotton Co.	do	170	Pease, D. B.	do	
Metzler, Rev. J.	Refund			do	
Metzler, Rev. J. Miller, Wm.	Lessee	180	Pelletier, P.	Salary	187
Milligan, Capt. A.	Fines	14	Permanent Loan Co.	Lessee	
	Lessee			Lessees	
Moody & Son	do	170	Phelps, Calvin	Lessee	
Molson, J., jun.	dο	172	Pillous Harrow & Co	Lessees	170
Montreal—	Salaries and contingencies	196	Pillow, Hersey & Co	do	
Canal Office Cotton Co.	Lessees	174	Poitras, F. X.	Lessee	
Coal & Elevating Co.	do	176	Port Colborne Canal	Contingencies and salaries	
Harbour Commis'rs	do	176	Office	-	
Street Railway Co.	do		Port Dalhousie Canal	do do	186
Transportation Co.	do				100
do	Fines	14	Port Maitland Canal	do do	186
Warehousing Co.	Refund 18	190	Office	do do	186
Morris, W. D	Lessee	180	Office Canal	uo uo	100
Moseley E V & Co		178		Lessee.	170
Muir, A.	Lessee	170	Dock Co.		•
Mulhern, M. M.	Salary	186	Poulin, P.	do 174	-176
Municipal Council of			Powell, Wm.	do	
Iroquois	Lessee	172	Pridham, A.	Contingencies and salary.	
Murphy, D.	Contingencies and salary	188	Quesnel, Jules	do do Salary	100
Murphy, D., & Co.	Refunds	188	Ramsden, J. A.	Lessee	170
Murray Canal Office Musson, P. H.	Contingencies Lessee	170	Rees John F.	do	
McArthur, Donald	Purchaser	184	Refunds	18	
McArthur, Wm.	Salary	188	Reid, J.	Contingencies and salary.	187
McCaffrey, Charles	Lessee	180	Reid, John	Lessee	172
McCloy, Robert	do	180	Reid, G.	Salary	
McCullough, G. W	do	178	Read, Capt. J.	Refund	
McDonald, A.	do	172	Revenue.	Lessee	176
McDonagh, John McDonald, James	do do	174	Co.	Lessee	110
McDonald, Jas., Est.	do			Fines	14
McFarland, D. E.	Contingencies and salary.	186	Richev. W. M.	Contingencies and salary.	188
McFarland & Lemon	Lessees	170	Rickey, George	Lessee	180
McFee, Col.	Lessee	174	Rideau Skating and	do	178
McGlashen, L		172	Curling Club		100
McIntyre, J	Danis 4	$^{178}$	Kiendeau, H	Lessee.	170
McKay, AL. D., & Sons	Refunds	5-19 170	Riordan, J.	Refund1	8.10
McKay, Thos. McKenzie, J.	Fines.	1/0	Roleton & Heaking	Lessees	179
McKinnon, M.	Salary.	189	Rose H. A.	Lessee	173
McLeary & McLean	Lessees.	170	Ross, J. H.	do	
McLennan, H.	Lessee.			do	183
McMillan, R. P.	Salary	187	Rowland, Wm.	do	180
McNaily, T.			Royal Electric Co.	do	170
McNally, T. McNeil, Neil	Lessee.	182	Sandford, F.	do	107
	do			do Lessee	17
McPhee & Co., Alex.	do Lessee			do	17
McPherson & Weir	ASCANDOLIS SALES SALES SALES	178	Scott. Wm. and Alex.	Purchasers	18
McPherson & Weir McRory, P.	do	-10	Shaver Sydney	Lessee	173
McPherson & Weir McRory, P. McRae & Co., J. W.	do	170			_
McPherson & Weir McRory, P. McRae & Co., J. W. Neelon, S.	do do	170	Shaver, Henry	Fines	1.
McPherson & Weir McRory, P. McRae & Co., J. W.	dodododo	170 178 170	Shaver, Henry Shepherd, George	Fines Lessee	18
McPherson & Weir McRory, P. McRae & Co., J. W. Neelon, S. Neville, John Norris & Neelan Norris, James	do	170 178 170 14	Shaver, Henry Shepherd, George Sherwood, A.	FinesLesseedo	18 17
McPherson & Weir McRory, P. McRae & Co., J. W. Neelon, S. Neville, John Norris & Neelan Norris, James O'Callaghan, T.	do do do Fines. Salary.	170 178 170 14 186	Shaver, Henry Shepherd, George Sherwood, A. Simard & Godin	FinesLesseedo	180 173 173
McPherson & Weir McRory, P. McRae & Co., J. W. Neelon, S. Neville, John Norris & Neelan Norris, James	do	170 178 170 14 186 179	Shaver, Henry Shepherd, George Sherwood, A. Simard & Godin Smith. J. B.	FinesLesseedo	180 173 173 170

<del></del>			· · · · · · · · · · · · · · · · · · ·	
	Þ	GE.		PAGE.
Smith, R. C.	Lessee		Towers, Thomas	Lessee 170
	Contingencies and salary	188	Trent Canal	Contingencies 188
Office.	Contingencies und satury	100		Lessees 174
	Lessee	180	Trustees School	do 170
Club.	1100000	100		Lessees 170
South-Fastern Railway	, do	179	Valley field Capping Co	do
Co.	do	170	do Electric	e do 174
	Purchasers	104		3 QO 1/9
Statistics Appendix	A	104	Vices Co.	J. 196
Steel, Robert	Lange	174	Willeneuse T	do
Stephen Comm	Lessee	174	Vancala Total Torrange	Classified 14
Stephen, George Sterling, G.	uo	179	vesseis, 10tai 10nnage	Classified 146
Sterning, G.	do Lessees	1/0	and Nationality of	D 141 141 1 100
Stormont Cotton Co.	Lessees	174	do do	Passed through the canals 138
St. Amour & Co.	Lessee	174	Wallace, George	Lessee 172
	Contingencies and salaries	188		do 174
Office,		.	Walthe, S., & Co.	do 172
St. Catharines	_		Ward, W. H.	do 170
Canal Office			Ward, R., Estate of	
	Lessees			do 178
Water Power Co.	do	170	Paving Co.	
St. Catharines & Wel-		170		do 174
land Canal Gaslight		- 1	Weatherly, S. J.	do 172
Co.	_		Webster, James	Fines 14
St. Catharines & Nia-		170	Webster, W. J.	Lessee 182
gara Central Ry. Co.		- 1	Welland Canal—	
				,
St. Lawrence & Ottawa	Lessees	180	Railway Co.	Lessee 175
Railway Co.			Loan Co.	do 170
St. Louis, J.	Salary Contingencies and salaries	187	Whealey, W. H.	do 180
	Contingencies and salaries	187	White, A. C.	do 180
Office.			White, F. O.	do 175
Sunday Labour		186		- do 170
Swayze, Caleb	Lessee			
Tait, G. & W.	do	176	Whitney, D.	Fines, &c 14
Tanner, A. W.	do	184	Wiggle, Capt. N. J.	Refund 19
		158	Wilson, Chas. E.	Lessee 17
Taylor, John	Lessee			do 170
Taylor, F. H.	Refund	18	Wilson J iun	do
Teakles, B. H.	Travelling expenses	189	Wilson John H	do 17
Temporal Committee.	Travelling expenses	100	Witton, H. B.	Contingencies and salaries 18
St. Andrew's Church	Lessee	180	Wood A	Lessee
Tett, J. B. and B.	11108ACC.	180	Wood J & C H	Lessees 17-
	Lessee	170	Wood W D & 4 C	
Tipton, T. L. M.	Contingencies and salary	190	Wood & Green	do
	Contingencies and salary	760	Wright & Duncan	do
	Lessees			Refunds 18-1
rotonio raper co.	LICENCES	1/4	i roung, n. A.	iverunds

# TWENTY-FOURTH ANNUAL REPORT

OF THE

# DEPARTMENT OF MARINE

FOR THE

# FISCAL YEAR ENDED 30TH JUNE

1891

PRINTED BY ORDER OF PARLIAMENT



## OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY.

1892.

[No. 10-1891.] Price 15 cents.

To His Excellency the Right Honourable Lord Stanley of Preston, Governor General of Canada, &c., &c.

## MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit herewith, for the information of Your Excellency and the Legislature of Canada, the Twenty-Fourth Annual Report of the Department of Marine.

I have the honour to be,

Your Excellency's most obedient servant,

CHARLES H. TUPPER,

Minister of Marine and Fisheries.

DEPARTMENT OF MARINE, OTTAWA, 31st December, 1891.

# CONTENTS.

D b-	with J. L. Minster	PAG
	mitted by Minister	
Report of t	he Deputy Minister	
4 ' 1 · 3T	SUBJECTS EMBRACED IN DEPUTY MINISTER'S REPORT.	
	vigation in Ontario	
• .	ce, Quebec	
do	Nova Scotia	
do	New Brunswick	
	umbia Lighthouse Division	
-	Beacons, British Columbia	
	let Resurvey	
	intaining Lighthouses, &c., and Dominion Steamers	
	y	
_	rade, Law relating to	
	ence <sub>.</sub>	
Dominion S	Steamers	
do		
do		
do		
do	"Lansdowne"	
do	"Stanley"	
do	"Sir James Douglas"	
do	" Quadra "	
do	" Bayfield "	
do	" Alert "	
Deck Load		
Fog-alarms	Quebec	
do	Nova Scotia	
do	British Columbia	
Fraser Riv	er, Improvements in Navigation of	
	Quebec Division	
	Bay Survey	
	Police	
	Iasters	
	ents proposed in British Columbia	
	ail Service	
Inspection	of Shipments of Live Stock	
	Service	
	ers, changes of	
	of Montreal, Determination of	
	3	
Tive Creek	, Inspection of Shipments	
TIME DOOCK	, the provious of outhing the second	

Legislation	•		106
			70
_			72
•		s, Foreign Sea-going	81
do	do	Inland and Coasting	81
		and Tonnage of Vessels	87
•• •		and Tomage of Vessels	104
		Quebec Division	15
		sion	20
Nova Scotia Ligh New Brunswick	do	sion	34
		•	8
Ontario	do		48
		Domoural of	77
		Removal of	85
<del>-</del>	•	f, Inside Service	85
do	do	Outside do	89 39
		ouse Division	
			105
			15
<del>-</del>			12
do	-		16
do		otia	21
do		ınswick	34
$\mathbf{do}$		dward Island	. 39
do		Columbia	44
			75
		B	63
Signal Service			77
		rtificates to Engineers	78
Tidal Observation	s		83
Wrecks and Casu	alties		83
•		APPENDICES.	
		port on	146
		Statement of	109
		t on	144
The second secon	_	perintendent, Quebec	158
	•	of	172
Meteorological Se	rvice, Repo	rt on	112
Magnetic Observe			126
Masters and Mate	es, Report o	of Chairman Board of Examiners	141
Revenue of Depar	rtment, Sta	tement of	110
		atement of	168
		ent of	111
		t of Chairman of Board	138
			147
		ection Act and Regulations	162

# REPORT

OF THE

# DEPUTY MINISTER.

To the Honourable

CHARLES H. TUPPER.

Minister of Marine and Fisheries.

SIR,—I have the honour to report on the transactions of this Department for the fiscal year ended the 30th June last, and to give an account of a considerable portion of the business up to 1st December, 1891.

A supplement will be issued to this report, comprising returns from the Chairmen of the Boards of Steamboat Inspection and of Examiners of Masters and Mates; the reports of the Toronto, Belleville, Montreal, Quebec, Three Rivers, Pictou and North Sydney Harbour Commissioners, the Pilotage Authorities, the Harbour Masters, the Port Wardens and the Harbour Police of Quebec, together with statements of wrecks and casualties.

The total amount expended on the various branches of the public service administered by this Department, including the salaries of the Established Staff, during the fiscal year ended 30th June last was \$874,132.76, being an increase of expenditure over that of the previous year of \$66,948.88. This increase is largely due to the outlay for the new steamer "Quadra" built for the British Columbia service. The total amount voted by Parliament was \$938,350.10, which amount includes the department salaries. It will be seen that during the last fiscal year the expenditure was \$63,983.59 less than the amount appropriated by Parliament.

The whole number of persons engaged in the outside service of the Department at the date of this report is 1,434.

During the past fiscal year the expenditure for Lighthouse and Coast Service amounted to \$492,196.99, including construction, while for the previous year it amounted to \$466,155.09, showing an increase of expenditure for the past fiscal year of \$26,041.90. The appropriation by Parliament for Lighthouse and Coast Service was \$516,833.80. It will thus be seen that the expenditure for this service was \$24,636.81 less than the appropriation.

#### LIGHTHOUSE SERVICE.

The lighthouse service of the Dominion is divided as follows, viz.: The Ontario Division, embracing all lights from Montreal westward to the North-West Territories; the Quebec Division, extending below Montreal and including the River and Gulfof St. Lawrence and the Strait of Belle-Isle; the Nova Scotia Division including

St. Paul's Island, Cape Breton, Sable Island and Cape Race, Newfoundland; the New Brunswick Division, the Prince Edward Island Division and the British Columbia Division, each including the lights within the provincial boundaries. The total number of light stations in the Dominion on the 1st of December, 1891, was 605 and of lights shown, 710; the number of steam fog-whistles and foghorns, 54; the number of light-keepers and engineers of fog-whistles and other assistants, with crews of lightships, was 670.

The following is the number of lights shown, of tog-whistles and fog-horns in the several Provinces of the Dominion on the 31st of December of each year, from 1886 to 1891 inclusive.

These numbers include the light stations on the coast of Newfoundland maintained by the Dominion.

,	Dominion.	•				•
			Light Stations.	Light- Houses.	Fog- Whistles.	Fog-horns.
31st	December,	1868	198	227	2	
	do	1869	219	233	2	
	do	1870	240	<b>27</b> 8	4	
	do	1871	264	297	8	
	do	1872	280	314	13	
	do	1873	316	363	17	••••
	do	1874	342	384	18	
	do	1875	377	444	22	
	do	1876	407	<b>48</b> 8	24	• • • • • •
	do	1877	416	<b>50</b> 9	<b>25</b>	2
	do	1878	427	<b>51</b> 8	<b>25</b>	4
	do	1879	443	542	<b>2</b> 3	6
	do	1880	452	551	<b>22</b>	7
	do	1881	462	<b>55</b> 3	<b>2</b> 3	9
	do	1882	470	562	23	9
	do	1883	484	<b>57</b> 8	23	9
	do	1884	507	597	23	10
	do .	1885	. 526	617	<b>2</b> 3	12
	do	1886	534	625	<b>2</b> 3	16
	do	1887	561	658	23	24
	do	1888	<b>5</b> 69	664	<b>2</b> 3	27
	дo	1889	<b>57</b> 9	675	24	29
	do	1890	. 599	705	<b>2</b> 3	32
	do	1891	605	710	23	31
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#### ONTARIO LIGHTHOUSE DIVISION.

This division includes the lighthouses and lightships in that part of the Province of Quebec lying west of Montreal, all the lights in the Province of Ontario, embracing the lights on the Ottawa River, the St. Lawrence River above Montreal, the great lakes, and some of the smaller inland lakes, as well as a lighthouse and lightship on Lake Winnipeg in the Province of Manitoba.

The number of lighthouses, lighted-beacons and lightships maintained by the Dominion in the Ontario Division, inclusive of the two in Manitoba, is 203. There are also 425 buoys and 20 beacons.

The number of lightkeepers in this division, paid directly by the Government, is 158, but in several cases assistants are employed by keepers and paid by them out of the allowance made by the Government for that purpose.

The lights in this Division, with the exception of those on the Bay of Quinté, the Ottawa River and small lakes, were inspected during the months of July and August by Mr. Patrick Harty, Superintendent of Lights, and supplied with the necessary stores; the steamer "Canada" having been chartered for that purpose for the sum of \$3,200.

#### NEW AIDS TO NAVIGATION.

#### Peninsula Harbour.

The light buildings at Peninsula Harbour, in Lake Superior, to which reference was made in last year's report, were completed according to contract during the past season, and the light was put in operation for the first time on the 1st August last.

The main building, which stands on the south end of the island opposite the peninsula at the entrance to the harbour, consists of a wooden tower, square in plan, with a dwelling attached, the tower surmounted by an iron lantern. The woodwork is painted white and the lantern red. The height of the building from its base to the vane on the lantern, is 56 feet.

From the lantern is shown a revolving white or bright catoptric light, the flashes attaining their greatest brilliancy every 30 seconds. This light, being elevated 105 feet above the level of the lake, should be visible in clear weather 16 miles from all points of approach by water.

Mr. Charles Mickler's contract price for this work was \$3,165, and the total cost of establishing the light, including lantern and illuminating apparatus, was \$5,340.

# East End of Long Point, Lake Erie.

The fog building at this light station was erected during the past season by Messrs. McCall and Mason, of St. Williams, under the contract allotted to them last year, but the alarm has not yet been put in operation, as delay occurred in receiving the fog alarm machinery, the Pictou Iron Foundry and Manufacturing Company having failed to deliver the same by the date specified. Two horns and machines, and two boilers complete are now near the station ready to be conveyed there and set up as soon as navigation opens next spring.

#### St. Anicet Shoal.

As proposed last year the lighthouse at Port Lewis, on the south shore of Lake St. Francis, in the County of Huntingdon, P.Q., was removed to a pier built on the north-west point of the bar, which extends out, on the south side of the channel, into Lake St. Francis, opposite the village of St. Anicet. The pier consists of a substructure built of timber cribwork, surmounted by a steel cylinder filled with

stone. It is sunk in 9 feet water on the south edge of the steamboat channel, and is distant 5,700 feet N.  $\frac{1}{2}$  E. from St. Anicet parish church, and about two miles from the old position of the lighthouse. The tower which was removed is a square wooden building painted white, surmounted by an iron lantern painted red. The part of the steel cylinder above water is painted brown, and the height of the tower from the top of the pier to the vane on the lantern is 31 feet.

The light, which was put in operation upon the opening of navigation last spring, is fixed white, catoptric, elevated 31 feet above the summer level of the lake, and visible, in clear weather, 10 miles from all points of approach. The lowest tender received for doing this work was \$2,600. As this was considered excessive the work was done by the Department under the superintendence of Mr. Noble, Foreman of Works, at a total cost of \$1,914.37, but modifications were made from the plans on which tenders were asked by substituting iron and stone for a wooden pier, which greatly enhanced the cost and also improved the durability of the structure.

# Murray Canal and Approaches.

It was stated in last year's report that several improvements in aids to navigation would be required in the Bay of Quinté and in Presqu'Ile Bay, in connection with the opening of the Murray Canal for traffic. During the past season these improvements have been carried into effect. They consist of the following:—

Three new range light buildings on piers were established in Presqu'Ile Bay, and were put in operation on the 10th September last. They were erected under contract by Mr. Walter Alford, of Belleville, the contract price being \$5,995. One of these lights is located 1,100 feet from Brighton wharf. The octagonal pier stands in 14 feet water. The tower, previously standing on a crib on Calf Pasture Shoal was removed on to this crib and the Calf Pasture Shoal light discontinued, the cribwork pier, however, being allowed to remain on Calf Pasture Shoal as a day beacon. The light shown from the tower in its new position is fixed white, elevated 28 feet above the water, and visible 6 miles in the line of range.

The second light of this system stands on a pier in 7 feet water, 1,440 feet from Brighton wharf. The pier is surmounted by a square wooden tower, 47 feet high, painted white. The light is fixed red, elevated 45 feet above the water, and visible 6 miles. In conjunction with the light last described, this light forms a range to lead in through the middle of the dredged channel, from Lake Ontario, past Salt Point. In conjunction with that next to be described, it leads to and from the western end of the canal.

The third light is on a pier in 15 feet water, 3,920 feet from Brighton wharf. The tower is a square wooden building, painted white, and 30 feet high. The pier is octagonal. The light is fixed white, elevated 29 feet above the water, and visible 3 miles. It forms a range with the light last described, and also shows a turning point in the dredged channel.

In consequence of the establishment of these range lights, the back range light at Salt Point, which showed the alignment through the old channel into Presqu'Ile Bay, was discontinued.

In addition to the eight spar buoys set out last season, one spar buoy was placed at the Bay of Quinté end of the canal during the past summer, and all the buoys in this neighbourhood have been placed under the control of the superintendent of the Murray Canal, to ensure prompt and efficient supervision.

In addition to these improvements, carried out by the Department of Marine, six lights were established last year on the pier-heads and bridges of the canal, by the Department of Railways and Canals, which are regularly maintained by the super-intendent of the canal, as follows:—

- 1. A fixed red light, elevated 19 feet above the water, on a square, pyramidal, open frame, 30 feet from the end of the north pier, at the east entrance to the canal.
- 2. A light, elevated 35 feet above the water, placed over the swing pier of the Carrying-place highway bridge, which is 4,725 feet up the canal from the light on the east pier-head. The lantern is so arranged that when the swing is open for vessels a white light is shown over the southern edge of the swing pier, and when closed a red light is shown directly over the middle of the pier.
- 3. A similar light to that last described, but 20 feet above the water, on the swing pier of the Northern Ontario Railway bridge, which is 1,500 feet westwardly from the Carrying place bridge.
- 4. A similar light, 35 feet above the water, on the Smithfield bridge, which crosses the canal near the middle of its length, or 6,600 feet westwardly from the railway bridge.
- 5. A similar light, 35 feet above the water, on Lovitt's bridge, which crosses the canal 6,490 feet from its western extremity, or 7,700 feet westerly from the last described.
- 6. A fixed red light, visible 4 miles, elevated 14 feet above the water, standing over a square, pyramidal open frame, 30 feet from the outer end of the north pier, at the west entrance to the canal.

# Approaches to Kingston Harbour.

Urgent representations have been made to this Department for some years past of the necessity for improving the approaches to Kingston harbour, so as to accomomdate the heavy draught vessels entering that port, especially late in the autumn, with cargoes of grain, and during the past season the Chief Engineer of the Department made a special examination and report of desirable improvements. As a part of the contemplated improvements it is proposed during the coming season to erect range lights on Barriefield Common, to lead into the freight wharves, clear of all shoals, and tenders will shortly be invited for the construction of skeleton iron towers for this purpose.

Three isolated shoals in the harbour which have heretofore been marked by small spar buoys, will in future have anchored on them large, square platform buoys, surmounted by conspicuous framework beacons.

The desirability of establishing a steam fog-horn at Nine Mile Point is also under consideration. In the meantime the fog-bell was been removed to the most prominent position on the point and improved in every possible way, at a cost of \$69.21.

## Dickinson's Landing.

A small lighthouse at Dickinson's Landing, at the head of the Cornwall Canal, which had previously been maintained by the Department of Railways and Canals, was, at the suggestion of the Auditor General, transferred to the charge of this Department on the 1st July, 1890. Inspection of the existing lighthouse tower indicated that it was very much out of repair, and as it was a small and inconvenient building, it was decided to replace it by a new tower. The work was carried out under contract by Mr. Wm. H. Miller of Moulinette, whose price for the new tower was \$253. The work was completed on the 5th October last, the total cost being \$326.33.

The new tower, which stands on the pier-head on the south side of the west entrance to the Cornwall Canal, is a square wooden building, painted white, standing 22 feet high above the pier. The light is fixed white, dioptric, and leads to the entrance to the canal from the river above.

## Limekiln Crossing.

The temporary lights maintained by this Department below the dredged channel at the Limeklin Crossing, on the Detroit River, opposite Amherstburg railway station, in the South Riding of Essex, Ontario, were replaced last year by two permanent structures erected in the alignment of the centre of the 440 foot wide dredged channel. The buildings, consisting of iron skeleton towers, surmounted by metal lanterns, were supplied by the Russell Wheel and Foundry Company of Detroit, Michigan. They stand upon cribwork piers erected under the superintendence of the Engineer of the United States Government in charge of the dredging operations at the Crossing. This arrangement enabled the Department to have the piers built at very little cost, and under adequate supervision. The iron buildings were procured in the United States, under authority of Order in Council, because at that time no reasonable offer for such buildings could be procured in Canada. Since then however enquiries have been made of Iron Works in the Dominion for skeleton iron structures, and it is probable that any required in future can be made in this country at reasonable cost,

The total cost of doing this work, including piers, towers, lanterns, illuminating apparatus and fitting up was \$1,861.

#### Wiarton Breakwater.

For the sake of facilitating approach to the new breakwater at Wiarton, at the head of Colpoy's Bay, Georgian Bay, in the North Riding of Bruce, Ontario, the Department has undertaken to maintain a pole light at the head of the Government breakwater. This light, which replaces one previously maintained by the town, is shown from a lens lantern, hoisted to the top of a pole 15 feet high, which has a white shed at the base. The light is fixed red, elevated 19 feet above the level of the water, and should be visible 6 miles from all points of approach.

# PRINCIPAL REPAIRS AT EXISTING STATIONS.

## Colchester Reef.

The cribwork protection at Colchester Reef light station, begun during the past season, as described in the last annual report, was finished under Mr. Noble's direc-

tions. The cribwork now completely surrounds the iron foundation of the light-house, and the total cost of building it has been \$9,560.42.

## Pointe aux Anglais.

The lighthouse pier at Point aux Anglais station on the Ottawa River, having become unsafe through the rottenness of the timbers, it is necessary to replace it by a new, and tenders for the necessary work have been invited.

## Bois Blanc Range Lights.

During the past season one of the small range light towers at the head of Bois Blanc Island, in the Detroit River, was destroyed by fire, and the other one being very much dilapidated it has been decided to replace them by iron structures. These two iron skeleton towers have been built by the Canadian Bridge and Iron Company of Montreal, their contract price for the same being \$573. It is expected that they will be erected in position before the opening of navigation this season.

## Mississauga Strait.

Complaints having reached the Department that the fog-horn at Mississauga Strait light station, at the west end of Great Manitoulin Island, Lake Huron, was not giving satisfaction, the Department replaced the horn by a steam whistle on the 15th July last. The new alarm is a whistle of the description commonly known as a "Wildcat," that is, it is fitted with a piston that changes the tone of the blast, which, beginning low, rises to a screech, and again sinks to a low note at the end. The blasts are of 8 seconds' duration, with intervals of 2 minutes between them. Vessel masters report the change to give complete satisfaction. The total cost of making this change was \$111.

# Rondeau.

The main light at Rondeau was a high, open-framed wooden tower, standing on the outer extremity of the east breakwater pier. In consequence of the rotting away of the pier timbers it became necessary either to remove or thoroughly renew the outer end of the breakwater pier. Under these circumstances it was determined to improve the range by making the inner range light the main lake light and the higher of the two, and to remove what had previously been the back range light to the position formerly occupied by the main light.

As the work required included extensive repairs that could not be specified until some progress with it had been made, it was impossible to let the repairs by contract, and they were consequently carried out under the direction of Mr. W. H. Noble, Foreman of Works.

On the 1st October last the lights in their new positions were shown for the first time, and are now as follows:—

The outer or front range light tower is the same building which was previously the back range light tower. It stands upon a cribwork block, built upon the outer end of the east breakwater pier, and is a square, wooden, open framework painted white, 18 feet high from the top of the block to the vane on the lantern. The light is fixed white, catoptric, elevated 34 feet above the level of the lake, and visible 11 miles in and over a small arc on each side of the alignment.

The inner or back range and main tower is on the same eastern breakwater 780 feet N. by E.  $\frac{1}{2}$  E. from the front range light. The tower has been completely rebuilt, the old metal lantern and illuminating apparatus only being utilized.

The new tower is a wooden octagonal structure painted white, standing on a masonry steel-faced cylindrical base, built up from the pier foundation, and painted brown.

The light is as previously a revolving light, showing alternate red and white flashes every  $1\frac{1}{2}$  minutes. It is elevated 70 feet above the level of the lake, and is visible 14 miles from all points of approach by water. The total cost of making this change was \$2,178.15.

# Thames River Light Station.

The pier at this station, which is a pile structure, was put in thorough repair at a cost of \$172.56.

## Gull Island, Lake Ontario.

The tower at this station stands on a shoal in Lake Ontario, exposed to the action of the waves, and is surrounded by cribwork piers. During the past season it has been necessary to make extensive repairs to the woodwork of these piers, and one side was extended 30 feet to give better shelter to the lightkeeper's boat. This work was carried out under Mr. Noble's superintendence, at a total cost of \$980.93.

# Burlington Beach main light.

The main light at Burlington Beach, which is a lake coast light, as well as a guide to Hamilton, was improved during the past season by replacing the old lantern and illuminating apparatus by new ones of modern pattern. The total cost of making this change was \$1,290.71.

### Frenchman's Bay.

The outer end of the pier at this station, on which the lighthouse stands, has been repaired and the tower levelled up, at a cost of \$115.77.

#### Point Pleasant.

The dwelling house was repaired and a new pump furnished, at a cost of \$138.52.

#### Nottawasaga Island.

A new platform was built from the dwelling to the tower, at a cost for materials of \$18.74, the keeper doing the work.

### Killarney.

A new kitchen was added to the dwelling house at a cost of \$175.

#### Boyd Island.

The keeper was allowed \$80 for a kitchen addition to the dwelling.

#### Cape Robert.

The keeper built a pier at this station at his own expense, but the Department allowed him \$24 for planks to cover it.

# Lake des Chenes, Ottawa River.

The pier under the tower was repaired at a cost of \$28.50.

In addition to the above, necessary repairs and painting were carried on by the light keepers at several stations.

# QUEBEC LIGHTHOUSE DIVISION.

This division comprises the aids to navigation below Montreal, on the Rivers St. Lawrence and Richelieu, and Lakes Memphremagog and St. John, as well as all the lighthouses, light ships, steam fog-whistles, gas, bell and other buoys and beacons in the River and Gulf of St. Lawrence, within the limits of the Province of Quebec, on the north-west coast of Newfoundland and the Labrador coast. This division is under the charge of Mr. J. U. Gregory, Agent of the Department at Quebec, who also has under his superintendence the Dominion steamers "Alert" and "Druid."

Besides performing the duties of Agent of the Department of Marine, and such work as may be required at the port of Quebec by the Department of Fisheries, Mr. Gregory is also Superintendent of River Police and Shipping Master for the port of Quebec, attends to the requirements of the British Board of Trade, in connection with distressed scamen, shipwrecks, and casualties at sea, and acts as receiver of wrecks.

His staff consists of Messrs. L. A. Blanchet, Accountant and Deputy Shipping Master, G. H. O'Farrell and A. Hamel, clerks, N. Fitzhenry, Store-keeper and wharfinger. Captain E. Larochelle, Inspector of Lights and Pilot, is also attached to the Agency. The workshops are under the control of C. Vezina, master shipsmith and T. Routhier, master carpenter.

There are in this division 151 fixed and revolving lights, 10 lightships, 3 of which are supplied with steam fog-whistles; 8 fog guns, 2 explosive bomb stations, and 11 steam fog-horns; 116 buoys, 8 of which are gas buoys; 59 beacons and 10 life-saving canoes for service in the ice.

The steamer "Druid" during the past year supplied the lights between Quebec and Montreal, and attended to the gas and other buoys. She also attended lights between Quebec and Father Point.

The steamer "Alert" supplied all the lights in the lower part of the river St. Lawrence, the Gulf, Baie des Chaleurs, Strait of Belle Isle, Labrador, and north-west coast of Newfoundland.

All the lights, fog-alarms, &c., in this division, were inspected by Captain Larochelle, Inspector of Lights. Captain Demers, of the "Druid" also inspected some of the stations when on duty.

#### NEW LIGHTS AND FOG-ALARMS.

#### Bersimis.

On the 24th August last two range lights on poles were put in operation at the mouth of the Bersimis River, in the county of Saguenay, on the north shore of the River St. Lawrence, below Quebec.

Both lights are located on a tongue of sand running out westwardly from the Hudson Bay Company's post on the north side of the mouth of the river, and forming

part of the Betsiamits Indian Reserve, and both are fixed white lights, shown from reflector lanterns hoisted on masts.

They should be visible for 5 miles in and over a small arc on each side of the alignment.

The outer range mast is located on the shore line, as near high water mark as it was safe to erect it. The light is elevated 30 feet above high water mark. The mast is 20 feet high, and has attached to it a diamond-shaped slatted beacon, 10 feet square facing the channel to make it more conspicuous as a day mark. The whole is painted white.

The back range mast is located 360 feet north-west 3-8 north (N. 65° W. true) from the front one. The light is elevated 40 feet above high water mark. The mast is similar to that of the front one, and is 30 feet high.

This range is intended to show the best water into the river, over the sand bar, which extends over a mile outside Bersimis Point, and carries four feet at low water at the shallowest point. Inside Bersimis Point the water is much better.

The work in connection with the erection of these poles was done by the St. Lawrence Lumber Company, and the total expense in connection with the establishment of the station has been \$197.

## Cape Chatte.

On the 15th August last an explosive fog signal was established at Cape Chatte light station, on the south shore of the Gulf, consisting of cotton powder cartridges, exploded at a height of about 100 feet above the water, from a derrick erected on the edge of the cliff, east of the lighthouse.

One cartridge is fired every 20 minutes.

The cost of establishment of this firing apparatus was \$180.43, and the increase of the keeper's salary in consideration of the extra work and increased risk is \$200 per annum. This improvement was made in accordance with the joint recommendation of Mr. Anderson and Captain Smith, R.N.R.

# Cape Magdalen.

As another part of the same scheme of improvement it has been decided to establish a steam fog-whistle at the Cape Magdalen light station, on the south shore of the Gulf of St. Lawrence. The necessary plans and specifications have been prepared, and tenders will be invited during the present winter for the completion of the work during the coming summer.

# EXTENSIVE REPAIRS OR IMPROVEMENTS.

#### Pointe aux Citrouilles.

For many years past a temporary pole light has been maintained at Pointe aux Citrouilles, in the County of Champlain, on the north shore of the River St. Lawrence between Quebec and Montreal. This light having proved very useful it has been decided to continue it permanently. A site has in consequence been purchased and plans and specifications have been prepared for the erection of a small

tower on a pier, and tenders will be invited during the present winter for the necessary building.

## Cape Madeleine.

In consequence of the encroachment of the river on the site of the front range light tower of the lower range at Cape Madeleine, in the County of Champlain, on the north shore of the River St. Lawrence, between Quebec and Montreal, it was necessary to remove the building, and advantage was taken of this to improve the range by increasing the distance between the two towers, and also by increasing the height of both buildings. The front range light has been moved 290 feet N. 60° 30" E. from its former position, and now stands 230 feet back from the river bank, at a point 21 miles below Cape Madeleine parish church. The building consists of a wooden tower, square in plan, surmounted by a polygonal lantern, and is 20 feet high from its base to the vane on the lantern, the whole painted white. The light is fixed white, elevated 44 feet above the level of the river, and should be visible 6 miles in the line of range. The illuminating apparatus is catoptric. The back range tower is distant 536 feet N. 60° 30" E. from the front one, and shows a similar light, elevated 54 feet above the water, which should also be visible 6 miles. The building is 36 feet high. The two lights in range lead into the upper entrance to the channel north of Provencher Shoal. The work involved in these improvements was executed under contract by Mr. F. A. Verrette of Three Rivers, whose contract price was \$530.

# Trembles Shoal Lightships.

During the past season the temporary lightships established on Trembles Shoal, in the River St. Lawrence above Quebec, between Ste. Croix and St. Antoine, were again maintained, and having proved of great assistance, particularly to deep draft vessels, it is now contemplated to mark the points permanently by gas buoys similar to those in the river below Quebec. It is proposed to build these buoys in Canada, and plans have been prepared and tenders invited therefor.

### Father Point.

During the winter of 1890-91 new illuminating apparatus was provided for Father Point light station, on the south shore of the River St. Lawrence below Quebec, and from the opening of navigation last year the character of the light was changed from fixed white to revolving white, with flashes attaining their greatest brilliancy every 20 seconds. The illuminating apparatus is catoptric. The light is elevated 48 feet above high water mark, and should be visible from all points seaward. This improvement was made as part of the scheme recommended by Messrs. Anderson and Smith, as a result of their inspection in 1890.

#### Point Ste. Anne.

In conformity with the same report the steam fog horn at Point Ste. Anne was discontinued on the opening of navigation last year, and no complaints have reached the Department in consequence of this removal.

## Cape Chatte.

Very favourable reports have, however, been received respecting the utility of the explosive signals established at Cape Chatte, in the same neighbourhood, and the Department is convinced that this change has been in the interests of navigation.

## Cape Gaspé.

On the 7th November, 1890, the lighthouse and keeper's dwelling at Cape Gaspé were destroyed by fire, and in May last tenders were invited for the erection of a new building. Only one party tendered, Mr. Adolphus Rousseau, of Williamstown, Ont., his price being \$2,980, but on being called upon to complete the contract, he refused to do so, and it became necessary to invite tenders anew. These tenders were received on the 5th September last, and the lowest, that of Mr. E. T. Nesbitt of Quebec, for \$3,480, has been accepted, the contract to be completed by the 1st August next..

### Point Rich.

During the past season the opinions of masters of vessels using the Strait of Belle Isle were obtained respecting the advisability of re-erecting the lighthouse destroyed by fire on Point Rich, and a majority of them being in favour of retaining the light in its old position, plans have been prepared and tenders will be invited for completing a new lighthouse at that point as soon as possible after navigation opens next spring. The light will be a powerful flashing light.

### Crane Island.

On the opening of navigation last year the light on the outer extremity of the wharf at Crane Island, in the River St. Lawrence below Quebec, was improved by changing its character from fixed to occulting white, the light being obscured for 4 seconds every  $\frac{1}{2}$  minute by means of rotating screens. The illuminating apparatus is dioptric, of the 6th order. The light is elevated 48 feet above high water mark, and is visible 10 miles from all points of approach by water.

#### Belle Isle.

On the 15th August last the fog alarm at Belle Isle light station was changed, the fog gun formerly fired every half hour being replaced by rocket signals or cotton powder bombs, fired at intervals of 20 minutes, from a point near the upper lighthouse, at a height of about 400 feet above the sea, and thrown out to a distance of about 500 feet in a southerly direction, exploding high in the air.

It is expected that these signals, in consequence of the sharpness of the report as well as from the fact that they are thrown out well over the water before exploding, will be audible much farther that the gun, besides which they can be fired more frequently than guns without any increase of expenditure.

# Lake St. Peter Lightships.

During the past winter the Lake St. Peter lightships were improved by removing from them their masts with the balls which were used for day marks, and by building on them amidships octagonal towers surmounted by the lanterns which previously stood on the decks. This change has had the effect of raising the lights higher above the water and of allowing them to be seen without interruption from all points of approach. The towers on the deck are painted white, and the lanterns white with red roofs. The light in each case is now elevated 22 feet above the water; the illuminating apparatus is a dioptric lens of small size, hung on gimbals,

and showing a fixed bright light, which should be visible 9 miles. The cost of this change was \$550.

In addition to the above work small ordinary repairs were made and painting was done at such stations as required them.

### CHANGES IN BEACONS AND BUOYS.

#### Platon.

Two day beacons were erected last year to mark the line of the middle of the ship channel recently surveyed, at the Barre à Boulard, in the Richelieu Rapids, above Quebec.

The front beacon stands 2470 feet N 41° 45' E. from the Platon back range light tower on and near the edge of the cliff.

It shows a rectangular face up stream consisting of slatwork 18 feet high by 13 feet wide, supported on two posts 50 feet high. It is painted white with a black vertical stripe  $3\frac{1}{2}$  feet wide down the middle. The top is elevated 170 feet above high water.

The back beacon is located 2770 feet E. N.-E.  $\frac{1}{4}$  E. from the front one, on high land, and shows against the sky. It is of the same type and size as, and painted similarly to the front one, but stands on posts 37 feet high. Its top is elevated 234 feet above high water.

This work was done by Mr. James Howden, Superintendent of Public Works, in charge of the dredging, at an expense to the Department of \$377.

# Washsheecootai Bay.

During the past summer the master of the Dominion steamer "La Canadienne" took advantage of a visit to Washsheecootai Bay, on the north shore of the Gulf of St. Lawrence, to erect a white conical beacon, 25 feet high, on the island at the head of the Bay, which beacon, bearing North-east, leads into the Bay clear of all shoals, and to westward of the dangerous rock on the eastern side of the Bay. At the same time he replaced the beacon on Beacon Island and built a similar beacon on Anicon Island, in the same locality.

## Beauport Shoal.

During the past season a red wooden can buoy has been placed on Beauport Shoal to mark its outer extremity, and a similar buoy has been moored at Chateau kicher in the channel north of the Island of Orleans. These buoys are in addition to the number previously maintained by the Quebec Agency.

## Winter Buoys.

Eight large spar buoys were provided last season to replace the most important can buoys in the St. Lawrence below Quebec at the close of navigation, so that they might be available to guide the last vessels out when the other buoys are removed on account of the ice, the intention being to leave them out all winter, when, if lost, ther comparatively small cost would make the expense only trifling.

These buoys were placed as follows:-

Crane Island, Little Channel-1 red and 1 white.

Crane Island, Flats-1 red and black horizontal bands.

Channel Patch-1 checkered black and white.

West End Traverse Middle Ground-1 red.

Pointe St. Roch-1 black.

Pilgrim's Shoal-1 black.

Barrett's Ledge North East Rock-1 black and white checkered.

During the past autumn these buoys rendered good service, amply repaying the cost and risk of their establishment. The Pilot of the Allan steamer "Newfoundland" reported them of great service to him in taking that vessel out. They were also used by the steamer which went to Anticosti on the 5th December last to take off the crew of the wrecked Norwegian barque "Anna", as well as by the American steam tug "Pentagoet."

## Gas Buoy Lights Changed.

In continuation of the policy of improving the character of the lights wherever it can be done without undue expense, the character of the gas lights shown from three buoys in the river St. Lawrence, below Quebec, was changed on the 25th August last from fixed white to occulting white, the period of occultation being about six seconds. The buoys so changed were those on Barrett Ledge, Pilgrim Shoal and the Channel Patch, and the changes were made for the purpose of making the character of the lights more distinctive, and to prevent confusion with anchorlights of small coasters.

During the season all the gas buoys were served by the ss. "Druid," and were found to require considerable attention. Those in the more frequented channels seem to be specially subject to having the light extinguished by collision with small vessels.

## NOVA SCOTIA LIGHTHOUSE DIVISION.

This division, in charge of Mr. H. W. Johnston, Agent of the Department for the Province, includes the charge of 175 lighthouses, exhibiting 188 lights, 1 light vessel, 16 steam fog-alarms, 1 signal bomb station, 14 hand fog-alarms, 2 fog-bells, 13 automatic whistling buoys, 9 iron bell-buoys, 110 iron can buoys, about 660 spar buoys and other small buoys, 8 stationary beacons, 15 life-boat stations, 3 humane establishments, and 4 signal stations. The Dominion steamer "Newfield," is also under the control of this Agency.

The lighthouses, fog-alarms, and life-saving stations were inspected by Mr. C. A. Hutchins, Superintendent of Lights for the Nova Scotia district. Mr. Warner, Engineer of the "Newfield," also examined the boilers and machinery, when opportunity offered.

### PROPOSED NEW LIGHTS.

The two new lights authorized for this year have not yet been erected for reasons as follows:—

### Dover-West of Halifax.

It was at first arranged to build a lighthouse on Meaghar's Island, but owing to difficulties arising in acquiring a title to the land, another suitable site was looked for. For this purpose the Superintendent of Lights visited the locality and consulted with the residents interested in shipping. The result was that the southern end of Callaghan's Island was selected as affording a more suitable site than that of Meaghar's Island, inasmuch as it afforded a direct lead into Dover Harbour, and was more suitable as a harbour light. It was finally settled to build there, and the land was secured. Subsequently a petition was received at Ottawa against this selection and in favour of Meaghar's Island. After further consideration the officers of this Department agreed that Callaghan's Island was the more suitable place, and ultimately Mr. Martin Fader, of Spry Bay, was awarded a contract for erecting a lighthouse in that place for \$1,200. The work will be proceeded with as early next spring as the weather will permit.

### Candlebox Island.

The erection of a lighthouse, as authorized has been deferred principally in consequence of the difference of opinion held by persons in the vicinity as to whether Ellenwood or Candlebox Island afforded the better site for the erection of a light to aid vessels navigating Schooner Passage or Ellenwood Passage. It was finally decided by the officers of this Department that Candlebox Island would be preferable inasmuch as it afforded a straight lead through Schooner Passage from the southward, and is visible to vessels approaching either the northern or southern entrance. Tenders being called for, it was considered that the lowest tender received was too high. It has therefore been decided that the work of erecting the necessary buildings should be proceeded with as early as possible next spring, by day's work, under the superintendence of a competent foreman appointed by the Department.

### PRINCIPAL REPAIRS AT EXISTING STATIONS.

The following is a statement of the principal repairs and improvements at the different stations during the past year:

### Meagher's Beach.

In consequence of encroachments of the sea an experimental test has been made with a view to building up the beach on the inner side of the lighthouse by erecting two crib work groynes, ballasted with stone, each 50 feet long. A report of the result will be made in due course. Considerable repairs have been made to breakwater on south side of beach, by renewing the plank covering, strengthening work with iron ties and waling pieces and filling up with stone ballast. Building was painted.

## Pope's Harbour.

Roof of lighthouse re-shingled, new spouts fitted, window frames repaired and leaded. Boat slip repaired, and all buildings painted.

### Sheet Rock.

Boat slip renewed and ballasted. Lighthouse roof re-shingled. Foundation wall of oil store re-built. Chimney repaired. Sink drain renewed. Plank walk renewed from landing to lighthouse.

### Beaver Harbour.

New copper lantern supplied.

## Wedge Island.

1 Pilley's hand fog trumpet supplied, to be sounded in answer to a vessel's signal from sea. New sail for boat and buildings painted.

## Tor Bay.

\$103.02 have been expended on repairing road from station to main road,  $2\frac{1}{2}$  miles.

## Canso Harbour.

Lantern floor repaired, new boat and 3 new lamps supplied. Building painted.

### North Canso.

The deck of lighthouse rebuilt and a new 12-foot iron lanteru, supplied by the establishment of E. Chanteloup, has been erected in place of the old lantern which had been condemned. The A-burner lamps replaced by mammoth flat-wick burner lamps. Corner of foundation wall taken down and rebuilt. Barn repaired and shingled, and road leading from landing repaired. The work was done by Mr. James Mackay as foreman, and local labour employed. The total expenditure on these repairs and improvements was \$950.

#### Crichton's Head.

Buildings painted. Southern end of breakwater has been extended 30 feet into the bank.

## Cow Bay.

Lantern derrick and roof of building which were destroyed by heavy storm, are undergoing repairs, and the lantern, which was damaged, is being put in order.

### Flint Island.

The six A-burner lamps have been replaced by six B-burner lamps, new reflectors supplied and buildings painted. Materials will be sent next year, as authorized, to build a boat house at this station.

### Bird Island.

A new boat house 24x12 has been erected by Keeper at a cost of \$100.

### Ingonish.

Roof of dwelling, porch, L-kitchen and oil store re-shingled. Damage caused to lighthouse by lightning repaired. New spouts put up all round roof of dwelling. Lantern deck re-covered with canvas and railing renewed. New window frame and sash to oil store. New platform at entrance to dwelling. Part of foundation wall of dwelling taken down and rebuilt, and remainder pointed. Oil store foundation wall pointed. New brick bottom laid in cistern in cellar and side repaired with cement mortar. Outside of chimney repaired. Buildings painted.

## Cape North.

Materials for boat house were landed by the "Newfield" (the frame having been made at Halifax) and the keeper instructed to have the building erected. Buildings painted.

## Cape St. Lawrence.

The heavy gales of last December did considerable damage at this station, breaking in 6 large panes lantern glass, washing away slip and underpinning of oil store, and necessitating discontinuing of light until necessary repairs could be effected. In the spring additional bars were prepared by Mr. E. Chanteloup to strengthen the sashes in lantern, and repairs were made by Mr. Noble early in the season. The two new Chance pressure lamps were also set up by Mr. Noble in place of the temporary lamps theretofore in use.

## Margaree Island.

A new 18 feet squid boat supplied to replace one lost in last December's storms, and a new entrance porch to dwelling built. Buildings painted.

# Cape St. George.

Extensive repairs have been made at this station, comprising renewal of crown roof of light house, new sills, joists and flooring on lower floor, and barn repaired. The buildings have all been painted. The lamps changed from A to B burners and new reflectors supplied.

### Cariboo Island.

In consequence of the washing away of the bank in front of lighthouse, it became necessary either to rebuild the breakwater, which had been almost totally destroyed by last winter's gales, or to move the lighthouse back to a safe position. The latter course being decided on, plans and specifications for the work were prepared and tenders called for. The contract was awarded to Mr. Hugh Henderson of Pictou, for the sum of \$525, and the work was duly completed under the supervision of Mr. Geo. Chisholm of Cariboo, who was appointed inspector. The oil store was subsequently moved back for safety by Mr. Geo. Chisholm for the sum of \$15.

### Amet Island.

The wooden crib work breakwater and the inside stone wall having been damaged by severe storms, materials were sent by "Lansdowne" to effect repairs. Mr. John Mulrony of Halifax is now engaged superintending this work, employing local help.

### WEST OF HALIFAX.

### Sambro.

The keeper's dwelling has been re-shingled, and minor repairs made throughout. Roof of store at landing re-shingled.

### Westhaver's Island.

New lantern supplied. Shelter house, boat house and slip repaired.

### Port Mouton.

The wharf at landing having been carried away, a new wharf with slip and boat house has been erected at a more sheltered spot inside the head.

# Little Hope.

Rocks thrown in by the sea at landing have been removed and the slip repaired. The keeper having reported the probable decay of interior of wooden breakwater and its consequent unsafe condition, the structure was opened up and thoroughly examined. It was found to be perfectly sound, the inside work being composed of white hemlock. A few repairs were made to top of breakwater. Buildings painted.

### Carter's Island.

Boat house and slip built. Roof of dwelling re-shingled and minor repairs made. Buildings painted. New zinc umbrella fitted inside lantern to protect lamps.

### Gull Rocks.

Buildings painted and plan arranged for building landing slip next year. New spy glass furnished.

#### Shelburne.

A grant of \$240 for repairing road leading from landing is being expended by keeper. Three new lamps supplied.

### Baccaro.

Floor of oil store renewed and 5 storm sashes supplied for dwelling and anchor crock fitted to chimney.

## Cape Sable.

A new porch has been erected to keeper's dwelling, roots re-shingled and other repairs effected. The efficiency of this light has been greatly improved by cutting out a number of sash bars in lantern and changing the lantern glass from 12x18 to 73x24. The 9 circular burner-lamps have been changed to mammoth flat wick.

### Pubnico.

The breakwater surrounding lighthouse having been extensively damaged by last winter's storms, it was rebuilt to the extent of 150 feet under the supervision of keeper for \$183. New pump supplied to kitchen.

# Barrington Lightship.

Decks caulked, rigging set up with new lanyards and slip painted throughout. A new hand fog trumpet supplied.

### Abbott Harbour.

A permanent mast with shed at base has been built to replace the temporary mast hitherto in use. This work was done by contract by Mr. M. d'Entremont for \$125. One half acre of land with right of way to landing was also secured.

## Argyle.

The Government land has been fenced off by a wire fence and landing slip repaired. A wheelbarrow and necessary tools for doing ordinary repairs have been furnished.

### Yarmouth.

Entrance porch to dwelling repaired with new sill and floor. Platform at rear of dwelling repaired. Ceilings and walls of two rooms renewed and chimney repaired.

### Bunker Island.

Some necessary repairs to crib work and a new door frame and sill to lighthouse are being furnished.

# Kingsport.

The small tower on the end of Kingsport pier was burned on the night of 24th March, 1891, caused by the explosion of a lamp. Plans and specifications were prepared and tenders called for a new tower. The contract was awarded to S. S. Crowe, of Truro, for the sum of \$185, and the new building completed on 16th September. During the interval a temporary light was shown from a lantern hoisted on a mast.

The new tower is a square wooden building surmounted by a small wooden lantern, the whole painted white. The height of the vane of the lantern above the pier is 23 feet.

## General Repairs.

In addition to the repairs above described, various minor repairs, as well as incidental improvements to the appointments of the stations were carried out at a large number of places.

At all stations where it was required to preserve the buildings painting was done, generally by the keepers, the materials being supplied from Departmental stores.

### FOG ALARMS.

### Cape Race.

Crosby automatic brought off for repairs. Injector and fittings furnished for boiler at landing.

## Cranberry Head.

Steam and air pistons renewed and cleaned and springs re-set. Boiler re-tubed. Ratchet brace and drills and reed box and reed supplied. Engine room floor repaired.

### Scatarie.

Patches on bottom of boiler removed, leaks stopped and patches replaced. Twelve new tubes placed in boiler. Steam dome pipe joint made tight and new hand hole door fitted.

## Cranberry Island.

A new horizontal boiler supplied by the Truro Iron Foundry Company was sent down and placed. The old boiler was brought off and repaired by Mr. N. Evans

and sent back and all connections made. We have now two good boilers operating the fog trumpet. The engine was brought off, repaired and sent to Yarmouth for the new boilers being set up at that station. Three reed blocks supplied.

### Sambro.

On June 15th the fog whistle was discontinued and a bomb rocket signal, fired every 20 minutes, substituted. The operating and condensing boilers are worn out and condemned. The two engines have been brought off and put in order for Chebucto Head, All pipes and fittings will be utilized as far as possible in fitting up the new fog-alarm station at Chebucto Head. The condenser will be brought off the first chance, and disposed of as may be directed. A suitable derrick for firing the gun cotton cartridges and necessary alterations to building for store room, etc, were made at the station.

### Cross Island.

The boiler re-tubed. Injector repaired and new pipes, valves, &c., supplied. Leaks under legs stopped. The work of erecting coal shed at landing and building reservoir near whistle house has been deferred until next year owing to pressure of other work.

### Cape Roseway.

Boiler re-tubed and pipe connections renewed. Top tube sheet renewed.

### Cape Sable.

A new boiler made by W. G. Matheson at a cost of \$1,181.25 has been set up in place of the old one condemned, and all pipes and connections overhauled and renewed where required and the boiler fitted with an injector. Work done by Power Co. Roof of coal shed raised and re-shingled.

### Seal Island.

Landing slip repaired and planking renewed. Building painted.

A compound cock and injector supplied to boiler. The spring in swamp enclosed with stone wall.

### Brier Island.

A new boiler made by W. G. Matheson has been furnished, the old one having been condemned. All necessary repairs and renewals made to fittings. Work done by W. & A. Moir, of Halifax. A new 10-inch whistle supplied. A new chimney built and necessary repairs made to whistle house reservoir.

### Digby.

Two new brass tubes placed in old boiler, and two flanges on steam dome of new boiler made good.

## Apple River.

A set of new tubes to old boiler. A new horizontal boiler has been sent to replace the old worn out upright boiler. The machinery to be taken down and abutments built to support them. Wheel barrow supplied. Buildings painted.

### Cape d'Or.

All the buildings at this station are old and require extensive repairs. Partial necessary repairs to coal sheds at station and Horse Shoe Cove and reservoir are now being made, and also 1000 ft. 1½-inch pipe is being laid under frost line from spring to reservoir. New set tubes to boiler. One block for valve, one steam gauge, new man hole door, one check valve, oil cup for cylinder and globe valve, supplied.

# Meagher's Beach.

An additional brick cistern has been built under engine room and the other two tanks repaired. Additional pipe connections made with boiler, and a new wheelbarrow supplied.

# Yarmouth Fog Alarm.

Last year the Department decided to provide this important station with duplicate boilers and, as the one then in use, owing to its worn-out state, was with difficulty kept in condition for service, it was determined to provide two new boilers. On a careful examination of the whistle house, which is an old wooden structure, it was found to be in such a bad state of decay that it was decided to erect a new building for the new boilers. Plans and specifications were prepared at Ottawa for a brick building 57 x 29 x 15 ft. walls, being divided by a cross wall, in the centre, into two compartments, one for an engine room and the other for coal room. The time being too short to ask for tenders and the work including renewals that could not be accurately specified, instructions were given to have the work done by day's work under the supervision of the Superintendent of Lights. Mr. Benj. Williams, builder, of Yarmouth, was engaged as foreman, and materials purchased to the best advantage. The new building has been erected in front of the circular water tank, facing Yarmouth Sound, and is at present in an advanced state toward completion, requiring but a few days work of carpenters to finish the interior of engine room. The two brick cisterns under engine room of old building have been thoroughly repaired and arched over with brick and the arches cemented and fitted with man-holes. Brass pipes laid under ground, lead the water from the large tank and eisterns into engine room of new buildings. A stone wall about 5 feet deep and 12 feet high has been built in front of whistle house to provide a level space in front of building. The large circular tank has been stripped of the decayed plank covering in sides, and the cement coating over brick walls, outside, repaired where required. The entire roof of tank has been covered with Sparham Roofing. The coal supply will be removed from old building into new coal room, and the old buildings torn down and removed. It was intended to build a tramway fitted with steam winch from landing to coal room but as there are difficulties in the way of carrying tramway to boat landing, owing to tidal causes and long rocky shore, it is thought advisable to consider a plan of substituting a derrick, to be operated by steam power to take coal from near high tide mark, and thus save cartage. This is still under consideration.

One new boiler has been placed in position and pipe connections are being made by the Burril Johnson Iron Company, of Yarmouth. This boiler was built by W. G. Matheson, New Glasgow, under contract for \$1181.25. The duplicate boiler is being built by the Pictou Iron Foundry Company and when finished will be sent

down and set up. The old boiler connections will be utilized as far as possible in connecting the duplicate boilers. A Crosby attachment will be furnished as soon as it can be procured from the makers. The operating engine taken from Cranberry Island, and the pumping engine from condensing house at Sambro, have been overhauled and put in thorough order for this station, as they are more powerful and better adapted for the new boilers than were the smaller engines used in the old house. It is expected that the new boiler will be ready to go into operation in about a fortnight's time. The rapidly growing importance of Yarmouth as a shipping port and the frequency of fog on that part of the coast necessitated the large outlay which will result in establishing one of the best fog-alarms at Cape Fourchu equipped with duplicate boilers, Crosby automatic and all necessary machinery of the best description. The total expenditure in connection with the improvements has been \$6,536.74.

#### Chebucto Head.

In carrying out the scheme adopted by the Department for improving the approaches to Halifax Harbour, plans and specifications for the erection of a steam fog-whistle at Chebucto Head were prepared at Ottawa, and tenders called for. As the lowest tender received was considered too high, and as the site selected for the building presented many difficulties owing to the extremely rugged nature of the granite cliffs, the impediments to landing materials and conveying them to the site, and the probability of unforeseen difficulties arising after the commencement of the work, rendering deviations from the plans and specifications necessary, thereby giving occasion for disputes and charges for extras, or else resulting in unsatisfactory work, the Superintendent of Lights was directed to supervise this work and to employ necessary labour and to purchase materials at the best advantage. In carrying on this work the Superintendent found it necessary to deviate from plans and specifications for reasons hereinafter specified.

Foundation, etc.—At the commencement of this work it was found necessary to change the site from that described in plans and specifications, to a position about 30 feet more southerly, in order to take advantage of the only portion of the cliff running down to the sea at all suitable for the construction of the necessary tramway. The plan shows a natural depression on face of level part of cliff chosen for the site, which would be taken advantage of for position of cistern under engine room. Had this site been adhered to, it would have been impossible to construct a tramway from coal room to landing as it would have to span a chasm, through which the sea rushes in heavy storms, rendering it impossible to construct a tramway that would stand. This change of site rendered it necessary to quarry into the solid cliff to obtain cellar room for cistern. In blasting this rock, dynamite was used, and all suitable stones produced having fairly square faces were used in lower courses of foundation walls. In building walls at this point, solid work was made close in to the faces of excavation, in order to guard against the possibility of water soaking in and injuring the walls. A contractor would have carried the 2-foot walls up straight and filled in at the top, with probably disastrous results later on. In carrying up the back and south walls, two extra courses of cut stone were added for about half the length of said walls. This was done in order to guard against the damaging effects of snow and water coming in contact with the brick walls at these parts, as the snow will

probably collect in heavy drifts between the high cliff in rear of building and the back wall, and in thawing would cause the water to flow along the brick walls. The back and north walls of building have been protected in the following manner. At the back, a portion of the base of the cliff has been blasted out in order to give a northerly slope clear of obstructions, the surface next to wall grouted with concrete, and the whole space between cliff and wall graded with hard earth from reservoir excavation. The hollow on north side of north wall, has been filled up with useless stones from blastings, the face of wall grouted with concrete, and the whole surface graded off, with a good slope, with excavated earth from reservoir. Under all this, a stone pipe drain has been laid through and from bottom of north wall, to face of seaward cliff, to carry off any possible soakage or leakage at any time in the cistern. The uneven bottom of excavation has been grouted level to carry foundation of chimney, cistern and abutment for operating engine, and the remaining space will be filled up with broken stone to the proper level to carry concrete floor of engine room.

Tramway.—In building this it was necessary to blast away a large portion of the brow of cliff facing the coal room, and also to do a good deal of blasting all the way down. The entire length was built with second-hand railway rails, supported on 2-inch iron standards, and braced throughout where necessary. The standards are let into holes drilled 12 inches into the solid rock, and filled around with melted brimstone. This tramway is of a very substantial and permanent nature, and is much preferable to the composite one at first contemplated. In building this tramway much labour and time were consumed, but the result is most satisfactory, in so far as utility, strength and permanency are concerned.

Reservoir.—As described in specification, this work would seem to involve a very moderate expenditure, as it was assumed that the depth of earth from the surface to rock bottom was but a few feet, and that a 2-foot masonry wall would be sufficient to withstand the pressure of water. The depth of soil actually averaged at least 7½ feet, and the earth was found to be nearly as hard as cement, after the top had been removed. To remove this earth much labour was required before the rock bottom was reached. In building this reservoir, the supreme importance of providing a never-failing supply of water for such an important station was kept in view, as in the event of running short during the season of drought in summer, when fogs most prevail, the cost of conveying water to the station from any possible source, and for such large boilers, would be very great, and in any case would probably necessitate the frequent stoppage of the whistle. A reservoir 50 feet square was consequently built.

This reservoir has been filled, and by estimate contained 117,000 gallons. It was found that no actual spring existed, as was supposed, but the water accumulates from soakage, and the extensive watershed which the surrounding cliffs form leads the water into it after each rainstorm. Two such rainstorms recently entirely filled it, so that a constant water supply is assured.

It will be seen by this, that, allowing for thickness of walls, over 22,000 cubic feet of hard soil had to be removed before the rock bottom necessary to ensure a reliable resevoir was reached.

Considering the large body of water to be enclosed and its depth, it became necessary to build a suitable retaining wall to withstand the pressure. Instead, there-

fore, of a 2 foot wall, the wall was built 5 feet thick at the base, tapering to 3 feet at the top on both sides. A batter on the inside was made in consideration of the probability of ice forming on the surface of water in winter. A dry stone wall of similar dimensions was built at the upper end to prevent the earth from above falling in and filling up the reservoir.

Description of Stone used.—The cut or dressed granite used in construction comprises the following:—

One base course for brickwork.

Two extra courses on back and south walls about half their length respectively.

Four door sills.

Six window sills.

Four door lintels.

Six window lintels.

One step to engine room door.

One curb for man-hole of cistern in engine room.

The granite lintels over doors and windows were substituted for brick arches, as they were considered cheaper than turning the arches, especially as suitable granite blocks were on hand.

Instead of galvanized iron roofing and spouting, a slate roof with cast iron spouting has been substituted, and instead of wood mouldings and finish under eaves a brick projection or cornice is provided, so that there will be no exposed wood work to decay.

There yet remains to be done the following: Iron cross rods (already made by Department's blacksmith) to be fitted to strengthen walls and for supports of roof. This is an extra precaution. Cistern chimney and engine abutment to be built, external spaces to be filled up and concrete floor laid. Engine room to be sheathed overhead and closet, bench, basin, etc., fitted up, roof to be slated, spouts fitted, ridge and hip rolls to be leaded, and also edge of eaves under first course of slate leaded. Pipes from down spouts from roof to be connected with reservoir, and overflow from cistern connected with drain pipe. Doors and window sashes to be placed. The sashes are glazed and painted.

Pipe connection between reservoir and cistern and a tramway from building over face of cliff to lighthouse have to be completed. The copper pipe brought off from Sambro is all ready to connect.

When completed this station will probably be one of the best on the coast; and considering the exceptional difficulties in building at such a rugged and comparatively inacessible place, and the necessary changes made from the original specificacations to meet local requirements, the cost will not be considered excessive.

The total expenditure on this work to the present has been \$7,711.55.

The fog-whistle engines brought off when Sambro station was discontinued, have been fitted up for use here, but the boilers being in bad repair two new ones are being made under contract by Mr. John Patterson, of Halifax, at a cost of \$865 each.

#### BUOY SERVICE.

Owing to an accident to the "Newfield," the "Lansdowne" was employed in taking up the eastern coast buoys for the winter, and later on, in the months of January and February, she was engaged in changing the buoys in Halifax Harbour and approaches, under the supervision of the Inspector of Lights. Both ships have been engaged in placing new coast buoys as ordered, and in changing others whenever opportunities occurred, but the Agent still reports that the ships at his disposal are inadequate to attend to the changing of buoys and moorings as frequently as his instructions indicate and the importance of this rapidly increasing and extensive service demands.

The following is a list of casualties for this year:-

### Bell Rock.

The "Lansdowne," under Capt. Dakin, placed an iron buoy on 20th February, 1891, which was reported disappeared on 27th February. She again placed a wooden spar on 1st April, 1891, which was reported disappeared four days later. Both buoys are supposed to have sunk in deep water, in consequence of having been placed too near the edge of shoal water; the rocky nature of the bottom precludes the possibility of grappling.

#### Canso Automatic.

"Lansdowne" found buoy adrift off N. side of Sable Island, on the occasion of her visit there in January, 1891, with loss of moorings. Buoy recovered and brought in.

# Louisburg Automatic.

This buoy was reported "disappeared" in June, 1890. An unsuccessful attempt to recover it by grappling was made by the "Newfield" shortly after. The attempt was renewed this summer, without success. Being short of buoys until late in the season no buoy was moored off Louisburg during the past year.

### La Have Bell.

This buoy when changed on 27th February, 1891, was found in a damaged condition, having lost cage and spindle and sustained damages to frame work.

### Sou'-West Breaker-Sambro.

Buoy broke adrift in September and was towed into Lunenburg by fishermen. The buoy was brought home by "Newfield" on 24th October, 1891, and \$100 salvage paid for its recovery.

## Lockeport Automatic.

Buoy reported disappeared on the 5th January, 1891, by Capt. Hill of SS. "Halifax." Not since recovered. New buoy and moorings placed, 6th April, 1891.

### Halifax—Outer Automatic.

Reported adrift 10th September 1891. "Newfield" picked up buoy 10 miles south of Sambro with 28 fathoms chain attached. Loss 17 fathoms.  $1\frac{1}{4}$ -in. chain, 25 fathoms  $4\frac{1}{2}$ -in. steel wire rope and a 20 cwt. Trotman anchor. The buoy had been placed on 12th February, 1891.

The following additions have been made during the year:—

## Broad Shoal-Off Pennant Point.

In 1878 a No. 1 iron can buoy was moored off this shoal, but broke adrift shortly after. It was not replaced until 9th February of this year. This was done by the Inspector in the "Lansdowne" in response to urgent appeals from residents of Pennant Harbour and vicinity.

# North-West Ledge Bell Buoy.

No bell buoy has been maintained at this point since the one which went adrift in 1880 until it was replaced this year by the "Lansdowne" and handed over to the St. John Agency.

### Sambro Automatic.

In fulfilment of the recommendations of Mr. Anderson and Capt. Smith for improving the approaches to Halifax Harbour, an automatic whistling buoy was moored near the outer end of Sambro Outer Bank on 31st January, 1891, to act as a fairway buoy in conjunction with the outer and inner automatic buoys, for vessels seeking entrance to Halifax Harbour and to guard vessels from approaching the dangerous reefs off Sambro. The buoy is painted in alternate black and white vertical stripes and is moored in 25 fathoms water.

Lat. N. 44° 21′ 30″

Long. W. 63° 30′ 15"

Since this buoy was placed most gratifying reports have been received of its usefulness,

# St. John Ledge Bell.

A bell buoy has been moored about 1½ miles south westerly from St. John Ledge in the County of Shelburne.

Lat. N. 43° 29' 50"

Long. W. 65° 49′ 30″

The buoy is painted red and is moored in 21 fathoms. The iron can buoy hitherto marking this shoal has been discontinued.

# Lunenburg Fairway Automatic.

An automatic whistling buoy has been moored off the western entrance to Lunenburg, for the purpose of aiding vessels in making the harbour of Lunenburg.

Lat. N. 44° 17′ 0″

Long. W. 64° 11′ 25″

The buoy is painted in red and black horizontal stripes.

### Isaac Harbour Automatic.

An automatic whistling buoy has been moored outside the shoals and reefs off Isaac Harbour, as a fairway buoy to assist vessels in making Isaac, Country and Fisherman's Harbours and to warn vessels approaching the reefs.

Lat. N. 40° 2′ 20″.

Long. W. 61° 32′ 37″.

The buoy is painted red with "Isaac Har." in white letters and is moored in 25 fathoms of water.

### HARBOUR BUOY SERVICE.

The following additions have been made to this service since last report:-

### Pubnico.

An iron can buoy has replaced the wooden spar on Pubnico Ledge.

## Westport.

An iron can buoy has been placed off Dartmouth Point.

### East Dover.

One iron can buoy placed off Shag Bay breaker. One wooden spar off outer Garden Shoal. One wooden spar off Callaghau's Island, south end.

### Yarmouth.

An iron can buoy to mark Sallows Rock.

#### Chezzetcook,

Three spar buoys have been placed to mark channel leading into East Chezzet-cook.

### Petpeswick.

Three spar buoys have been placed to mark channel leading into harbour.

# Cow Bay Ledge.

An iron can has been authorized for this place. It will be placed in the spring.

A large number of contracts for harbour buoys service have been renewed at old rates, and several new ones entered into by the Department at Ottawa.

### NEW BUOYS FOR STORES.

The following new buoys have been received since last report:-

Three 10-feet automatic whistling buoys made under contract by Messrs. Bannerman & Power, of Ottawa. Cost \$850 each, to which must be added royalty on patent, \$100 each.

Three 10-feet automatic whistling buoys made under contract with W. G. Matheson, New Glasgow, at \$850 each, royalty, \$100 each.

Three bell buoys by Mr. J. Fleming, of St. John, at contract price of \$945 each. One of them was delivered in St. John for N. West Ledge off Brier Island.

There were also imported from Messrs. Timothy Parks & Son, for buoy mooring, 360 fathoms 1½ inch close link chain; 90 fathoms 1-inch close link chain.

A number of granite mooring stones have been purchased, and have been fitted with eyebolts by the agency blacksmith. These stones have been found very satisfactory in mooring large automatic and bell buoys in many places, and cost much less than Trotman anchors.

## NEW BRUNSWICK LIGHTHOUSE DIVISION.

This division is under the charge of Mr. J. H. Harding, agent of the Department at St. John, and comprises all the lighthouses, fog-signals, buoys and beacons and other aids to navigation on the coasts and rivers of the Province of New Brunswick. It also includes the charge of some large buoys on the Bay of Fundy coast of Nova Scotia, which are attended to by the "Lansdowne," with headquarters at St. John. There are now in operation in this division 112 lighthouses, 1 lightship, 12 steam fog-alarms, 1 signal-gun, 4 automatic whistling-buoys, 3 bell buoys and about 480 other buoys.

During the past year Mr. James Mitchell, who was Superintendent of Lights in this agency, at a salary of \$1,200 per annum, was superannuated on account of age, and the office has been abolished.

The harbour and river buoys are maintained under contracts for a period of three years, and the agent reports that this arrangement has produced a saving to the Department, and gives general satisfaction.

### NEW LIGHT.

# Bridges Point.

The only new light established in the New Brunswick Agency during the past season was a small river light on the east side of the St. John river, at Bridges Point, in the county of Sunbury. The light is fixed white, elevated 45 feet above the ordinary high water, and should be visible over an arc of 180° between the bearings of N. W. around by E. to S.-E., for a distance of twelve miles. The tower is a square wooden building, painted white, with lantern roof red, resting on a square cribwork block. It is 30 feet high from the block to the vane on the lantern. The erection of the building was carried out under contract by Mr. Frederick W. Bailey, of Sheffield, for \$439.

## REPAIRS AND IMPROVEMENTS, &c.

The following is a synopsis of the principal repairs and improvements effected at the lighthouse stations in this division.

### Anderson's Hollow.

This lighthouse was damaged by a heavy storm during the season, and the necessary repairs were made by Mr. Anderson at a cost of \$23, and the building was painted. It is now much stronger and safer in case of a heavy storm.

# Beaver Harbour.

\$88.91 were expended in repairing the tower and deck of the lighthouse during the year. The building required painting, this the keeper was directed to do, and paint and oil had been supplied for this purpose. \$30 were allowed the keeper for opening up and repairing the road from the public road to the lighthouse.

## Big Duck Island Fog-alarm.

The dwelling house at this station being altogether too small for the needs of the engineer, and additional accommodation for coal being also required, plans and specifications for the necessary additions have been prepared and tenders have been invited for the necessary work. Repairs will also be required to the derrick and reservoir, which will be made under the direction of the Department.

# Belle Isle Bay Range.

The range lights established at the public landing in the Belle Isle Bay, as described in last year's report, were during the past season altered by Mr. Israel Noble, at a cost of \$46.75, so that the front light would answer as a guide up the Bay, and obviate the necessity for the light at Hatfield Point; this last-mentioned light will consequently be discontinued from the opening of navigation next year.

The front light of the Belle Isle public landing range, as at present established, will be fixed white shown from a lantern hoisted on a mast 45 feet high. It will be elevated 50 feet above the water and should be visible in the line of range as formerly and for 5 miles from all points of approach between the bearing of N. E. through N. to S. W.

The back light will be in future fixed red instead of fixed white. In other respects it will be unchanged, and the range lights will be used in the same way as formerly.

### Belloni Point.

The keeper built a small shelter shed at this station without authority at a cost of \$13.60.

## Cape Enragé.

Mr. Daniel Tingley erected a new coal shed at the fog-alarm at a cost of \$147.

## Dipper Harbour.

An additional window was put in the lantern at a cost of \$24, which appears to be a great advantage in making the inner harbour.

### Grindstone Island.

The fog alarm at this station consists of two Holmes trumpets of very intricate make, and not sufficient as sound producers, consequently one of the Neptune foghorns was taken to the station, but it was deemed desirable to provide a new fogalarm building to contain it, as the present building is in a bad position. Plans and specifications for the new building have been prepared and tenders invited. It is proposed to erect it on the present site of the lighthouse, the light building being removed nearer to the dwelling to make room for it. This change is desirable so that no building or other obstruction will stand between the fog-alarm and the water in any direction in which the sound is required.

## Goose Lake.

Mr. Joseph Wilson built a fence and boathouse at a cost of \$166.

### Grand Harbour.

There was an expenditure of \$71.69 at this station to repair the damages caused by the heavy gales last winter washing away a portion of the protection to the lighthouse and damaging the building.

### Head Harbour.

One of the fog-alarm boilers having given out last year a new boiler was made under contract by Mr. James Fleming of St. John at a cost of \$505.

### . Letête.

This fog-alarm station is in good order. Some small repairs to the buildings will be performed by the keeper, the Department furnishing materials. Repairs were made to the piston rod of the engine by the Truro Foundry and Machine Company amounting to \$75.65.

### Machias Seal Island.

A new boiler was supplied to fog-alarm, built by Mr. Matheson of Pictou at a cost of \$1181.25, delivered in St. John.

A large part of the railway track was carried away during a heavy storm last winter. Tenders received for repairs being considered too high the work was done by day's labour, the material and labourers being sent from St. John. The total cost of this work and of building a water tank under the keeper's dwelling was \$420.42.

### McMann's Point.

The lighthouse at this station was moved from where it formerly stood 50 feet back, and placed on a stone foundation. The cost of moving the building, including repairs was \$95; in addition to this amount the site was purchased by the Department for \$30, making a total expenditure of \$125. The station was also painted.

## Partridge Island.

The dwelling house owned by the Department, and formerly occupied by Mrs. Doherty, was repaired by Mr. James Wilson, the light keeper, at a cost of \$199.09. This building is now occupied by the light keeper as a dwelling; the house formerly occupied by him having belonged to the Department of Agriculture who required it for quarantine purposes.

### Swashway.

It was found necessary during the past season to replace the range lights at the Swashway by new buildings, and advantage was taken of the opportunity to improve the character of the lights so as to make them more powerful and better proportioned in height to give a good range, and the buildings so as to make them more conspicuous as day marks.

The new towers are skeleton wooden buildings, square in plan, with horizontal slatwork on their seaward faces, and sheds at their bases, each entire structure painted white. The illuminating apparatus in each case consists of a locomotive reflector lantern hoisted to the top of the tower between the posts. Each light is fixed white, catoptric, and shows only over a small arc in the line of range. The front tower stands on the east shore of the island  $1\frac{1}{2}$  miles from its south end, on ground 6 feet above high water mark, and 100 feet back from the shore line. It is 46 feet high from base to summit. The light, elevated 47 feet above high water mark, should be visible 12 miles. The back range light building stands 1220 feet

W by  $N \frac{1}{4} N$  from the front one, and is 71 feet high. The light is elevated 72 feet above high water mark and should be visible 14 miles.

## Southern Wolf.

The wharf and landing amaged by a heavy storm last winter have been repaired, cost \$94. Some plastering and other repairs inside the lighthouse building were to have been carried out last season, but for the material for this work having been carried away by the same storm that damaged the landing, they must remain over until next year.

### Tabusintac.

The chief engineer of the Department visited this station last autumn and reported that in consequence of the shallow water in the Gully the range lights were of no further value in their present positions, but he recommended that they should be transported to the mainland and used as an inner range at Neguac Gully. Tenders for doing this work have been invited.

# William's Landing.

The new mast and shed required to replace those carried away, as reported in last year's report, have been provided at a cost of \$25, and a boat furnished at a cost of \$12.

### BUOYAGE.

The buoy service in this agency has been augmented by placing an automatic whistling buoy, of the Courtenay pattern, off the south-east end of the South Wolf Island, in the Bay of Fundy. This buoy is painted black, with the name "S. Wolf" on it, and is moored in 52 fathoms.

The gong on the bell-buoy boat off Partridge Island having cracked through long service, a new gong was supplied, at a cost of \$188. The hull of the boat received a general overhauling, and she was supplied with a new mooring chain, and painted.

The following buoys belonging to the Nova Scotia Agency were put under the care of the New Brunswick Agency, viz.: Bell buoy off the North-West Ledge, automatic buoy at Lurcher and the Trinity buoy. This latter buoy broke its mooring chain and went adrift; it was secured by Alex. Forbes and others, their salvage charges were paid, amounting to \$150, and the repairing of the buoy cost \$112.

Another bell buoy was moored in the same place, as soon as the loss of the first was made known.

## Shippegan.

Two new iron can buoys were supplied to Miscou Harbour, and one for Big Shippegan Gully, also one for the north entrance to the same harbour. These were added to the list of Mr. Degrace the contractor, he being allowed an addition to his contract of \$30 for taking charge of these additional buoys.

## Musquash.

It was found necessary to supply seven new spar buoys for Musquash Harbour, which were placed during the present season under the direction of the Harbour Master.

### Escuminac.

A new can buoy, painted black, was moored in 5 fathoms on the outer edge of the Reef off Escuminac Point, entrance to Miramichi Bar, in the county of Northumberland, during the past season.

## Neguac.

Romain Savoy was allowed \$5 for changing the buoy at this place, and doing away with the outside can buoy, changing the colour of the inside buoy to black instead of red, and changing it from the port to the starboard side of the entrance, and maintaining two additional spar buoys between the entrance buoy, and the inside of the bar, which allowance he is to receive annually.

# Nappan River.

Buoys were ordered to be placed on this river leading from the Miramichi River up to the mainland.

### Shediac.

A change was made in the position of the buoys at the entrance to this harbour at the suggestion of the Harbour Master, which it is considered will prove of advantage to vessels arriving and departing from the port.

The change consists in marking the Medea Rock by an iron can buoy, coloured for middle ground, moored in 8 feet water, and by marking the south east turn by a wooden can buoy painted red, moored in 18 feet water.

### St. John River.

The contract for placing and lifting, &c., of buoys was let to Thomas F. Granville, for three years, at \$215 per year.

### Beaver Harbour.

An iron can buoy was placed on the west side of the middle ground, in the place of the spar buoy, to mark this dangerous reef.

### Grand Manan.

An iron can buoy was placed on the south west ledge of Big Duck Island, instead of the spar buoy, which was not sufficiently conspicuous to be seen in the surf that rolls over this ledge. A large ship was wrecked on this ledge during the summer, and the steamer "Lansdowne" has to pass this ledge in delivering the supplies of coal to the station. The coast buoys in the Bay of Fundy are attended by the steamer "Lansdowne."

### PRINCE EDWARD ISLAND LIGHTHOUSE DIVISION.

This division is under the charge of Mr. Artemas Lord, Agent of the Department at Charlottetown.

In it there are 52 lights and 1 steam fog horn, under the charge of 39 keepers. There is one automatic whistling buoy and one bell buoy in this agency. The majority of the lights are situated on headlands and serve the general purposes of navigation, the remainder being harbour lights intended particularly for the benefit of fishermen. Thirty-five harbours in this province are buoyed by the Department under contract, the buoys being under the general supervision of the agent.

The lights were as usual inspected during the summer season by the agent in the Government schooner "Prince Edward" which also delivered the lighthouse supplies. The agent reports a continued and increasing endeavour on the part of the lightkeepers to keep up the required efficiency.

### REPAIRS AND IMPROVEMENTS TO LIGHT STATIONS.

The following is a statement of the more extensive repairs and improvements made at the several stations during the past year. In addition to those mentioned ordinary repairs and replacing of supplies were made and painting done wherever required.

### Blockhouse Point.

The pitch and gravel flat roof on the dwelling was removed and replaced by a deck of cotton duck, under the direction of Mr. Walsh, who is permanently employed as lampist and mechanic in this agency. A door into the roof was removed and the western side of the tower wall was re-shingled. The whole building was painted two coats.

# Cape Egmont.

The lamps at this station, which were suspended from a central shaft, were removed and placed on shelves close to the lantern glass, for the purpose of preventing to a certain extent interference with the light by the lantern sash bars.

Reports received from vessels indicate that the light has been strengthened by the change.

# Cape Bear.

Leaks in roof repaired. Cellar floor removed. Chimney above the roof repaired. Corner casings of the tower removed and the shingling carried out to the corners. Plaster repaired and finished.

# Darnley Range Lights.

In consequence of a change in the channel at the eastern passage over the bar at the entrance to Malpeque Harbour it was necessary to move the range lights established in 1889 at Darnley. The outer or front range light was moved 230 feet SW by W  $\frac{3}{4}$  W from its old position, and the back light was moved so as to stand 1,340 feet SW by S from the front one. New lanterns were also provided for this range so as to enlarge the arc of visibility, the lights now showing not only in the line of range but also north westerly along the north bar at the entrance to Richmond Bay.

# Georgetown Inner Range.

The mast on Westaway's farm, which served for the inner range light at Georgetown, has been replaced by a square wooden tower, painted white, surmounted by a galvanized iron lantern, the whole 46 feet high from the base to the vane on the lantern. the light is fixed white, catoptric, elevated 62 feet above high water mark, and should be visible 12 miles in the alignment and also across the harbour to Georgetown.

### Indian Point.

The breakwater at this station received extensive repairs to remedy encroachments by the sea. The expenditure for labour in connection with this work was \$108.30.

### New London.

During the past winter the range lights at New London, on the north coast of Prince Edward Island, were moved, for the purpose of bringing them nearer the channel and placing them in positions where they would be more useful in making the harbour. This work was done under contract by Mr. James Barclay, of O'Leary, for the sum of \$110. It has also been found necessary to increase the size of the brush and stone protection work to the back range light, and the necessary work is being done by Mr. Jonathan Delancy. The front range tower was moved a distance of about 200 feet S.S.W. from its former position on the sand beach, to the outer end of the breakwater, on the north-west side of the entrance to the harbour. The light is, as formerly, fixed, white, catoptric, elevated 24 feet above high water mark. The upper part of the wooden tower is enclosed and paint ed white, the open posts and framework below are brown. The back range tower was moved about 200 feet south-westwardly and now stands on the beach about 1,500 feet south-west from the front one. The light is fixed red, catoptric, elevated 45 feet above high water mark.

The square wooden tower, with dwelling attached, stands upon a cribwork foundation, and is painted white, surmounted by an iron lantern, painted brown. The lights should be visible about 7 miles to seaward between Sims Point on the west and the sand hills on the east side of the harbour, in one bearing S.W. they show the best water over the bar at the entrance to the harbour, but the back light must be opened to the seaward of the front one when abreast of Sims Point, to clear the rocky shoal off that Point.

## North Rustico.

Further repairs were required at this station in consequence of the breastwork being damaged during a storm by timber belonging to the Public Works Department swept off the breakwater upon which it had been piled for the winter, and lodging against the brush and stone protection work of the pier, during the severe gales of the beginning of September, 1890, the cost of repairs was \$75.

### St Andrew's Point.

A new 4-foot square galvanized iron lantern, made by Mr. Walsh, was placed on the tower here instead of the old cast iron lantern, which had been rusted out.

### BRITISH COLUMBIA LIGHTHOUSE DIVISION.

This division comprises all Canadian waters on the Pacific coast, and is under the charge of Mr. Herbert G. Lewis, agent of the Department at Victoria.

There are in it 13 lighthouses and 2 lights on buoys, under the charge of 14 keepers, who provide the necessary assistance, and who also have charge of 4 steam fog alarms and 4 fog bells run by machinery. The lighthouses and fog alarms were inspected during the season by the agent and by the officers of the Dominion steamer "Sir James Douglas," which is the lighthouse tender for the province. This vessel having, however, been found insufficient for the requirements of the service a new steamer, the "Quadra," was built on the Clyde to replace her.

### SPECIAL INSPECTION BY THE CHIEF ENGINEER.

In view of the rapidly increasing importance of the shipping interests of the Pacific province it was deemed desirable to send Mr. Wm. P. Anderson, Chief Engineer of this Department, to make a special inspection of the waters of that province, and he spent the months of April and May in visiting all existing light stations and in carefully examining the vesse! routes in British Columbia. He was instructed to pay special attention to the requirements of navigation in the following particulars:—

- 1. Needs of deep draft vessels crossing the Pacific to Vancouver harbour.
- 2. Needs of the northern trade between Victoria, Queen Charlotte Islands, Port Simpson and Alaska.
- 3. The local needs of the ports of Victoria, New Westminster, Vancouver and Nanaimo. Special reports have been made by the Chief Engineer on all these points, and as a result of his visit important improvements are being gradually carried out in the system of lighting, establishing fog alarms, placing buoys and beacons and other aids to navigation.

### NEW LIGHTS AND FOG ALARMS ESTABLISHED DURING THE PAST YEAR.

### Yellow Island.

In last year's report it was stated that a lighthouse was being built on Yellow Island, in Baynes Sound. This lighthouse having been taken out of the contractor's hands and completed by the officers of the Department the light was put in operation on the 1st January, 1891. It is a group-flashing white light, showing three bright flashes, with intervals of 15 seconds between their points of greatest brilliancy, followed by an interval of 30 seconds, during the greater part of which the light is eclipsed, thus completing a revolution in one minute. It is elevated 120 fect above high water mark, and should be visible 17 miles from all points seaward, except where intercepted by the trees and high land of Denman and Hornby Islands. To clear Maple Bank, in Baynes Sound, the light must not be brought to bear to the northward of E. by N. ½ N., while the light bearing S.W. will clear the dangers off the south-east point of Hornby Island.

The tower is a wooden building, square in plan, and with the dwelling attached is painted white; the iron lantern surmounting it is red. The height from the base to the vane on the lantern is 55 feet.

#### Carmanah.

The lighthouse and fog alarm building which were being erected under contract at Carmanah on the south coast of Vancouver Island, at the west extremity of the Strait of Juan de Fuca, were satisfactorily completed, and the station was put in operation on the 15th September last. The light is a group-flashing white light, showing three bright flashes, with intervals of 15 seconds between their points of greatest brilliancy, followed by an interval of 30 seconds, during the greater past of which the light will be eclipsed, the light thus completing a revolution in one minute.

It is elecated 173 feet above high water mark, and should be visible 19 miles from all points of approach by water. The lighthouse is built on land 136 feet above high water mark, on the extremity of the point, immediately to the westward of the Indian village of Carmanah, and two miles W. by N. ½ N. from Bonilla Point. It is a wooden building; both tower and attached dwelling are painted white, and the iron lantern surmounting the tower is red. The height from the base to the vane on the lantern is 46 feet. The fog alarm building is of wood, painted white, with unpainted shingled roof, and stands immediately in front of, and a little tower than the lighthouse tower, facing S. by E.  $\frac{1}{2}$  E. The horns, which are in duplicate, are 125 fect above high water mark. The fog. alarm will be a single blast of 6 seconds' duration, with intervals of 24 seconds between the blasts, in other words, one blast every half minute. machinery consists of a horn operated by steam and compressed air, and is in every respect in duplicate, so that in the event of one machine or boiler breaking down the other can be used without delay.

During the past season a telephone line has been completed from Victoria to Cape Beale light station, following the coast through Port St. Juan, and Carmanah, with stations at Port St. Juan, at Carmanah lighthouse and at Cape Beale lighthouse. A flag signal has also been established at Carmanah lighthouse for communicating with passing vessels by the international code of signals, and printed regulations have been issued covering this service, which it is hoped will be of great service to all British Columbia shippers, and will facilitate towing in of sailing vessels.

The total expenditure in connection with the establishment of this station has been \$15,220.89.

### Pin Rock buoy.

Complaints having been made of the difficulty of entering Victoria Harbour at night, in consequence of the glare of the electric lights rendering the buoys invisible, a hand lantern showing a fixed white light at an elevation of 8 feet above the water was attached on the 1st October last to the framework beacon of the platform buoy which marks Pin Rock, in Victoria Harbour. This was done because a similar light on the Shoal Point buoy, in the same harbour, proved very satisfactory, and reports received since the establishment of the new light proves that it is rendering good service, and it will consequently be maintained regularly.

### PROPOSED IMPROVEMENTS.

## Turn Point and Patos Island.

In last year's report it was stated that an appropriation would probably be made by the United States Government for the establishment of lights and fog alarms at these two important points. Since then the Department has learned with pleasure that a liberal appropriation has been made, and preliminary plans have been prepared and submitted for the approval of the Lighthouse Board, at Washington; it is consequently presumed that the buildings will be erected and in operation without undue delay.

### Fraser River entrance.

The re-survey of the Fraser River, for which \$500 were voted in last year's estimates, was duly completed by Mr. F. C. Gamble, and a plan submitted, from which a chart was prepared and forwarded to the local authorities in September last. The new survey showed a least depth of 13 feet at low water spring tides between New Westminister and the Gulf of Georgia, equivalent to 27 feet at extreme high water spring tides. In reducing the work for publication it was necessary to omit some of the soundings shown, and in doing this it unfortunately occurred that at one point soundings showing the best water were omitted, so that at Garry Point it appeared that a channel with only 9 feet at lowest water existed. Since this was ascertained the charts have been corrected and the defective ones, recalled.

During the past season eight iron can buoys have been made at a cost of \$2,372, and furnished for use on the Fraser River. A bell buoy has also been manufactured by the Albion Iron Works of Victoria, at a cost of \$1,550, which it is intended to moor at the mouth of the river outside the Sand Heads, as soon as the "Quadra" is commissioned. This buoy was too large for the "Douglas" to handle, and consequently it was necessary to delay placing it until the "Quadra" would be commissioned.

In May last three beacons, each consisting of a cluster of three piles surmounted by a cross 8 feet wide by 8 feet long, were driven on the edge of Sturgeon Bank. Each structure stands 11 feet above high water mark, and is painted black. The most southerly beacon is on the south-west extreme of Sturgeon Bank, immediately to the northward of the discontinued south channel of the Fraser River. The middle beacon is on the edge of the bank  $2\frac{7}{10}$  miles to the northward of the northerly Sand Heads buoy, and the most northerly beacon is on the north-west extreme of the bank three miles southward from Point Grey. The Department has learned that this last-named beacon has been carried away since it was placed.

The tide gauge alluded to last year at the entrance to the river, has also been placed, and observations have been taken with a view of ascertaining the fluctuations in the level of the river.

The agent has been instructed to drive piles in the North Fork of the Fraser to indicate the best channel for light draft steamers as soon as convenient, at an estimated cost of \$500.

## Brotchy Ledge.

The agent has been instructed to build a large stone beacon on Brotchy Ledge, during low water spring tides next season, and enquiries are being made as to the feasibility of lighting this beacon at night by means of incandescent lamps, connected through a submarine cable with the electric light plant in the city of Victoria. It is thought that this improvement, especially if the beacon can be lighted without requiring the constant attendance of a keeper, will greatly increase the facility of entrance to Victoria Harbour.

## Kelp Reefs.

The agent has been instructed to have a stone beacon erected on the outermost Kelp Reef during low water spring tides, next season. This beacon will be made large and surmounted by a slatwork so as to be as conspicuous as possible.

### Active Pass.

The fog bell at this station has not given satisfaction, and the Chief Engineer has recommended the establishing of a steam fog alarm for the convenience of the large traffic using the Active Pass route between Victoria and Vancouver, although he reports unfavourably on this route for heavy draft vessels, especially in thick weather. An additionnal half acre of land has been secured, including a suitable site for a fog alarm building, and an appropriation for this expenditure will probably be asked next session.

### Entrance Island.

A dioptric apparatus with a red sector to cover Gabriola Reef, has been ordered from England for this station, and the advisability of establishing a steam fog horn here is now under consideration.

### Nanaimo Harbour.

Some method of facilitating approach to Nanaimo at night being required by the numerous vessels now running there for coal, the matter has been under the consideration of the Department since Mr. Anderson's visit, and the agent has been instructed to place lights on two of the platform buoys in the harbour, similar to those which have given great satisfaction in Victoria harbour. It is thought that these buoy lights will be preferable to any system of harbour lights on land, as the only two available points are at some distance from the channel, with outlying reefs between.

#### REPAIRS TO EXISTING STATIONS.

### Race Rocks.

The boiler of the steam fog whistle having been condemned a new boiler was constructed under contract by the Polson Iron Works of Toronto, they being the lowest tenderers, and has been placed in the fog whistle building. Contract price for the boiler delivered in Victoria was \$868.50. It has been decided for the sake of increasing the efficiency of the station, to put in a duplicate boiler in case of accident, and tenders are now being asked for this work. The whole of the interior of the fog alarm building has been refitted to receive the new boilers. An old stone tank in the engine room was pulled down, and two iron tanks put in its place.

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## Cape Beale.

The trainway from the landing to the lighthouse was repaired and partly rebuilt in July last by the crew of the "Douglass," with the assistance of four labourers, and the trail from the light station to Bamfield Creek was at the same time cleared of underbrush. A porch was built at the back door of the dwelling, and some minor repairs made.

### Yellow Island.

When this station was inspected by Mr. Anderson in May he found that several parts of the building were not in accordance with the specification, and instructed the agent to take a carpenter and mason up and have the defects remedied, which was done at the expense of the contractor.

### Point Atkinson.

Steps from the landing to the lighthouse have been rebuilt.

### Sand Heads.

Two additional dolphins were driven close to the iron base of the building to prevent ice and logs from striking it.

Minor repairs and necessary painting were executed at all stations which required them, in the ordinary manner.

## BUOYS AND BEACONS.

The Sand Heads, Fraser River, buoys are kept in position by the snag-boat "Sampson".

## Rosenfelt Rock.

In consequence of the disappearance of the wreck of the ship "John Rosenfelt" from the reef off the east coast of Saturna Island, in the Straits of Georgia, the extremity of the reef has been marked by a large iron black conical buoy moored in 12 fathoms.

# Sydney Channel.

A spar buoy, painted in alternate red and black horizontal bands, was moored last March in 16 feet water, on the more south-easterly of the two rocky patches off the north-west part of Sydney Island in Sydney Channel.

### Nanaimo.

A red spar buoy has been moored on the edge of the bank on the north side of the middle ground, off the Vancouver Coal Company's southern most shed in Nanaimo Harbour.

The beacon on Beacon Rock having been carried away the rock is now marked by a platform buoy, similar to the others in that harbour.

## Buoys in northern waters.

Advantage was taken of Mr. Anderson's trip to the north in the steamer "Sir James Douglas" to establish the following spar buoys:

- 1. A red buoy on the northernmost extreme of the sand bank off the mouth of Nimpkish River, opposite Alert Bay, in Broughton Strait.
  - 2. A red buoy off Ledge Point in the same waters.
  - 3. A middle ground buoy on Dall Patch, in Seaforth Channel.
- 4. A small black spar buoy at the entrance to Ecstall Inlet, in Port Essington, Skeena River. This buoy has not proved satisfactory, as the strong current usually carries it under.
  - 5. A black spar on the south-eastern extremity of Tugwell Island Reef.
- 6. Three small spar buoys in Metlah Catlah Bay. These buoys have since been reported adrift.
  - 7. A red spar on the south-west extremity of Hodgson Reefs.
- 8. A middle ground spar on the Sparrowhawk Rock, south of Finlayson Island, Chatham Sound.
- 9. A red spar in the Dead Tree Point channel, at the entrance to Skidegate Inlet. This buoy also has since been reported adrift.

## Goose Spit Beacon.

A wooden pyramidal beacon 32 feet high, painted black, was erected in July last by the crew of the "Douglas" on the extremity of Goose Spit, at the entrance to Port Augusta, Baynes Sound.

### Sisters Beacon.

A similar beacon, 42 feet high, was similarly erected on the easternmost of the Sisters Rocks, in Stevens Passage, west of Lasquita Island, Strait of Georgia.

The total cost of maintaining the lights, fog alarms, buoys and beacons in the Province of British Columbia, for the fiscal year ended 30th June last, was \$7,251.55, and the expenditure on account of construction of new stations was \$10,258.80.

### CHANGES IN LIGHT-KEEPERS.

The following changes in the List of Light-keepers appointed throughout the Dominion, have taken place during the year ended 1st December, 1891:—

### LIGHTS ABOVE MONTREAL.

Name of Keeper.	Name of Station.	Date of Appoint- ment by Order in Council.	Salary per An- num.	Remarks.
		1891.	\$	
Thos. Darling	South East Bay, Muskoka	Jan. 31.		Succeeded M. Howe, left locality.
	Christian Island		425	Exchanged with J. Hoar, now keeper of Hope Island light.
John Hoar	Hope Island	do 25	450	Exchanged with A. Collins, now keeper of Christian Island light.
Jas. Burlingham	Point Peter Fog Alarm	do 26	650	Increase of \$250 on assuming
				charge of new fog alarm, in addition to his duties as light- keeper.

## LIGHTS ABOVE MONTREAL-Continued.

Name of Keeper.	Name of Station.	Date of Appointment by Order in Council.		Salary per Annum.	Remarks.		
		189		8			
John A. Innes Alphonse Blondin	Port DoverLachine Pier	April May June	13 26 6	100 260 200	Succeeded Thos. Graham. Succeeded C. Morgan, resigned. Succeeded C. L. dit Parisien, superannuated.		
D. B. Hawkins	Peninsula Harbour, Algoma	Aug.	31		New light.		
H. E. Matthews	Pole Light, Wiarton Long Point McKie's Point	do Oct.	21	50 400 175	do New fog alarm. Succeeded Alex. McDonald, super- annuated.		
	QUEBEC 1	oivis	ION	•			
Elzan Hannal	Rigguet Light and Fog Alaum	April	17	700	Provides assistant. Succeeded E.		
	Bicquet Light and Fog Alarm.	_			Parent, deceased.		
N. Arsenault Alex. Poitras	Etang du Nord Bersimis Range Lights	July Sept.	21 21	350 100	Succeeded T. O'Brien, deceased. New lights.		
Paul Salvail, jr	Isle à la Pierre		9		Succeeded W. Matte, jr., super seded.		
C. E. Forgues	Perroquet Island		9	600	Succeeded H. de Puyjalon, resigned.		
	NEW BRUNSW	ick i	DIVI	SION.			
Burton McNichol Miles McMonagle	Bliss Island Oromocto Shoals	Jan. May	31 . 26	300 80	Succeeded C. McNichol, deceased Succeeded W. Rutledge, super seded.		
Norman B. Jones	Oak Point, St. John River	Oct.	9	80	Succeeded Z. Jones, deceased.		
Jude Robichaud	Bridges Point	Dec.	9 . 5	200	New light. Succeeded P. Leger, deceased.		
,	NOVA SCOTI	A DI	VISI	ON.			
L. S. Nickerson	Wesses Lodge Lightship.	Jan.	31	500	Succeeded J. R. Kenny, super		
M. McFadyen	Mabou Range Lights	April	17 .	50			
Alfred Brownell	Cold Spring Head	May	26	100	cality. Succeeded J. H. Brownell, re		
	Walton Harbour	1	26	125	signed. Succeeded A. McN. Parker, de		
Geo. A. Briggs	Apple River	Dec.	5.	200	ceased. Succeeded A. McCullough, resigned.		
	BRITISH COLU	MBIA	DIV	VISIO			
F. M. Eastwood	Race Rocks	Jan.	31.	1,200	P. Daykin, transferred to keepe		
R. S. Jones	. Sands Head	May	1	900	ship Carmanah light. Succeeded J. R. Wick, deceased		

### OIL.

A contract was entered into two years ago with the Imperial Oil Company of Petrolea, Ont., for the supply of petroleum required for lighthouse purposes, and oil was delivered during the past year under that contract at the following rates, viz:—

Delivered at	Per gallon in barrels. Cents.	Per gallon in cases. Cents.
Sarnia	$15\frac{1}{2}$	21
Hamilton	$17\frac{1}{8}$	$22\frac{5}{8}$
Kingston	18 <del>§</del>	$23\frac{1}{8}$
Montreal	18 <del>3</del>	$23\frac{7}{8}$
Quebec	19	24
St. John, N.B	$19\frac{1}{2}$	$24\frac{1}{2}$
Pictou, N.S		$25^{-}$
Halifax	19 <del>1</del>	$24\frac{1}{2}$
Charlottetown, P.E.I	$20\frac{1}{2}$	$25\overline{\frac{1}{2}}$
	===	===

By the terms of the contract the oil is required to be of the best quality of standard white extra refined petroleum, free from acid or other impurities, to weigh at 62° Fah. not less than 7.85 lbs. nor more than 8.00 lbs. per gallon; to withstand a flash test of 115° Fah. by the standard pyrometer, and in all other respects to comply with requirements of the Petroleum Inspection Act. The oil is required to be delivered partly in barrels and partly in cases; barrels to be of the best quality, new, iron-hooped, made of white oak, prepared inside with liquid glue and painted outside; the cases to contain each two cans, each can containing four to five Imperial gallons; cans to be made of best brand of cnarcoal tin.

The quantity supplied to the lights above Montreal during the past fiscal year was 18,928 gallons; to the lights in the Quebec district 23,899 gallons; to the Nova Scotia district 52,765 gallons; to the New Brunswick district 10,351 gallons; to the Prince Edward Island district 6,624 gallons, and to British Columbia 4,520 gallons; making in all 117,187 gallons.

The oil for British Columbia is American; it has been found that it is in the public interest to purchase high test oil of that description for the lights in that province. A quantity-of American oil was also purchased for the service of the dioptric lights as the Canadian oil is not found to be very suitable for such lights. The expenditure for oil for the past fiscal year was as follows: Above Montreal, \$3,606.48; Quebec, \$4,582.35; Nova Scotia, \$12,927.51; New Brunswick, \$2,636.85; P. E. Island, \$1,561.02; British Columbia, \$1,123.00; total, \$26,437.20.

## DOMINION STEAMERS.

The steamers under the control of this Department consist of the screw steamer "Newfield"; the "Druid," paddle wheel; the "Lansdowne," screw; the "Alert," screw; the "Stanley," screw, and the "Bayfield," screw, and the small steam launch "Dolphin." employed at Quebec in connection with the River Police Force, and also the "Quadra," a new steamer, screw, and the "Sir James Douglas," screw, with her small steam launch tender.

### NAPOLEON III.

The Government steamer "Napoleon III," belonging to the Quebec district was wrecked on the 18th of October, 1890, by grounding on a flat rock at the entrance of Little Glace Bay during a heavy gale. It was deemed advisable to raise and repair her, and a contract was accordingly entered into with Messrs. McDonald & Co. of Halifax to float and repair the vessel. This contract was not carried out as on the 2nd of December last a terrific gale so completely wrecked the hull that it was not considered possible to repair it. The machinery and boilers were taken out by the contractors, who have made a claim for saving them, which claim has not been settled as yet. The machinery was found to have sustained very little damage. Tenders were called for the purchase of the machinery and hull separately, but as none of the offers were satisfactory no tender was accepted. The machinery has been carefully overhauled and cleaned and is now in good condition if required for another vessel. It has been removed to Halifax, together with the boilers, and stored on the premises of the Marine Department at that port. The hull of the steamer is now lying where the vessel was wrecked; steps have been taken to dispose of it, and one or two offers are being considered.

#### DRIIID

The steamer "Druid" was employed during the past year in attending to the gas and other buoys in the River St. Lawrence and supplying a number of the river lights. During the past fiscal year the sum of \$2,262.42 was expended in repairs to the hull and engines of this vessel. A new row boat was placed on board the "Druid" during the season. This steamer requires new cylinders and air pumps, the estimated cost of which would be from \$6,000 to \$8,000. As a large outlay has already been made in recent years on this boat for repairs in order to keep her in suitable condition for the service of the Department, it has been considered more in the public interests to offer her for sale than to make extensive repairs now to the machinery. Tenders for her purchase have accordingly been invited, up to the 5th of February, 1892. The "Druid" is an iron paddle wheel steamer of the following dimensions: length, 160 feet; breadth, 26.6 feet; depth of hold, 9.6 feet; gross measurement, 239 tons; draught with bunkers filled, 7 feet 6 inches. Her furniture has been removed, a careful inventory taken, and is now stored at Quebec. The average number of her officers and crew was 21 in all, and the cost per diem per man for provisioning the vessel was about 39 cents.

## NEWFIELD.

The steamer "Newfield" was engaged from the 2nd of August, 1890, to the 1st of October in cable service for the Public Works Department and from the 14th October, 1890, in lighthouse and buoy service on the Nova Scotia coast and the North Shore of New Brunswick. On the 10th December, 1890, while returning from Brier Island to Halifax the powder magazine exploded, tearing up the deck and part of the port side of the ship, breaking deck-beams and completely wrecking all the forward part of the ship. One man was killed and six injured, two of whom afterwards died in hospital, at Yarmouth, N.S. A careful inquiry was held into the cause of the explosion, by Lieut. Gordon, R.N., of the "Acadia," who reported that the explosion was accidental. The sum

of \$1.114 was voted by Parliament and was paid in gratuities to the relatives of the deceased men. While the "Newfield" was lying in harbour at Yarmouth, Capt. Richard A. Guilford, who had been in the service of the Department since March, 1880, suddenly fell dead in the cabin. This sudden death was very much regretted by the Department, as was also the sad calamity of the death of the men killed by the explosion. Temporary repairs were made to the "Newfield" by contract at a cost of \$80, at Yarmouth, and the vessel taken to Halifax, where a thorough inspection was made of her machinery and hull, by Hull Inspector Coker and Steamboat Inspector Stevens, who reported that extensive repairs were necessary. Tenders were invited for these repairs from firms in Halifax, St. John, Pictou, New Glasgow and Yarmouth. The tender of Messrs. W. & A. Moir, offering to repair both the hull and machinery, was the lowest. It was accepted and the work done according to specification and contract, under the inspection of Messrs. Stevens and Coker, at a cost of \$7.730. Tenders were also invited to make repairs to the deck and other wood-work, and the offer of Mr. Michael O'Brien, which was the most advantageous, accepted, the cost of the work being \$883. New steam steering gear was put in at a cost of \$775. Tenders for this work were invited, with the result that the tender of Messrs. W. & A. Moir was the only one received. The windlass was also repaired by contract at a cost of \$225. The ship was painted outside and inside by contract at a cost of \$870. In addition to the above repairs costing \$10,483, the sum of \$3,848.57 was expended during the year for ordinary repairs, making the total expenditure on account of repairs to the "Newfield" for the fiscal year \$14,331.57. The earnings of the "Newfield" in connection with cable service amounted to \$5,900. On the 20th May, 1891, the vessel went into commission and was engaged in buoy service and visiting Sable Island with supplies. She continued in the lighthouse and buoy service during the summer and fall, in which work she is now engaged. The average number of the officers and crew during the past season was 33, and the per diem cost of provisioning the steamer per man was about 42 cents.

### LANSDOWNE,

The steamer "Lansdowne" was employed during the last year in buoy and lighthouse service, both in the New Brunswick and Nova Scotia divisions. The sum of \$2,387.91 was expended on repairs to this vessel during the past fiscal year. The average number of the officers and crew of the "Lansdowne" was 29, and the cost of provisioning the vessel was 44 cents per diem per man.

#### STANLEY.

The steamer "Stanley," which is employed for the maintenance of winter communication between Prince Edward Island and the mainland, began work on the 6th December, 1890, and made her last trip in this service, for the season, on the 1st of May, 1891, during which time she made fifty-five round trips. Her first regular trip was between Charlottetown and Pictou, on which route she continued till the 14th of December when she was compelled to go to Georgetown after an attempt to enter Charlottetown Harbour, which was blocked with heavy drift ice. The vessel continued to ply between Georgetown and Pictou till the 18th of April, 1891, when she again ran between Charlottetown and Pictou. The continuity of the Stanley's trips was broken at various periods during

the season by heavy drift ice in the Strait of Northumberland. On the 5th January. 1891, the vessel left Georgetown but did not arrive at Pictou till the 7th. On the 8th she left Pictou but did not arrive at Georgetown till the 10th. She left Pictou on the 16th February but did not arrive at Georgetown till the 28th, being twelve days fast in the ice which was the heaviest known for years. Arriving at Georgetown on the 28th February, the steamer was laid up till the 13th March for the purpose of cleaning her boilers. From the 30th March to the 3rd April the "Stanley" was prevented by heavy ice from reaching Pictou. On the return trip heavy ice again interfered, and the steamer was two days reaching Georgetown. From the 6th to the 8th of April she was in port at Georgetown unable to proceed to Pictou owing to heavy drift ice. The total number of days lost during the season, from heavy packed ice and gales, was twenty-nine, whilst fourteen days were occupied in cleaning the boilers at a season when it is almost impossible to keep up continuous communication unless the winter be very mild. The "Stanley" arrived 54 times at Pictou; 41 at Georgetown and 13 at Charlottetown during the winter service. During the season 1,868 bags of mails were carried by the "Stanley." It was found necessary, on the 3rd of January last, to transfer the "Stanley" mail service to the iceboats, crossing between Capes Traverse and Tormentine. mail service was resumed by the "Stanley" on the 11th of April last. The earnings of the boat were as follows: Approximate weight of freight carried, 4,325 tons, \$7,698.54; passengers carried at \$3 and \$1,50, 2,317, \$6,558,00, and meals and state rooms, \$1,082.50; towing vessels in Cardigan Bay, \$200, making the total earnings for the season of 1890-91, \$15,539.04. The expenditure on account of maintenance for the fiscal year amounted to \$15,873.90 and the sum of \$5,567.85 was expended for repairs within the same time, making a total expenditure of \$21.441.75. The "Stanley" was employed in the Fisheries protection service from the 18th June to the 18th October, 1890, and again from the 18th June to the 11th of September, 1891.

After three seasons running, indentations in the iron plates of the "Stanley" at the water line, could be plainly observed, and it was the opinion of the captain that the vessel's progress in the ice was retarded by these indentations. caused by contact with heavy ice but did not extend the whole length of the vessel as one third of her, forward, had been double plated and no indentations could be seen in the double plated part. The steamer was placed on the Pictou marine slip and two officers of this Department, (the Hull Inspector and Steamboat Inspector for the Maritime Provinces), made a thorough inspection of the plates and frames. They reported that the indented plates should be removed, heated and straightened and double plating put on the whole length of the steamer with filling plates between. Tenders were called for the work recommended by the inspectors, and the contract awarded to Mr. J. Patterson, of Halifax, whose tender was the lowest, being \$14,500. The vessel was placed in the new dry dock at Halifax on the 15th September last and the work done according to a carefully prepared specification and under the inspection of Mr. Stevens, steamboat inspector, and Mr. McMillan, the chief engineer of the steamer who reported that the vessel was ready for sea, according to contract, on the 26th November last. The plates were imported from the Steel Company of Scotland by the Marine Department, and are of the kind known as Siemens process ship plates; they cost \$966.84. In addition to this the sum of \$289.85 was expended for minor repairs, making a total of \$15,752.72 paid for repairs since the end of the fiscal year, 30th June 1891.

On the recommendation of the chief engineer an evaporator was imported from Messrs. G. & J. Weir, Glasgow, Scotland, and placed on board the Stanley. This evaporator was procured by contract and the cost of it was \$606.04. The work of putting it in position was tendered for and awarded to Mr. J. Patterson, of Halifax, whose offer was the lowest, viz., \$290, making the total cost \$896.04. Evaporators are designed for supplying fresh water to marine boilers to "make up" the loss sustained through leakages at gland joints and at sea. It was found that difficulty was experienced in getting fresh water, at critical times, in port. To obviate this difficulty the evaporator was placed on board for the purpose of doing away as far as possible with the necessity of using salt water to "make up" any deficiency in the boilers.

· In accordance with your instructions of the 9th January last, I proceeded to Prince Edward Island to enquire into the management of the winter service between the mainland and the Island. I crossed in the S.S. "Stanley" from Picton to Georgetown in the midst of a north-east gale and was astonished at the great power and capacity of the "Stanley" as was shown in passing through very heavy ice. As a result of my observation of the difficulties encountered on the trip in getting through the heavy ice, I have no hesitation in saying that the "Stanley" has proved a great success for the particular service in which she is engaged during the winter months. In March last I recommended some additional steel plating on her sides, which work, as stated above, has been done, after careful inspection was made. While in Charlottetown I put myself in communication with the Board of Trade of that city and attended a meeting of the Council of the Board and listened to the representations concerning delays which had occurred in the delivery of the mails. I informed the Board that I would report what I had heard, and would recommend to the Minister any change which I thought would remedy the difficulties referred to by the Council, so as to give the Island a daily mail, either by the ice-boats or steamer, as often as the weather will permit. These recommendations have since been made by me and steps have been taken to avoid unnecessary interruption to steamboat communication in the early part of the winter season. The Department issued a public notice dated 3rd February, 1891, fixing the time of running of the "Stanley" for the winter months, from the 1st of December till the 1st of May, unless it may be found that the Prince Edward Island Navigation Company's Boats are unable to continue their trips as late as the 1st of December or are not on their routes on the 1st of May. If such a contingency should arise, then, in order to keep up daily communication, the "Stanley" will begin to run when the company's boats cease running in the fall and continue till they begin in the spring. This public notice also states that the "Stanley" will make daily return trips between Charlottetown and Pictou as long as the ice will permit, but when the steamer is no longer able to make daily trips between these ports she will be put on the route between Georgetown and Pictou and will make daily return trips if possible. In accordance with the public notice the "Stanley" began her trips between Charlottetown and Pictou on the 1st December of this season.

When the "Stanley" was placed on the marine slip at Pictou, it was found that three of her propellor blades were broken by the ice. A new set of blades were immediately ordered from Scotland, of greater strength and more durable material. These blades have lately arrived in Halitax, and cost, including the freight, \$908.70. The average number of officers and men on board the "Stanley" was 34 in all, and the cost of provisioning the vessel was about 43 cents per diem per man.

### SIR JAMES DOUGLAS.

The steamer "Sir James Douglas," stationed at Victoria, B.C., was put in commission on the 16th March last and remained in commission till the 30th of November, when her crew was paid off. This steamer was generally engaged in buoy and lighthouse service. On the 24th April the Chief Engineer of this Department, Mr. W. P. Anderson, and the agent at Victoria, entered upon a tour of inspection of all the light stations in the province, and of the waters of British, Columbia, north to Port Simpson and including Queen Charlotte Islands; completing the inspection on the 21st of May. The steamer at the same time delivered supplies at some of the From the 17th June, 1890, to the 23rd, this steamer was engaged by the Canadian Pacific Railway Company in laying cable, for which service this Department received the sum of \$622.25 on the 6th of September, 1890. She was again hired by the same company to repair cable as before, from the 11th to the 22nd of August, 1890, for which the sum of \$1,122.50 was received on the 27th of September, 1890. The boat was again employed by the C. P. R. Company during the first week of December, 1890, as before, and the sum of \$731.50 was received by the Department on the 19th of January, 1891. The "Sir James Douglas" was placed at the disposal of the Local Government of British Columbia on the 25th August, 1890, for the purpose of making an exploratory survey of the west coast of that province in connection with the scheme of establishing Crofter fishing settlements. A suitable steamer in the meantime was placed at the disposal of this Department by the Local Government of British Columbia. On the 2nd of July last the "Sir James Douglas" was employed by the Indian Reserve Commission on a special trip to Banks Island, which occupied 12 days. The earnings of this trip will appear in the accounts of the next fiscal year. The total earnings of the "Sir James Douglas for the fiscal year, including \$21 subsistence of Indian Reserve Commisioners, were \$2,497.25, and the total expenditure for the same time was \$11,012.14. Instructions have been given to prepare a specification of the fittings of this boat with a view of disposing of her, as the new boat "Quadra" will take her place.

The average number of officers and men on board the "Sir James Douglas" was 12, and the cost of provisioning the vessel was 53 cents per diem per man.

#### QUADRA.

The steamer "Quadra" is a new steel steamer constructed in Paisley, Scotland, and will take the place of the "Sir James Douglas" on the British Columbia station. Tenders for the construction of a steel steamer were invited by public notice throughout the Dominion, including British Columbia. Copies of these public notices, together with specifications and tracings, were sent to the High Commissioner for Canada with the request that he would forward them to shipbuilders in Great Britain. Similar notices specifications and tracings were sent direct from this

Department to shipbuilders in Great Britain. Ten tenders were received offering to build a steel steamer, three for a wooden steamer and one for a composite steamer. Some of the Canadian firms offered to supply a boat built in Great Britain. The tender of Messrs. Fleming & Ferguson, of the Phænix Works, Paisley, G.B., was the lowest and most favourable. They offered to build a steel steamer according to requirements of the specification for £15,000 sterling. As this was the most advantageous offer made it was accepted and a contract signed for the delivery of the boat on the Clyde, on the 6th of June, 1891. The steamer was not completed and delivered on the 6th of June as required. The cause given by the contractors for this departure from the terms of the contract was the Railway Strike in Scotland in February last, which interfered with the operations of all shipbuilding concerns there, preventing the delivery in time of material which had been ordered. Proper steps were taken through the High Commissioner to inquire into the delay with a view of protecting the Department's interests, by deducting the stipulated amount for damages from the contract price if the delay might have been controlled by the contractors, bearing in mind that strikes, fires and other causes beyond the builders' control were excepted in the contract. A careful enquiry under legal advice showed that the delay was beyond the builders' control. All necessary material to build the vessel had been ordered in due time, but owing to the non-delivery of it, in consequence of the strike, the builders could not proceed with the construction and therefore under the contract could not be held responsible for the delay. On the 25th of September last the "Quadra" was completed and went on her first trial trip, attaining a speed of 12 knots an hour. She was delivered to the officer representing this Department, at Glasgow on the 6th of October and the last instalment of contract price was paid on the 7th of the same month. Mr. Lawrence Hill, Civil Engineer, represented this Department during the time the boat was building and carefully inspected her con-He certified that the work was in every respect up to the requirements of the specification,

The vessel was built under the special survey of English Lloyds and the following certificate of class was issued on the 21st of September, 1891: "This vessel has "been built under the special survey of the Surveyors to this Society, and was "reported to be on the 21st September, 1891, in a good and efficient state, fit to "carry dry and perishable cargoes, and has been classed and entered in the Register "Book of this Society with the character 100A1." The engines and boilers were also surveyed during construction by Lloyds' Surveyors, and a Lloyds' Machinery Certificate issued 2nd October, 1891. In addition to this, certificates were issued by Lloyds for the anchors and steel hawsers which successfully withstood the mechanical tests required by the Imperial Act of Parliament. All these certificates are in the possession of the Department.

The dimensions of the "Quadra" as appears by the register are, length 174 feet; breadth, 31·1 feet; and depth of hold, 13·6. Her gross tonnage is 573·30 tons, and her register tonnage 265·25 tons. Her engines are Fleming & Ferguson's patent, quadruple expansion engines, of the improved type, designed to maintain a speed of ten knots at sea. These engines and boilers are guaranteed to be "upheld" for six months from date of delivery, any defect in material or building to be made good by the contractors. An evaporator of Morrison's type to "make-up" loss of

fresh water in the boilers, has been placed on board. The vessel also contains an armory and magazine which can immediately be brought into use if required. She is also fitted with a donkey engine for pumping and the use of the winch.

The contract price paid for this boat, as already stated, was £15,000 sterling, or \$72,999.99; the sum of \$356.00 was also paid for some minor fittings not at first specified, and this sum has been charged to construction. The total sum paid Mr. Lawrence Hill for inspection and expenses was \$345.55, thus making the total first cost of the "Quadra" \$73,701.00. The grant from Parliament was \$70,000.

On the 15th October last she sailed from Greenock, Scotland, for Victoria, B.C., with Captain Walbran as master, Mr. Hodgert, as guarantee engineer, on behalf of the builders, and Mr. Grant, of the "Sir James Douglas," engineer, together with a crew, including engineers and firemen, of 28 persons in all. Stores and fuel amounting in value to about \$3,800, were placed on board. She reached St. Vincent, Cape Verde Islands, on the 30th October, all well, but encountered very rough weather in the Bay of Biscay, which continued till the vessel reached the Canary Islands. During this heavy weather, amounting to a hurricane in the Bay of Biscay, the steamer proved herself to be an excellent sea boat. About 124 tons of steam coal were placed on board at St. Vincent, and the vessel proceeded to Valparaiso, which port she reached all well on the 9th December, 1891.

As this report was being prepared for printing the Department received intelligence from Captain Walbran, reporting the arrival of the "Quadra" at Esquimalt, B.C., on the 5th of January, 1892. The passage was made from Greenock safely in 80 days, including 10 days at anchor in the following places: St. Vincent, (Cape de Verdes) Strait of Magellan, Smyth's Channel, Lota (Chili) and San Fancisco (Cal). Several gales were encountered of a severe character in which the "Quadra" proved herself to be an excellent sea vessel. The average consumption of coal was about 9 tons per day, and the speed of the steamer was about 9 knots per hour. The distance made by her was 14,817 miles.

#### BAYFIELD.

The "Bayfield" is a wooden steamer of 150 tons gross, and 94 tons register, is 29 years old, and is employed for the purpose of the hygrographic survey of the Georgian Bay. This vessel left Owen Sound to continue the survey, on the 4th of May last, and was employed at that work till the 25th of October last, she was then put in the Fisheries protection service and remained in that service under the Fisheries Department till the 30th of November last. The sum of \$550.87 was expended for repairs during the fiscal year on the "Bayfield." The officers and crew numbered 22 in all, and the per diem cost of provisioning this boat per man was 47 cents.

#### ALERT.

The "Alert," which had taken the place of the "Newfield," while the latter was being repaired, was put in a temporary condition at Halifax, to proceed to Quebec, to replace the "Napoleon III" as a supply boat. Tenders were invited for a steam windlass for the "Alert," and the offer of the Pictou Iron Foundry Company being found the lowest it was accepted, and the windlass put on board according to

contract, at a cost of \$625. She arrived at Quebec on the 23rd of November, 1890. A larger windlass and one more suitable for the "Alert," was in store at Quebec, and was put on board in the place of the new one, which was stored. In order to make this vessel efficient, repairs were found necessary, and a contract was entered into to place the steamer on Roche's gridiron for the sum of \$33.15. As navigation closed unexpectedly, a further agreement was entered into with Mr. Roche to allow the steamer to remain all winter on the gridiron for the sum of \$100. The work of repairs was carried on under the supervision of departmental officers and by carpenters and blacksmiths employed at the Quebec agency. The decks and bulwarks were caulked, the topsides smoothed with putty and cement and painted, and repairs to machinery made. The total cost of repairs to the "Alert" for the fiscal year was \$4,786.59; the principal part of the expenditure was for labour. In December of 1889, instructions were given to have the "Alert" measured, at Halifax, under the Merchant Shipping Act. Her dimensions, as appears by certificate of survey, are 168.5 feet in length; breadth, 31.5 feet, and depth of bold 20 feet; gross tonnage, 607.80, and net tonnage, 413.30. A wheelhouse and life-boat, formerly belonging to the SS. "Stanley," were shipped from Charlottetown, P.E.I., to Quebec, in May last, at a cost of \$25, and placed on board the "Alert." Two new boats were also supplied her. Tenders were invited in April last, at Quebec, for the building of five boats, and the contract awarded to P. Pouliot of Quebec, whose tender was the lowest, being \$4 per foot. Two of these boats were put on board the "Alert," and the cost will appear in the next year's fiscal statement.

On the morning of the 13th of November, 1890, while the "Alert" was on her way to Quebec from Halifax under the command of Captain McElhinney she collided with the schooner "Scylla" loaded with potatoes from Prince Edward Island for Boston, near Cape Jack, N.S., in the Straits of Canso. In the darkness the extent of the damage to the "Scylla" could not be observed, but as she was believed to be in a sinking condition her crew were taken on board of the "Alert." was afterwards towed to Port Hawkesbury, N.S., in a derelict state, by the steamer "Coila" and there appraised and disposed of. A preliminary enquiry into the cause of the collision was held at Pictou by Mr. J. R. Noonan under the Wreck and Salvage Act, on the 14th November, 1890. A further investigation was held by Captain W. H. Smith, R.N.R., Chairman Board of Examiners of Masters and Mates, on the 20th January, 1891. A commission of enquiry to hold a formal investigation into the cause of the collision was appointed by Order in Council on the 4th February, 1891, consisting of Captain W. H. Smith, R.N.R, and Lieut, Gordon, R.N., officials of this Department. The enquiry was held at Halifax, beginning on the 12th February, 1891, under the provisions of the Wreck and Salvage Act, Cap. 81 Revised Statutes of Canada. Evidence was given under oath by the officers of the "Alert." and the captain and crew of the "Scylla." These enquiries resulted in the finding that the officers of the "Alert" were to blame for the collision, as the wrong order was given to the man at the wheel by the officer in charge on deck when the vessels approached each other. A claim was made by the owner of the "Scylla" against the Government for the loss of that vessel and a similar claim made by the owner of the cargo. These claims were carefully investigated and submitted to the Justice Department for an opinion as to the liability of the Government. The Justice Department gave the opinion that the claimants were entitled to pay, as the

56

investigation proved that the captain of the "Scylla" was not to blame for the collision and consequent loss of his schooner. The original amounts claimed were not allowed, but the following sums were offered in settlement. To the Reliance Insurance Company, Boston, \$1,100 for amount paid the owner of the cargo by them; to the owner of the cargo for advance on freight, &c., \$150; to the Boston Marine Insurance Company, \$2,251, for amount paid by that Company to the owner of the vessel; to G. W. Hennesey, owner, \$1,134.55, which includes \$100.35, expenses of his crew as witnesses at investigations; to the captain and crew for loss of effects, \$511. In addition to this the sum of \$83.35 was paid in connection with the investigations, making a total sum of \$5,230. The value of the vessel and fittings was arrived at by careful enquiry, and estimated at \$3,340; the value of the cargo was taken from the invoice of the cost price. An appropriation of \$6,000 was made by Parliament for the payment of the "Scylla" claims.

On the 12th of October last while the "Alert" was engaged in delivering lighthouse supplies at Wreck Bay, Anticosti, she ran aground at ebb tide. schooner at that time in the vicinity was employed by the captain at \$50 per hour to assist in getting the "Alert" afloat. An anchor was run out and by heaving on the windlass and the combined use of the "Alert's" engines and the wrecking schooner the vessel was got afloat at high tide, having been aground six hours. A preliminary examination was held into the cause of the stranding, by the agent at Quebec, on the vessel's return to that port, which revealed the fact that one of the men under instructions of the boatswain had cut two fathoms from the lead line but had not removed the marks on the line nor had the boatswain informed the officers of the ship. As the captain was governed entirely by the soundings which were being taken by the shortened line when entering Wreck Bay, he was deceived as to the depth of water and consequently took the ground although the "Alert" was moving cautiously. A formal investigation held by Captain W. H. Smith, R.N.R., Commissioner of the Court of Enquiry, brought to light the same facts as the preliminary investigation, and in addition to the sentence given at the preliminary examination the Court dismissed Theodore Simpson from the Government service and suspended his certificate for three months, on the ground of gross negligence in not informing the officers that the lead line had been cut. The Court also censured the 1st mate, Arthur Morin, for neglectingto inspect the lead line. The expenses in connection with the inquiry amounted to \$27.10. On the 28th of July last whilst the "Alert" was proceeding to the Magdalen Islands from Cape Race, Newfoundland, a steamer was sighted stranded on Bird Rocks which proved to be the SS. "Tiber." The services of the "Alert" to draw the "Tiber" off were requested and the captain and crew of the "Alert" immediately proceeded to the work of hauling the "Tiber" from the rocks. When several ineffectual attempts had been made the crew was engaged in assisting to jettison the cargo, after which the "Alert" succeeded in getting the "Tiber" afloat. Twenty-six hours were occupied in the work, for which the sum of \$500 was paid by the agents of the "Tiber" and the amount placed to the credit of the Receiver General. This amount will appear as earnings of the "Alert" in the next fiscal year. The average number of officers and men all told on the "Alert" was 32 while the cost of provisioning the vessel was about 40 cents per diem per man.

57

The following statement shows the expenditure for maintenance and repairs of each steamer and the receipts for the fiscal year ending 30th June, 1891.

	Expenditure.						
	Repairs.	Main- tenance.	Total.	Receipts			
:	\$ ets.	\$ cts.	\$ cts.	\$ ets.			
Newfield". Stanley". Sir James Douglas " Lansdowne". Druid ". Napoleon III ". Alert ". Quadra". La Canadiene" Fishery cruiser, temporarily employed by Marine Department.	5,567 85 431 31 2,387 91 2,262 42 1,690 89 4,786 59	731 05	29,698 51 21,441 75 11,012 14 21,800 67 11,970 95 10,024 22 10,152 94 1,813 51 731 05	15,539 04 2,497 25			
ExpenditureReceipts		,	9	<del></del>			

The system of provisioning the Dominion steamers which fit out at Halifax and Quebec, was changed during the season of 1891. Formerly at these two ports the captains of the steamers entered into an agreement with the Department to supply provisions at a fixed sum per month for each officer and seaman. At Quebec the sum was \$12 per month for officers and \$10 for seamen. Some complaints were made against this system and the Department adopted the present method of inviting tenders from provision merchants, grocers, butchers and others, to furnish supplies at contract prices. The lowest and most favourable tenders were accepted and the system has been found to work satisfactorily. Tenders were received in Halifax for the "Newfield," in St. John, N.B., for the "Lansdowne;" in Charlottetown, Georgetown and Pictou for the "Stanley;" in Victoria, B.C., for the "Sir James Douglas," and in Quebec, for the "Alert," "Druid" and "Dolphin."

# COST OF MAINTAINING LIGHTHOUSES, ETC., AND DOMINION STEAMERS.

The following comparative statement shows the expenditure on account of maintenance of lighthouses, steam fog-whistles and steam fog-horns for the years 1883-84 to 1890-91, both inclusive. The method of auditing all accounts in the Department before payment has been followed of late years. It will be seen that the lighthouses, &c.,

have increased in number yearly, but the expenditure for maintenance has decreased during the last three years.

Year.	Number of Lighthouses.	Number of Fog-Whistles.	Number of Fog-Horns.	Cost of Maintenance.	
				* ets.	
1883-84	597	23	10	456,868 33	
1884-85		23	12	478,064 04	
1885-86	625	23	16	505,929 27	
1886-87	658	23	24	476,514 44	
1887-88	664	23	27	464,471 76	
1888-89	675	24	29	459,423 80	
1889–90	705	23	32	434,802 10	
1890-91	710	23	31	455,254 42	

STATEMENT showing cost of maintaining Dominion steamers from 1884 to 1891.

Year,	Cost of Maintenance.
	\$ cts.
1883-84	123,816 25
1884-85	148,864 26
1885-86.	130,759 83
1886-87	141,424 42
L887-88	150,659 19
1888-89	126,629 33
1889-90.	114,959 20
1890-91	111,437 03

# ICEBOAT MAIL SERVICE.

This service was begun on the 25th December, 1890, and was continued up to the 11th April, 1891. Six boats were engaged in the service, manned by 5 men each, making a total of 30 men. These men are divided; 15 of them having charge of 3 boats, and a like number of the other 3 boats. There are two captains having charge of 14 men each, and the men are subdivided into boatswains, waistmen and bowmen. Three boats were under the direction of each captain, and crossings were effected alternately from Capes Tormentine and Traverse. When the weather permitted the boats which left Cape Tormentine returned to the place of starting the same day, and so with the other boats which left Cape Traverse. Seventy-seven crossings were made by one captain and his men and 75 by the others, thus making a total of 152 Mails were carried each trip and occasionally passengers. Four thousand one hundred and seventy-two bags of mail matter were taken; 126 passengers with their baggage at \$2 and 27 at \$4. The quantity of baggage exceeding the regular allowance for passengers, was 2,066 lbs., for which carriage was paid. The schedule of rates charged for carrying passengers and baggage is as follows: passengers drawn in the boats from shore to shore, \$4; passengers who are assisted by the boat and crews, \$2. Baggage not exceeding 40lbs, is carried free if in small valises; in excess of 40lbs, and in large trunks 40 cents per cubic foot is charged. The earnings, irrespective of carrying mails amounted, to \$421.98, and the cost of maintaining the service for the fiscal year \$7,026.89. The chief importance of the service is in connection with the carrying of mails to and from Prince Edward Island and for this purpose the Department did not spare any effort or expense to secure the delivery of a daily mail when the weather would admit. Daily reports to the Department were made by the Agent at Charlottetown as to the movements of the boats.

Since the close of the season 6 new boats have been built to take the place of the old ones. Tenders were invited in June last for the construction of them, and the contract was awarded to Mr. Joseph Rogers whose tender was the lowest, being \$58 for each boat complete, except painting and tinning. The boats were built according to specification, which required them to be 19 feet 6 inches in length, 5 feet 6 inches in breadth and 1 foot 6 inches in depth. The material is of the lightest kind consistent with strength and durability. The model is of the same as that in use for years past and which experience and experiment have proved to be the best adapted for such service. The boats are capacious, safe in water, can be easily propelled by oars, are easily pulled up on the ice hummocks owing to the construction of the stem and can be drawn upon the smooth ice with ease, being fitted with runners like those of a sleigh, which are fastened to the bottom and shod with steel. Each boat is supplied with 4 oars and 5 boat-hooks. Five leather straps are fastened to the gunwale on each side, and when used are thrown diagonally over the shoulder to assist in drawing the boats and for safety when crossing broken ice and lolly.

A boathouse has been built on each shore for the protection of the boats and which the crews and passengers make the points of starting and arrival. Teams have been employed to convey the boats, mails and passengers, from the boathouses to the edge of the shore ice, and from the place of landing on the shore ice to the boathouses. This work was done by contract at so much per trip, and cost for the season of 1890-91 the sum of \$899.25. An extension was made to the boathouse at Cape Traverse and a look-out tower placed on the roof; this work was done by contract and cost \$185,

With a view of making this service still more efficient the Department instructed Mr. C. A. Hutchins, inspector of lights for Nova Scotia, to visit the iceboat station at Cape Tormentine and report upon the discipline and state of the staff. The question of reorganizing the staff has been carefully considered by the Department, and as a result fifteen men residing at Cape Tormentine will be employed in future, when required, as boats' crews for that station, and fifteen residing on Prince Edward Island for the Cape Traverse station. It is proposed to move the iceboat station from Money Point, N.B. where it now is, to the railway wharf at Cape Tormentine, about three miles distant, and erect a new boathouse there to accommodate both the iceboats and the lifeboat which it is intended to establish for active service at that place.

## HARBOUR POLICE.

The last annual report referred to the permanent disbanding of the Harbour Police Force at Montreal in 1889. The inspector of the force and agent of the Marine Department at Montreal, Mr. St. A. Ormond, was placed on the retired list with a pension of \$308 per annum, and Mr. George Murphy, chief constable, with a pension of \$263.04 per annum. A retiring allowance was also paid to the men who had served ten years and upwards; the amount paid to each one being regulated by the length of service. The total amount of the gratuities paid was \$3,367.70, of which the sum of \$573.80 was paid during the fiscal year ending 30th June last. The building that was occupied by the force as a station and for the steamboat inspector's office was leased till the 1st of May, 1893, at a rental of \$600 per annum. This lease was transferred to the Department of Agriculture from the Department of Marine and all liability in connection with the payment of rent, etc., was assumed by the Department of Agriculture.

The force at Quebec, which is under the charge of Mr. J. U. Gregory, agent of the Department, consisted, during the past season, of one chief constable at \$2.15 per diem, four coxwains at \$1.65 per diem, twelve constables at \$1.25 and one steamboat engineer at \$1.40 per diem. In addition to this the sum of 25 cents per diem, good conduct money, was allowed each of the above men at the end of the season. On the 1st or May the men were sworn in and on the 14th November, the constables were paid off and the duties for the rest of the season were performed by the officers and engineer. These officers were disbanded on the 30th November with the exception of the engineer, who was retained for the purpose of cleaning and laying up the engine of the police steamer "Dolphin." The "Dolphin" is employed solely for harbour police purposes in the port of Quebec and patrols the harbour at least twice a day, during the season. She was placed safely in winter quarters by men of the force before they were disbanded.

The report of the Agent as to the efficiency and work of the force during the past season appears as an appendix to this report. It will be seen by reference thereto that the efforts of the police have been directed towards the suppression of crimping and desertion. It will be seen also that 29 arrests were made for offences of one kind and another and that a number of vessels were boarded by the policemen for the purpose of searching for deserters. The force is governed by rules and regulations which have been prepared by the Department, and daily reports have been made to Ottawa.

The total amount expended in connection with the maintenance of the force at Quebee for the fiscal year ended 30th June, 1891, was \$7,299.85, while the dues collected at the same port amounted to \$7,649.19. The total expenditure in connection with the Harbour Police, including the sum of \$573.80 for gratuities paid to the men formerly belonging to the Montreal Harbour Police, amounted to \$7,873.65, an excess over the receipts of \$224.46. Included in the total expenditure is the sum of \$250 expended in connection with the steam launch "Dolphin."

The receipts and expenditure on account of this service during the past 22 years are as follows, viz.:—

								Receip	ts.	Expenditur	e.
For	fiscal	year	$\mathbf{ended}$	30th	June,	1870	\$	23,996	68	\$ 18,461	83
	do	•		do		1871		21,235		17,400	73
	do			do		1872		27,215	80	20,348	00
	do			do		1873		26,618	<b>50</b> .	32,653	87
	do			do		1874		28,650	39	38,897	52
	do			do		1875		25,620	09	37,895	00
	do			do		1876		26,499	09	41,222	68
	do			do		1877		28,598	10	35,006	37
	do			do		1878		26,702	<b>4</b> 3	37,560	14
	do			do		1879		21,464	97	38,486	50
	do			do		1880		21,510	15	35,225	<b>54</b>
	do			do		1881		27,375	09	35,451	07
	do			do		1882		21,420	33	42,316	<b>56</b>
	$\mathbf{do}$			do		1883		28,060	02	38,318	65
	do			dο		1884		28,497	<b>25</b>	41,980	72
	do			do		1885		20,698	<b>7</b> 9	38,082	92
	do			do		1886		24,089	97	43,916	57
	do			do		1887		22,934	<b>49</b> .	40,340	12
	do			do		1888		21,072	73	37,279	<b>52</b>
	do			do		1889		19,688	27	31,647	<b>50</b>
	do			do		1890		17,816	95	21,787	61
	do			do		1891		7,649	19	7,873	<b>65</b>
							\$	517,414	34	<b>\$</b> 732,153	07
	$\mathbf{I}$	educ	t receip	ots fr	om ex	penditure.	•••		· · · · · · · · · · · · · · · · · · ·	517,414	34
	E	xcess	of exp	endit	ure ov	er receipts	s		•• .•••••	<b>\$214,738</b>	73

The men of the force at Quebec were supplied with uniform suits of serge and cloth; also a cap and hat and boots for each man. Tenders were invited from different local firms to supply the above clothing and the contract was awarded Messrs. Foley & Co., as their tender was the lowest. The total cost of suits, caps and boots was \$836.20, which amount will appear in the expenditure of the next fiscal year. Overcoats were supplied in 1890 at a cost of \$380.00. The clothing is not furnished annually but as necessity arises.

As vessels bound to Montreal do not pay River Police dues at Quebec, these dues being paid only by vessels remaining in Quebec to discharge or load cargoes, it has been suggested that the vessels remaining in Quebec should not be taxed for this service, when vessels proceeding to Montreal are free. From enquiries made by the Department, it appears that the owners of many of the vessels frequenting Quebec, would be pleased if this tax was abolished, as they do not consider they derive sufficient benefit from the River Police Force to compensate them for the amount of dues paid, which are at the rate of three cents per ton, not exceeding two payments a year.

There is a strong feeling among steamboat owners and agents of vessels trading to the Saint Lawrence, that the Government dues collected for River Police services

and sick mariners should be abolished altogether and let the owners of vessels attend to the requirements of their crews.

## SICK AND DISTRESSED MARINERS.

Under the provisions of Chapter 76, Revised Statutes, a duty of two cents per ton register is levied on every vessel arriving in any port in the Provinces of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, the money thus collected forming "The Sick Mariners Fund." Vessels of the burden of 100 tons and less, pay the duty once in each calender year, and vessels of more than 100 tons three times in each year.

By an Amendment to this Act passed at the Session of Parliament in 1886,50-51 Vic., chap. 40, it is provided that no vessel which is not registered in Canada and which is employed exclusively in fishing or on a fishing voyage, shall be subject to the payment of this duty.

The receipts for the fiscal year ended 30th June last amounted to \$43,830.98 being a decrease of \$4,050.77 as compared with the preceding year. The decrease in receipts of sick Mariners dues in the various Provinces was as follows: Quebec, \$2,650; Nova Scotia, \$1,560.58; New Brunswick, \$1,173.02; Prince Edward Island, \$20.40; whilst there was an increase in British Columbia, of \$1,353.40.

The Sick Mariners' Act does not apply to the Province of Ontario, and consequently no dues are collected from vessels in that Province, although a small expenditure is incurred on account of sick seamen. For a number of years past a grant of \$500 has been made by Parliament to the General Hospital at Kingston, and a similar amount to the General Hospital at St. Catharines for the care of such seamen as may receive medical attendance in them. During the fiscal year ending June 30th sick seamen were paid for at a per diem rate of 90 cents, but the amount paid to each Hospital did not exceed the parliamentary grant, viz: \$500.

In the Province of Quebec the expenditure on account of sick seamen amounted to \$7,216.45. By reference to last year's report it will be seen that the sum of \$15,521.75 was expended, but in this sum is included the cost of maintenance of the Marine and Immigrant Hospital at the port of Quebec. As this hospital was closed, in accordance with an Order in Council of the 4th February, 1890, nothing was expended for sick seamen in connection with it, during the fiscal year, however, \$751.75 was paid for watching and keeping the premises from injury. The total collections for the entire Province amounted to \$12,945.02, being \$2,650.77 less than the previous year.

At the port of Montreal sick seamen are cared for at the General Hospital and at Notre Dame Hospital, under an arrangement made by the department, by which 90 cents per diem is paid for board and medical attendance of each seaman. The amount paid the Montreal General Hospital during the fiscal year where 114 men were admitted, was \$1,200.50 and the amount paid Notre Dame Hospital, was \$1,286.10 for treatment of 112 men. The sick mariners' dues collected at the port of Montreal during the same period amounted to \$3,631.20.

The Sick Mariner's dues collected at the port of Quebec during the last fiscal year amounted to \$7,107.40, being \$2,177.10 less than the previous year. At this

port sick seamen are cared for at the Jeffery Hale and the Hotel Dieu hospitals, the sum of 90 cents per diem for each man is allowed in return for medical attendance and board. The sum paid the Jeffery Hale hospital was \$2,812.80 where 225 men received treatment, and \$1,695.70 was paid the Hotel Dieu hospital where 35 men were admitted.

As stated above, the Marine and Immigrant hospital at Quebec was closed on the 4th February, 1890, by Order in Council. The same Order in Council directed that the use of the building and everything belonging to it, including furniture, medicines, &c., be offered to the Government of the Province of Quebec, free of rent or charge on the following conditions, viz., that sick seamen entitled to medical care and board be received on the same terms as at other public hospitals in Quebec and other ports; that the house physician be retained with emoluments similar to those received from the Department: that the building shall remain the property of the Dominion Government, with power to resume the use of it, if required, after due notice: that the Provincial Government shall be responsible for keeping the building and grounds in repair and good order and that all taxes and rates after transfer, be defrayed by the Provincial Government and that the building be kept insured. This offer was not accepted by the Government of the Province of Quebec owing to the fact that it was not within the attribute of the Province of Quebec to maintain hospitals.

On the 8th May, 1890, another Order in Council was passed containing the same offer to the City Council of Quebec, on the same conditions. The offer was considered by the City Council and a request was made to the Department to alter the conditions and that the Dominion Government bear the expense of keeping the buildings, &c. in repair. The Department replied, stating that the request could not be complied with and intimated on the 22nd of October that the offer would be withdrawn if not accepted within ten days. An extension of time for further consideration was asked for by the corporation which request was acceded to by the Department. On the 22nd January, 1891, an Order in Council was passed accepting certain conditions specified in a resolution of the City Council of Quebec relating to the transfer and referring the matter to the Department of Justice in order that a proper agreement be prepared for execution.

On the 12th February, 1891, the Mayor of the City of Quebec opened the Marine Hospital on his own responsibility to receive the dead bodies and wounded of the employees of a worsted factory in the vicinity in which there had been an explosion. The agreement above referred to was duly prepared and submitted to the City Council of Quebec. The City Council requested that certain changes be made in the terms. Some of these changes were assented to but it was deemed inexpedient to assent to others of them. As there was much delay and the agreement was not executed on the 7th May, the Department informed the City Council that the offer would be withdrawn on the 20th of May unless a settlement was previously arranged. On the 27th May the Mayor of Quebec enclosed a resolution of the City Council insisting upon changes in the terms. The Department could not fully accept these changes and the Mayor was informed accordingly on the 1st June. On the 8th July the City Council was notified that the offer would be finally withdrawn on the 11th. As no answer was received the City Council was duly notified of the fact that the offer had been withdrawn.

An Order in Council, dated 25th August, authorized the sale of the said Marine Hospital and its appurtenances by private sale or public auction, or by inviting tenders, as might be deemed most advantageous in the public interests.

In accordance with this Order in Council, public notices were printed on the 18th of September, 1891, inviting tenders up to the 15th of October, 1891, "for the purchase of the Marine Hospital property at Quebec." In addition to this, advertisements appeared in several newspapers. Tenders were also invited for the furni-Two tenders were received, the highest offer being \$52,000 for the ture and effects. Marine Hospital property, and \$2,000 additional for the furniture, etc., by the Rev. B. Bernier, on behalf of the Asylum of the Good Shepherd of Quebec. This tender was received on the 13th October, 1891, and on the 24th of the same month, an Order in Council passed accepting the tender of the Asylum of the Good Shepherd and the Rev. B. Bernier was accordingly notified by the Department that his offer was accepted, subject to satisfactory arrangements for payment. The terms of payment were ten per cent. of the purchase money of the property at the time of notification of acceptance of the tender and the balance in annual payments of ten per cent. of the price with interest at six per cent. per annum from the date of the deed; the property to be insured and the policy of insurance to be made out in the name of the Minister of Marine and deposited in the Department; also, deed of sale to be made out on these terms and a mortgage taken on the property from the owners. A cheque for \$5,200 was received on the 2nd of November, 1891, from the purchasers of the property, being the first payment on account. The sum of \$2,000 was also received from the Attorney of the Asylum of the Good Shepherd, on the 9th of the same month being payment in full for the furniture and other effects belonging to the Marine Hospital, which effects were delivered to the purchasers when the money was paid. On the 12th of December, 1891, the premises were taken possession of by the purchasers who exhibited receipts for insurance premiums paid on the sum of \$30,000.

The expenditure on account of sick seamen in the Province of New Brunswick for the fiscal year amounted to \$6,185.75, or \$1,383.03 less than the preceding year and the collection of dues to \$8,899.48 or \$1,173.02 less than the previous year. Marine Hospitals have been maintained at the Ports of St. John, St. Andrews, Miramichi, Richibucto, Bathurst and Sackville.

The collection of dues at the Port of St. John amounted to \$5,027.74, or \$108.02 less than the previous year, and the cost of maintaining the Marine Hospital \$2,931.63, or \$517.63 less than the year preceding. The Medical Superintendent at St. John has reported that 205 seamen were admitted during the year ending 30th June, 1891: 192 of this number were discharged, 5 died and 8 were still in the hospital on the 1st of July.

The Agent of the Department at St. John enclosed a report upon repairs said to be necessary to place the building in good condition for hospital purposes. A new barn is required, also a fumigating room, dead-house and vegetable cellar at an estimated cost of \$2,700. The stone wall which partly surrounds the building requires repairs, as does also the fence; the estimated cost being \$1,000. Articles of furniture and bedclothing need replacing in order to make the Hospital comfortable

and suitable for patients. The cost of repairs to the Hospital, water rates and fuel are all defrayed by the Public Works Department and appear in their accounts.

The Matron of the Marine Hospital at St. Andrew's was informed on the 17th of November, 1890, that in consideration of the small number of seamen treated at the Hospital, the Department would no longer continue to pay a salary, but if she wished to live in the building and keep it in repair she might do so, and that sick Mariners requiring treatment at that port would be sent to the Hospital and board paid for at a rate of \$3 per week. The Hospital has, since the 29th of November, 1890, been kept by the former Matron on the above conditions. The sum of \$52.65 was paid for board during the fiscal year; \$71.40 for repairs; \$49.94 for fuel, and \$100 for doctor's salary; total, \$273.99. The collection of dues for this Port amounted to \$142.58. Seven seamen received medical attendance.

The Sackville Marine Hospital buildings are in a dilapidated state and can only be suitably repaired and made complete for a Hospital at a large outlay. The number of sick seamen annually treated at the port does not justify any large expenditure for repairs on the building. The Department has accordingly considered it in the public interest to close the Hospital. With this in view, the Matron was notified that after the 31st of December, 1891, her allowance for salary would cease. The expenditure at the Port of Sackville in connection with the Marine Hospital, was as follows:—Doctor's salary, \$100; Keeper's salary, \$150; board and medicine, \$56.85, making a total of \$306.85, for which nine seamen received treatment. The receipts at this port amounted to \$313.94.

The treatment of seamen at the hospital will be discontined and arrangements will hereafter be made to board sick seamen at suitable boarding-houses in Sackville, where medical attendance will be given. The Marine Hospital at Sackville is upwards of 3 miles from the town.

The building and grounds have been offered for sale, and several individuals have been in communication with the Department respecting the price. Up to the present time no adequate offer has been received. The original cost was \$3,200; the land attached being seven acres in extent. As no reasonable offer had been made for this property an agreement has been entered into with Mr. Bradford Carter to lease the building and its appurtenances, for three years at a nominal rental of one dollar per annum, on condition that he keep the buildings and fences in good repair, and that the premises be vacated, if required by the Department, at any time. As stated above, sick seamen will in future be boarded and receive medical treatment at boarding houses in the Town of Sackville, but if the Hospital should at any time be required for sick seamen, with infectious or contagious diseases, the Department will resume possession of it.

The Medical attendant at the Miramichi Hospital reports that forty-nine seamen were admitted to the Hospital and fourteen attended either on board vessel or at his office, making a total of 63. The Doctor's salary is \$400; the Keeper's salary \$200, and the total expenditure at this Hospital including cost of medicine, fuel and boarding sick seamen, was \$1,236.26 for the fiscal year. The collection of dues in Miramichi amounted to \$1,228.28. Repairs were made to the Hospital in September last at a cost of \$181.85, which sum will also appear in the expenditure of the next fiscal year.

The expenditure in connection with the Richibucto Marine Hospital for the fiscal year was as follows; Doctors salary \$200, Keepers salary \$150, board of seamen, etc. \$36.98, total \$386.98. Eight sick seamen were admitted to this Hospital.

The Bathurst Marine Hospital was maintained as follows; \$150 for Medical Superintendent's salary, \$183.80 for board of sick seamen and repairs, total \$333.80. Eleven sick seamen were admitted, and the keeper received a rate of \$3 per week for boarding these men. The receipts at the port of Bathurst for Sick Mariners dues amounted to \$203.36.

In the Province of Nova Scotia, Marine Hospitals are maintained at the ports of Yarmouth, Pictou, Sydney, Lunenburg and Point Tupper. At Halifax provision is made for the care of sick seamen at the Victoria General Hospital; under arrangements made with the Managers, by which the sum of 90 cents per diem is allowed for board and medical attendance of each seaman. The sum of \$6,627.60 was collected at Halifax as sick mariners dues during the past fiscal year and the sum paid the Victoria General Hospital for board, attendance and funeral expenses was \$5,726.85. The number of seamen admitted to the Hospital was 306 for the Port of Halifax and outports. The total expenditure on account of sick seamen in the Province of Nova Scotia for the fiscal year amounted to \$11,847.65 and the receipts to \$15,389.24.

The Marine Hospital at Yarmouth is located on Bunkers Island. The expenditure for the year in connection with this Hospital in detail was, \$150.00 Medical Superintendents salary; repairs \$128.77; bed clothes \$47.30 and Keepers account for board of sick seamen at \$3 per week and other expenses \$86.39 making a total of \$422.96. Seven men received medical treatment. The collection of dues at Yarmouth was \$428.32. The Medical Superintendent has reported that the building is too small to afford proper accommodation for patients, in accordance with the Superindent's recommendation the Department is now considering the matter of building an addition to the Hospital, for the purpose of providing a new ward room.

The Pictou Marine Hospital is situated in the town of Pictou. The Medical superintendent receives a salary of \$400 per annum and the Keeper a salary of \$200 per annum. The Superintendent and Keeper received three quarter's salary during the fiscal year ended 30th June; the expenditure was therefore on account of salaries, \$450; for board of seamen at \$3 per week, to the Keeper \$378.44, total for fiscal year \$828.44 while 19 seamen received treatment. The collection of dues at Pictou amounted to \$511.90.

At Sydney Marine Hospital the Medical Superintendent receives a salary of \$300 per annum and the Keeper a salary of \$250 in addition to \$3 per week for the boarding of sick seamen. The total expenditure at this Hospital for the fiscal year including funeral expenses, \$15, repairs \$16.61, was \$844.43. Eighty-five seamen entered the Hospital, some of whom were taken from the port of North Sydney where there is also a Medical Superintendent. The sick mariners' dues collected at Sydney amounted to \$2,821.46.

At Lunenburg there is also a Medical Superintendent for the Marine Hospital who receives \$150 per annum and a keeper whose salary is \$150 besides the rate of \$3 per week for board of sick seamen. The total expenditure in connection with

this hospital for the fiscal year including repairs, fuel and medicines amounted to \$701.20 while 21 seamen were admitted. The collection of dues at the port amounted to \$395.42.

At Point Tupper Marine Hospital, Port Hawkesbury, the Medical Superintendent receives a salary of \$100 per annum, the keeper a salary of \$144. The total expenditure at this hospital for the fiscal year was \$322.89 and the number of seamen admitted was 13, while the dues received at Port Hawkesbury amounted to \$96.28.

In the Province of Prince Edward Island the expenditure on account of sick and disabled seamen for the last fiscal year amounted to \$1392.92, and the receipts on account of sick seamen to \$447.56. Sick seamen are cared for at the Charlottetown and Prince Edward Island Hospitals under arrangements made with the managers of these institutions at the same rate as is paid to the public hospitals in other parts of the Dominion.

The Prince Edward Island Hospital admitted two sick seamen at 90 cents per diem and received the sum of \$115.20 for medical attendance and board. At the Charlottetown Hospital 9 men were admitted and the sum of \$211.50 was paid.

There is a Marine Hospital at Souris, Prince Edward Island. This hospital was built by the Public Works Department in 1876 and with the land, cost \$4,685.62. The foundation was made of posts with planks nailed to them to prevent the earth from falling into the cellar. This foundation soon decayed in places and the earth fell into the cellar. The building thus became useless for a hospital and unhabitable in the winter. Although the building is a substantial wooden building yet the department deemed it in the public interest to offer the land and building for sale by public tender rather than incur the expense of putting in a stone foundation. Tenders were accordingly invited on the 26th November last, for the purchase of the property, up to the 30th of December next. Public notices have been posted in conspicuous places and advertisements have appeared in the newspapers of Prince Edward Island.

In the Province of British Columbia the sum of \$3,422.62 was expended for sick seamen while the receipts from collections of dues amounted to \$6,149.68.

The Marine Hospital at Victoria has in attendance a Medical Superintendent with a salary of \$300.00 per annum, a keeper whose salary is \$500.00 per annum; he is also allowed a rate of \$5 per week for board and attendance of each seaman. The keeper procures fuel, lights, bedding, etc., at his own cost. The expenditure at this Hospital for the fiscal year was \$1,750.33, including salaries and keeper's allowance; fifty six men received medical attendance and board. The sick Mariners dues collected at the Port of Victoria amounted to \$1,382.64. The Agent at British Columbia in his Annual Report states that repairs to the Hospital at Victoria are necessary, and a report recommending in detail what the repairs should be was made by the Chief Engineer of the Department on his return from British Columbia in May last. The Public Works Department has been notified of the needed repairs and informed this Department that provision will be made in the estimates to be laid before Parliament next Session.

At ports where no hospitals are established in the Provinces of Quebec, Nova Scotia, New Brunswick, British Columbia and Prince Edward Island, sick seamen are cared for under direction of the Chief Officer of Customs, if the vessels to which the seamen belong paid dues according to law. By reference to the Departmental Report of last year it will be seen that it was formerly contended that a sick seaman was not entitled to relief at any other port than the one where his vessel paid dues. An opinion was requested from the Justice Department on this subject and a reply was received expressing the opinion that the construction of the clause relating to treatment of sick seamen, in the Sick and Distressed Mariners Act, is doubtful. A circular to collectors of Customs was therefore issued 7th February, 1891, permitting sick seamen to be attended at the port of arrival of a vessel, pending further legislation, provided that the regular dues were previously paid at some port.

During the fiscal year the sum of \$3,839.98 was expended for shipwrecked and destitute seamen under the provisions of the Sick and Distressed Mariners Act. The above amount was appropriated from the fund arising from the collection of Sick Mariners dues and was paid for seamen belonging to the different Provinces as follows; Quebec, \$247.12; Nova Scotia, \$910.30; New Brunswick, \$116.69; Prince Edward Island, \$51.83 and general account \$39.52. A sum was also paid Her Majesty's Imperial Government to reimburse expenses incurred in caring for shipwrecked and distressed Canadian seamen in foreign ports, amounting to \$2,474.52 making the total expenditure of \$3,839.98 for distressed and shipwrecked seamen.

The total expenditure by this Department on account of sick and disabled seamen during the fiscal year amounted to \$31,315.14 and for distressed and shipwrecked seamen, \$3,839,98 making a total expenditure from the Sick Mariners fund of \$35,155.12, being \$6,573.99 less than the sum expended the preceding year and \$3,494.88 less than the amount appropriated by Parliament for the service. The dues collected amounted to \$43,829.68 or \$4,052.07 less than the preceding year. It will be seen that the receipts exceeded the expenditure \$8,674.56.

The receipts and expenditure in connection with this service during the preceding 23 fiscal years are as follows:—

			Receipts.	Expenditure.
For fiscal	year ended 30th June,	1869	<b>\$31,353</b> 78	\$26,987 64
do	do	1870	31,410 46	27,029 34
do	do	1871	29,683 41	28,971 22
$\mathbf{do}$	do	1872	3 <b>4,</b> 911 64	38,947 60
do	do	1873	37,136 10	41,016 43
do	do	1874	41,500 16	59,778 90
do	do	1875	37,801 46	50,684 76
do	do	1876	41,287 66	48,828 49
$\mathbf{d}\mathbf{o}$	do	1877	43,739 21	51,647 94
do	do	1878	44,665 07	43,780 90
do	do	1879	37,779 57	42,729 36
do	$\mathbf{d}\mathbf{o}$	1880	42,523 20	42,160 91
do	do ·	1881	49,779 72	40,667 52
do	do	1882	45,951 47	39,359 11
do	do	1883 69	45,573 42	36,249 65

			Receipts.	Expenditure
For fiscal year en	ded 30th June,	1884	48,667 07	39,553 58
do	do	1885	39,068 39	44,501 57
do	$d\mathbf{o}$	1886	40,848 05	50,377 62
do	do	1887	42,334 92	37,447 35
$d\mathbf{o}$	do	1888	41,669 64	36,447 85
do	do	1889	39,306 29	41,320 59
do	do	1890	47,881 75	41,729 11
do	do	1891	43,829 68	35,15 <b>5</b> 12
		•	\$938,702 12	945,372 26
Deduct Rec	eipts from expe	nditure		938,702 12
Evenes of H	Expenditure over	receints		<b>\$</b> 6,690 14

On the 19th May, 1891, a petition was forwarded to His Excellency the Governor General in Council from the foreign, coastwise and inland shipping interests of the Port of Montreal requesting the abolition of Harbour Police dues and Sick Mariners' dues in the ports of the Province of Quebec and the Maritime Provinces. A copy of a resolution passed by the Harbour Commissioners and a similar resolution of the Board of Trade of Montreal embodying the same request accompanied A circular dated 10th June, 1891, issued from this Department to Collectors of Customs at various ports in the Province of Quebec and the Maritime Provinces was also sent to Members of Parliament and shipping firms asking their opinions on the subject of the abolition of Sick Mariners' dues. About eighty replied to the Circular, the preponderance of opinion being in favor of continuing the collection of Sick and Distressed Mariners' dues, in the interests of seafaring men. After careful consideration of the whole subject it has not been deemed advisable to abolish the Sick Mariners' Fund as it has been found to be a means well adapted for providing relief and medical attendance for sick seamen who are disabled or become sick while engaged on board ship.

The abolition of Harbour Police dues at Montreal is dealt with under the heading of Harbour Police dues. The matter of abolishing similar dues at the port of Quebec is now under the consideration of the Government.

## METEOROLOGICAL SERVICE.

The report of the Meteorological Service by the director, Mr. Carpmael, extending from the 1st October, 1890, to the 31st October, 1891, forms an appendix to this report. During the period referred to 12 stations in Ontario, 3 in Manitoba, 2 in the North-West Territories, 6 in British Columbia and 1 in Bermuda have been added to the list, while two ceased to report. The total number of stations in connection with the Meteorological service and the expenditure therewith at the end of the fiscal year is as follows:—Central office Toronto, \$12,636.18; ten chief stations viz: St. John, N. B., Quebec, Halifax, Montreal, Sydney, C. B., Fredericton, N. B., Regina, Woodstock, Ont., Esquimalt, B.C., and Winnipeg, Man., the expenditure in connection with these chief stations being \$8,086.46. There are also 24 telegraph stations, expenditure \$7,399.00; four reserve stations, \$775.00; fifty drum stations \$2,223.33, thirty-one special stations \$1,368.02, while for telegraphing the sum of

\$14,108.39 was expended, and for instruments, apparatus and miscellaneous expenses the sum of \$10, 585.55, making a total expenditure of \$57,181.93 for Meteorological service, an excess of expenditure over last year of \$4,314.01. The appropriation was \$56,100.00. The salaries of the superintendents at chief stations range from \$400 to \$1,200 according to the importance of the station; salaries of officers at telegraph stations range from \$50 to \$400 according to the work done, for special stations from \$18 to \$120, for a number of drum stations from \$45 to \$100, while at others 50 cents for each message received is paid. The Bermuda station is maintained jointly with the Government of Bermuda. This station was established at a cost of £21 sterling, half of which amount was paid by this Department; the instruments necessary for observations were sent from Toronto to Bermuda on the 4th of July, 1890. The further sum of £10 sterling is paid by the Department towards the annual expenses of the station. An effort was made to secure the transmission of messages by the Halifax and Bermuda Cable Company free of charge, as the service is largely in the interests of shipping on the Atlantic coast, but such an arrangement could not be made. The entire cost of cable messages to Halifax and by land lines to Toronto is borne by the Dominion Government. Steps were taken to ascertain cable rates, but no definite rate could be obtained from the company till their account was furnished, when it was found full rates were charged for code messages, a charge which the Department did not anticipate. It was then decided to terminate the service with Bermuda in view of the expense, as Parliament had not provided by vote a sufficient sum to defray the annual cost of messages at the rates charged in the account. This fact was intimated to the Cable Company through its agent at Ottawa and the company finally agreed to transmit meteorological cypher messages at half rates. The superintendent at Toronto was accordingly instructed to resume the service with the Bermuda station.

Many severe storms occurred in Canada since the last report was issued and in each instance warnings were issued. From the 1st of January to the 31st October, 1891 (10 months), 669 warnings were sent out, 540 or 80.7 per cent of which were verified. Weather forecasts were supplied and published in the newspapers and at about 1,400 telegraph offices in Ontario, Quebec and the Maritime Provinces and for Manitoba and part of the North-West Territories, forecasts were first published on the 26th August, 1891.

Warnings of approaching snow storms were issued to railways and it is proposed to extend this service to Manitoba and as far west as Qu'Appelle.

Voluntary observers have continued their work in many parts of the Dominion and have rendered assistance in interesting the public in a study of our varied climate. Many more have volunteered their services and have requested to be supplied with instruments, but these requests could not be complied with as the appropriation for Meteorological service, would not admit of any increase of expenditure for instruments.

The interest taken by the general public in the information furnished by the Meteorological and Magnetic observations is steadily increasing; this is evidenced by the increased number of enquiries at the central office from legal, municipal and railway corporations as well as private individuals.

For some years past the United States Army Signal Service co-operated with the Dominion service. This co-operation will be continued under the newly formed Weather Bureau connected with the Department of Agriculture, of the United States.

Inspection of the stations formed part of the duty of the staff at the central office Toronto; the reports upon the subject of inspection show that 73 stations were visited where instruments were adjusted and put in good order. Some changes have taken place in the staff at the central office caused by the withdrawal of some and the appointment of others. Lieut. A. R. Gordon, R.N., who was Deputy Superintendent of the Meteorological services for many years, was appointed Nautical Adviser and commander of the Fisheries Protection Services by Order in Council of the 14th October last. The office of the Deputy Superintendent of the Meteorological Service has been abolished.

## MAGNETIC OBSERVATORIES.

The annual reports of the Director of the Magnetic Observatory at Toronto and the Observatories at Quebec, Kingston, Montreal and St. John, are attached to the report on the Meteorological Service. The sum of \$4,275.17 was expended on the magnetic observatory at Toronto, and \$500 for each of the observatories at Kingston and Montreal. The total expenditure on account of the Meteorological and Observatory Services for the past fiscal pear amounted to \$62,457.10.

# DETERMINATION OF THE TRUE LONGITUDE OF MONTREAL.

The accurate determination of longitude is a matter of very great importance, and is necessary for the construction of reliable hydrographic and other charts. Our knowledge of the positions of all points in Canada have hitherto depended on the longitude determinations made by the Government of the United States and Harvard College Observatory. The McGill College authorities have, for some time, entertained serious doubts respecting the longitude of Montreal, as determined in the past, and as better means for transatlantic determinations are now available than at the time when the American work was performed, it has been considered most desirable that an independent Canadian determination of longitude, should be made by direct connection of Montreal and Greenwich.

The Astronomer Royal at Greenwich and the authorities at McGill College have been in correspondence on the subject through the High Commissioner for Canada. The Board of Visitors to the Royal Observatory, Greenwich, passed a resolution stating that it "Is of opinion that the telegraphic determination of longitude is a matter of very great importance, and that necessary instrumental appliances should be obtained in order that the Royal Observatory may efficiently take part in such determination." The Admiralty accordingly set aside the sum of £350 for the instruments and £300 for the operations connected with the work. The sum of \$2,000 was also appropriated by the Parliament of Canada for the same purposes during the last session.

Mr. Hosmer, General Manager of the Canadian Pacific Railway Telegraph Company, has, on behalf of that Company, arranged for the free use of the Cable and Telegraph lines for transmission of signals and messages in connection with the work.

During the past season Prof. C. H. McLeod of McGill College Observatory Montreal, visited Canso, N.S., the Canadian terminus of the Cable and caused an observing hut to be erected at Hazel Hill. Instruments have been imported and preliminary tests in transmission of messages were made on the 7th and 14th June last between Montreal and Waterville the terminus of the cable in Ireland, and return, a distance of 8000 miles. The mean time of some one hundred trials was 1.05 seconds. In the operations of determining the longitude of Montreal it has been recommended by the Astronomer Royal that one or two English observers cross the Atlantic from England to Canada and that one or two Canadian observers cross from this side to England. All arrangements are practically completed and it is expected that observations will be commenced early next spring and continued throughout the summer.

#### TIDAL OBSERVATIONS.

The objects of Tidal Observations are two, first to make it possible to predict the time and height of high and low water on any day and any time, second, to connect therewith observations of tidal currents. It is this second object which has recently most attracted the attention of those interested in shipping within the Dominion. Many ships have run ashore and been wrecked in the darkness when the officers had supposed themselves far from shore. It has been improperly assumed that tidal currents are always connected with the direction and force of the wind and defy prediction. While this is true of surface currents, there is reason to suppose that by far the greater part of their irregularities are truly tidal and their laws may be ascertained by a proper system of observation.

All the observations on the tides which had until quite recently been worked up had been taken and reduced by methods which are now recognized as being inadequate to the solution of the problem. It was therefore decided to take observations at a number of points in the Dominion and have them reduced by modern methods. For this purpose three self recording tide guages were imported from Scotland and sites were selected for the erection of these gauges during the season of 1891 by Mr. Carpmael, at the following places viz: St. John, N.B., Father Point, P.Q., and South West Point, Anticosti. It is proposed to keep the self recording gauges in operation for nineteen years for the purpose of ascertaining the long period tides. At other points similar observations with similar gauges will be necessary, extending over a period of three years, while at the same time, observations for a period of two months will be taken at numerous intermediate stations in order to complete the system.

Mr. Carpmael during the month of October visited certain points for the purpose of ascertaining their suitability for observing stations and has reported that it would be better to leave the establishment of some ten tide staff stations until the opening of navigation next spring. The expenditure on account of tidal observations including instruments, salaries of observers at Liscomb, and Canso, N.S., and reduction of observations at Halifax was \$1,654.96. Tide tables for the port of Halifax were distributed in 1890 for the past year and tide tables have already been distributed to Collectors of Customs along the south coast of Nova Scotia for the year 1892, free of charge.

73

#### CLIMATOLOGY.

The Meteorological Service is divided into two branches: the first engaged in the work of utilizing the observations taken simultaneously all over the Continent and transmitted by telegraph to Toronto from whence issue storm warnings and weather predictions for Canada; the second branch is employed in the examination, classification and reduction of the observations taken by Volunteer Observers and others for statistical and climatological purposes.

The publication of the results of observations in this second division has been continued annually since the establishment of the service in 1872, but inasmuch as the matter all appears in tabular form, it is only available to those who have the full series and desire to make a special study of the question. It is now proposed to deal with the mass of accumulated observations and put them in a serviceable and readable form, covering as far as possible observations in the whole Dominion-The question of comparative climatology of the different Provinces of the Dominion with known climates of the different Europern countries, will be fully dealt with.

This will be the first authoritative Government publication on the climate of Canada. It will cover a period of twenty years' continuous observations. A more detailed enquiry into the local climate of each province will follow in due course.

The object of the publication is to convey climatological knowledge that will be useful for immigration purposes and to show the suitability of the climate, in various localities, for raising certain agricultural crops and for horticulture, which can now be ascertained only by experiment.

It is expected that the work will require three years to complete. An assistant of literary ability and experience, having special climatological knowledge, will be added to the staff at Toronto, to whom this work will be assigned under the direction of Mr. Carpmael. The estimate for the necessary funds for carrying on the work will be submitted to Parliament during the coming session.

## GEORGIAN BAY SURVEY.

The report of Staff Commander Boulton. R.N., as to the operations of the survey forms an appendix to this report. The sum of \$18,000 was voted for this service last Session, making with previous votes, a total appropriation of \$174,000 for the service. This survey will probably require three years more to complete it.

The expenditure for the past fiscal year amounted to \$17,677.51, being \$291.72 less than was expended the previous year.

The yearly expenditure on account of the Georgian Bay survey has been as follows, viz:—

Year 1882-83	\$ 77	81
1883–84	26,745	<b>54</b>
1884–85	20,454	68
1885–86	17,759	36
1886–87	21,592	<b>55</b>
1887–88	19,468	13
1888–89	17,808	<b>46</b>
1889-90	17,969	23
1890-91	17,677	51

#### BURRARD INLET RE-SURVEY.

In September of 1890 it was reported by the Pilotage authority of Burrard Inlet, British Columbia, that a shoal was discovered in the first Narrows of the Inlet. The Canadian Pacific Railway Company's steamer "Parthia" touched on the shoal on her voyage to China in June, 1890. The information first reached the Department through the Agent at Victoria who, considered it advisable to have soundings made in order to establish the depth of water at low tide on the shoal. proceeded to Vancouver in the S.S. "Sir James Douglas," and had an interview with the commander of H. M. S. "Amphion," who granted the use of his steam cutter under the charge of Lieut. Barrett, R. N., which proceeded to the shoal, with Captain Gaudin of the "Sir James Douglas," and the Harbour Master on board. Captain Gaudin reported on the 5th Septemer, 1890, that Lieutenant Barrett, R. N., took soundings on the middle ground of the first Narrows, Burrard Inlet, on that day and found 5 fathoms midway between Brockton Point and number 3 Beacon, which would make 4 fathoms low water spring tides. It was further represented to the Department that a re-survey of Burrard Inlet was necessary in view of the fact that large vessels with heavy draft of water are now entering Burrard Inlet. An Order in Council dated 4th November, 1890, recommended to Her Majesty's Government a re-survey of Burrard Inlet. Replies were received 9th December, 1890, and 5th March, 1891, agreeing with the proposal of the Dominion Mr. W. J. Stewart 1st Assistant to Staff Commander Boulton was detached from the Georgian Bay survey and with two men as assistants, and necessary instruments was conveyed from Owen Sound, Ont., to Vancouver, B.C., free of charge by the Canada Pacific Railway, arriving on the 21st April. A whaleboat was loaned by the Naval Authorities at Esquimalt, B. C., in which Mr. Stewart sounded 450 miles, while 75 nautical miles of shore line were travelled on foot. The re-survey was completed on the 25th September last, and the expenditure during the fiscal year was \$1,690.12; the parliamentary grant being \$2,500. Mr. Stewart's Report will be found attached to that of Staff Commander Boulton's, which will form an Appendix to this report.

# REWARDS FOR SAVING LIFE AND LIFE-BOAT SERVICE.

An appropriation of \$8,000 was made by Parliament for the above named service, and the sum of \$4,952.20 has been expended during the last fiscal year. In an appendix published with this report will be found a list of persons to whom rewards and testimonials have been granted by the Government of Canada and by Her Majesty's Government, and also by Foreign Governments, for humane and gallant exertions in saving life at sea, and also of rewards given for saving life on the shores of Canada.

An appendix to this report contains a statement of the life-boat stations established in the Dominion, together with particulars as to boats, crews, equipment and services rendered.

The crews of life-boats consist of a coxswain and 6 men, who all sign articles of engagement, in consideration of compensation prescribed by the Department. This compensation has hitherto been \$1.50 per man for each drill satisfactorily performed while the Coxswain, who is also the superintendent of the station, receives in addition

the sum of \$75 per annum for taking charge of the life-boat house, boat and all apparatus and is responsible to the Department for the property placed in his care. Rewards of money are also given to the crews when lives are saved through gallant exertions or the rescues have been sufficiently meritorious to deserve recognition by money rewards. Reports have been received from the superintendents of 18 stations, showing that drill had been satisfactorily performed by the crews twice a month, for seven months at each station. The crew of the life-boat at Wellington station went to the assistance of the American schooner "Owasco" of Detroit, on the 30th of August last and found that the vessel was in distress and partially disabled. No lives were saved by the life-boat crew, but as in all cases where exertions have been made to aid vessels in a storm the service counted as drill.

The life-boat crew at Blanche, N.S., rescued the captain, cook and 14 fishermen of the American schooner "Plymouth Rock," which vessel was totally wrecked on Blanche Island, N.S., on the 11th December, 1890. The sum of \$5 was paid each of the rescuers as a reward for his efforts in saving the lives of the fishermen. The Blanche life-boat crew also visited, twice, the wreck of the American schooner "Paul and Essie" on the 8th of September last: no lives, however, were saved by the life-boat crew, but the service was duly considered as drill.

The Port Stanley life-saving crew rescued the captain, mate and four seamen of the Canadian schooner "E. G. Benedict" on the 19th November last. The E. G. Benedict was stranded in the Harbour of Port Stanley and the crew was compelled to take to the rigging as a heavy sea was breaking over the vessel at the time. All hands were taken from their perilous position, with much difficulty, by the life-boat crew. The rescued men publicly acknowledged in the St. Thomas Times the great service rendered by the life-boat. The sum of \$5.00 each was paid to the rescuers by the Department as a reward for saving life.

The Goderich life-boat crew went to the rescue of the Canadian schooner "Bavarian" which was driven on the shoals to the north of Goderich Harbour, in the storm on the 31st of October last. The captain, mate and four seamen were saved by the life-boat; the vessel became a total wreck. On the 17th November the Goderich life-boat crew went to the assistance of the American schooner "Edward Kelly," of Monroe, Michigan, U.S. Assistance was given the exhausted men of the schooner by relieving them at the pumps and procuring provisions for them. The "Edward Kelly" was aftewards towed to Cleveland, Ohio, by a tug.

Two self-righting and self-bailing boats were taken to Sable Island in 1888, but owing to their great weight have never been used in actual service. They are not suitable, it has been found, for this station, as it is often necessary to draw the boats over a sandy beach to launch them where required. It has been deemed advisable to remove these boats to stations where they can be immediately launched into deep water and have them replaced by a Beebe open surf-boat and a Beebe McLellan self-bailing surf-boat. Tenders were accordingly invited on the 31st March last for the construction of two boats of the above description and one surf-boat waggon. The tender of E. F. Williams of Dartmouth, Nova Scotia, for \$375 and \$245 respectively, for the boats, and the tender of Messrs. DeWolfe & Co. of Halifax, offering to build the waggon at a cost of \$84.90, being the lowest, were accepted. The waggon was completed according to specification in August last. The boats are approaching

completion, some delay having been caused by the difficulty in procuring the proper description of wood, which the specification requires should be of white cedar.

One of the heavy self-righting boats at the Sable Island station was put on board the "Newfield" on her late trip to the Island and taken to Halifax. The boat will be removed to Cape Tormentine in the Strait of Northumberland when a boat-house is completed which the Department proposes to build at that point to meet the requirements of the ice-boat as well as the life-boat service.

## SIGNAL SERVICE.

The report of Mr. McHugh, Inspector of this service at Quebec, forms an appendix to this report. A statement is given in his report of the movements of ice in the Straits of Belle Isle, as noted by the signal agents at various stations. Daily reports have, for some time past, been forwarded to the Boards of Trade of Montreal, Quebec, St. John, N.B., and the Chamber of Commerce of Halifax, respecting the prevailing winds, weather and conditions and locality of ice in the spring, in the Gulf and River of St. Lawrence. The ice reports were discontinued to some of these ports as the season advanced. During the past year similar reports have been sent to North Sydney, a port of call for large vessels from European ports. In addition to this, information was telegraphed from one ice signal station to another. Vessels arriving from Europe and other vessels bound up the Gulf and St. Lawrence River are thus enabled to obtain information as to the winds, ice and weather at the localities they may have to pass. The month of April is the month in which the ice reports are found of most service, as navigation then opens. Sealing vessels are also aided very much by the messages which are forwarded from one station to another, respecting the appearance of seals.

The expenditure for the fiscal year was \$4,700, whilst the parliamentary appropriation was \$6,000.

The distances from Quebec to the different signal stations have been found by actual measurement to be slightly different from those previously published. The correct measurement, in Marine miles, will be found in the appendix published with the present report.

## REMOVAL OF OBSTRUCTIONS TO NAVIGATION.

An appropriation of \$5,000 was made by Parliament for the removal of obstructions in navigable waters, and the sum of \$3,633.65 was expended during the last fiscal year. The schooner "Susie Prescott" was sunk in the channel of the Petitcodiac River, New Brunswick, in June of 1890 and still remains, having caused no trouble. The sum of \$20 has so far been expended in marking this obstruction. The sum of \$1,858.89 was paid for the successful removal of the wrecked American schooner "Mary Birkhead" sunk at Limekiln Crossing, Detroit River, Ontario. Tenders for removing this wreck were publicly invited and the contract was given to Messrs. F. B. Hackett and A. Herminger. The wreck of the schooner "Charger," also an American vessel, sunk by collision in the Point Pelee Passage, Lake Erie, was removed in April last. Tenders were also invited by public notice and the contract was awarded to F. B. Hackett, his tender being \$1,600.

The schooner "Magnolia" was wrecked and sunk in the Annapolis River, Nova Scotia. The wreck formed an obstruction to navigation, and tenders were invited for the removal in the usual way. The tender of Timothy B. Chapman was the lowest and the contract was awarded to him. The work has been completed at a cost of \$475.

The American schooner "Foyette Brown" is sunk nine miles east of the Dummy Lighthouse, Point Pelee, Lake Erie, and is an obstruction to navigation. The wreck has been abandoned by the owner. The work of removing the vessel was begun by Mr. F. B. Hackett last fall, and will be continued next spring under an agreement to accept the wreck as compensation. The sum of \$100 has been expended in connection with this obstruction.

The "Maria Catharine," coal laden, was sunk in Mill Cove, Dartmouth, Halifax Harbour. Tenders were invited by public notice and the contract of removing the wreck was awarded to Mr. E. J. Bowes, who removed the vessel in December, 1890, at a cost of \$300.

The schooner "Fremont" which sunk at her moorings in Dartmouth Cove, Halifax Harbour, was also removed by contract, at a cost of \$300, by Mr. John Sheridan, who tendered for the work in response to a public notice inviting tenders.

The wrecked schooner "Ellen" was left by the owners on the proposed site of the public wharf at Kingston, Kent County, N.B. This wreck was removed in August last, by Messrs. G. & J. Robertson, whose tender was \$125, and this sum has been paid and will appear in the expenditure of 1891-92.

The tug "Lion" which was sunk at the entrance of Richibucto Harbour was removed by contract June, 1890, for which tenders were called. The sum of \$950 was expended during the fiscal year of 1890-91, in connection with the removal of this obstruction.

The Government hold the owners of wrecked vessels responsible for the cost of removal of them when they form an obstruction in navigable waters in Canada, under the provisions of "An Act respecting the Protection of Navigable Waters." Steps are usually taken to recover the amount expended in removing obstructions unless the owners are entirely without the means of reimbursing the Government.

Tenders have been called for the removal of the schooner A. G. Ryan," sunk off Captain John's Island, bay of Quinté, Ontario; also for the removal of the schooner "J. L. Crossley" sunk off the Gas Company's wharf in Halifax Harbour, Nova Scotia.

# STEAMBOAT INSPECTION AND CERTIFICATES TO ENGINEERS.

The annual report of the Board of Steamboat Inspection for the year 1891, forms an appendix to this report. The statement showing certificates granted to engineers of steamboats will be published in the supplement to this report, together with a list of steam vessels inspected and steam vessels not inspected; numbers of passengers allowed to be carried in each passenger steamboat; steam vessels added to the list, and steamers lost or laid up, or rendered unfit for service during the year.

The amount received during the past fiscal year on account of tonnage dues, inspection of steamboats and certificates to engineers was \$21,644.72, of which sum \$20,890.72 was for tonnage dues and inspection fees, and \$754 for certificates to engineers. The expenditure for the fiscal year amounted to \$22,183.76, leaving a deficiency of \$539.04.

The following is a comparative statement of receipts and expenditure:

	•		Receipts.	Expenditure.
For fiscal year	ended 30th Jun	e, 1870	\$ 12,521 29	<b>\$</b> 7,379 18
do	$\mathbf{do}$	1871	10,369 96	8,321 00
do	do	<b>1872</b>	11,710 43	8,500 00
do	do	1773	15,412 75	11,205 54
do	do	1874	<b>15</b> ,603 19	10,291 58
do	do	1875	15,011 90	12,199 81
do	do	1876	13,811 24	13,081 86
do	do	1877	15,858 42	12,073 01
do	do '	1878	12,431 25	13,228 28
do	do	1879	12,331 16	13,076 46
do	do	1880	15,424 02	11,854 34
do	do	1881	16,905 49	12,211 65
do	do	1882	15,277 78	14,835 97
do	do	1883	12,577 36	16,209 02
do	do	1884	15,371 79	<b>21,893 28</b>
do	do	1885	13,343 66	23,235 04
do	do	1886	14,087 76	21,775 57
do	do	1887	12,701 20	22,837 80
do	do	1888	12,550 14	21,430 45
do	do	1889	12,576 18	22,313 03
do	do	1890	19,859 18	20,989 52
do	do	1891	21,644 72	22,183 76
			<b>\$</b> 317,381 87	<b>\$342,146</b> 15
Deduct receipts	s from expendi	ture	•••••	317,381 87
Balan	ce to debit of fi	ınd	••••••	<b>\$</b> 24,764 28

It will be seen by reference to the report of last year, that as Minister of Marine and Fisheries, under the authority of the Steamboat Inspection Act, you directed that the sentence of the Court of Enquiry, in the case of the loss by fire of the steamer "Quinté," in 1889, be set aside, on the ground that the sentence was unduly severe, and that the law did not provide for the suspension of an engineer's certificate, which suspension was part of the penalty for alleged negligence on the part of the engineer of the "Quinté." Some of the passengers who were injured on board the "Quinté" entered an action against the owners of the steamer for damages, and the case was tried at Picton, Ontario, Assizes in the spring of 1891. Mr. Justice Rose delivered an elaborate argument in the case, in which he found that there was no culpable negligence on the part of the owners or officers of the "Quinté."

In the matter of suspending an engineer's certificate "The Steamboat Inspection Act" was amended in May, 1890, and now reads, sub-section eight, section forty-one: "The certificate of any such engineer may be suspended or revoked by the Minister of Marine and Fisheries upon proof of negligence, unskillfulness or drunkenness, or in consequence of the finding of a coroner's inquest, and may also be suspended or revoked by the said Minister for any other cause, provided such other cause is deemed sufficient by the said Minister and is certified as such by him."

The Act was also amended in August, 1891, by adding the following paragraphs: "The expression 'passenger' means any person carried on a steamboat, other than the master and crew, and the owner, his family and servants."

"The expression 'Minister' means the Minister of Marine and Fisheries."

In the case of the prosecution of the owners of the "Edith May," of Toronto, referred to in the report of last year, it was found that the steamer had been running on the Muskoka Lake without a certificate of inspection. The case was tried before two Justices of the Peace, at Bracebridge, Ont., and resulted in the full penalty of the law being imposed, viz., \$400. This full penalty was imposed as the 10th section of the Steamboat Inspection Law does not contain any provision for a smaller penalty. It was learned that the vessel had been inspected and part of the equipment was deficient, the necessary equipment was afterwards supplied as directed by the hull inspector, but the "Edith May" began running before the final inspection was made, and therefore, did not obtain her certificate of inspection. A petition signed by the mayor of Bracebridge, the sheriff, the Crown attorney, the two justices of the peace who imposed the fine, and numerous influential residents of the District was forwarded to the Department, asking that the amount of the fine be refunded. After careful consideration of the case in which it was apparent that the letter of the law only was violated, and that the safety of passengers had been provided for, an Order was passed by the Governor General in Council on the 31st January, 1891, remitting the fine imposed on Mr. Cox, less the expenses incurred by the Government in the case, together with the amount of inspection fees and dues payable for the years 1889 and 1890.

An investigation into the cause of the collapse of the furnace of the boiler of the steamer "Lillie," of Hamilton, was held in May last by the Board of Steamboat Inspection. The Board recommended the suspension of the engineer's certificate for three months, but as no proof of negligence of the nature required by the Steamboat Inspection Act was furnished the Minister of Marine and Fisheries, the engineer's certificate was returned to him.

On the 9th April, 1891, serious damage was caused to the boiler of the SS. "Islander" of British Columbia by the alleged negligence of the third engineer of the steamer in allowing the water to become short. An investigation has been held into the case, and the matter of the suspension of the engineer's certificate is now pending.

The following list contains the names of the inspectors of boilers and machinery, and hulls and equipment of steamboats, viz.:—

Name.		Position			Address.	
W. J. Meneilley	Inspector of do do do do do Inspector of do do do Equipme	Hulls and Equipn do do do do do do do do do do do do do	inery	Hulls and	do St. John. Toronto. Quebec. Victoria, B.C. Kingston. Quebec. Montreal. Halifax. Kingston.	
Jas. Johnson	Inspector of	Boilers and Mach	inery		Toronto.	
${f John\ Dodds}$	do	do			.  do	
J. A. Thomson		do				
W. L. Waring	dο	do			. Halifax.	

# CERTIFICATES TO MASTERS AND MATES FOREIGN SEA-GOING.

The report of the chairman of the Board of Examiners of Masters and Mates of sea-going ships for the year ending 30th November, 1891, will appear as an appendix to this report.

During the past twelve months, as will be seen by reference to the report in the appendix, the Board of Examiners have held meetings for the examination of candidates at the Ports of Halifax, N.S., St. John, N.B., Quebec and Yarmouth, N.S., 143 candidates presented themselves for examination at the ports named; 102 succeeded in passing, while 41 failed. Of the 102 that passed, 52 received certificates as master, and 50 as mate.

The number of candidates who have passed and obtained sea-going masters' certificates of competency since the Act went into operation, viz: 16th September, 1871, to the 30th November, 1891, is 1,791 and the amount paid for certificates at the rate of \$10 each, \$17,910. During the same period 1,204 candidates received certificates of competency as mate, and the amount paid, at the rate of \$5 each was \$6,020.

In the supplement to this report a list will be found of all who have obtained certificates of competency and service, either as master or mate from the 30th November, 1890, to the 30th November, 1891.

During the twelve months no certificates of service-foreign sea-going have been granted. The total number of certificates of service issued since the Act came into operation is 947 for the grade of master and 380 for that of mate, making a total of 1,327 certificates of service granted. The fee charged for certificates of service is at the rate of \$5 for master and \$3 for mate.

#### INLAND AND COASTING CERTIFICATES.

During the 12 months ended 30th November, 1891, the number of candidates who have passed and obtained masters' certificates of service is 63 and the amount

F

paid for their certificates at the rate of \$4 each, was \$252. During the same period 9 candidates applied for certificates of service as mate and the amount paid at the rate of \$2 each, was \$18.

Applicants for certificates of competency as master numbered 120 and the amount paid at the rate of \$8 each, was \$960. Sixty-three applied for certificates of competency as mate, and the amount paid, at the rate of \$4 each, was \$252. The amount received for renewed certificates of competency and service was \$13 making a total of \$1,495 received from masters and mates inland and coasting certificates.

A list of certificates issued during the twelve months ended 30th November, 1891, will be found in supplement No. 1 to this report.

The total amount of fees received on account of certificates of competency and service, both sea-going and inland and coasting, during the fiscal year ended 30th June last, amounted to \$2,586 and the amount in detail expended on account of this service as will be seen by reference to appendix No. 1 to this report, was \$4,255.24. The vote for this service was \$5,000, and the sum expended to 30th June, 1891, \$4,255.24 leaving an unexpended balance of \$744.76. A list of certificates cancelled during the last twelve months will also be found in the supplement to this report.

The following statement shows the total receipts and expenditure on account of masters and mates since 1871.

			Expendi	ture.		Receipt	ts.
For fiscal year e	nded 30th June	, 1871	<b>\$</b> 1,410	45		• • • • • • • • • • • • • • • • • • • •	•••
do	do	1872	4,312	07	\$	1,344	00
do	do	1873	6,466	18		4,963	00
do	do	1874	4,520	19		2,995	00
do	do	1875	5,696	62		2,715	00
do	do	1876	4,672	08		2,021	87
do	do	1877	4,050	00		1,740	<b>50</b>
do	do	1878	4,249	76		1,296	<b>50</b>
do	do	1879	4,250	12		1,334	<b>50</b>
do	do	1880	4,253	43		1,547	00
do	do	1881	3,888	41		1,333	50
do	do	1882	3,965	19		1,152	<b>50</b>
do	do	1883	4,021	20		1,314	00
do	do .	1884	3,909	<b>5</b> 9		9,437	<b>50</b>
do	do	1885	4,324	15		2,897	00
do	do	1886	5,245	<b>2</b> 8		2,152	00
do	do	1887	4,855	98		2,172	00
do	do ·	1888	5,060			3,220	
do	do	1889	4,381	04		2,202	
do	do	1890	4,117			2,186	
do	do	1891	4,255			2,586	
Receints			\$94,905 50 610		8	50,610	67

Excess of expenditure over receipts \$44,295 10

The following amendments were made to the Masters and Mates Act in August, 1891:—

- "1. Section one of the Act respecting Certificats to Masters and Mates of Ships, chapter seventy-three of the Revised Statutes, is hereby amended by adding the following paragraphs thereto:—
- "'(h.) The expression 'inland waters of Canada' means all the rivers, lakes and other navigable waters within Canada, except salt-water bays and coasts on the sea-coast, and includes the River St. Lawrence as far seaward as a line drawn from Father Point, on the south shore, to Point Orient, on the north shore;
- "'(i.) The expression 'minor waters of Canada' means all inland waters of Canada other than Lakes Ontario, Erie, Huron including Georgian Bay, and Lakes Superior and Winnipeg, and includes all bays, inlets and harbours of or on the said Lakes and Bay.'
- "'7. The Minister may, subject to the proviso hereinafter made, grant to every applicant who is duly reported by any one or more of the examiners to have passed the examination satisfactorily, and to have given satisfactory evidence of his sobriety, experience, ability and general good conduct on board ship, a certificate (hereinafter called a certificate of competency), to the effect that he is competent to act as master or as first or second mate of a sea-going ship, or as master or mate of a ship trading on the inland waters of Canada, or on the minor waters of Canada, or in the coasting trade, as the case may be, and whether for sailing ships or steamships—stating, in the case of sailing ships, whether for square-rigged ships or for fore-and-aft rigged ships only, and, in the case of steamships, whether for passenger, freight, ferry or tug boats; but in every case in which the Minister has reason to believe that such report has been unduly made, he may remit the case either to the same or any other examiner or examiners, and may require a re-examination of the applicant, or a further inquiry into his testimonials and character, before granting him a certificate."

## WRECKS AND CASUALTIES.

The total number of casualties to British, Canadian and foreign sea-going vessels reported to the Department as having occurred in Canadian waters, and to Canadian sea-going vessels in waters other than those of Canada during the twelve months ended 30th November, 1891, was 260, representing a tonnage of 72,360 tons register, and the amount of loss, both partial and total, to vessels and cargoes, so far as ascertained, was \$694,653.

The number of lives lost in connection with these casualties will appear in the supplement to this report.

The disasters reported to this Department as having occurred to vessels on the inland waters of Canada, and to Canadian vessels on the inland waters of America during the twelve months ended 30th November, 1891, were 14, and the tonnage involved was 11,414 tons register, and the amount of loss both partial and total to vessels and cargoes, so far as estimated, was \$44,169.

There were no lives reported as lost.

When the wreck register was closed in 1891 a number of casualties had been reported of which the Department had not sufficient particulars to enable it to publish them in the list for that year. Returns have subsequently been received for many of these casualties, and a detailed list of these will be found in the supplement to this report. These casualties have been added to those previously reported, with the result of increasing the totals for 1891.

COMPARATIVE STATEMENT of the Losses reported to the Department since 1870:

		(	Casualties.	Tonnage.	Lives Los	t. Damage.
For the year	ending 31st December,	1870	335	82,808	210	\$ 901,000
do	do	1871	274	81,035	81	2,100,000
do	do	1872	290	99,109	237	2,507,338
do	do	1873	<b>35</b> 0	99,523	*813	2,844,133
do	do	1874	308	106,682	109	2,029,965
do	do	1875	286	99,427	78	2,468,521
do	do	1876	452	153,368	404	2,942,955
do	do	1877	<b>46</b> 8	177,896	153	3,952,582
do	do	1878	414	161,760	187	3,445,875
do	do	1879	<b>53</b> 3	198,364	339	4,119,233
do	· do	1880	445	179,993	217	3,820,652
do	do	1881	440	210,719	399	4,982,423
do	do	1882	451	193,655	271	3,138,423
do	do	1883	366	158,826	259	2,029,752
do	do	1884	324	119,741	253	2,965,321
do	do	1885	346	144,726	198	2,753,667
do	do	1886	377	150,277	<b>54</b>	1,950,799
do	do	1887	335	149,395	91	1,662,688
do	do	1888	319	105,060	52	1,126,124
For 11 month	s ended 30th November	, 1889	<b>26</b> 8	110,716	163	1,554,319
do	31st October,	1890	242	78,343	64	1,194,516
For 12 month	s endéd 30th November	,1891	<b>260</b>	72,360	•••••	694,653

<sup>\*</sup>Of this number, 545 persons were lost by the wreck of the steamship "Atlantic" on the 1st of April, 1873.

# COASTING TRADE OF CANADA.

By the provisions of chapter 83, Consolidated Statutes of Canada, being an Act respecting the coasting trade of Canada, no goods or passengers can be carried by water from one port in Canada to another except in British ships; but the Governor in Council may, from time to time, declare that the Act shall not apply to the coasting trade of such country. The Parliament of Canada was empowered to pass the Act alluded to under the provisions of the Imperial Act, 32 Vic., Chap. 11, intituled: "An Act for amending the Law relating to the Coasting Trade and Merchant Shipping in British Possessions," which came into operation in this country on its proclamation by the Governor-General on the 23rd October, 1869.

It having been ascertained that the following countries, viz., Italy, Germany, the Netherlands, Sweden and Norway, Austro-Hungary, Denmark, Belgium and the Argentine Republic, allowed British ships or vessels to participate in their coasting

84

trade on the same footing as their own national vessels, the ships of Italy by Order in Council of the 13th August, 1873; those of Germany by Order in Council of the 14th of May, 1874; those of the Netherlands by Order in Council of the 9th of September, 1874; those of Sweden and Norway by Order in Council of the 5th November, 1874; those of Austro-Hungary by Order in Council of the 1st June, 1876; those of Denmark by Order in Council of the 25th of January, 1877; those of Belgium by Order in Council of the 30th September, 1879; and those of the Argentine Republic by Order in Council of the 18th May, 1881, were admitted to the coasting trade of Canada.

#### INSIDE SERVICE.

The following list comprises the names of officials and employés engaged in the Inside Service of the Department on the 1st December, 1891.

Name.	Rank.	Salary.
John Hardie. F. Gourdeau Wm. P. Anderson. A. R. Gordon. W. L. Magee W. H. Alexander. M. P. McElhinney A. W. Owen J. B. Halkett W. W. Stumbles V. C. Nicholson. V. H. Steele	Deputy Minister Chief Clerk do and Accountant Chief Engineer and General Superintendent of Lighthouses Chief Clerk and Nautical Adviser First Class Clerk do and Nautical Adviser Second Class Clerk do do do Third Class Clerk do do do do do do do do do do do do do	\$ cts. 3,200 0 2,400 0 2,100 0 2,400 0 1,800 0 1,450 0 1,450 0 1,150 0 1,150 0 1,150 0 1,150 0 1,000 0 850 0 730 0 600 0
M. Lamouche. C. F. Cox. W. G. Lampey. B. H. Fraser. L. J. Burpee. R. G. Davis Miss Dovle.	do do do do do	2 25 per dien 4 00 do 2 50 do 2 25 do 1 50 do 400 per annu 00 do

## OUTSIDE SERVICE.

The number of persons employed on the Outside Service on the 1st December, 1891, was as follows:—

Superintendent of Lights and Light-keeper &c., in Ontario	
and above Montreal	156
Officers of agency in city of Quebec, and Light-keepers, Fog-	
whistle keepers, crews of Lightships, &c., at and below	
Montreal, in the Province of Quebec	158

Agent, Clerk, Messenger, Superintendent of Lights, Light-	
keepers, Fog-whistle Keepers, Attendants at Humane	
Establishments, &c., in Nova Scotia	197
Agent, Clerk, Messenger, Superintendent of Lights, Light-	
keepers, Fog-whistle Keepers, &c., in New Brunswick	103
Agent and Light-keepers in Prince Edward Island	41
Agent and Light-keepers in British Columbia	15
Officers and crews of Dominion steamers and vessels	165
Captains of lifeboats	28
Inspectors of Steamboats	16
Examiners of Masters and Mates, and Clerk to Chairman of	
Board	15
Officers and servants in Marine Hospitals	41
Shipping Masters	24
Harbour Masters	187
Officers of Observatories, Meteorological Observers, &c., re-	
ceiving pay	142
Receivers of Wreck	37
Wharfingers	108
Making a total of	1,434

For the previous year the number was 1,379. In addition to the 1,434 mentioned above, there are 79 Registrars of Shipping, who act under the direction and control of this Department, but are, at the same time, Collectors of Customs at the various ports of registration, and receive no salary or fees in their capacity of registrars. There are 95 measurers and surveyors of shipping at certain ports throughout the Dominion, who act as officers of this Department, and are remunerated from their fees of office, although, in addition to such office, many of them hold a position in the Customs service. Also, in addition to the above, by Orders in Council of the 21st April and 2nd December, 1874, the Chief Officer of Customs at each port in the Provinces of Quebec, Nova Scotia, New Brunswick, British Columbia and Prince Edward Island, where no separate shipping office has been established, is to be held and deemed a shipping master, is to receive the fees, make the half-yearly returns to this Department, and act in that capacity under its directions.

From the above statement it will be seen that there are 142 officers of observatories, &c., who receive pay for the performance of their duties; but in addition thereto there is a large number of meteorological observers throughout the Dominion who give their services gratuitously.

#### CORRESPONDENCE.

The correspondence has been gradually increasing from year to year. The number of letters received and registered in 1878 was 5,853 while the number received and registered in 1891 was 9,326. This does not include the applications for masters' and mates' certificates, wreck returns, returns from harbour masters, shipping masters, wharfingers, nor accounts, all of which are entered in books specially kept for the purpose. The number of letters sent from the Department during the last calender year was about 10,000.

## MERCHANT SHIPPING.

NUMBER AND TONNAGE OF VESSELS, LOAD LINES AND DECK CARGOES.

The total number of vessels remaining on the Register Books of the Dominion, on the 31st December, 1891, including old and new vessels, sailing vessels, steamers and barges, was 7,015, measuring 1,005,475 tons, register tonnage, being an increase of twenty-four vessels and a decrease of 19,499 tons register, as compared with 1890. The number of steamers on the registry books on the same date was 1,433, with a gross tonnage of 221,679 tons. Assuming the average value to be \$30 per ton, the value of the registered tonnage of Canada, on 31st December would be \$30,164,250.

The number of new vessels built and registered in the Dominion of Canada during the present year was 312, measuring 52,145 tons, register tonnage. Estimating the value of the new tonnage at \$45 per ton, it gives a total value of \$2,346,525 for new vessels. The number of tons of new vessels is included in the total register tonnage of 1,005,475, and in the total value of \$30,164,250.

A statement follows showing the number of vessels and number of tons on the Register Books at the different ports of registry in the Dominion, on the 31st December, along with a comparative statement of the tonnage from 1873 to 1891, both inclusive. A statement is also attached showing the number of vessels built and registered in the Dominion during the present year, and a comparative statement of the number of new vessels built and registered from 1874 to 1891, both inclusive. The number of steamers herein mentioned and their gross tonnage, differ from the number and gross tonnage stated in the report of the Chairman of the Board of Steamboat Inspection, as inspectors returns include only steamers inspected and those known to them.

STATEMENT showing Number of Vessels and Number of Tous on the Registry Books of the Dominion of Canada on 31st December, 1891.

#### PROVINCE OF NOVA SCOTIA.

Ports.	Number of Vessels.	Number of Steamers.	Gross Tonnage of Steamers.	Total Registered Tonnage.
Amherst Annapolis Arichat Barrington Baddeck	10 73 126 44	3 1 1	85 66 15	906 10,453 5,826 1,880
Canso. Digby Guysboro'	1 165 47	• 4	123	73 11,962 2,389
Halifax Liverpool Lunenburg	817 - 85 311	49 3 6	7,372 146 409	56,975 7,469 27,153
Maitland Pugwash Parrsboro'. Pictou	36 9 120 70	1 12	12 928	34,216 693 28,056 18,29
Port Hawkesbury Port Medway Sydney	66 26 122	1 2 1 9	43 45 695	2,810 2,09 5,24
Shelburne Fruro Windsor	99 4 196	2	57 1,517	8,600 1,214 134,660
Weymouth	35 316 2,778	118	$ \begin{array}{r} 154 \\ 2,325 \\ \hline 139,92 \end{array} $	3,062 97,714 461,756

STATEMENT showing Number of Vessels and Number of Tons on the Registry Books of the Dominion of Canada on 31st December, 1891.

# PROVINCE OF NEW BRUNSWICK.

Chatham  Dorchester,  Moncton.  Richibucto.  Sackville  St. Andrews.  St. John.  Total.  PROVINCE O  Amherst, M. I.  Gaspé.  Montreal  New Carlisle.  Perce.	195 14 17 18 13 140 572 969 0F QUEBEO 40 40		1,416 50 107 231 45 7,064 8,913	9,166 7,596 2,822 4,277 2,109 4,002 163,222
Montreal New Carlisle.	17 18 13 140 572 969 0F QUEBEO 30 40	2 2 3 3 58 97	107 231 45 7,064	2,827 4,275 2,104 4,002 163,222
Amherst, M. I.  Gaspé. Montreal New Carlisle.	13 140 572 969 0F QUEBEO 30 40	2 3 58 97	231 45 7,064	2,104 4,002 163,222
Total	572 969 PF QUEBEC 30 40	58 97	7,064	163,222
PROVINCE O Amherst, M. I. Gaspé Montreal New Carlisle.	F QUEBEO	D.	8,913	193,193
Amherst, M. I	30 40			
Gaspé Montreal New Carlisle.	40		1	
Faspé Montreal New Carlisle.			l	1,098
New Carlisle.	401	1 139	709 51,645	2,490 78,489
Perce	16	3	49	80
Juebec	865	124	21,729	13 79,32
Total	1,404	267	74,132	162,33
PROVINCE O	F ONTAR	[O	<u></u>	<u> </u>
		1	1	1
Amherstburg	3 14	7	499	14 86
Brockville	31	28	766	83
Bowmanville	3 46	44	5,021	3,87
Chippewa	3 2	2	263	15
Jramahe	27	16	1,103	1,66
Cobourg	6 3	2 2	51	47
Cornwall	9	5	178 636	1,02
Deseronto	7	5	785	78
Goderich Hamilton	39 47	20 32	867 7,700	1,99 6,91
Kingston	206	76	12,505	26,09
Morrisbug Napanee	3 8	1 3	55 302	36
Owen Sound	32	29	4,833	3,3
OttawaOakville	196 4	100	12,143	20,52
Prescott	28	14	627	3,78
Port Burwell.	15	6	167	1,41
Port Arthur	6	6 4	382 131	1,1
Port Colborne	5	2	95	59
Port Hope	64	38	3,031 168	5,78
Port Stanley	11	9	1,864	1,48
Pictou	30 24	9	450 7 856	2,77
ste. Marie	15	17	7,856 538	6,25
t. Catharines	123	54	9,127	19,8
Baugeen Coronto	211	142	407 13,057	14,5
Wallaceburg	39	21	1,458	2,50
WindsorWhitby	54	26	5,720	5,40
Total	1,345	741	92,785	138,9

STATEMENT showing the Number of Vessels and Number of Tons on the Registry Books of the Dominion of Canada, on the 31st December, 1891—Continued.

# PROVINCE OF PRINCE EDWARD ISLAND.

Number of Vessels.	Number of Steamers.	Gross Tonnage of Steamers.	Total Registered Tonnage.
195	17	4,555	23,316
MANITOL	BA.		
78	51	5,762	6,197
TISH COL	JMBIA.		
157 - 79 - 19	83 59	13,928 6,719 893	13,238 5,805 724
246	142	21,540	19,767
ARY.		a come per company or one perfections	
969 2,778 1,404 1,345 195 78 246	97 118 267 741 17 51 142	8,913 13,992 74,132 92,785 4,555 5,762 21,540	193,193 461,758 162,330 138,914 23,316 6,197 19,767
7,015	1,433	221,679	1,005,475
	of Vessels.  195  MANITOE  78  TISH COLU  157  70  19  246  ARY.  969 2,778 1,404 1,345 195 78 246	of Vessels. Steamers.  195 17  MANITOBA.  78 51  TISH COLUMBIA.  157 83 70 59 19	Number of Steamers.    195

3,193 1,758 2,330 8,914 6,767 6,197 8,778 2,778 1,684 1,684 1,687 1,687 ,260,777 ,005,475 COMPARATIVE STATEMENT showing the Number of Vessels and Number of Tons on the Registry Books of the Dominion of Canada, on the 31st December, in each Year, from 1873 to 1891, both inclusive. 215,246,74 137,621 8.528.83 Tons. 1891. 1882 7,312 857,48,195 87,48,195 87,78 015 88511888 Vessels. 333,2151 558,9113 224,9361 139,9981 6,296 2,130 209,460 464,194: 164,003: 138,738|1 26,080 16,024 6,475 1,310,8961,024,974 Tons. 890 1881 8888822 7,394 2,793 1,399 1,312 196 196 6,991  $\Lambda$ essels. 336,976 550,448 233,341 137,481 5,049 1,992 218,873 464,431; 168,500 1141,839 25,506 15,241 6,091 ,311,218 040,481 .suoT 8 6881 2,097 1,988,1 2,042 2,042 2,042 2,042 2,042 7,153 7,377 5.8.8.8.8.8.7.1 5.8.8.8.8.8.7.1  ${f V}$ essels. 340,491 252,159 246,025 136,987 49,807 4,701 239,332 485,709 178,520 139,502 26,586 14,249 5,744 ,332,094 ,089,642 .suoT .628 1888. 2,1135 1,975 1,006 1,006 22 22 7,14217,471 1,000 1,498 1,330 167 69  $\Lambda_{essels.}$ 335,965 1 553,368 2 248,349 1 135,440 1 54,250 4,482 1,161 255,126 498,878 189,064 139,548 12,789 5,811 1,333,015 1,130,247 .suoT 1878 1887 7,469 1,027 1,5845 1,575 1,275 149 17 32003 1,676 322 322 171 329, 457 541,579 248,399 131,761 55,547 3,479 246 269,2241 526,9212 232,5561 140,9291 30,658 11,900 5,578 1,310,468 1,217,766 .suoT 1877 1886 324,513,1,133 529,252,2961 228,562,1,951 123,947 926 50,682 3,809 178 6 7,362] 7,294  $\Lambda$ essels. ,260,893 288,589 541,832 203,635 144,487 36,040 11,834 5,439 928 .snoT 23, 1876. 1885 308,1321,060 544,048,2,988 202,8421,631 142,3871,223 39,213 227 11,403 123 5,722 63 7,315 1,124 1,967 1,902 889 40 40  ${f V}$ essels. 307,926 2525,144 5 2222,965 114,990 50,677 3,685 178 6,952 1,205,565 ,253,747 .suoT 1875. **₹** 7,254 8282225  ${f V}$ essels. 294,741 479,669 218,946 113,008 48,388 3,611 315,906 541,715 216,577 140,972 49,446 9,046 2,778 1,158,363 ,276,440 Tons. 1874. 883 1,14 2,787 1,837 815 312 35 6,783 1,073,718 6,930 1,107 3,037 1,739 1,133  $\Lambda$ essels. 7,374 277,850 449,701 214,083 89,111 38,918 4,095 .suoT 1873. 1,147 2,803 1,842 280 280 30 Vessels. Prince Edward Island. Provinces British Columbia New Brunswick. British Columbia New Brunswick. Quebec..... Ontario P. E. Island.. Provinces. Nova Scotia Quebec..... Manitoba Total Total

List of Ports at which Vessels may be Registered, showing the number of New Vessels Built and Registered in the Dominion of Canada during the Year ended 31st December, 1891.

### PROVINCE OF NOVA SCOTIA.

Port.	Number of Vessels.	Number of Steamers.	Gross Ton- nage, Steamers.	Total Registered Tonnage.	
Amherst. Annapolis Arichat.	6	1	32	1,015	
Barrington	2		******	104	
Canso Canada Canso Canso Canso Canso Canso Canso Canso Canso Canso Canso Canada Canso Canada	2	••••	*****	783	
Guysboro' Halifax. .iverpool	13 6	1 1	52 98	1,193 616	
unenburg Maitland Parrsboro'	24 7 24			4,661 6,648 4,661	
Port Medway	7 1	4	593	2,032	
Port Hawkesbury Shelburne Sydney	1 6	. 1	16	509 127	
Weymouth	4			783	
Windsor Yarmouth.	15 8	1 1	471 142	11,406 955	
Total	130	10	1,404	35,528	

### PROVINCE OF QUEBEC.

Amherst, M. I. Gaspé Montreal New Carlisle.	$\begin{array}{c}2\\14\\1\end{array}$	3	256	158 2,209 10
Percé. Quebec St. John's.	29	3	1,140	1,823
Total		6	1,396	4,200

### PROVINCE OF NEW BRUNSWICK.

Chatham Dorchester. Moncton. Richibucto.	4		89	#O*
St. John . St. Andrews . Sackville	28 1	2	132 11	4,716 8 11
Total	43	4	232	6,269

# List of Ports at which Vessels may be Registered, &c.—Continued. PROVINCE OF ONTARIO.

Port.	No. of Vessels.	No. of Steamers.	Gross Ton- nage, Steamers.	Total Registered Tonnage.
Amherstburg				
Brockville				
Belleville				
Bowmanville				
Chatham	1	<i></i>		12
Cobourg.	· • • • • • • • • • • • • • • • • • • •			·
Collingwood	1	1	9	j 6
Cornwall				
Goderich	1	ii	51	35
Hamilton	$\mathbf{\hat{2}}$	2	5	4
Kingston	7	5		
Owen Sound				
Ottawa	17	7	453	1,125
Picton	· • • • • • • • • • • • •			
Port Burwell	• • • • • • • • • • • •		ļ	
Prescott				90
Port Dover	1	1	266	39 170
Port Rowan			200	110
Port Stanley	2	2	110	73
Port Arthur	$ar{f 2}$	2	21	15
Sarnia		1	<u>.</u>	
Saugeen	1	1	3	2
Ste. Marie	1	1	24	14
St. Catharines	1	1	4	3
Foronto	5 1	5	115	78 41
Windsor		1:		41
Wallaceburg				
Total	44	29	1,176	2,662
			1,170	2,002
PROVINCE OF PRINC	E EDWAR	1	1,170	2,002
	E EDWARI	1	1,170	
	5	D ISLAND.		1,000
Charlottetown	5	D ISLAND.		
Charlottetown PROVINCE OF	5 MANITOE	D ISLAND.		1,000
PROVINCE OF Winnipeg PROVINCE OF BRI	MANITOE 3 TISH COL	D ISLAND.  BA.  J MBIA.	193	1,000
PROVINCE OF Winnipeg PROVINCE OF BRI	MANITOE 3 TISH COL	D ISLAND.  BA.  J SA.  UMBIA.  6	193	1,000
PROVINCE OF Winnipeg . PROVINCE OF BRI Victoria . New Westminster	MANITOE  3 TISH COL	D ISLAND.	193 411 2,296	1,000 122 415 1,529
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster	MANITOE 3 TISH COL	D ISLAND.  BA.  J SA.  UMBIA.  6	193	1,000
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster	MANITOE  3 TISH COL	D ISLAND.	193 411 2,296	1,000 122 415 1,529
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster Vancouver	5 MANITOE 3 TISH COLI 9 20 12 41	D ISLAND.	193 411 2,296 475	1,000 122 415 1,529 420
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster Vancouver Total	5 MANITOE 3 TISH COLI  9 20 12 41 ARY.	D ISLAND.  BA.  3  UMBIA.  6 20 8 34	193 411 2,296 475 3,182	1,000 122 416 1,526 420 2,364
PROVINCE OF Winnipeg	5 MANITOE  3 TISH COLI  9 20 12 41  (ARY.	D ISLAND.	193 411 2,226 475 3,182	1,000  122  415 1,529 420 2,364
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster Vancouver Total SUMM New Brunswick Nova Scotia	5 MANITOE 3 TISH COLU 9 20 12 41 ARY.	D ISLAND.	193 411 2,296 475 3,182	1,000  122  415 1,529 420 2,364
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster Vancouver Total SUMM New Brunswick Nova Scotia Quebec	5 MANITOE 3 TISH COLI  9 20 12 41  ARY.  43 130 46	D ISLAND.	193 411 2,296 475 3,182 232 1,404 1,396	1,000 122 416 1,526 420 2,364 6,266 35,526 4,200
PROVINCE OF Winnipeg  PROVINCE OF BRI Victoria New Westminster Vancouver  Total  SUMM New Brunswick Nova Scotia Quebec Ontario	5 MANITOE 3 TISH COLI 20 12 41 (ARY.	D ISLAND.	193 411 2,296 475 3,182	1,000  122  41E 1,526 420 2,364  6,266 35,526 4,200 2,662
PROVINCE OF Winnipeg  PROVINCE OF BRI Victoria New Westminster Vancouver  Total  SUMM New Brunswick Nova Scotia Quebec Ontario Ontario	5 MANITOE 3 TISH COLI 9 20 12 41 (ARY.	D ISLAND.	193 411 2,296 475 3,182 232 1,404 1,396 1,176	1,000  122  415 1,529 420 2,364  6,269 35,528 4,200 2,662 2,662 1,000
PROVINCE OF Winnipeg PROVINCE OF BRI Victoria New Westminster Vancouver Total	5 MANITOE 3 TISH COLI 20 12 41 (ARY.	D ISLAND.	193 411 2,296 475 3,182 232 1,404 1,396 1,176 193	1,000 122 415 1,529 420
PROVINCE OF Winnipeg  PROVINCE OF BRI Victoria New Westminster Vancouver  Total  SUMM New Brunswick Nova Scotia Quebec Ontario Prince Edward Island Manitoba	5 MANITOE  3 TISH COLI  9 20 12 41  ARY.  43 130 46 44 5 3	D ISLAND.	193 411 2,296 475 3,182 232 1,404 1,396 1,176	1,000 122 415 1,529 420 2,364 6,269 35,528 4,200 2,662 1,000 122

COMPARATIVE STATEMENT of New Vessels Built and Registered in the Dominion of Canada during the Years ended 31st
December, in each year from 1874 to 1891, both inclusive.

1882.	.snoT	66 16,820 17 26,711 26 6,785 55 4,389 15 3,508 1 1,631 1 289	288 60,113	1 1,029	289 61,142	1891.	130 130 130 146 147 150 100 100 123 123 123 123	312 52,145	312 52,145
	Vessels.	255 2113 251113 16	74,060 28	<u>:</u> : :	74,060 28		572 907 917 917 218	378	52,378 31
1881.	.snoT	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	336 74	<u> </u>	336 74	1890.	8884255 58446	52,	
	,si9sseV	896 ( 2257 11 219 ( 610 ( 359 )	<del>1</del>	<del></del>			2488844 -	285	146 285
1880.	.snoT		3,		65,441	1889.	4,ల్లోబ్రబ్లి	34,346	34,346
	Vessels.	\$218.42 · 1	23		27		3222328	88 : :	8
1879.	Tons.	19,067 39,208 7,421 2,464 5,279 788	74,227		74,227	1888.	2,530 12,965 2,663 5,095 1,412 1,412	25,130	25,130
	Vessels.	# 8 8 8 8 ° :	1365		8		8518882181	264	264
1878.	.suoT	27,368 49,784 10,870 2,409 10,382 45	100,873	663	101,506	1887.	2,909 12,310 2,888 2,993 601 376 439	22,516	22,516
	Vessels.	35 4 8 8 4 L	330	- :	O#		37 × 33 1-0 ×	224	224
1877.	Tons.	31,158 47,980 19,253 3,316 17,026 204 48	118,985	1,943	120,928	1886.	20,948 20,948 2,683 1,318 154 98	32, 207	32,207
	Vessels.	45 25 25 25 25 25 25 25 25 25 25 25 25 25	83	٥٦ :	432		¥8225000	88	82
1876.	.suoT	31,040 58,771 17,800 5,397 14,571	127,700	2,721 480	130,901	1885.	7,736 24,703 4,556 4,509 1,707 320	43,179	43,179
	Vessels.	194 124 125 1	416	e -	420		¥2284110	240	240
1875.	.suoT	33,483 67,106 22,825 7,760 19,838	151,012		151,012	1884.	12,888 42,032 3,815 4,446 5,189 675 3,366	72,411	72,411
	Vessels.	25. 103. 53. 53. 53. 53. 53. 54. 54. 54. 54. 54. 54. 54. 54. 54. 54	84	: :	84		82 82 83 83 84 84 85 84 84 84 84 84 84 84 84 84 84 84 84 84	387	387
1874.	Tons.	42,027 84,480 20,796 10,797 24,634 276	183,010	7,746	190,756	1883.	21,103 35,765 6,594 4,311 5,343 125	74,090	74,090
	Vessels.	177 177 178 178 178 178 178 178 178 178	490	9 :	196		202 224 171 225 245 25 25 25 25 25 25 25 25 25 25 25 25 25	374	374
	Provinces.	New Brunswick Nova Scotia. Quebec Ontario Frince Edward Island British Columbia. Manitoba	Add new vessels built in Canada which proceeded to the United Kigndom under a Governor's nasa without being regis-		Total.		New Brunswick. Nova Scotia Quebec Ontario. Prince Edward Island. British Columbia. Manitoba.	Add new vessels built in Canada which proceeded to the United Kingdom under a Governor's pass without being registered.  Add new vessels which left Quebec for registration in Germany.	Total

### LOAD-LINES.

By reference to last year's report it will be seen that a report of a Committee of the International Marine Conference held at Washington in 1889, was published, on the subject of a uniform system of load-marks or load-lines. The conclusion of the Committee on the question is summed up in these words: "This matter is not ripe for consideration by this Conference, and that it ought to be left to the negotiations to be carried on between the Governments of the maritime nations." The Committee furthermore stated in the body of its report: "The laws of many nations contain provisos for dealing with the question of over-loading and enabling the local authorities to detain over-laden ships. But nowhere, except in Great Britain, so far as is known, have statutory rules been introduced for the purpose of ascertaining whether a ship be fit to carry a certain cargo by a load-mark or load-line."

The statutory rules referred to in the above extract from the report of the International Marine Conference Committee, were contained in the British Merchant Shipping Act of 1876, twenty-sixth and twenty-seventh sections, sub-section (2) in those sections respectively. But this Act was amended by an Act on compulsory marking of load-line passed by the Imperial Parliament on the 9th of June, 1890, and entitled: "An Act to amend the Merchant Shipping Acts relating to Load-line." Previous to the passing of the amended Act a Load-line Committee had been appointed for the purpose of framing freeboard tables, which were adopted as part of the provisions of the Act, and by which the place of marking the load-line on each vessel is determined.

The following paragraphs contain the regulations and form part of the Merchant. Shipping Act, 1876, as amended by the Merchant Shipping Act of 1890:—

"(1.) The owner of every British ship (except ships under eighty tons register, employed solely in the coasting trade, ships employed solely in fishing and pleasure yachts) shall, before entering his ship outwards from any port in the United Kingdom upon any voyage for which he is required so to enter her, or if that is not practicable, as soon after as may be, mark upon each of her sides amidships, or as near thereto as practicable, in white or yellow on a dark ground, or in black on a light ground, a circular disc, twelve inches in diameter, with a horizontal line eighteen inches in length, drawn through its centre."

"(2.) The centre of this disc shall be placed at such level below the deck-line marked under the provisions of this Act as may be approved by the Board of Trade, and shall indicate the maximum load-line in salt water to which it shall be lawful

to load the ship."

"(3.) He shall also, upon so entering her, insert in the form of entry delivered to the collector or other principal Officer of Customs, a statement in writing of the distance in feet and inches between the upper edge of each of the lines indicating the position of the ship's decks which is above that centre."

"(4.) If default is made in delivering this statement in the case of any ship,

any Officer of Customs may refuse to enter the ship outwards."

"(5.) The master of the ship shall enter a copy of this statement in the agreement with the crew, before it is signed by any member of the crew, and no superintendent of any mercantile marine office shall proceed with the engagement of the crew until this entry is made."

"(6.) The master of the ship shall also enter a copy of this statement in the

official log book."

"(7.) When a ship has been marked as by this section required, she shall be kept so marked until her next return to a port of discharge in the United Kingdom."

With respect to the marking of a load-line of British ships in the coasting trade, the following are the provisions:

"(1.) The owner of every British ship employed in the coasting trade on the coasts of the United Kingdom (except ships under eighty tons register employed solely in that trade) shall, before proceeding to sea from any port, mark upon each of her sides amidships, or as near thereto as practicable, in white or yellow on a dark ground, or in black on a light ground, a circular disc twelve inches in diameter, with a horizontal line eighteen inches in length drawn through its centre:

"(2.) The centre of the disc shall be placed at such level below the deck-line marked under the provisions of this Act as may be approved by the Board of Trade and shall indicate the maximum load-line in salt water to which it shall be lawful to

load the ship."

"(3.) He shall also in every twelve months, immediately before the ship proceeds to sea, send or deliver to the Collector or other principal officer of Customs of the port of registry of the ship a statement in writing of the distance in feet and inches between the centre of the disc and the upper edge of each of the lines indicating the position of the ship's decks which is above that centre."

"(4.) The owner, before the ship proceeds to sea after any renewal or alteration of the disc, shall send or deliver to the Collector or other principal officer of Customs of the port of registry of the ship, notice in writing of such renewal or alteration, together with such statement in writing as before mentioned of the distance between

the centre of the disc and the upper edge of the deck-lines."

"(5.) If default is made in sending or delivering any notice or statement required by this section to be sent or delivered, the owner shall be liable to a penalty not exceeding one hundred pounds."

"(6.) When a ship has been marked as by this section required, she shall be

kept so marked until notice is given of an alteration."

"(7.) The Merchant Shipping Act, 1890, section 5, enacts as follows:—"'For the purposes of the Merchant Shipping Act, 1876, as amended by this Act, the expression 'amidships' shall mean the middle of the length of the load water-line as measured from the foreside of the stem to the aft side of the stern post."'

"(8.) In the regulations made by the Board of Trade, under section 2, subsection 2, of the Merchant Shipping Act, 1890, it is provided as follows:—The master of every British ship shall, before she leaves any dock, wharf, port or harbour in the United Kingdom, Her Majesty's possessions, or in a foreign country, for the purpose of proceeding to sea, enter in the official log-book all the particulars stated in the certificate of approval of the position of the disc."

Under section 2, Merchant Shipping Act, 1890, regulations were made by the Board of Trade, whereby the freeboard tables of the committee appointed for determining the load-lines of merchant ships, were adopted for marking all vessels, whether registered in the United Kingdom or Her Majesty's possessions. These tables were adopted in order to secure uniformity in marking vessels and apply only to cargo-carrying vessels. The freeboards assigned under the tables are suitable for vessels of the highest class in Lloyds Register or of strength equivalent thereto, and are increased for ships of inferior strength.

Vessels under the regulations are subject to the following modifications, viz.:-

"Hardwood ships, i. e., other than fir or pine, classed A (red) in Lloyds, are to have their freeboards, by the tables, increased 8 per cent."

"Hardwood ships classed Æ in Lloyds are to have their freeboards, by the tables,

increased 15 per cent."

"Hardwood ships without class are to have their freeboards, by the tables, increased by 20 per cent, unless opened out for survey, when their freeboard will depend upon their condition."

"Softwood ships will require to have their coefficient of fineness modified in respect of the excess of the registered breadth caused by the extra thickness of side. That for hardwood ships is already provided for in the tables."

"Softwood ships classed A (red) in Lloyds are to have their freeboards, by the

tables, increased 10 per cent."

"Softwood ships classed Æ in Lloyds are to have their freeboards increased 20

per cent."

"Softwood ships without class are to have their freeboards, by the tables, increased 25 per cent, unless opened out for survey, when the freeboard will depend upon their condition."

There is also a distinction between summer and winter freeboards, and between fresh water and salt water freeboards. Sailing vessels are to be marked under the Act and regulations by a vertical line, and two horizontal lines at right angles with the top and bottom of the vertical line, and marked respectively **F**. (freshwater)

and W. N. A. (winter North Atlantic), as follows: W. N. A.

The vertical line extends above and below the horizontal line drawn through the centre of the disc, and which horizontal line is the load-line for summer. The vertical and horizontal lines are placed 21 inches forward of the disc. "Sailing ships engaged solely in the coasting trade shall only be marked with the line indicating the maximum load-line in fresh water."

These sections took effect from the 9th December, 1890, as regards vessels registered in the United Kingdom, and provision was made in the Act for taking effect in Her Majesty's possessions from the 9th June, 1891, as regards vessels registered therein.

The scale of fees for survey and assignment of freeboard to vessels in the United Kingdom is as follows:—

							£	8.	d.
For Vessel	s under 300	tons ;	gross .		••••••	• • • • • • • • • • • • • • • • • • • •	1	1	0
do	of 300 ton	s and	under	1,000	tons gros	88	2	2	0-
do	of 1,000	do	do	2,000	do		3	3	0
do	of 2,000	do	do	3,000	do		4	4	0
do	of 3,000	do	do	4,000	do		5	5	0
do	of 4,000 a	nd ab	ove			•••••	6	6	0

Section 3 of the Merchant Shipping Act, 1890, provided for legislation in Her Majesty's possessions in the matter of fixing, marking and certifying of load-lines in these possessions, based on the principles of the Imperial Act and that enactments in the colonies would have the same effect with respect to ships registered in the colonies as if marked, &c., in pursuance of the Imperial Act.

It was quite apparent that the Imperial Act of 1890 would injuriously affect the shipping interests of the Dominion if applied to all vessels registered in Canada, and Her Majesty's Government was promptly requested by cablegram and despatch from the Governor General and Council, to suspend the operation of the Act so far as it related to Canadian vessels till a Bill could be framed and passed by the Dominion Parliament, in compliance with section 3 of the Imperial Act. A reply was received from Her Majesty's Government dated 4th May, 1891, stating that action would be deferred under section three as regards Canadian vessels till the 1st of October, 1891.

The following notice was issued on the 11th May, 1891, by the Department of Marine, viz:--

"This Department has received notice that the Imperial Board of Trade will "defer action under the Imperial Act of 1890, relating to marking of load-lines, so "far as ships registered in Canada are concerned, till 1st October next, instead of "the 9th June next, as defined in the Act referred to."

In the meantime a petition numerously signed by Canadian managing owners and ship-owners was forwarded to His Excellency the Governor General, the Senate and House of Commons: which was in substance as follows:-

"That under the Load-line Act, 1890, Canadian vessels visiting the United Kingdom will be unable to clear after June 9th, 1891, without being marked with a compulsory load-line:"

"As far as Canadian vessels are concerned there has been no such percentage

of losses from overloading as to justify so stringent an enactment."

"Should, however, the Dominion Government deem it necessary to legislate in the premises it will for the following reasons be a great hardship if a load-line be enforced on the date named (June 9th, 1891:

"To fix the load-line it is necessary for a vessel to go on the dock to ascertain

her moulded length and depth. This cannot yet be done as there are no surveyors

appointed in the Dominion to take these particulars, etc.:"

"We therefore ask that it be arranged with the Imperial Government that no load-line be compulsorily enforced as against Canadian vessels either here or in the United Kingdom until January, 1892, but that liberty be given ship-owners to apply to have their vessels marked in the meantime by proper surveyors appointed as hereinafter mentioned:"

"Having regard to the known buoyancy of our spruce ships, and their different model, it is impossible in fairness to tie them down to rules applicable to iron and steel vessels. These rules have been prepared in the United Kingdom by the Board of Trade in conjunction with English Lloyds. Most of our wooden ships are classed in the Bureau Veritas, it will therefore be necessary to have special rules and tables framed for them."

"We therefore ask if a load-line is to be marked that it be done by surveyors, both here and in the United Kingdom (appointed by the Dominion Government) who will have a special knowledge of our wooden ships and their known large dead-weight carrying capacity, and that in addition English Lloyds, Bureau Veritas, American Record, and many other well-known classification be from time to time licensed by the Government to fix load-line on Canadian vessels classed in their books."

"That surveyors in fixing the load-line of every vessel give her credit for the freeboard she had with previous cargoes she carried in safety, and any known circumstance favorably affecting her carrying."

Strong representations were made to the Department by letters from shipowners of light draft vessels as to the disastrous effect of the Imperial load-line regulations upon certain classes of Canadian vessels. The following extracts from a letter written by a ship-owner of St. John, N.B., presents a fair example of the opinions expressed.

"I am thoroughly convinced that if the rules of the British Board of Trade are adopted by our Government and applied to our shoal vessels, that the effect will be disastrous to us; for these reasons: our vessels are built of high class and fitted out especially for the River Platte and Brazil trades, and we come into competition with foreign vessels that have no load-line restrictions, and you understand that sugar shipped from most of the Brazil ports is wet sugar

in bags, the drainage on which runs from 15 per cent to 20 per cent loss on the voyage, so the custom is to put a good cargo in at the loading port, the captain will lighten his vessel by pumping part of the cargo overboard. You can see that if we are forced by our Government to mark our vessels with a load-line equal to winter North Atlantic, and then at Brazil ports only load to this mark, then on the passage to the United States or Canada, pump out one-fifth of the cargo, by the time the vessel reaches her destination she would not have much cargo on board to collect freight from, as these cargoes are payable upon the weight delivered. The result would be to throw the carrying trade of this sugar into the hands of foreign ship-owners.

"The winter freeboard on one of my vessels as determined by freeboard tables would be two feet. This vessel has carried cargo from bar ports where her draft could not exceed 11 feet 6 inches, consequently her freeboard was 35 inches she did not work so well nor prove to be so good a sea-going vessel with this freeboard as when she was loaded with 175 tons more cargo and only 12 inches of freeboard, and she has carried still more cargo with a freeboard of 9 inches in safety in a gale. Others of my vessels have been sailing for years carrying coal from Great Britain to Brazil and the River Platte and bringing back to Canada cargoes of sugar not one of them having met with accident, and yet if the rules of the Board of Trade were applied to them we would in future be compelled to give them from 9 to 12 inches more freeboard and deprive them of all the profit that is made on the voyage.

"Now while it may be necessary to have a load-line Act, yet it must not be one that will bear hardly upon our shoal draft vessels. While the rules of the Board of Trade may not work hardly upon deep ships, the same rules applied to our broad

and shallow vessels would almost drive them out of existence."

A Bill was framed and introduced into the Dominion Parliament by the Minister of Marine and Fisheries under Section 3 of the Merchant Shipping Act, 1890, embracing the general principles of the Imperial Act but differing from it in two important particulars viz.: the Freeboard Tables which form part of the Board of Trade Regulations were not adopted as part of the provisions of the Bill. It was provided that the owner or master of a ship shall in every case be one of the two persons to determine the level at which the centre of the disc shall be placed below the deckline marked under the provisions of the Bill. The Board of Trade Regulations do not permit owners or masters to assist in fixing the load-lines.

It was provided in the Bill that the maximum load-line in salt water should be determined by a surveyor of British Lloyds, French Bureau Veritas or any Port Warden appointed by the Governor in Council, assisted as above stated by the owner or master of a vessel; it was also provided that the limit of exemption from the operation of the Bill should be fixed at 150 tons and under.

The objection to the freeboard tables adopted by the Board of Trade lay in the fact that they are unsuited to Canadian wooden vessels under 600 tons. These vessels are engaged in the coasting trade on the North and South American coasts where shoal harbours exist. They are constructed with great breadth of beam, are of light draft of water, are high class and very substantially built of strong and heavy material. Shoal water being a marked feature on the coast of countries with which Canadian vessels trade as well as on the Canadian coast, vessels of shoal draft are the only class that can successfully compete with ships of other nations which have no restrictions or very limited regulations respecting load-line. It has been maintained that the freeboard tables of the Board of Trade are suited only for British ships which are of a very different character from Canadian coasting vessels, the application

of the tables would therefore, most injuriously affect the coasting trade with the United States, South America and the West Indies, a trade which ship-owners of the Maritime Provinces have laboured so strenously to build up. It has already been shown by the letter of a ship-owner which forms part of this report that a practical application of the freeboard tables would increase the freeboard of a vessel which may be considered a fair representative of Canadian coasting vessels, from 12 inches to about 2 feet, thereby depriving the owner of the means of carrying sufficient cargo to make his vessel pay. A report to this effect was made by Lieut. A. R. Gordon, R.N., who had a conference at St. John with ship-owners and others interested in the coasting trade. It was shown that nearly 400 vessels in the port of St. John alone would be injuriously affected by the adoption of the freeboard tables of the Imperial Act.

It was also observed by the Department that foreign vessels sailing from British ports were not compelled to submit to the operations of the Load-line Act and it was likewise noticed that a foreign vessel having a load mark fixed under the Act of 1890, could load in a port of the United Kingdom until the line was submerged and then sail from that port after notifying the Imperial officers of the condition of the ship and their intention to sail. This, of course, would place any Canadian vessel marked according to the Imperial Act under a disadvantage in any British or foreign port.

The Bill introduced by the Minister of Marine and Fisheries was referred to a Select Committee of Parliament approved and passed both Houses.

As some time would elapse before the Bill could receive the Royal Assert it was deemed necessary to request Her Majesty's Government to further defer the operations of the Imperial Act so far as it affected Canadian registered vessels, till the 1st of January, 1892.

A despatch was accordingly forwarded to the Colonial Office on the 26th June, 1891, enclosing a minute of Council requesting the postponement of the date of application of the Imperial Load-line Act of 1890 to Canadian vessels. This was consented to and the application of the Act further deferred till the 1st of January, 1892.

In view of the fact that the Canadian Bill has not yet received the sanction of the Imperial Government it was deemed advisable to request that the operations of the Imperial load-line be still further postponed as far as Canadian vessels are concerned. Her Majesty's Government has in accordance with the above request deferred the enforcement of the Act as regards Canadian vessels, till the 1st of May next. This information was conveyed to the Department by cablegram from the High Commissioner for Canada.

The matter of amending the Canadian Load-line Act on a basis which will be mutually acceptable to both the Imperial and Canadian Governments is now receiving consideration, but up to the present time-the Canadian Act is not in operation in Canada.

### DECK-LOADS.

During the session of the Imperial Parliament held in the early part of 1890, a Bill was introduced entitled: "A Bill to amend the law in regard to timber deckloads in winter, bulkheads in iron vessels and the landing of live cattle." Another

Bill was introduced in November of 1890, entitled: "A Bill to prevent the deckloading of timber in winter." It was contemplated by the promoters of this Bill to amend the Merchant Shipping Act, so as to repeal that portion of it, which relates to the carrying of deck-loads in winter. The Bill did not become law. As the law now stands in Great Britain and Canada, ships crossing the Atlantic are permitted to carry deck-loads to a height of 3 feet above the deck. The proposed Bill aimed principally to prevent the carrying of wood goods on deck.

The Government of Canada were invited by the Imperial Authorities to forward any observations they were desirous of making upon the proposed legislation, in case a similar Bill might be introduced at another session.

An enquiry was therefore held by me under your instructions, at the port of St. John, New Brunswick, at a meeting of the Board of Trade of that city, on the 27th, 28th and 29th of January, 1891. The enquiry was held at St. John, as that port is the principal one in the Dominion from which vessels carrying deck-loads of timber or deals, sail in the winter months.

Evidence was given by captains, pilots and others of experience on the deckload question. This evidence tended to show that a full deck-load of sawn lumber flush with the ship's rail is preferable to a deck-load only 3 feet in height, or no deck-load at all, as it can be more securely fastened than can a 3 feet load. It was stated by nearly every witness examined that there was less danger to vessels, and consequently to life, when deck-loads were carried, as ships without deck-loads are not so steady in heavy gales and shipped heavy seas which did great damage on deck. It was the opinion of the majority of the witnesses that a vessel with a deckload of 4 feet 9 inches was safer in heavy seas than when she carried no deck-load, or one of 3 feet, as the water would wash overboard, instead of remaining in the space between the deck and rail. It was furthermore stated that when vessels carrying 3 feet deck loads shipped seas, that the wash of water was liable to burst the deck-loads loose and injure the bulwarks. This would be obviated it was urged by a deck-load carried above the rail and securely fastened by spars athwart ships. thereby affording no space for the water to remain and do damage.

The Halifax Board of Trade, as well as private individuals engaged in shipping at Halifax, forwarded letters addressed to me deprecating the steps that had been taken towards abolishing deck-loads and stating that they considered the present law relating to deck-loads is fair to ship owners and secures safety to the sailor.

A recommendation was made to the Imperial authorities in accordance with the above evidence and copies of the proceedings at the enquiry were forwarded, together with a report made by Lieutenant Gordon, R. N. A further suggestion was made that if the Canadian recommendation was favorably received, concurrent legislation be introduced in the United Kingdom and Canada, on the matter of carrying deck-loads in winter, as high as the main rail.

It is to be regretted that acting on the advice of the Board of Trade the reply of Her Majesty's Government was not favourable to this proposition.

The Board of Trade have, however, as yet not dealt with the reasons put forward as above in support of the recommendation.

# INSPECTION OF SHIPMENTS OF LIVE STOCK EXPORTED FROM CANADA.

A despatch dated the 10th September 1890 was transmitted from the Right Hon. the Secretary of State for the Colonies, to His Excellency the Governor General, enclosign a copy of the Merchant Shipping Act Amendment (No 2) Bill, introduced into the Imperial House of Commons, which proposed to amend the law in respect of "Timber Deck Loads in Winter, Bulkheads in Iron Vessels and the Landing of Live Cattle" in the United Kingdom.

It was also stated in the dispatch that a departmental committee under the chairmanship of the Right Hon. H. Chaplin M. P., President of the Board of Agriculture, was engaged at that time in inquiring into the conditions under which cattle are imported into the United Kingdom, and that the Imperial Board of Trade would be happy to lay before the committee any information bearing upon the subject which the authorities in Her Majesty's possessions may think right to forward.

The following is an extract of a minute of Council on the subject, forwarded to the Right Honourable the Secretary of State for the Colonies: "The Minister" (of Marine) "has directed that a full enquiry be made through the officers of the Department of Marine, into the operation of the present law dealing with timber deck loads and the shipment of cattle, the result of which he will present to Your Excellency" (the Governor-General) "to be forwarded to the Right Hon. the Principal Secretary of State for the Colonies in due course."

In accordance with your instructions I proceeded to Montreal and opened an inquiry on the 5th of January, 1891, for the purpose of taking evidence relative to the export trade in live cattle between Canada and Great Britain. The inquiry was held in the board room of the Harbour Commissioners of Montreal, and was attended by a large number of those engaged in exporting cattle from Canada, representing ship-owners, steamship agents, \*Marine Underwriters' Association, persons employed in taking charge of cattle on the voyage across the Atlantic, and others interested in the trade and commerce of Montreal.

The evidence taken at this inquiry contained very valuable information respecting the method of loading, the time at which steamers received such cargo, and the condition in which cattle arrive from the stockyards, the fittings on each deck of the steamers, the means of ventilation and as to whether the cattle should be placed on the hatches or not, the care of them on board ship, the food and water supplied, where carried, and if liable to damage by salt water. Evidence was also given as to the treatment of cattlemen on board ship, the food supplied them, and whether they should sign the ship's articles and thereby be immediately under the control of the captain and officers. Much information was elicited respecting the adaptation of the different classes of vessels employed for that trade, and the percentage of loss of cattle carried by regular liners and vessels transiently engaged in the trade. Further information was elicited, all of which will be found in the verbatim report

101

of the evidence as it was given at the inquiry held at the ports of Montreal, Quebec, and Three Rivers. The Report was published as a Blue Book of this Department in 1891. It will be seen by reference to the evidence given at the inquiry that as far as the export cattle trade is concerned the business has been carried on in nearly all the cases referred to, in a careful and safe manner. It appears that the losses of cattle incurred by the principal lines of steamers have been very small, scarcely exceeding one half of one per cent. Other vessels which carried cattle late in the fall met with exceptionally heavy weather, but they were vessels commonly known as "Ocean Tramps," and were not provided with adequate fittings and appliances to enable them to resist the force of gales, and at the same time give the required ventilation to the cattle carried below the hatches.

An Order in Council was passed on the 26th February, in accordance with your recommendation of the 9th February, 1891, informing Her Majesty's Government that an enquiry had been held, eliciting important facts in connection with the transit of cattle from Canada to the United Kingdom, and forwarding at the same time a copy of the evidence furnished at the enquiry, to be laid before the Inter-Departmental Committee then sitting in London. The same Order in Council included a recommendation from you relating to the promotion of a Bill at the approaching session of the Canadian Parliament of 1891, providing for a thorough Government inspection of the vessels engaged in the translantic cattle trade and for necessary rules and regulations.

The report of the departmental committee of the Imperial Board of Trade and the Board of Agriculture to enquire into and report upon the transatlantic cattle trade, appeared in due course and the report of the Canadian inquiry was published as Appendix 30, to the Report of the Committee.

The following is a "summary of conclusions" arrived at by the Committee of the Imperial Board of Trade and Agriculture:—

- "We have now considered the various questions arising out of the reference to the Committee, and we proceed to state the conclusions at which we have arrived.
  - "The evidence shows clearly-
- "(i) That the transatlantic cattle trade is a large and growing business, carried on in various kinds of vessels by private enterprise, and regulated partly by people interested in the trade, and partly by official inspection on behalf of the Governments of the United States and the Dominion of Canada, and of Her Majesty's Government, at the ports of embarkation and debarkation respectively.
- "(ii) That the successful carriage of animals by sea is to some extent affected by their condition before embarkation, especially after long land journeys.
- "(iii) That in fine weather the transit of cattle by sea is conducted in safety, with a minimum of loss and a comparatively small amount of suffering, even in ships of as low tonnage as 1,200 tons.
- "(iv) That in heavy weather, either in summer or winter, although it is more frequent in winter, even in the best ships, cattle are always liable to suffering and sometimes heavy loss; but that with sufficient shelter and ventilation, adequate fittings and space, proper stowage, good attendance, and a due amount of skill in navigation, the average loss and suffering can be still further diminished."

The live stock trade between Canada and the United Kingdom has become a very important one, and forms a noticeable factor in the exports of the Dominion, having increased from 7,639 cattle exported in 1877, to 83,588 in 1889, 121,309 in 1890, and 112,397 in 1891. Of this latter number 3,088 cattle were sent from Montreal to United Sates ports and thence shipped to Great Britain. Although forming part of the total export of cattle from Canada, they were not inspected by Canadian officers before leaving Montreal, and, having been shipped from United States ports would probably be scheduled at the port of debarkation in Great Britain. It will thus be seen that 109,309 head of cattle were shipped at the port of Montreal directly for ports in the United Kingdom during the year 1891. The Board of Trade and Board of Agriculture Committee's report points out the fact that the progress of the Canadian trade has been less subject to fluctuations than the United States trade during the same period, the increments being more regular from year to year, while at the same time showing a considerable expansion.

With a view of fostering this trade, so far as can be done by legislation, and removing any causes that might lead to loss, injury or ill-treatment of cattle or cattlemen on board ship, an Act entitled "An Act respecting the shipping of Live Stock," 54-55 Vic., chap. 36, was passed last session of Parliament. A copy of this Act is published as an appendix to this report.

Pursuant to the authority vested in the Governor-General in Council, by the third section of the Act, regulations were provided for the fitting up and inspection of vessels engaged in the trans-atlantic cattle trade. These regulations are published as an appendix to this report.

The 4th section of the Act provided for the appointment of two inspectors. Under this authority two inspectors were appointed at the port of Montreal, to be remunerated out of the fees collected upon the number of cattle shipped, at 2 cents per head, to the extent of \$1,000 each, per annum, and office rent and all other expenses incidental to their office.

On the 24th October, 1891, Mr. George H. Pope and E. Baker Morgan were appointed inspectors. An office was provided for them in the building occupied by the inspector of steamboats in Montreal for the time being. Another office, however, will be occupied at the opening of navigation.

The following report from the inspectors of cattle shipments, shows the number of vessels fitted and inspected, under the Regulations, the number of cattle shipped from Montreal, and the loss of cattle, from the 1st November, when the Act came into operation, to the 21st November, when shipments ceased. It will be seen that the loss was very small, and the conclusion may fairly be adduced that the cattle export inspection has already worked beneficially to the cattle trade.

MEMO. of Live Stock Shipments from the Port of Montreal, Nov. 1st to 21st, 1891, inspected by Geo. H. Pope and E. B. Morgan.

1891.	Steamer.	Destination.	Sheep.	Cattle.		Fees	Remarks.
1001.	Steamer.	Destination.	Sneep.	Shipped	Lost.	Collected.	nemarks.
	4 Norwegian			364		\$ ets.	
do	4 Mongolian			405	2	8 10	
do	4 Lake Huron			131 241	7 10	2 62 4 82	Not your volichle
do do	5 Texas			254	3	5 08	Not very reliable. The Dominion Line
do	5 Cynthiana			651	9	13 02	keep no record here.
do	5 Fremona			457	1	9 14	keephorecord here.
do	6 Grimm.			509		10 18	ì
do	7 Dracona			323		6 46	1
do		Liverpool		127		2 54	No report.
do	7 Colina	Glasgow		195		3 90	
do 1	12 Sarmatian	do		394		7 88	•
	12 Lake Nepigon	Liverpool		56	1	1 12	
	12 Monte Videan			186		3 72	}
do 1	12 Gerona	Dundee	: 	776		15 52	I
do 1	12 Alcedes.	Glasgow	, <i></i>	241		4 82	ļ
do I	14 Labrador	Liverpool		170		3 40	No report.
	14 Steinhoft		<i>.</i>	484	1	9 68	
	16 Kehrweider	Dundee		479		9 58	Not arrived.
do 1	17 Corean	Glasgow					
do	18 Lake Ontario	Liverpool		43			Not reported.
	18 Rosarian	London		203		4 06	Lost 2 sheep.
	19 Dominion.				· · · · · ·	10 12	
	19 Scandinavian					7 58	
	19 Storm King.	do	101	250 184		5 00 3 68	
go :	21 Lake Winnipeg	inverpool	101	104		3 00	1
	m da u	1	957	8,468	23	169 36	1

GEO. H. POPE.

# MESSENGER PIGEONS FOR USE BETWEEN SABLE ISLAND AND HALIFAX.

By reference to the report of last year it will be seen that the Department has given attention to the subject of communicating intelligence by means of trained messenger pigeons, from Sable Island or dangerous places along the Atlantic coast of Nova Scotia. A pigeon loft was fitted up and an experienced naturalist was appointed at a salary of \$100 per annum for the purpose of training the young birds and superintending the breeding industry. One of the employes of the Marine Department attached to the agency at Halifax has been employed in feeding and otherwise caring for the pigeons. Major-General Cameron, of Kingston, who has given the subject of the messenger pigeon industry and the training of the birds for practical use a great deal of study and attention, was requested by the Department to visit Halifax in August and report upon the progress made in the breeding and training. His report will appear in the supplement to this report.

## PILOTAGE AUTHORITIES.

The annual returns from the different pilotage authorities will appear in the supplement to this report. The subject of pilotage dues charged vessels entering and clearing ports where pilotage authorities exist, is now receiving the considera-

tion of the Department with a view of making some change in the amounts paid to pilots. Compulsory pilotage in connection with the "white flag" regulations is also receiving consideration, but no steps have as yet been taken towards any change in the present regulations.

### PORT WARDENS AND HARBOUR MASTERS.

Port Wardens' annual returns will be published in the supplement to the report, as will also be the returns of harbour masters' for 1891.

### IMPROVEMENTS IN NAVIGATION OF FRASER RIVER.

During some years past the Dominion Government has been engaged in improving the entrance to the Fraser river by building pile work and laying down mattresses, so as to keep the current in one main channel of the delta, with the expectation that it would deepen itself, as proved to be the case at the mouth of the Mississippi river. This work is of vital importance to the interests of New Westminster, and the New Westminster Board of Trade has been actively engaged in furthering it by keeping the needs of the local shipping prominently before the public, and before the Dominion Government. In connection with this work this Department maintains buoys, has had a special survey made and has published a chart showing the latest soundings at the entrance to the river. Notwithstanding all these improvements, the New Westminster Board of Trade, in their eighth annual report published last year, take occasion to impute blame to this Department, accusing our officers inferentially of intentional misrepresentation and neglect of their interests. It is stated that in February, 1888, Captain Lewis, agent of this Department, refused to put out spar buoys as soon as requested to do so, and also published a statement that a vessel drawing more than 17 feet of water could not go up the river. Investigation into these charges shows that Captain Lewis put out the buoys as soon as instructed officially to do so, and that his statement was based upon the latest published chart of the Fraser river.

In consequence of representations of the Board of Trade, Captain Lewis was instructed to investigate the depth of water in the river, when he found 12 feet at low water, which he calculated would give 9 feet at low water spring tides, at the same time stating that in certain places there were only 8 feet at low water springs.

The next complaint is made against a chart published by this Department, as the result of surveys made by the Public Works Department in 1888. This chart was objected to so strongly in consequence of a 3-fathom centre line having been inserted in it, and in consequence of the soundings above the Sand Heads being taken from the old Admiralty chart, that the chart was withdrawn and a new survey was made to a point above New Westminster. As elsewhere stated in this report, the new chart based upon that survey has been issued, and since issue has been corrected, and I believe is now satisfactory.

It is evident from the rapid changes which repeated soundings show in the depth at critical points on the Fraser river, that no permanent chart can for some years to come be issued, as the soundings are changing from one season to another.

### LEGISLATION.

### "AN ACT RESPECTING THE INSPECTION OF SHIPS.

Under the Steamboat Inspection Act, steamboats are required to undergo inspection of machinery and boilers and hulls and equipment as well. For some years past, the Department has had under consideration the subject of inspecting sailing ships registered in Canada. It has been found that lives and property have been exposed to danger owing to the insufficient equipment and unseaworthy state of many unclassed vessels. As the result of the inquiries made into the matter an Act was passed at the last session of Parliament, entitled "An Act respecting the Inspection of Ships." It is provided that the Act shall come into force on a day to be named by proclamation of the Governor General in Council, in any place or places or within such limits in Canada as are in such proclamation designated.

A copy of the Inspection Act will be published in the supplement to this report.

The United States Government has had under consideration a Bill for the inspection of sailing ships and to carry into effect certain recommendations of the United States Delegates to the International Marine Conference. The following extract is from the United States Senate Mis. Doc. No 49 of the 52nd Congress pp. 5 and 6.

"Section 16. The following also applies to section 1 of this bill. Section 16 provides for the yearly inspection of sailing vessels and barges in addition to steamers. There should be no more opposition to the yearly inspection of the hulls of sailing vessels than of steamers, as the reasons for the inspection of the former are more numerous and urgent than of the latter. Steamers are employed about home, are in and out of port frequently, and any accident to the hull or deterioration of any of its parts would be more likely to come to the observation or knowledge of the underwriters' agents than in like case applied to sailing vessels. Notwithstanding this, and that the underwriters have supervision in their way over steamers, yet their hulls and outfits must, in addition, be submitted to a yearly inspection by Government officials. Vessels are classed by the underwriters as high as thirteen or more years, and to maintain that class must be examined at the end of the first seven years, and submit to occasional surveys, not oftener than every two years. That is a rule of the underwriters, but there is no assurance that the vessels are so surveyed. It is no doubt the case that vessels are strained or injured, and their condition concealed from the underwriters by the owners or masters to avoid extra outlay to put them in a safe condition. How strict a supervision the underwriters have over the condition and seaworthiness of sailing vessels is exemplified in a striking manner by the rotten vessels that are stranded under the observation of the Life-Saving Service. The records of that service will show cases where within one hour, or before the life-saving crew could transport the lifeboat the short distance between the station and the vessel, she has broken into fragments and melted away.

"In reply to a letter asking for an opinion on this matter the board of trade of the city of Chicago, through its secretary, Mr. George F. Stone, thus emphatically

"'I beg to say that to argue in favor of the proposition that sailing craft should be as rigidly inspected as steam vessels, both with regard to construction and equipment, would be, it seems to me, a work of supererogation. The proposition is axiomatic and carries with it a rebuke that the Federal authorities have not ere this insisted that sailing vessels be thoroughly inspected in all respects, especially when it is considered the awful record of disasters to such craft as compared with disasters to steam vessels. Vast mercantile interests and a decent regard for human life unite in urging upon the National Government immediate compliance with the recommend-

ations of the conference. Intense competition in the business of water transportation frequently results in overloading and in making voyages in unseaworthy bottoms with an inadequate equipment. Again, shipmasters vie with each other in making quick voyages, straining hulls, sails, and rigging to a fearful extent, resulting in many instances in appalling losses which a rigid inspection could have prevented. It is undeniably true that, under the present system, insurance companies are compelled to carry risks out of proportion to the premium received, and are thus in a measure imposed upon.

"The inspection or survey by the underwriters is for their own protection of the risks they take upon the vessel and cargo. If they have no risks on a vessel it naturally follows that they would have no concern as to her seaworthiness. The proposed yearly inspection by government officials is for the protection of the lives embarked on a vessel, whether insured or not. A seaman has no means of knowing the condition of a vessel on which he ships, and frequently does not know even to what port he is bound until days after when at sea. Neither would the officers have any better knowledge of the condition of the vessel, if recently employed. Many cases are on record where vessels have been delayed or returned to port on account of the refusal of the crew to proceed, having accidentally discovered the unseaworthy condition of the vessel. Such delays, resulting in great expense, would be reduced or avoided if the master held a license that the vessel had been inspected within a year."

An Act was passed last session of Parliament entitled: "An Act respecting the "Shipping of Live Stock," which has been referred to in this report under the heading of "Inspection of shipments of life stock exported from Canada."

The Steamboat Inspection Act was amended during the same session of Parliament with regard to the expression "passenger," defining the meaning to be, "any person carried on a steamboat, other than the master and crew, the owner, his family and servants." "The expression 'Minister' means the Minister of Marine and Fisheries." An amendment was also made giving authority to the chairman of the Board of Steamboat Inspection to approve of examinations of engineers by Inspectors, when the Board was not sitting.

Amendments to the Masters and Mates Act were made in August last, and these amendments will be found in this report under the heading of "Inland and Coasting Certificates," issued to masters and mates.

The following Acts were also passed during the session of 1891, viz.:-

An Act entitled: "An Act to amend the Act respecting Government Harbours, Piers and Breakwaters." Chapter eighty-four of the Revised Statutes was amended by adding the following section immediately after section four:—

"4a. All tolls and dues payable under this Act or under any rule or regulation made thereunder shall constitute a debt due and payable to Her Majesty jointly and severally by the owner of the goods, wares or merchandise in respect of which such dues or tolls are payable, and the consignee or person to whom such goods, wares or merchandise are delivered or who is in charge of them,—or, in the case of a person using a harbour, wharf, pier or breakwater, by such person,—and in the case of a vessel, jointly or severally by the owner, master and agent of such vessel; and such debt may, at any time, be recovered with full costs of suit in any court of competent jurisdiction."

An Act entituled: "An Act to provide for the Marking of Deck and Load Lines." This Act has not received the assent of Her Majesty, and has therefore not

become law; explanations respecting legislation on the subject of Load Lines will be found under the heading of "Merchant Shipping," in this report.

An Act intituled "An Act to amend Chapter seventy-seven of the Revised Statutes, respecting the safety of Ships." Section 19a was added immediately after section 19 providing that every person who knowingly sends, attempts to send, carries or attempts to carry, in any ship carrying passengers to or from any port in Canada or between one port and another in Canada, dangerous explosives is guilty of a misdemeanour and shall be liable to a fine or imprisonment.

Gunpowder, to make necessary signals, sufficient for one round voyage may be stored or carried in a place approved by a Steamboat Inspector.

A freight steamer carrying passengers incidentally, may be granted a permit by the Minister of Marine and Fisheries to carry explosives, provided she is specially fitted for the purpose, if not so fitted the section applies as if no permit had been granted.

"An Act to amend the Acts respecting the Harbour of Pictou, Nova Scotia," which provides that the Harbour Commissioners of Pictou are constituted a body corporate and with the sanction of the Governor General in Council may purchase, acquire and hold such lands, &c., as are described in section thirteen of the Act, thirty-sixth Victoria, chapter sixty-three, as they may deem necessary for the maintenance and improvement of the Harbour.

The Minister of Marine and Fisheries upon application of the Commissioners, with the approval of the Governor in Council, may take such lands under the provisions of the "Expropriation Act."

The lands so taken may be conveyed by the Crown to said corporation upon repayment of all damages, charges and expenses incurred by the Crown.

A deposit must be made with the Minister of Finance and Receiver General, of an amount sufficient to satisfy all claims against the Crown by reason of any expropriation, before the Minister of Marine and Fisheries shall take any proceedings.

The Harbour Commissioners may borrow money for carrying out the improvements, not to exceed the sum of \$4,000 in all, and for securing the repayment of the borrowed money may mortgage the real estate, works, tolls and revenues of the said Harbour.

All property held by the corporation shall be held in trust for all purposes for which the said corporation is created.

I have the honour to be, Sir,

Your most obedient servant.

WM. SMITH,
Deputy Minister of Marine.

DEPARTMENT OF MARINE, OTTAWA, 1st December, 1891.

## APPENDIX No. 1.

STATEMENT of Expenditure of Department of Marine, for the Fiscal Year ended 30th June, 1891.

Service.	Amount.	Total.
	S cts.	
Ocean and River—		
Maintenance and repairs to Government steamers.	111,437 03	
Construction of steamer "Quadra"	54,773 37	
Examination of Masters and Mates	4,255 24	
Investigations into wrecks, &c	1,172 77	
Registry of Canadian shipping	1,207 07	
Removal of obstructions in navigable waters	3,633 65	
Tidal observations.	4,952 20 1,654 96	
Cattle export enquiry.	520 85	
Winter mail service	7.012 70	
Gratuities	1,025 00	
Water Police, Montreal	573 80	
do Quebec		
sighthouse and Coast—	400.00	
Salaries and allowances of lightkeepers. Agencies, rents and contingencies. Maintenance and repairs Construction of lighthouses, &c Signal Service.	186,094 43 17,653 31 251,506 69 32,241 77 4,700 79	•
Agencies, rents and contingencies  Maintenance and repairs  Construction of lighthouses, &c  Signal Service	17,653 31 251,506 69 32,241 77	492,196 9
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service Scientific Institutions—	17,653 31 251,506 69 32,241 77 4,700 79	492,196 9
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service cientific Institutions— Meteorological Service	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93	492,196 !
Agencies, rents and contingencies  Maintenance and repairs  Construction of lighthouses, &c Signal Service  Cientific Institutions—  Meteorological Service  Observatory, Kingston	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00	492,196 !
Agencies, rents and contingencies  Maintenance and repairs  Construction of lighthouses, &c.  Signal Service  Scientific Institutions—  Meteorological Service  Observatory, Kingston  do Montreal	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 500 00	492,196 9
Agencies, rents and contingencies  Maintenance and repairs  Construction of lighthouses, &c Signal Service  Scientific Institutions—  Meteorological Service Observatory, Kingston	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00	·
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service Scientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 500 00	492,196 9 62,457 1
Agencies, rents and contingencies  Maintenance and repairs  Construction of lighthouses, &c Signal Service  Scientific Institutions—  Meteorological Service Observatory, Kingston do Montreal do Toronto	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17	·
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  Scientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Marine Hospitals—  Marine Hospital, St. Catharines	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00	·
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  cientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Iarine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines do and sick and disabled seamen	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39	·
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  Cicientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Iarine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39	62,457
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  cientific Institutions—     Meteorological Service     Observatory, Kingston     do Montreal     do Toronto  Iarine Hospitals—     Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines     do and sick and disabled seamen Shipwrecked and distressed seamen	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  Scientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Marine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines do and sick and disabled seamen Shipwrecked and distressed seamen	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155 22,183
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service Cientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Iarine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines do and sick and disabled seamen Shipwrecked and distressed seamen  teamboat inspection.  urvey, Georgian Bay	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155 22,183 17,677
Agencies, rents and contingencies Maintenance and repairs Construction of lighthouses, &c Signal Service cientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Iarine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines do and sick and disabled seamen Shipwrecked and distressed seamen teamboat inspection. urvey, Georgian Bay do Burrard Inlet	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 500 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155 22,183 17,677 1,690
Agencies, rents and contingencies  Maintenance and repairs Construction of lighthouses, &c Signal Service  Cicientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Iarine Hospitals— Marine and Immigrant Hospital, Quebec Marine Hospital, St. Catharines do and sick and disabled seamen Shipwrecked and distressed seamen  iteamboat inspection.  urvey, Georgian Bay do Burrard Inlet Sivil Government, salaries of staff including Minister.	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155 22,183 17,677 1,667 35,764
Agencies, rents and contingencies Maintenance and repairs Construction of lighthouses, &c Signal Service Scientific Institutions— Meteorological Service Observatory, Kingston do Montreal do Toronto  Marine Hospitals— Marine Hospitals— Marine Hospital, &t. Catharines do and sick and disabled seamen Shipwrecked and distressed seamen Steamboat inspection.	17,653 31 251,506 69 32,241 77 4,700 79 57,181 93 500 00 509 00 4,275 17 751 75 500 00 30,063 39 3,839 98	62,457 35,155 22,183 17,677 1,690

WM. SMITH,

Deputy Minister of Marine.

F. Gourdeau,
Accountant.

## APPENDIX No. 2.

STATEMENT of Revenue of Marine Department for the Fiscal Year ended 30th June, 1891.

Service.	Amount	t.
Casual Revenue (sale of Shipping Forms, \$160.75; Sundries, \$4,313.34).  Capes' Mail Service. Dominion Steamers. Examinations Masters and Mates. Fines and Forfeitures. Harbours, Piers and Wharves. Harbour Improvement. Harbour Police Dues Lighthouse and Coast Service Steamboat Engineers' Certificates Steamboat Inspection.	4,474 421 15,589 2,586 129 6,999 9 7,649 915 754 20,890	98 04 00 65 04 35 19 00 00 72
Sick Mariner's Fund	43,830 104,249 1 104,247	04 30

WM. SMITH,
Deputy Minister of Marine.

F. Gourdeau, Accountant.

### APPENDIX No. 3.

STATEMENT of Sick Mariners' Dues Collected for the Fiscal Year ended June, 1891.

Quebec.	\$	cts.	Nova Scotia—Concluded.	\$	cts
aspé	65	92	Brought forward	933	02
Montreal	3,631	20			
New Carlisle	290	96 :	Digby	171	66
ercé	61	<b>30</b> :	Guysboro'	37	7:
Duebec	7,107		Halifax	6,627	6
limouski		44	Kentville	30	
t. Armand		92	Liverpool	82	2
St. John's	1.348		Lockeport	36	
orel		58	Lunenburg	395	
Stanstead		85	Magaretsville		3
Three Rivers		13	North Sydney	1,057	
nree Kivers	100	16,	Parrsboro'	844	
Total	12,945	. 09	Pictou	511	
10tal	14,54.	, 02	Port Hawkesbury		2
·			Port Medway	61	
					3
New Brunswick.			Shelburne	2.821	
	000	36	Sydney		5
Bathurst	1.228		Truro	143	
Chatham			Weymouth		
Dalhousie		94	Windsor	1,050	
Dorchester		94	Yarmouth	428	3.
Moneton		52	m	12 000	
Newcastle		2 36	Total	15,389	z
Sackville		3 94			
St. Andrew's		2 58			
St. John	5,027		British Columbia.		
St. Stephen	91	l 82	l'		_
		<del></del>	Nanaimo	3,323	
Total	8,899	48	New Westminster		7
;.			Vancouver	1,383	
			Victoria	1,382	6
Nova Scotia.			<u> </u>		
			Total	6,149	) 6
Amherst	672	2 76	-		
Annapolis	130	38			
Arichat		5 02	Prince Edward Island.		
Baddeck	18	8 94			
Barrington		3 48	Charlottetown	379	7
Bridgetown		2 44	Summerside	67	78
- ingerous			-		
Carried forward	93	3 02	Total	447	7 5

### RECAPITULATION.

Quebec	12,945 02
Quebec	8,899 48
Nova Scotia	15,389 24
British Columbia	6,149 68
Prince Edward Island	447 56

\$ 43,829 68

F. Gourdeau, Accountant.

WM. SMITH, Deputy Minister of Marine.

# APPENDIX No. 4.

### REPORT ON THE METEOROLOGICAL SERVICE.

The Honourable
The Minister of Marine and Fisheries,
Ottawa.
Sir,—I have the honour to submit herewith the twenty-first report of the Meteorological Service, this report being for the period 1st October, 1890, to 31st October, 1891.
Since the last report the following stations have been added to our list:—
Ontario.
Class II—
Cook's Mills, Algoma
Sudbury
Minden (resumed)
Calling and A. D. Cambar, M. D.
Collingwood
Oshawa
Class III—
GlastonburyN. E. Ruttan.
Lake TalonW. T. Gale.
HuntsvilleC. A. Wattson.
ActonJ. V. Kannawin.
CayugaRev. P. Bardon.
Barrie
Mount Forest
Edulit Fotost.
Manitoba.
Class II—
Gladstone David Rintoul.
ElkhornR. S. Mowat.
KillarneyJ. L. Stuart.
North-West Territories.
Class I—
BattlefordL. P. O. Noel.
Class II—
Lethbridge
British Columbia.
Class I—
Class 1—
CarmanahW. P. Daykin.
Class II—
KamloopsE. H. Jones,
Kermeos E. B. Webster,
Donald
Griffin's LakeAgent Č.P.R.
112

### Bermuda.

Class I-

Prospect....... J. R. Murray, M.D.

Sunshine recorders have been supplied and are now in operation at the chief station at Esquimalt, B.C., and at the Experimental Farm Stations at Agassiz, B.C., Indian Head, N.W.T., and Brandon, Man. Instruments have also been supplied to several stations in the Dominion, from which up to the present time no reports have been received.

The following stations have ceased to report for the reasons assigned:—Québec Class I—

Cranbourne and Huntingdon, the former by the death of Mr. W. P. Cassidy and the latter from the rapidly advancing age of the observer, Dr. Shirriff, rendering it impossible for him to attend to the duties. Two valuable series of observations have been the result of the prompt and intelligent attention paid to the work by these gentlemen, continued voluntarily at Cranbourne for sixteen years, and at Huntingdon for twenty-two years.

There have also been some changes of observers since the last report, of which I regret to have to record the following by death: Miss Jessie Whiteway of the Hudson Bay Company's Station at Lake Abitibi; W. J. McKeen, Storm Signal Agent at Port

Hastings; and George Hutchinson of the Chief Station at St. John N. B.

The following have also left the service:—Mr. N. Wolverton of the Chief Station at Woodstock who resigned the Presidency of Woodstock College and was succeeded by Mr. W. H. Huston; Messrs. H. S. Cayley and J. Ewart who were succeeded by Messrs. Thomas O'Brien and J. K. Drinnan at the Telegraph Station at Calgary and Medicine Hat, N. W. T., respectively; and Mr. F. Reynolds who has left Cobourg, Ont., was succeeded by H. B. Crusoe at the storm signal station at that place. Both the first and last named gentlemen had been in the service many years and will be remembered for their zealous care.

The observers in Ontario under the Department of Agriculture, and those in Manitoba under a similar bureau, continue to manifest an equal interest in the work as in former years, in many cases voluntarily seeking an extension of their work and incurrence the perpensibility of these deliberations.

incurring the responsibility of three daily observations.

The stations at the Experimental Farms have not as a whole succeeded in their meteorological duties as well as could have been wished; this is particularly the case with Nappan, N. S. The really excellent work done at Ottawa and Brandon bring-

ing the failing of the others more strongly into contrast.

Of the stations on the line of the Canadian Pacific Railway it should be remarked that while fully appreciating the valuable and extremely interesting information obtained from the abstracts furnished by the agents of that railway, the frequent changes of the agents at the various stations very much increased the work of instruction and supervision, and render periodic inspection most necessary.

### STORM SIGNAL SERVICE.

Many severe storms have occurred in Canada since the issue of the last report, and in each instance they were warned; some of the most noticeable are as follows:—

During the evening and night of the 13th October, 1890, as an important disturbance passed over the lake region, a heavy gale prevailed in all localities. Port Arthur reports furious gale, the breakwater was damaged, warning was received in time, and all craft had taken precautions. Warnings were first despatched for this storm at 10.10 a.m. on the 12th.

A very important storm swept over the Gulf and Ocean districts between the night of the 17th October, 1890, and the following day. The steamship "Yarmouth" experienced a heavy gale in the Bay of Fundy. Little Glace Bay reports the heaviest and most severe storm that had visited the coast for years, the Dominion steamship "Napoleon III" and "Schooner" C. H. Tupper were both driven ashore. Sydney says very heavy gale duly warned. Sambro Island recorded east 47 miles an hour.

Warnings for a heavy easterly gale were dispatched at 10.20 a.m. on the 17th,

throughout Eastern Canada.

On the 1st December 1890, a very severe storm passed over the Maritime Provinces and Newfoundland. This storm, on the preceding day is reported to have swept over the Bermuda Islands, doing great damage. Along our Atlantic coast and in the Gulf, the winds in many places increased to hurricane force. Sambro Island recorded 72 miles an hour from the north, and Grindstone 69 miles an hour; over 40 vessels are said to have been wrecked. At St. Pierre and Miquelon alone, 13 vessels were driven ashore. Cautionary signals were dispayed along our Atlantic coast from the morning of 30th November.

During the evening and night of the 12th January, 1891, a very heavy gale from the south and west was experienced in the Maritime Provinces attended by an unusually high tide. Point Lepreaux says highest tide on record. St. Andrews reports very high tide on the 12th; damage done to wharves, cellars overflowed.

Warnings for this storm were first despatched at 4.20 p.m. on the 11th.

On the night of the 12th March, 1891, a disturbance developed with great rapidity in a trough of low pressure which stretched from the Gulf of Mexico to Maryland. It at first travelled north and north-westerly to Lake Erie, and then north-easterly along the St. Lawrence Valley, reaching its maximum on the evening of the 13th when in the Ottawa Valley, barometer reduced to sea level at Rockliffe 28.98 inches. Its accompanying westerly gale was very heavy in Ontario and portions of Quebec, but in the Maritime Provinces a moderate storm only generally prevailed. Signals were ordered for the ocean stations at 9.25 p.m. on the 13th, which was too late to be of any use in the Bay of Fundy.

On the evening of the 7th September, 1891, a storm of great importance, a West India hurricane, moved on to the Nova Scotian coast from the Atlantic. This storm travelled up the Atlantic a long way from the American coast and gave practically no warning of its approach. It caused, in the Maritime Provinces, during the evening and night of the 7th, a disastrous gale from the south-east veering to the south-west attended by a great downpour of rain, over four inches was recorded in some places. Much damage was done both on land and at sea, the fishing fleets suffered severely and many lives were lost. Cautionary cones only were displayed

for this storm, and they were ordered at 4 p.m. on the 7th.

October, 1891, was remarkable for the number of severe storms which travelled up the Atlantic. No less than five deep disturbances either passed over or close to Maritime Provinces, and dangerous gales were on each occasion experienced at nearly all places. Warnings of these storms were duly issued and in nearly all cases were received in ample time.

The only heavy gale on the lakes in October, 1891, occurred from the westward during the evening and night of the 31st, caused by a moderately deep disturbance taken in conjunction with an important high pressure system. Warnings for this

storm were issued to all lake stations during the 30th.

Additional storm signal stations were established at Louisburg, C.B., Port Hood, N.S., Tignish, P.E.I., and Paspebiac, P.Q.

TABLE No. 1.

The following table shows the total number of Warnings issued and percentages verified:—

Year.	No. Issued.	No. Verified.	Percentage Verified.
877	743	510	68.6
9(8	860	673	78.3
879	712	591	83.0
880,,	889	736	82.8
881.,	854	727	85.1
082	841	658	78.2
883.	1,085	858	79.1
084	798	663	83.2
885	830	741	89.3
886	906	799	88.2
997	1,093	972	88.9
888	897	758	81.3
889	$1,126 \\ 1,199$	926	82.3
890	669	540	80.7

### WEATHER FORECASTS.

Weather forecasts have been published regularly throughout the period comprised in this report, both in the newspapers and at about fourteen hundred telegraph offices in Ontario, Quebec and the Maritime Provinces. Forecasts for Manitoba and west as far as Qu'Appelle were first published on 26th August and have since continued without interruption to be posted daily, Sundays excepted, at all the offices of the Canadian Pacific Railway Company's telegraph in that region, besides appearing in the daily newspapers.

The demand from persons in Toronto, and at a distance, for special forecasts continues to increase and in all cases predictions have been furnished at once to these arbitrary for the continues.

those asking for them.

Warnings of approaching snow storms, as heretofore, were issued to the railways, and from letters received from their different superintendents it is evident that they are much appreciated. During the coming winter this service will be extended to

Manitoba and as far west as Qu'Appelle.

Train weather signals as usual were displayed during the past summer on all morning trains in the older provinces, and it is gratifying to be able to state that a great deal more care has been shown by the train hands in changing the signals, though several instances were reported in which the same signals were allowed to remain for more than one day. In each case this negligence was promptly brought home to the offender by the Superintendents who continue to manifest great interest in the work.

The following table (No. 2) shows the predictions and the percentage of fulfil-

ment in each district, in each month and in the whole period.

30, to	
, 189	
October	
$\mathbf{period}$	
$^{\mathrm{the}}$	
in	
and	
month	
each	
ij.	ve.
District,	October, 1891, inclusive
each	er, 189
in	top
f Fulfilment	೦
9	
ns and percentage of Fulfilment in each District, in each month and in the period October, 1890, t	•
tions a	
Predic	
of	
NUMBER	

Torat.		Percentage.	888.3 ± 2 ± 2 ± 3 ± 3 ± 3 ± 3 ± 3 ± 3 ± 3 ±
	ied.	No. Not.	31 708525555571658888888888888888888888888888888
	Verified	No. Partly.	418 23 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
	A	No. Fully.	392 386 386 387 383 363 363 37 418 444 444 490 490 1
	tions.	No of Predic	520 620 620 620 523 523 523 523 523 523 523 523 573 634 641
Maritime.	<u>.,</u>	Percentage.	1-1-1-2010 04-10-10-10
	Verified.		25 8 8 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		No. Partly.	201129 139 139 139 139 149 151 151 151 151 151 151 151 151 151 15
		No. Fully.	00 105 105 105 105 105 105 105 105 105 1
			103 104 107 107 107 108 108 108 108 108 108 108 108 108 108
	.enoitoiberq to .o.N		
Gur.		Percentage.	<u>8333888888888888888888888888888888888</u>
	Verified.	No. Not.	
		No. Partly.	
		No. Fully.	1 6
	No. of Predictions.		128 105 105 105 105 105 105 105 105 105 105
		Ретсептаge.	20
Lower Lawrence.	fied.	JoN .oV	e 11 e 22 5 5 1 7 1 1 4 1
OWE	Verified	No. Partly.	# # # # # # # # # # # # # # # # # # #
		No. Fully.	88 88 88 82 82 82 82 82 83 84 84 85 85 86 86 86 86 86 86 86 86 86 86 86 86 86
Sr.	anoi.	No. of Predic	102 122 122 122 93 103 103 103 167 1822
		Регсептаве.	8 88 8 25 5 5 5 8 8 8 8 8 8 8 8 8 8 8 8
SNCE	jed.	No. Not.	132 123 25 25 25 25 25 25 25 25 25 25 25 25 25
<b>U</b> ррев Lawrence.	Verified	No. Partly.	22 22 22 22 22 24 17 19 19 19
		No. Fully.	85 82 95 65 85 85 85 85 85 85 85 85 85 85 85 85 85
St.	No. of Predictions.		103 104 118 108 109 101 101 108 101 108 101 108 107 108 108 108 108 108 108 108 108 108 108
_		Регсептаge.	88 88 88 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NA.	jed.	Yo. Yot.	81121121121131131131131131131131131131131
OWE REC	Verified	No. Partly.	82723827730040
LOWER LAKE REGINA		No. Fully.	8821688844888
ī	.snoi	No. of Predict	113 108 108 108 105 112 116 1118 1118
MANITOBA.	Verified.	Регсептаве.	96 7811 787 0 11 10 10 10 10 10 10 10 10 10 10 10 1
		No. Not.	
		No. Fully.	78 111 240 32 178 178 178 179 179 179 179 179 179 179 179 179 179
	'suoi	No. of Predict	960 96 97 12 12 12 12 12 12 12 12 12 12 12 12 12
Months			er inber. inber. ry. ry. try. try. try. nber. inc. try.
			October November. December. December. Perlanuary. 91 February. May. June June June June June June October
		1	

NOTE.—The percentage of verification is obtained by taking the sum of those fully verified and half the sum of those partly verified and dividing by the whole number.

### CENTRAL OFFICE.

The following changes have taken place in the staff of the office since my last report. Lieutenant A. R. Gordon who was employed during the greater part of each year in connection with the Fishery Protection Service has finally severed his connection with this office, being now employed in another branch of the Government Service. Messrs. R. F. Smyth, secretary, F. Barnard and W. A. Taylor, assistants have also left the service, and have been succeeded by Messrs. F. F. Payne, F. G. Drewitt and C. E. Tweedie, respectively. Mr. W. A. Bannon was also appointed to fill the vacancy caused by Mr. Payne's promotion.

Attention may be called to the marked increase of office work over that of former years. As the observer's interest in the work increases and he seeks an enlargement of his work, this involves an increased amount of time necessary to supervise the returns themselves and to perform the deduction to render the returns of any value, as in nearly all cases the volunteer observer considers it enough to simply enter the reading at the time of observing. As the enlarged tabular matter of the Monthly Weather Review requires this to be done monthly, it is sometimes

difficult to keep up with current work.

The interest taken by the general public in the information obtained from the data collected is shown by the increased number of inquiries from legal, municipal and railway corporations as well as private individuals. These inquiries however entail a large amount of extra work which is increasing daily.

### TIME SERVICE.

The method of performing this work, together with a table showing discordance at the different observatories will be found in the report on the Magnetic Observatory.

The report on Quebec Observatory forms Appendix A. The report on St. John Observatory forms Appendix B.

### United States Wheather Bureau.

In July the meteorological work of the Army Signal Service at Washington was transferred to the newly formed Weather Bureau under the Department of Agriculture. The co-operation which has so long continued between this Service and the Signal Service is maintained under the new regime.

### VOLUNTARY OBSERVERS.

It is desirable to again draw attention to the indebtedness of this country to the many volunteer observers throughout its wide range by whose assistance so much has been done towards interesting the public generally in a study of its varied climate; and it is much to be regretted that want of funds have necessitated a refusal from time to time to many requests for instruments, as the information given in our Monthly Weather Review is largely contributed by unpaid observers.

### PUBLICATIONS.

Applications are frequently made by persons and institutions in different parts of the world for the publications of this office and it is to be regretted that the Annual Report of the Meteorological Service is so much behind, the last issued being that for 1887. The printing of each report has of late years taken over a year therefore they are becoming more and more behind. Nearly 750 Annual Reports and over 800 copies of the Monthly Weather Review are distributed immediately upon their being printed.

### LIBRARY.

The number of publications received was 217, several of which were from new contributors and by far the greatest part of them treat upon Astronomy, Meteorology and Terrestrial Magnetism.

117

### Inspection of Stations.

There were 73 stations inspected this year. Of these 13 were inspected by Mr.

Payne, 24 by Mr. Stupart and 36 by Mr. Webber.

These reports form Appendices C, D, E, and give the state and condition of the various places visited, and show the absolute necessity of regular and systematic inspection.

All of which is respectfully submitted.

CHARLES CARPMAEL, Director.

### APPENDIX "C."

CHARLES CARPMAEL, Esq., M.A., F.R.A.S., Director Meteorological Service of Canada, Toronto.

SIR,—I have the honour to submit the following report of the stations inspected

by me during the present year:

Collingwood, Ont., 14th May, 1891.—Observer and Storm Signal Agent. The observations were not being taken and previous records were reported burnt at a fire in the Town Hall. The instruments had not been placed in position. The storm signal mast required painting. Recommended that this Agent be reduced to a signal agent only.

Obtained a new volunteer observer, Dr Stephen, who will take temperature

and rainfall observations.

Owen Sound, Ont., 15th May, 1 891.—The volunteer observer, Mr McLean, is getting very old and fears he will not be able to continue observations much longer. Minimum thermometer C. 786 out of order and returned to store.

Presqu'Isle, Ont., 16th May, 1891.—Anemometer and anemograph in good order, connections required adjusting, slight repairs required to electrical vane and platform made more rigid. Signal mast is rotting at butt and will require replacing before long. Signals in good order, but lamps not working satisfactorily and require shorter chimneys.

Lundy's Lane, Niagara South, Ont., 25th June, 1891.—observations well taken,

slight repairs required to rain-gauge, and thermometer shed to be painted.

Cayuga, Ont., 26th June, 1891.—The late Observer has left the town. Obtained a new volunteer observer, Rev. P. Bardon, M. A., who will take regular rainfall observations.

Port Dover, Ont., 27th June, 1891.—At this station all thermometers were in good order except maximum 10066, which besides being improperly hung has a small air bleb in column, making it read 1°5 too high. The rain-gauge is worn out. The wet bulb thermometer M.O. 351 was kept continually immersed in water which The storm signal mast required painting. was altered and exposed properly. Signals were in good order.

Chatham, Ont., 29th June, 1891.—The returns from this station were much behind hand, owing to press of other work. The volunteer observer promised to forward them immediately. All instruments were in good order and much interest taken in the work. Rain-gauge removed to another position, as it was too much

surrounded by shrubs.

Kingsville, Ont., 30th June, 1891.—The volunteer observer takes much interest in the work and observations were well taken. All instruments were in good order. Sunshine recorder was set to latitude 40° instead of latitude 42° to which it was changed.

Pelee Island, Ont., 1st July, 1891.—Anemograph was not working, owing to want of supplies which had miscarried. All instruments were in good order and anemometer &c., very well exposed on top of lighthouse. A larger inner shed is required for thermometers, as present one does not allow of ordinary thermometer C. 1605 being placed inside it. The signal mast is well set up and stayed with  $\frac{47}{8}$  inch wire stays.

Both lamp radiator glasses are cracked but will answer for the present.

Sprucedale, Ont., 26th September, 1891.—The thermometer shed was badly exposed, facing west, this was changed to a better position. Minimum thermometer 69153 was out of order, this was repaired. The work is well attended to by the volunteer observer, Miss S. W. Kirkman.

Huntsville, Ont., 1st October, 1891.—The observer was moving to a new house. A position will be selected for the rain-gauge giving good exposure as soon as

premises are fenced in.

Axe Lake, Ont., 2nd October, 1891.—The minimum thermometer was out of order and required repairing and with care will do, but as the glass catch at top of tube is broken off some care must be used in setting. The present inner shed is too small to hold the maximum and minimum thermometers which at present are poorly

exposed. The other instruments at this station were in good order.

Barrie, Ont. 5th October, 1891.—In an interview Mr. J. S. Gillan offered to take the observations in place of the late observer, Mr. H. B. Spotton, M.A., who is leaving the town, and he would probably make a good observer as he is much interested in the work and has taken observations for many years. I would therefore recommend that the instruments be handed over to him. The sunshine recorder is in the hands

of Mr. G. Wattie, who attends regularly to these records.

I beg to call your attention to the suggestion made by me in my report of last year that "the approaching direction and velocity of the wind be given by a simple code of flag signals to the shipping and fishermen by utilising the signal stations already established by the Signal Service in the Maritime Provinces," as from suggestions made to me and from answers to subsequent enquiries it would appear that "the direction and velocity of the wind has a very large influence in many localities, locally known, and that a foreknowledge of them would be great service, especially to the fishermen."

I have the honour to be, Sir,
Your obedient servant,
HUGH V. PAYNE.

Inspector.

### APPENDIX D.

CHARLES CARPMAEL, Esq., M.A., F.R.A.S.,
Director Meteorological Service of Canada,
Toronto.

SIR.—I have the honour to submit the following report of stations inspected by

me during the past year:-

Port Dalhousie, Ont., 13th April, 1891.—The signals at this station required a few slight repairs, such as splicing, &c., but on the whole everything in good condition. Mr. Dwyer, who for years past has been agent, was on the point of removing from Port Dalhousie. I interviewed Mr. Clark, the present agent, who

has since been doing good work.

St. Hyacinthe, Que., 28th May, 1891.—The observer, Father Choquette, is Principal of the College. He is a man devoted to science, and is desirous of having a complete meteorological outfit. I recommend that he be sent a barometer. He has good exposure for an anemometer, and is very anxious to have a self-recording instrument. I should much like to see his wish gratified, but it is to be remembered that the college is only thirty miles from Montreal. Observations at this station will in all probability be thoroughly reliable.

Quebec, Que., 29th May, 1891.—I found the anemometer and wind vane in a very unsatisfactory condition, the former being sheltered by latter and the platform very

far from rigid. The wet bulb thermometer was not properly exposed, the bulb not being covered with muslin; rain-gauge and thermometers in good positions,

barometer Adie, No. 1423 reading '004 higher than standard.

St. John, N.B., 1st June, 1891.—Found anemometer and wind vane in a decidedly dilapidated state—the former quite useless. Telegraphed to Toronto for new instruments and placed them in position on my return from Grand Manan. rain-gauge was in a very poor position, but I somewhat improved it by placing it on the top of thermometer fence. The thermometers and rain-gauge are too much shut in by fences, sheds, &c. I cleaned the barometer, a small Green, and comparisons showed an index correction of + .004.

Grand Manan, N.B., 5th June, 1891.—Found everything at this station all right except the minimum thermometer, which was reading 2° too low; this error has Barometer comparisons showed index error — .004. been rectified. At a most exposed place on Swallow Tail Head, about a mile from the agents office, I had erected a post, firmly braced by three other posts on which to place an anemometer. As the wire necessary for connecting with anemograph in office was not available, I placed anemometer and wind vane temporarily on platform on top of the office, leaving full instructions re removal to hill and plan of connection.

Digby, N.S., 8th June, 1891.—Storm signal mast in a very poor position and ought to be removed to the end of pier. To do this, permission of the Public Works Department is required. Should the change be made, a small signal house will be necessary and can be placed on the pier at the foot of the mast. Mr. Turnbull does not attend to the thermometers in by any means a satisfactory way and I have

serious doubts as to whether rainfall observations are any more reliable.

Yarmouth, N.S., 8th June, 1891.—Everything all right here except anemograph, which was not working satisfactorily. As Captain Murphy had made arrangements to go away for a holiday the morning following my arrival, I simply showed him where the fault lay in the adjustment of the instruments and suggested certain changes in running the wires to the tower of his house. The thermometers all agree, and rain-gauge is well placed. Index correction to barometer + .004.

Halifax, N.S., 10 June, 1891.—Anemograph not working well; with difficulty I put it in fair order; the trouble is probably owing to poor electrical connections, and the old wires will be replaced by new.

Sambro Island, N.S., 12th June, 1891.—I found the Sambro Island instruments at Mr. Allison's house in Halifax, they were covered with oil, and having been packed in wool and some hairy substance, were in a frightful mess; several screws were missing. Having put them into good order 1 took them back to Sambro, placed them in position and connected the battery, etc. I am convinced that the present anemometer will not work very long and another instrument should be sent as soon as possible. In Halifax I ordered turn-buckles for setting up stays in place of lanyards hitherto in use.

Truro, N.S., 15th June, 1891.—Mr. Little, the observer at this station, would like a sunshine recorder. The thermometer and rain gauges are in good positions and well exposed. The cistern of barometer is four feet lower than when in old

house on Bible Hill. Barometer reading with standard. No index error.

Sydney, C.B., 17th June, 1891.—One of Mr. Hill's turn over thermometers will not work satisfactorily, he would like the service to supply him with another; all

the other instruments are in good order and well placed.

Low Point, C.B., 18th June, 1891. Found the anemometer and wind vane on a rigid, well-built platform which was, however, too low. I gave instructions to have it made some three feet higher, which alteration will make the exposure very satisfactory. Captain Peters reported that the North direction hammer was not working and that he was unable to find the fault. I traced the trouble to a break in the wire which had corroded where it passed through the wall. Captain Peters is a most intelligent man and does good work.

Little Glace Bay, C.B., 19th June, 1891.—Found the observer, Mr. Rigby, ill in bed. The signal mast which had been blown down not yet up again, but Mr.

Rigby assured me that the work would soon be completed; he requires a new cone. He has not been taking meteorological observations of late, his barometer is broken and he wants it refilled; will send it to Toronto by express and it can be returned to him by one of Messrs. Kinman & Brown's steamships sailing from Montreal. Thermometers are all right, but new rain gauges required.

Louisburg, N.S., 20th June, 1891.—Signal mast in good order. The former agent at this station, W. H. Townsend, away from home, his father who told me that he always attended to hoisting and lowering of signals, conducted me to signal mast which is in good order. I gave instructions that mast and shed be painted and top of latter covered with canvas to make it water tight. New signals and running rigging required.

North Sydney, N.S., 22nd June, 1891.—At this station I gave orders that a signal house be built large enough for a man to enter and light lamps, also that two

of the three lanyards be renewed and stays be made taut.

Georgetown, P.E.I., 23rd June, 1891.—The thermometers and rain-gauge are well exposed. The minimum has been reading 2° too low and I failed to rectify the error.

Tignish, P.E.I., 24th June, 1891.—Visited this station for the purpose of having a signal mast erected. Mr. Gallant, an hotelkeeper and fisherman, took contract at \$100, the Meteorological Service to supply the running rigging; the spar fifty feet in length, of pine, to be erected at inner end of pier at harbour. The harbour is two and one-half miles by road from the telegraph office, but a local firm, Myrick & Co., have a telephone from their store in the village to a store at the port, and for a consideration of fifteen cents a message, will forward our warnings.

Charlottetown, P. E. I., 25th June, 1891.—Everything in first rate order at this

station.

Port Hood, C. B., 26th June, 1891.—Visited Port Hood for the purpose of having a storm signal mast erected. Contract let to Mr. Alex. Frazer, a man recommended by Mr. Tremaine, Collector of Customs. Mast to be of spruce, fifty feet above ground, well tarred at butt, fittings according to regulation specification, running rigging to be supplied by Meteorological Service.

Port Hastings, N. S., 27th June, 1891.—Mr. McKeen, the agent, had been away from home some months and the man left in charge of meteorological observations did not know anything about the work. The mast and signals in good order and according to local report the hoisting and lowering of signals has been well attended

to.

Pictou, N. S., 29th June, 1891.—Everything satisfactory at this station.

Chatham, N.B., 1st July, 1891.—Everything in good order here. Cleaned the barometer and by comparison verified index correction in use. Mr. Connors was about to remove to another house where the cistern of the barometer will be four feet

lower than at present.

Bathurst, N.B., 1st July, 1891.—Things in a lamentable state at this station. The signal mast in a fair state of preservation, one of the stays broken and the other three hanging loose, box broken and no bottom, signals much broken and battered but can be repaired; no halyards. I ordered that a good handy carpenter be employed, strong box be made and placed on a platform at foot of mast, that stays be repaired and properly set up, and in the future halyards be kept rove and ready for service. At house found barometer very dirty, thermometers in a delapidated shed facing the South, and rain-gauge in an old buggy. I cleaned barometer and left it reading within two thousandths of standard, and gave instructions as to placing of rain-gauge and disposal of a thermometer shed when received.

Guelph, Ont., 16th October, 1891.—The barometer is Adie 1447 which reads 013 too low. The thermometers are well placed and reading correctly, any faults have been owing to bad observing; rain-gauge also well placed. Anemometer and vane down shaft, shafting broken two years ago in a gale and never repaired. If wind

observations are to be taken at this station the platform should be raised about five feet and new shafting supplied.

I have the honour to be, Sir,

Your obedient servant,

R. F. STUPART,

Inspector.

### APPENDIX "E".

CHARLES CARPMAEL, Esq.

Director Meteorological Service of Canada, Toronto, Ont.

SIR,-I have the honour to submit herewith report of the stations, in Canada,

inspected by me during the period comprised in this report,—

Coldwater, Ont., 23rd October, 1890.—Mr. Lazenby the observer was away from home. The barometer was slightly opaque and will soon require cleaning. I replaced the broken minimum thermometer by minimum No. 69,147. The thermometer shed and screen had just been indifferently repainted before my arrival.

North Bay, Ont., 24th November, 1890.—Thermometers were still in the same filthy condition as they were in the preceding May. Gave Mr. McKeown the option of attending to the duties, or having the matter again laid before Mr. C. W. Spencer, the superintendent. He preferred the former. The thermometers I changed from the old position to Mr. McKeown's residence, a better and more convenient place, cleaned them and left everything in good order. The comparison gave both the maximum and the minimum therometers reading alike.

Rockliffe, Ont., 25th November, 1890.—The fence for the thermometer shed authorized to be built in the preceding May had not been erected, and the new thermometer shed which had been furnished had been put to one side in a back shed. The observer was severely reprimanded for his gross carelessness and

indifference.

Pembroke, Ont., 28th November, 1890.—Mr. Quinn, the agent here, has been deputed by the Canadian Pacific Company to take the observations at this point. I instructed him in the duties required, and placed the instruments at his residence on the brow of the hill in the western portion of the town, an excellent exposure.

Petrolea, Ont., 11th February, 1891.—It was necessary to change the anemograph at this station as it required some repairing. The electrical vane and anemometer were much worn, and had also to be replaced. It was also considered necessary to attach a tube to the post of the anemometer platform and run the wires through this to connect with those already in the building, formerly the outside wires were stapled to a tin roof. I instructed Mr. Bell how to ascertain the dewpoint and humidity, he has promised to do more careful work in the future.

Welland, Ont., 13th February, 1891.—The rain-gauge at this station was in

Welland, Ont., 13th February, 1891.—The rain-gauge at this station was in good order, also one upright thermometer No. 15,081, the other thermometers were destroyed, and the shed and screen all to pieces. It would be useless to attempt to have observations taken here under the existing circumstances, and it is extremely

doubtful whether another volunteer observer could be found in the town.

Winnipeg, Man., 19th July, 1891.—The anemometer exposure at this station is particularly good, it is placed on the west tower of the College. The thermometers would be better placed in the large plot of ground where the rain-gauge is situated, at present they are in the small yard adjoining the College. Mr. Warburton says he is too deaf to learn telegraph operating, under the circumstances I insisted that the signals must be repeated back over the telephone.

the signals must be repeated back over the telephone.

Indian Head, N.-W. T., 19th July, 1891.—The thermometer and rain-gauge are well exposed, a few slight repairs were necessary to the latter. I selected a good sight for the sunshine recorder which unfortunately had not then arrived, however

I instructed the observer as to its manipulation. Mr. McKay has promised that the

observations shall be well and promptly attended to in future.

Qu'Appelle, N.-W. T., 19th July 1891.— Substituted new Green barometer No. 3296 at this station for No. 2741 in use, which was faulty. The downshaft anemometer in use is not well situated. The exposure for wind force could be made very good, a suitable platform should consequently be erected and an electrical anemometer furnished. A regulation fence should be built to carry the thermometer shed. Mrs. Gordon attends to the observations faithfully and is very anxious to do well.

Regina, N-W. T., 20th July, 1891.—Sergeant Lasserwitz (the observer) was absent on leave, the assistant in charge could not show me the rain-gauge, did not know where it was placed. The thermometers were well situated, but required new suspension hooks. The anemometer exposure is good.

Battleford, N.-W. T., 24th July, 1891.—This station had not been visited for nine years. The newly appointed observer, Mr. L. P. Noel, is a thoroughly reliable and pratical man. The instruments were well exposed and in a good order, except the barometer which naturally after such a lapse of time, had become so dirty that it was not readable with any degree of accuracy. I cleaned it thoroughly and it is now in very good condition.

Henrietta, N.-W. T., 25th July, 1891.—Mr. Salsbury the Government telegraph operator at this point, will gladly take maximum and minimum thermometer readings and the precipitation, if furnished with the requisite outfit. As this is a desirable position for a series of observations of the character, I instructed him in the duties required and selected sites for the instruments in the event of their being

supplied.

Prince Albert, N.-W. T., 25th July, 1891.—As the exposure at this station from the west, north and north-east direction, (the most useful to our service for forecasting) is good, I placed the electrical anemometer on the platform which had originally been erected on the top of the college, for carrying a downshaft anemo-This latter was completely worn out and apparently had never been used. The wires from the electrical anemometer are run through the building to the anemograph in the study, where also the barometer is now placed. The thermometer and rain-gauge are well situated, but a new thermometer shed was required. Miss MacKay is painstaking and does her best, but at this station, one of the most important we have in the north west owing to its northerly position, we should certainly have a thoroughly well trained and practical observer, one who is able to keep electrical instruments in order both telegraphic and meteorological. Canon Flett, the nominal observer, allows Miss MacKay a certain sum for doing the work. The Canon would like the railway Agent to supersede Miss MacKay as observer. I have to report that the railway station is in no way suitable for an observing point.

Calgary, N.-W. T., 29th July, 1861.—I found Mr. Thos. O'Brien attending to the observations here, he quite understood the work and appeared careful. The raingauge was poorly exposed and the thermometer shed much out of repair. The barometer was very opaque and received the requisite cleaning. There is no exposure for an anemometer and there is none in use. Mr. Cayley informed me that he considered that as long as he supplied a man to do the work that was all that should be required, and that he had no intention of taking the observations himself.

Victoria, B.C., 2nd August, 1891.—The pole carrying the anemometer had worked very loose and required restaying; it also needed painting, together with the fence surrounding it, the better to preserve them. Mr. Reed has the instruments all in good order and well exposed, and conscientiously attends to the duties. The barometer, which was becoming opaque, with a small amount of air in it I cleaned and rectified.

Quamichan, B.C., 3rd August, 1891.—This station had never before been inspected. Mr. Lomas has the work here carefully attended to. No complete thermometer shed has ever been used at this station, the inner screen only was furnished to him by a previous observer.

Vancouver, B.C., 5th August, 1891.—Interviewed Mr. Abbott, the superintendent of the British Columbia Division of the Canadian Pacific Railway, re the establishment of the stations at Griffin Lake and the Glacier. He informed me that his company intended to have the observations carefully and promptly attended to at these stations, and at the same time he notified the agents to this effect.

Port Moody, B.C., 6th August, 1891.—This station is situated thirty-five feet above sea level and surrounded by lofty mountains. I cleaned and renovated the barometer which was very opaque with a large amount of air in it (057 inches). A new rain-gauge was required together with a cup for the wet bulb. An anemometer is quite useless in this sheltered place. The observations are carefully and conscien-

tiously taken.

Agassiz, B.C., 7th August, 1891.—Mr. Sharpe, the manager of the Experimental Farm here, is not yet in his house. The reason given for the indifferent manner the observations have been attended to, he expects to be settled shortly when the instruments will be placed conveniently near to the residence, and he will attend to the work himself. I placed the sunshine recorder in the best obtainable position and gave the necessary instructions. The very high mountains on every side preclude this as a good place for sunshine records. Maximum thermometer 1133 being useless, it was necessary to substitute a new one. The rainfall will be accurately measured in future.

Spence's Bridge, B.C., 8th August, 1891.—The barometer was dirty and carelessly suspended against the wall without a case. I cleaned it thoroughly, put it in a case and placed it in another portion of the office where a better light was obtainable. I also cleaned and adjusted the spare barometer and placed it in the observer's residence. The thermometer will now be situated adjoining the residence. There is no exposure for an anemometer, consequently the force of the wind will be estimated. It will be necessary to run a loop line to the office to insure the prompt despatch of the signals. Instructed Mr. Murray in all the duties required, laying particular stress as to the humidity and the dew point, and the use of the telegraph cypher.

Griffin Lake, B.C., 9th August, 1891.—I placed the instruments in position at

this station and instructed the agent in the duties required.

Glacier, B.C., 10th August, 1891.—I placed the instruments in position at this station and instructed the agent in the duties required. Here as at Griffin Lake, the spirit in the minimum thermometer was much detached, proving how liable this is to occur when thermometers are forwarded by express.

Donald, B.C., 12th August, 1891.—The thermometers were badly exposed, the shed being placed on a table and facing the west. This exposure will be rectified. The minimum thermometer was reading 10 too high, caused by an error in the scale.

Banff, N.-W.T., 12th August, 1891.—The instruments here are poorly exposed in the wooded portion of the park. Should this ever be made a telegraph reporting station and as such, owing to its elevation, it would undoubtedly be of much service, a more suitable place should be selected for the instruments. The high ground adjoining the Canadian Pacific Railway Hotel would be a good place and it is possible a well-equipped meteorological observatory would be of much interest to the majority of the guests at the Hotel. The anemometer should be placed on the submit of Tunnel Mountain where a good spot is to be found for the erection of the requisite platform, and the running of the wires to the proposed building one and a half miles below would be an easy matter at little cost. I placed a barometer at this station and instructed Mr. McLeod thoroughly in its manipulation, as well as in the taking of the dew point and humidity. Mr. McLeod attends to the duties with care and diligence.

Edmonton, N.-W.T., 18th August, 1891.—Although this station had been in existence for eleven years, it had never before been inspected. The barometer was in a very dilapitated condition, there was no attached thermometer, the cistern was excessively opaque, and it contained air to the amount of 036 inches. I thoroughly renovated the barometer leaving it reading correctly. The anemometer, a combined

124

downshaft, was placed on a low building and quite sheltered and consequently useless. A good wind exposure is procurable by the erection of a platform thirty-five feet high, and as this is an important point, I recommend that this be built and that an electrical anemometer be supplied. The thermometers are in good order, a new shed however was required. The rain-gauge is well exposed. Mr. Taylor is a good observer and a pratical electrician, he assures me that he is in no way to blame when the signals are delayed, that he is always on hand on time, and does his best to get them off.

Swift Current, N.-W. T., 22nd August, 1891.—I cleaned the barometer at this station as it was becoming dirty. Mr. Knight has moved to a small house adjoining the railway station where the exposure for the instruments is not as good as in the

old position, this is especially the case with regard to the anemometer.

Medicine Hat. N.-W. T., 20th August, 1891.—I removed the instruments to Mr. J. K. Drinnan's House and thoroughly instructed him in the duties. Mr. Drinnan is the newly appointed observer at this station and will, I think, do careful work, The thermometer shed required some repairing, a new rain-gauge was also necessary. The barometer received the requisite cleaning, the glass of cistern is badly cracked.

Maple Creek, N.-W.T., 23rd August, 1891.—The readings of the maximum and minimum thermometers will be taken at this station. The porcelain scale of the thermometer now in use is broken. The agent of the Canadian Pacific Railway here continues to take the observations well and carefully.

Balgonie, N.-W. T., 24th August, 1891.—Mr. Webb, the manager of the Kaye farm at this place will undoubtedly make a reliable observer. I selected sites for

the instruments and instructed him in the requisite duties.

Brandon, Man., 26th August, 1891.—Mr. Bedford, manager of the Experimental Farm here, has the observations well and carefully taken. The instruments are well exposed and in good order. An extra minimum thermometer has been furnished in order to ascertain the difference in the night temperature between the adjoining high and low land. A sunshine recorder has also been supplied.

Portage La Prairie, Man., 27th August 1891.—The Rev. A. H. Finch takes much interest in the work and is a good observer. He has charge of the electrical flash light at this point to warn the surrounding country of anticipated frosts during the harvest season. The exposure for the instruments is fair. An extra thermometer

for determining the dew point has been supplied.

Minnedosa, Man., 28th August, 1891.—This station had not been inspected for nine years. The instruments are more poorly exposed than in any other first class station that I have visited in Canada. They are situated in a valley, and the minimum thermometer by actual test reads 2° lower than on the surrounding high land. The anemometer is of course useless. The observer the Rev. Mr. Wellwood says it is impossible for him to move to a more suitable position as he owns the house that he occupies. The thermometer shed was in a very dilapitated condition with no fence. A regulation structure will be erected further up the hill for the thermometers, this should improve the exposure somewhat. The barometer which was very opaque received the requisite cleaning.

Oak Bank, Man., 31st August, 1891.—This station had never been inspected The rain-gauge exposure was good, but that of the thermometers useless; they were placed about a foot from the ground and protected by a board covering, The minimum was not an official thermometer, and the maximum was broken. Mr. R. E. W. Goodrich seems anxious to do good work, so he has been supplied with a

proper outfit.

Fort Osborne, Man., 1st September, 1891.—The temperature observations here are carefully taken under the supervision of Dr. Codd, the regimental surgeon, and

should prove a valuable series.

Stony Mountain, Man., 2nd September, 1891.—The thermometers and an emometer are very poorly exposed here on a platform about sixteen feet from the ground. The catch of tube of maximum thermometer was broken permitting it to slide in the scale. The rain-gauge was worn out, the rainfall had been entered at just double the actual amount. The barometer is correct. The present observer had received little or no instruction in the observations before my visit. As apparently little interest is manifested in the observations at this place, and the convict most available seems to be deputed to take them, I recommend that this station be abolished, as its proximity to Winnipeg makes it of small value.

Elkhorn, Man., 3rd September, 1891.—The maximum thermometer was in error at this station, and the shed was not suitable for the thermometers furnished. The exposure is good and Mr. Mowat is a painstaking and careful observer. He has by his request been supplied with a frame and forms, and will post the Manitoba "Pro-

babilities" for the benefit of the farmers in the neighbourhood.

Virden, Man., 4th September, 1891.—I called twice at this station but on each occasion the house was closed, the family being away. I was, however, able to inspect the thermometers and rain-gauge, and these instruments were in very good order and well exposed.

I have the honour to be, Sir,

Your obedient servant,

B. C. WEBBER,

Inspector.

## MAGNETIC OBSERVATORY,

Toronto, 4th February, 1891.

The Honourable

The Minister of Marine and Fisheries, Ottawa.

Sir,—I have the honour to submit herewith the report on this observatory for

the period 1st October 1890 to 31st October 1891.

During the above period the six daily magnetical and meteorological eye observations taken at 6 and 8 a.m. 2, 4, 10 p.m. and midnight have been continued as usual. On Sundays the hours of observations are 8 a.m. and 2 p.m. Absolute determinations of the magnetic elements have also been made—the self, recording declination, bifilar and vertical force magnetographs have been kept in operation, as also the barograph and thermograph.

Hourly measurements of the curves with the exception of the vertical force have been made and the results abstracted. We have now over 11 years of hourly readings tabulated, the daily and hourly means of which have been obtained. Continuous photographic records are available from 1875. Eye observations to check the photographic records have been regularly kept up, the agreement being satisfactory. In January the zeros of the thermograph standards were found to have

changed slightly, the corrections will be used from that date forward.

In June the barograph clock and cut-off apparatus was dismounted and cleaned and put into good working order. The magnetic driving clock was also dismounted, its action for some time previous being erratic, it was thoroughy overhauled; since then it has worked much more satisfactorily. It may be remarked that this clock has been in the Observatory over fifty years. The argentic bromide paper continues to give good results there being no photographic failures during the year. In January it was found necessary to alter the angles of the declinometer and bifilar mirrors; the former ordinate was getting too large with the increasing westerly declination and the bifilar the reverse on account of loss of magnetism.

The most important magnetic storms occurred on the 7th and 8th of November 1890, 31st March, 1891, 12 April, 14th, 15th and 16th of May, 28th and 29th August, 9th, 10th and 11th of September, the disturbance being particularly marked on the

night of the 9th.

#### TIME SERVICE.

The time exchanges with Montreal, Quebec and St. John have all been registered on the chronograph at Toronto, the comparisons taking place during the afternoon with Montreal and Quebec, and in the evening with St. John.

During the year the time at Halifax has also been regularly compared with that at Toronto, the comparisons taking place during the same evening as that with

St. John.

The errors of the Toronto clock, and of the time-pieces used by the observers

elsewere, are computed from the latest observations.

The examination of the monthly clock and chronometer comparisons and transit observations, sent in from the observatories at Quebec and St. John, has been performed.

During the year observations of 783 stars and 1 solar observation were made from which the time at the Toronto Observatory was obtained. The position of the stars used in the reductions are from the "Berliner Yahrbuch." The collimation error of the transit instrument has been determined frequently from micrometrical measurements on the collimating telescope and by reversals on "Polaris" and other stars.

The following table shows the difference between the time by standard

observer and that given at the various exchanges.

The sign + indicates that the time as sent from the various observatories is faster than that by the standard observer.

	Toronto.	Montreal.	Quebec.	St. John.
1890.	Secs.	Secs.	Secs.	Secs.
October 8th do 31st November 21st December 10th do 30th	+0·06 +0·27 +0·10 +0·68 +0·23	0·06 0·27 0·10 0·68 0·23	-2.15 $-1.23$ $-0.15$ $+3.70$	-1·52 -1·36 -1·53 -1·78
1891.				
January 21st February 6th do 25th March 17th. April 3rd do 20th May 7th do 21st June 9th do 25th July 9th do 31st August 27th. September 11th October 5th do 30th November 13th	$\pm 0.23$	-0 18 -0 36 -0 11 0 00 -0 29 -0 28 -0 15 -0 15 -0 15 -0 10 -0 23 -0 11 -0 04 -0 01 -0 34	$\begin{array}{c} -1.32 \\ -3.02 \\ +0.03 \\ +0.11 \\ +0.54 \\ 0.00 \\ -2.10 \\ +0.03 \\ -0.38 \\ +1.45 \\ -0.67 \\ -0.07 \\ -0.08 \\ -0.08 \\ -0.08 \\ -1.39 \\ +0.53 \end{array}$	-1 63 -0 74 +0 31 +0 08 -0 20 -0 06 -0 36 -0 93 -0 71 -1 28 -1 67 -1 39

The time by standard observer is obtained by taking the arithmetical mean of the times as determined at Toronto and Montreal, after applying the personal equations between the observers and the director of the Magnetic Observatory, whose absolute equation is known to be almost insensible.

Note.—Where no change has been made with Montreal the Toronto time corrected for its observer's personal equation is adopted as standard time for the com-

parisons with Quebec and St. John.

The result of the exchanges between the observatories at Toronto and St. John would seem to indicate that the longitude of the latter observatory is in error to the

amount of nearly one second in time.

The director was invited to attend the Meteorological Conference to be held at Munich on the 26th August, also to the meeting of the International Polar Commission to be held at the same place on 3rd September, but owing to his services being required by the department at the time, he was unable to accept the invitation.

All of which is respectfully submitted.

I have the honour to be, Sir, Your obedient servant,

CHARLES CARPMAEL,

Director.

# METEOROLOGICAL OFFICE,

TORONTO, 5th February, 1892.

The Honourable

The Minister of Marine and Fisheries,

SIR,—I have the honour to submit herewith the report on the Tidal Service for

the year ended 31st December, 1891.

The observations of last year taken at Canso have been worked up and the working of those at Liscomb is nearly completed. The results obtained at Canso are unsatisfactory, and the measuring of the trace for Liscomb proved very difficult owing to various causes chief of which has been the failure of the points on the feed roller of the gauge to mark the paper. Before using this gauge at another station this difficulty will have to be remedied.

The large amount of work entailed by extensions of the Meteorological Service prevented anything being done until late in the season towards placing new tide gauges; and it was not until October that I left the Central Office to do what could be done in this direction. I first visited several places on the St. Lawrence above Quebec in company with Messrs. Howden and Cowie, of the Public Works Depart-

ment to whom I am indebted for many valuable suggestions.

Cap à la Roche.—The first place visited was Cap à la Roche. Here observations have already been taken for various short periods. These observations will if possible be worked up, but I fear that they are not sufficiently continuous to yield very satisfactory results. I would recommend that the old gauge be replaced here as soon as navigation opens in the spring and as long a series as possible be obtained there

while the signalling station is in operation.

From Cap à la Roche it is twelve miles to the Richelieu Rapids and at the foot of the rapids is Point Platon. A gauge could be placed at the lower end of the wharf. It would require to be strongly protected with timbers as otherwise it would be in danger when the ice shove occurred in the spring. Between Point Platon and Cap à la Roche the character of the tides completely changes. At the former the lowest occurs at low water of spring tides whilst at the latter it occurs at low water of neap tides.

Short series of observations might also be taken at Pointe aux Trembles and

either at St. Nicholas or Cap Rouge.

At Levis it is desirable that a gauge should be permanently established. It might conveniently be placed at the end of the caisson recess, at the dry dock. This arrangement would have the advantage of enabling the depth of water at any time at the entrance to the dock to be accurately predicted. It would be here easy to provide for the gauge being properly attended to, and no difficulty would be experienced from the formation of ice.

The next station visited was Father Point. There the well will be connected with deep water by a pipe about two hundred and seventy feet in length. The work was at once put in hand and is now in an advanced state but was stopped by the

cold weather and cannot be completed until the spring.

St. John.—After careful examination of various sites including the Intercolonial Railway wharf, the Beacon Light and Partridge Island, it was concluded that the best would be the corporation wharf near the customs house. As the observer in connection with the Meteorological and Time Service has an office in the customs house this would also be a very convenient point. The city in view of the usefulness of the observations to the city would probably grant the right of using their wharf free of charge, and a committee of the council was appointed to look into the matter. It was found however that there was an unexpired lease of the wharf which prevented the arrangements being completed at once; but I hope before long to be able to put the work in hand and in a very short time afterwards the gauge could be started.

The next place visited was South West Point, Anticosti. A site was selected near the lighthouse, where there was a cleft in the rock immediately over deep water. There will be no difficulty in placing a gauge at this point, but owing to the lateness of the season it was impossible to undertake the work before the spring.

The Halifax tide tables for 1891 were distributed at the beginning of the year to the collectors of customs along the south coast of Nova Scotia. Those for 1892 were distributed in the same way in December and can be obtained from them.

It is proposed to push the placing of gauges as soon as navigation opens in the spring.

All of which is respectfully submitted.

I have the honour to be, Sir,
Your obedient servant,
CHARLES CARPMAEL,
Director.

129

# REPORT ON THE McGILL COLLEGE OBSERVATORY FOR THE YEAR ENDING 31st DEC., 1891.

WM. SMITH, Esq.,

Deputy Minister of Marine.

Sir,—I have the honour to present the report on this observatory for the year 1891.

Meteorological Observations.—The usual meteorological observations have been continued without interruption and the results have been published in the Montreal Gazette and Canadian Record of Science. An abstract for the year is appended hereto.

Time Service.—Determination of clock errors have been made on 114 nights by the observation of 619 stars. The instant of mean-noon has been given to the shipping, and other time signals have been distributed throughout the city and Dominion as in former years. The Ottawa time-service is still I regret to say a source of

annoyance, owing to the imperfect arrangements at Ottawa.

The system of time exchanges with the Toronto Observatory has been continued with the following results.—The average difference between the mean-time of the two observatories, on the sixteen days on which exchanges were made was 0'·17" and the greatest difference on any one day was 0'·38". The comparisons give a "probable error" for the time of one observatory as compared with that of another, at any instant, of 0'·08".

Longitudes.—Arrangements for the direct longitude determination, between Montreal and Greenwich, are practically completed. The transit instruments loaned by the Royal Observatory, and the special electrical apparatus constructed under the direction of the Astronomer Royal, by Messrs. Siemens Bros., were received at the end of August. The chronographs to be used in the Canadian portion of the work are of similar construction, and were made by Messrs. Fauth and Co., Washington.

The Commercial Cable Co's station at Hazel Hill, Nova Scotia, was visited in the month of June last. Certain preliminary experiments on transmission through the cable were made, and a shelter and pier for an Astronomical Station erected.

The experiment on cable transmission by automatic repetition of the signals between the land lines and the cables gave very encouraging results. A large number of signals were sent from Montreal to Waterville, Ireland, and back to Montreal on June 7. The total transmission time, including seven repetitions on land line instruments and two repetitions on the specially designed cable repeaters ranged between 1'.00" and 1'.10", the average time being 1'.04". The Circuit included 1,720 miles of land lines and about 6,000 miles of cable. On June 21st signals were sent through the cable from Hazel Hill to Waterville and back with the two cable repeaters only in the circuit. The average transmission time was 0'.67" and it ranged between 0'.63" and 0'.70", as measured on the trace of the siphon recorder. It is expected that observations will be commenced about 15th April next and continued throughout the summer.

Sunspots.—The observations of sunspots by the projection method have been continued throughout the year. The results for the year ending 2nd May, 1891 are being published in the Transactions of the Royal Society of Canada. Owing to lack of assistance no work has been done with the photoheliograph during the year.

Soil Temperatures.—The observations described in last year's report have been continued, the couples remaining in the same position and at the same depths. I regret to say that this work cannot be continued beyond the present year, unless additional assistance in the observatory is provided for.

General.—Upwards of 1,000 applications for information have been received and answered throughout the year. The movement for an approved site for the observatory has not advanced materially beyond the stage in which it was reported to be one year ago.

130

Mr. E. H. Hamilton, B.A. Sc., who for many years has filled the office of assistant in the observatory, has resigned in order to take an important position in chemical engineering in New York. Mr. Robert Bickerdike, jr., B.A., Sc., has satisfactorily performed the duties of assistant since 1st July last.

Respectfully submitted.

C. H. McLEOD,

Superintendent.

Montreal, 2nd February, 1892.

## METEOROLOGICAL ABSTRACT

OBSERVATIONS made at McGill College Observatory, Montreal, Canada.—Height

		• Тнег	RMOMET	ER.			* Baron	IETER.		pressure of	tive	point.	
Month.	Mean.	T Deviation from 17 year means.	Maximum	Minimun	Mean daily range.	Mean.	Maximum	Minimum	Mean daily range.	†Mean pre	# Mean relative humidity.	Mean dew point	
January February March April May June July August September October November December	52 · 36 65 · 17 66 · 33 66 · 65 62 · 29 45 · 14 35 · 10	+ 1.95 + 2.43 - 2.09 + 0.67 - 2.50 - 0.30 + 3.56 + 0.08		$\begin{array}{c} -13.0 \\ -2.1 \\ 21.8 \\ 31.7 \\ 40.4 \\ 45.6 \\ 50.6 \\ 42.5 \\ 24.0 \\ 0.0 \end{array}$	14·18 18·19 20·84 19·98 17·00	29 9984 30 1157 29 9198 29 9845 29 9192 29 9401 29 9422 30 0870 30 0241 30 0406	30·725 30·659 30·538 30·312 30·246 30·357 30·283 30·473 30·762 30·620		243 214 162 114 131 140 167 218 265	0826 0886 1098 1862 2513 4052 4564 4750 4285 2416 1673	81.8 77.7 72.1 67.3 61.7 63.6 70.9 73.0 74.9 76.6 74.4 78.4	11 4 18 0 31 5 38 5 51 6 55 9 57 0 53 9 37 9 28 0	
Sums for 1891 Means for 1891	43 63	+ 1 88			16.87	30 0032			220	2523	72.7	34 8	
Means for 17 years ending Dec. 31, 1891	41 75					29 · 9781		• • • • • • • • • • • • • • • • • • • •		2495	74.3		

\*Barometer readings reduced to 32° Fah., and to sea level. †Inches of mercury. ‡Saturation, 100 that it has been lower than the average for 17 years, inclusive of 1891. The monthly means are derived and wind vane are on the summit of Mount Royal, 57 feet above the ground, and 810 feet above sea level. The greatest heat was 90°0 on 16th June; greatest cold 15°0 below zero on January 17th; extreme 1st January; least range was 4°1 on 21st Aug. The warmest day was 13th July, when the mean tem-The highest barometer reading was 30°725 on 14th February and 31st December; the lowest was 28°874 and 7th June. The greatest mileage of wind recorded in one hour was 50 on 3rd March, and the greatest resultant direction of the wind for the year was S. 52° W., and the resultant mileage, 51,200. Auroras Lunar halos on 8 nights. Lunar coronas on 4 nights. Solar halos on 3 days, and on 6th December, city, on 27th March, and snow all gone on open ground on 10th April. The first snowfall of the autumn Note.—The yearly means above are the average of the monthly means, except for the velocity of the

#### FOR THE YEAR 1891.

above sea level, 187 ft. Latitude N. 45° 30′ 17″. Longitude 4<sup>h</sup> 54<sup>m</sup> 18<sup>s</sup>55 W.

C. H. McLEOD, Superintendent.

Wini	Э.	l per	possible nshine.	in.	of days on rain fell.	low.	of days on snow fell.	rain and lted.	days on ain $and$ .	of days on rain or snow	
Resultant direction.	Mean velocity in miles per hour.	Sky clouded per cent.	Per cent. possible bright sunshine.	Inches of rain.	Number of which rai	Inches of snow.	Number of which sno	Inches of rain snow melted	Number of which ra	Number of which rai fell.	Монтн.
N. 43° W.	15.6	74.8	29.0		6		23	3.30	5	24	January.
S. 32° W.	17.3	66.8	38 7	1.62	8	18.7	15	3 14	5	18	February.
S. 87½° W.	15 6	54 6	54.7	2.65	9	16.3	8	3.92		15	March.
S. $72^{\sigma}$ W.	16 2	68.1	41 5	2.38	12	7.1	6	3 26	2	16	April.
S. 58½° W.	14.7	59.9	55 3		12		1	1.71			May.
S. 72½° W.	15.0	58.6			. 8			1.75			June.
S. 34 <sup>8</sup> W.	13.0	57.1	52.9		20	•		4.80		20	July.
S. 44½° W.	10.8	53.0		3:70	14 14	• • • • • •		3·70 1·03		14	August.
S. 71 <sup>5</sup> W. S. 67° W.	11 · 6 13 · 0	44·0 60·0		1·03 2·38	13	1.5	3	2.53			September. October.
S. 24½° W.	16.3	72.0			13		7	$\frac{2}{3}\frac{33}{06}$	2	17	November.
S. 32° W. S. 873° W. S. 72° W. S. 725° W. S. 725° W. S. 7443° W. S. 71° W. S. 67° W. S. 2443° W. S. 40° W.	20.9	64.8		2.14	11	12 0	11	2.34		17	December.
S. 52° W.	14.99	61 1	47 3	28.16	140	80.1	74	35·54 2·98			Sums for 1891. Means for 1891.
• • • • • • • • • • • • • • • • • • • •	*15.27	61 4	§46·2	28 · 13	134	122.0	83	39 · 97	16	201	Means for 17 years ending Dec. 31, 1891.

<sup>\$</sup> For 10 years only. \* For 5 years only.  $\P$  "+" indicates that the temperature has been higher; "-" from readings taken every 4th hour, beginning with 3h. 0m., Eastern Standard time. The anemometer

range of temperature was therefore 105° 0. Greatest range of the thermometer in one day was 49° 9 on perature was 77° 22. The coldest day was 16th January, when the mean temperature was 6° 7 below zero. on 12th January, giving a range of 1° 851 for the year. The lowest relative humidity was 25 on 18th May velocity in gusts was at the rate of 72 miles per hour. The total mileage of wind was 131,316. The were observed on 12 nights. Fogs on 26 days. Hoar-frost on 17 days. Thunder storms on 18 days. coloured halos of 22° and 46°, with contact arcs and parhelia. The sleighing of the winter closed, in the was on 11th October. The first sleighing of the winter was on 7th December.

## APPENDIX "A."

THE QUEBEC OBSERVATORY.

Quebec, 27th November, 1891.

To the Director, Meteorological Service, Toronto.

SIR,-I have to submit the following report of the Quebec Observatory, for the year ending the 31st October last:-

There has been no change in connection with the duties.

I had occasion during the year to draw your attention to the fact that the shipping interests of this harbour greatly feel the want of an advertisement notifying them of the Greenwich time at which the "ball" drops, and hope that, as at present

arranged, this difficulty is overcome.

The harbour of Quebec is very differently arranged to-day to what it was at the time the "ball" service was instituted; at that time vessels, when not in the "stream," were entered for loading at the wharfs where, very generally, a view of the "Time Ball" could be got; to-day, since the construction of the Harbour Works, a large proportion of the vessels load at these works at the mouth of the St. Charles River, from where the "Time Ball" is not visible. I have casually discussed this matter with the Collector of Customs here, suggesting that the difficulty would be overcome by placing a "Time Ball" on the Custom House, if he could supply the labour necessary to the hoisting, etc., of the "ball." The matter was quite unofficially discussed between us. Considering the importance of the suggested extension of this service, I mention it here, so that if you think well of it, the necessary steps may be taken to carry it out.

I am, &c., W. A. ASHE, F.R.A.S., Director, Quebec Observatory.

## APPENDIX "B."

THE OBSERVATORY, St. John, N. B., 31st October, 1891.

CHARLES CARPMAEL, Esq., M.A., F.R.A.S., Director Meteorological Service of Canada. Toronto.

Sir,—I have the honour of submitting the following report on this observatory under my charge since the death of the late director, 7th July 1891.

The chief station routine of meteorological observations have been carefully

attended to, and copies of the records forwarded to Toronto.

The time service has also received my careful attention. Observations of stars with the transit instrument for the correction of clock errors and rates have been made at short intervals. Comparisons of the clocks are made before and after observing, also immediately before giving the daily time signal for the benefit of the shipping and others: this signal is given by dropping the time ball at 1 p.m. local

The City Council at a late meeting decided that it would not be advisable to adopt standard time of the 75th Meridian, which is the time used by the railways in this section.

Time exchanges with the Toronto Observatory indicate that the longitude used at this Observatory is in error, something about one second of time. I trust you will soon be able to arrange for an exact determination of our longitude.

Storm Signals have in all cases been promptly hoisted at the signal station

by Mr. J. Drake, signal officer.

I have the honour to be, Sir, Your obedient servant, D. L. HUTCHINSON, Acting Director.

# APPENDIX No. 5.

REPORT OF THE CHAIRMAN OF THE BOARD OF STEAMBOAT INSPECTION FOR THE YEAR ENDING THE 31st DECEMBER, 1891.

CHAIRMAN'S OFFICE, OTTAWA, 31st December, 1891.

Hon. CHARLES H. TUPPER, Minister of Marine and Fisheries. Ottawa.

SIR,—I have the honour to submit herewith my annual report for the year ending the 31st December 1891.,

#### BOARD MEETINGS.

Sessions of the board were held at Toronto from the 26th December ult., to the 5th January, 1891, when rules were formulated for the inspection of water tube boilers for steamboats (which were approved by an Order in Council on the 14th day of May following) and for the examination of engineers. The members of the board were:—James Johnston, boiler inspector, Toronto; O. P. St. John, boiler inspector, Toronto; Thomas Harbottle, hull inspector, Toronto; W. J. Meneilley, chair-

A quorum of the board met at Kingston on the 7th and 8th of January and inspected the steamer "Wherenow," in which a water tube boiler had been fitted, but could not be passed by the inspector, the board recommended additional stays to the boiler, which were afterwards made, and the boiler passed by the inspector.

There were also several engineers examined by the board at Kingston.

Sessions of the board were held at Toronto from the 3rd to the 10th of March, for the examination of engineers and revision of rules for the inspection of steam-

boats, their boilers and machinery, and for the examination of engineers.

Inspector O. P. St. John retired from the service on the 16th of April. to the steady increase of the work in this division and the reduction of the staff here through the removal of the chairman to Ottawa, it is almost impossible for

the Inspectors to meet the demands upon our time and attention."

I proceeded to Toronto 20th April, and on the 21st of April, with Inspectors Ed. Adams of Kingston, J. Johnson, and Thos. Harbottle of Toronto, forming the board, commenced the examination of Mr. John Dodds and Wm. Lee Waring, candidates for the office of steamboat inspector in the West Ontario and in the Maritime Provinces Divisions, respectively. The examination of Mr. Dodds was completed on the 27th April, passed, and of Mr. Waring on the 29th of April, failed; during this session of the board the members were (excepting the chairman) completed. pelled to be absent inspecting steamboats, which somewhat delayed the examination of the candidates.

Mr. John Dodds commenced his duties as steamboat inspector on the 29th of April, the press of work respecting steamboats necessitated this course which was approved by Order in Council dated the 31st August; Mr. Dodds' salary being fixed at \$1.000 per year by Order in Council of the 26th of May, 1891.

The work being too much for the two inspectors at Toronto since the staff was

decreased by the removal of the chairman to Ottawa, and making necessary the appointment of another inspector for Toronto and consequent increase of expenditure, the chairman, after the labours of the board were concluded, remained at

Toronto to direct and assist the Inspectors until the 1st of June, and during this interval held a session of the board to investigate the burning of the steamer "Lillie's" boiler, finding the engineer negligent and unskillful and in fault, recommending the suspension of his certificate for three months.

The Board met on the 12th, 16th and 30th of May to complete business left over on account of inspections of steamboats having to be attended to, the resident mem-

bers and chairman forming a quorum.

The final session of the Board from the 29th of June to the 7th of July, was for the re-examination of Mr. Wm. Lee Waring, and the examination of Mr. John Doran, candidates for the office of steamboat inspector, Mr. Waring for the Maritime Provinces Division, and Mr. Doran for the West Ontario, at Toronto. Mr. Waring passed, and was appointed to the office by Order in Council dated 31st August, 1891, at \$1,000 per year. Mr. Doran could not attend when the steamboat on which he was engaged was running, nor get an engineer to take his place, he applied to the Department for a postponement of his examination until his steamboat was laid up in the fall, this was granted by the Department, and his examination arranged for the 15th of December, which was again unavoidably postponed indefinitely.

The proceedings of the Board during the year were fully reported to the Depart-

ment when occurring.

#### INCREASE OF SALARIES.

By Order in Council dated the 25th August, 1891, (and on the recommendation of the Honourable the Minister of Marine and Fisheries, who had under consideration the salaries paid to steamboat inspectors in Canada as compared with salaries paid in Great Britain and the United States), the salary of the chairman was increased from \$1,600 to \$1,700 per year, and the salaries of Inspectors, C. R. Coker and Thomas Donnelly from \$1,200 and \$800 to \$1,300 and \$850 respectively.

#### AMENDMENTS TO THE STEAMBOAT INSPECTION ACT.

An amendment to the act was passed at the last session of Parliament giving authority to the chairman to approve of examinations of engineers made by inspectors when the Board of steamboat inspection was not sitting, this provision has been acted on, and will in future lessen the expense attendant on engineers' examinations heretofore required to be before the Board, especially as there is no longer, since the removal of the chairman to Ottawa, a quorum of the Board stationed at Toronto.

The amended Act also defines a "passenger to mean any person carried on a steamboat, other than the master and crew and the owner, his family and servants." This is a very important and much needed amendment, the ther provisions in the amendment will no doubt be found in the interest of the public service.

#### CASUALTIES.

#### West Ontario and Huron Division.

The SS. "Ocean" 484 tons stranded 2nd July on Lake Ontario shore, 12 miles east of Toronto during a fog, she was floated, and towed to Port Dalhousie where repairs were made costing \$1,800.

The SS. "W. M. Alderson" 121 tons was burned at Port Dover 4th of August,

a total loss.

The SS. "Athabasca" 2252 tons collided with the S.S. Pontiac 15th July on the Sault Ste. Marie river, the Pontiac was sunk with 2,500 tons of iron ore. The Athabasca was badly damaged, but proceeded on her trip to Fort William, and after discharging her cargo returned to Detroit where she received repairs amounting to \$20,000.

The SS. "Lothair"  $\frac{418}{281}$  tons waterlogged on Georgian Bay August 21st, loaded with lumber, lost her deck load, and all her houses on deck, was towed into Windsor,

and received repairs amounting to \$1,900.

The SS. "Interocean"  $\frac{14.8}{98}$  tons was burned at Wallaceburg August 23rd: her upper works were completely destroyed.

The Tug "R. S. King"  $\frac{58}{40}$  tons was partially destroyed by fire at Tobermory, September 17th, and is being rebuilt at Owen Sound.

The fishing steamer "Othello," \$\frac{8}{5}\$ tons, while lying at Sault Ste. Marie, Michigan, U.S.A., was run into by the steam barge "Alta" on the 28th of September, a total

The SS. "Sovereign," 613 tons, foundered on Lake Superior October 23rd; she was loaded with wheat; vessel and cargo a total loss; the crew escaped in her boats and were picked up by the schooner "Sligo."

The tug "Arbutus,"  $\frac{40}{34}$  tons, partially destroyed by fire at Wallaceburg, Decem-

ber 2nd. Loss, \$2,000.

The steamer "Energy," 116 tons, partially destroyed by fire at Wallaceburg 26th December. Loss about \$2,000.

#### East Ontario Division.

May 7th.—Tug "Eleanor" left Oswego, N. Y. State, for Kingston, Ontario, at 10 a.m., having two barges in tow. About 2 p.m., it was found she was making water, which, gaining on the pumps and syphon, extinguished the fires in the boiler about 3 p.m. The schooner "Eliza Fisher" took them in tow, and when about five miles north of Main Duck Island, the tug sank, proving a total loss. The crew were taken to Kingston on the barges in tow of the schooner.

May 13th.—Propeller "Glengarry," on her voyage from Fort William to Kingston, broke the crank pin of her engine, going into Detour, Michigan, U.S.A. She

was towed from there to Detroit, Mich., where a new crank pin was fitted.

September 11th.—Tug "H. F. Bronson," when opposite Alexandria Bay, River St. Lawrence, broke the crank pin of port engine and proceeded to Kingston with the starboard engine and had a new crank pin fitted.

October 7th.—Steamer "Ella Ross," when approaching the wharf at Rossmore,

Bay of Quinte, broke her air pump lever.

November 15th.—Tug "Eliza Bonar," was partially destroyed by fire while lying at the wharf at Belleville. Loss about \$1,800; origin of fire unknown.

#### Montreal Division.

The tug "Kate" was sunk at her wharf; cause unknown.

The screw passenger steamer "Eva" was destroyed by fire at her wharf at

Buckingham.

The screw tug "Resolute" was destroyed by fire while lying at her wharf at Ottawa.

#### Quebec Division.

The steamer "Dagmar," of the Ottawa River Navigation Co., was burned at her winter quarters at Como.

The steamer "Canada," of the Richelieu and Ontario Navigation Co., broke her

piston, on the 5th of May, while on the trip to Montreal.

The steamer "Berthier," on her trip down from Three Rivers, broke the strap of her crank pin, also her piston and cylinder, on 14th July.

The steamer "Montreal," of the R. & O. Nav. Co., broke her high pressure

cylinder, when leaving Montreal, on the 13th August.

The SS. "Cacouna," of the Black Diamond Line, entering the Louise Basin, Quebec, on the 25th August, struck a pier and stove in a plate on her starboard bow.

The steamer "Laprairie," of the R. & O. Nav. Co., on the 6th October, coming down the rapids from Laprairie, in a fog, struck the rocks and stove in two planks; she was put into dock and repaired.

On the 8th October the steamer "St. Louis" broke her crank pin and cylinder,

on her way down to Quebec.

#### Maritime Provinces Division.

November 12th.—The passenger steamer "Heather Belle" was run into and sunk at the mouth of the harbour of Charlottetown, P.E.I., by the SS. "Fastnet," the latter vessel being slightly injured.

December 5th.—The passenger steamer "Acadia," of St. John, N.B., was

destroyed by fire at St. John.

December 11th.—The passenger steamer "Neptune," while passing through the railway bridge at Grand Narrows, C.B., ran into one of the piers, carrying away her port paddle box, her crank, and twisting the crank shaft. She is laid up for the winter.

### Manitoba, Keewatin and N.W.T. Division.

August 6th.—The tug "Glendevon" was burned to the water's edge while lying at her dock at one of the Manitoba Fish Company's stations, on the Little Saskatchewan River; the vessel a total loss, and with the loss of one life, the fireman, Charles Mathews, after getting safely ashore went aboard again to save some valuables, and was overpowered by the flames and smoke and lost his life.

### British Columbia Division.

December 26th, 1890.—The SS. "Emma" struck a sunken seew when leaving Victoria harbour and sunk. She was raised two days afterwards and repaired

Victoria harbour and sunk. She was raised two days afterwards and repaired.

February 10th, 1891.—The SS. "Pilot" when off Cape Flattery, with the bark "India" in tow, lost one of her propeller blades, which carried away her shoe supporting the rudder. She had to let the bark go and return to Victoria for repairs.

March 7th.—The SS. "Hope" came to anchor at the N.E. end of Ballinac Island with a tow of logs. The wind shifted and drove her ashore, staving in her side and bilge planks. She was hauled out at Victoria and repaired.

March 14th.—The SS. "Nellie," lying at anchor at Howe Sound, with no one aboard, in a gale, dragged her anchor and filled and sunk in deep water, a total loss.

May 20th.—The SS. "Marion," moored at Golden, broke away at night and

was carried down rapids in the Columbia River and broken up; a total loss.

September 11th.—The SS. "Lois" struck on Portland Island in a fog, destroyed her outside condenser, and damaged the stem and keel, was repaired at Victoria.

September 23rd.—The SS. "Alpha" caught fire off False Creek, was beached,

broke up and became a wreck.

October 11th.—The SS. "Emma," bound to Nanaimo with two scows in tow from Victoria, struck on Mowatt reef, on the inside passage of Trial Island, in a fog, slipped off the reef and sank in deep water; total loss.

Tables A, B, C, D are appended, showing the number of steamboats subject

to inspection in the Dominion with their gross tons.

The amount of dues and fees collected.

The increase or decrease as compared with the year 1890:

The number of steamers added to the Dominion, and to each division.

I have the honour to be, Sir,

Your most obedient servant,

W. J. MENEILLEY.

Chairman Board of Steamboat Inspection.

# A.—Number of Steam Vessels inspected and known to the Inspectors, in the Dominion and their gross tonnage, during the Year ending 31st December, 1891.

Divisions.	Number of Steamers.	Gross Tonnage.
West Ontario, Huron and Superior.	364	70,905.00
wilkston.	140	17,686 22
WHO I I I I I I I I I I I I I I I I I I I	153	22,337 00
And help the state of the state	141	39,049 50
Maritime Provinces	201	35,499 0
"Idiliona Keewatin and North-West Territories	34	5,056 23
British Columbia	129	18,244 74
Totals	1,162	208,777 · 74

# B.—Dues and Fees collected on account of Steamboat Inspection, during the Year ending 31st December, 1891.

· ·	, Divisions.	Amou	nt.
		\$	cte
Vest Ontario, Huron ar	nd Superior.  d North-West Territories.	7,231	. 03
ingston		2,115	33
lontreal	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2,408	04
uebec		3,799	
laritime Provinces	••••••••••••••••••	3,632	
lanitoho IZ	d North-West Territories.	368	28
Turitoba, Keewatin and		2,003	

# C.—Number of Steam Vessels with their gross tonnage, and amount of Tonnage Dues and Inspection Fees collected during the Years 1890 and 1891, showing the increase in 1891.

Number of Steamers.	Gross Tonnage.	Inspection Dues and Fees.
		* ets.
1,103 1,162	195,418·89 208,777·74	19,716 94 21,558 16
59	13,358 85	1,841 22
•	of Steamers.	of Steamers. Tonnage.  1,103 195,418 89 1,162 208,777 74

# D.—Steam Vessels added to the Dominion during the Year ending 31st December, 1891.

Division.	Number of Vessels.	Gross Tons.	Registered Tons,
West Ontario, Huron and Superior. Kingston. Montreal. Quebec. Maritime Provinces. Manitoba, Keewatin and North-West Territories. British Columbia.	12 6 4 3 22 3 32	2,050 · 00 485 · 88 235 · 00 1,895 · 00 3,945 · 11 383 · 54 2,927 · 41	715 · 00 325 · 48 121 · 00 1,255 · 00 1,982 · 92 260 · 31 1,864 · 41
Total	82	11,921 94	6,524 12

# APPENDIX No. 6

Halifax, 5th November, 1891.

SIR,—I have the honour to submit the annual report of the proceedings of the Board of Examiners of Masters and Mates from the 31st October 1890 to the 31st October 1891.

The Board met for examination of candidates at the port of Halifax 11 times,

St. John 12 times, Yarmouth 8 times and Quebec 3 times.

There were in all 34 examinations at the four ports. At Halifax there were 22 applications for masters certificates, foreign-going and 1 coasting; 21 received certificates and 2 failed; 30 applications for mates certificates; 22 received certificates and 8 failed.

At St. John there were 27 applications for masters certificates; 20 were successful and 7 failed; 28 applications for mates certificates; 14 mates received

Certificates and 14 failed.

At Yarmouth there were 10 applications for masters certificates, foreign-going and 1 for coasting; 7 masters received certificates and 4 failed; 10 applications for mates certificates, foreign-going and 2 coasting; 6 received certificates and 6 failed.

At Quebec there were 2 applications for masters certificates and 4 for mates;

2 masters and 2 mates were granted certificates.

It will therefore be seen that during the year there were 63 applications for master's certificates of competency and 74 for mates.

50 masters were granted certificates and 13 failed; 46 mates were granted

certificates and 28 failed.

There were also 18 service certificates issued for masters and 3 for mates, 13 renewal certificates and one mate's certificate of competency, foreign-going, was granted to a master whose certificate was suspended by the Board of Trade.

The total number of certificate issued by the Department, including competency, service and renewal, was 130 and fees to the amount of nine hundred and

four dollars and fifty cents (\$904.50) were collected at the four ports.

This does not however include Coasting and inland certificates granted by the Department after an examination at any other ports, but those above mentioned.

I have the honour to be, Sir,

Your obedient servant,

W. H. SMITH,

Chairman.

The Deputy Minister of Marine, Ottawa.

# RESULTS of the different Examinations.

t. John armoutht. John	do	5 3 4 2	3 5	2 2 4	1	3 1	3	55 10 15
[alifax	September	5	3	4	3	1		60
alifaxarmouth	do	2 2	4	2	3	2	1	40 20
do		ī		·		1		15 10
alifax		$\frac{2}{2}$	2.	2 2	2			30
armouth	do	2	ī				i	10
uebec		1	1		. 1	1	···· i	5 15
alifax		2	1	2	1			25
armouth	do	1	ĩ			1	i	15
do	do	-	2 2	3	2 2			30 20
alifax	do	1C+	3	1C+	3			18
nebec	April	1	3	1	.,			25
John		2	ĩ	2	i			25
armouth	do March	4	3r · 201	4	2F 2C7		1 1	13 50
. John		5	3F* 2Ct	5	2F* 2C+		1 1F*	55
alifax		. 2	6	2	3		3	30
armouth	do	1	2	1			$\hat{2}$	20
. John	do	: 1	1	1		2	ა 1	30 15
armouth	do	1F* 1C+	1	1F* 1C+	1			18 30
alifax	do	111# 10#	3	1 12* 104	3			15
. John	do		4		3		1	5
uebec				ī				10
alifax	November do	1	1 3	1	1		3	15 25
		!						<b>s</b>
	Months	Masters	Mates.	Masters	Mates.	Masters	Mates.	
Port.								Fees.

<sup>\*</sup>Foreign. †Coasting.

# CERTIFICATES of Service Granted.

	Coasting,			Inland.	
Master.	Mate.	Fees.	Master.	Mate.	Fees.
16	3	\$ ets. 64 00 6 00	2		\$ ets. 8 00
16	3	70 00	2		8 00

#### RENEWALS Issued.

Competency.			Service.			
Master.	Mate.	Fees.	Master.	Mate.	Fees.	
		\$ cts.			\$ cts	
9		45 00		2	5 00 2 50	
9	-	45 00	2	2	7 50	

A mate's certificate, foreign-going, was granted to a master whose certificate was suspended by the Board of Trade and the Fee of \$5 charged for the same.

W. H. SMITH, Chairman.

# APPENDIX No. 7

#### REPORT ON GEORGIAN BAY SURVEY FOR THE SEASON OF 1891.

OTTAWA, 10th November, 1891.

Sir,—I have the honour to inform you that I sailed from Owen Sound on the 4th of May last, to continue the survey of the north-east coast of Georgian Bay, between the McCoy Islands and Moose Point, including the various channels leading to Parry Sound.

The coast line having been done in 1890, the work during the past summer consisted entirely in sounding; the shallow water being done in two open boats, while the deeper water was done from the vessel. The number of nautical miles

sounded in the two boats was 1320, while the vessel did 860.

This section is the most broken up portion of the whole north-east coast of Georgian Bay, there being upwards of 4,000 islands and dry rocks on the coast surveyed last season. Numerous sunken rocks were found, several lying at a considerable distance off the outer islands, and in the track of general navigation.

Many of the dangers of this Laurentian shore, rise abruptly from the bottom,

necessitating very close sounding to make sure of not missing them.

There are four channels leading to Parry Sound, the deepest and most direct

approach from the westward being that close south of Red Rock lighthouse.

In this channel not less than 20 feet of water may be carried to the town of Parry Sound. Steamers of 10 feet draught, and not over 120 feet in length, can take the inside passage by Point an Baril, if approaching from the northward.

Steamers from the southward may use the channel by Lone Rock, known as the Waubuno or Burritt's channel, in which will be found a depth of not less than

15 feet.

The light draught mail steamer from Midland and Penetanguishene, uses the

passage south eastward of Parry Island, known as the South Channel.

With the usual characteristics of North Shore water, there are many dangers in all these passages, and additional aids to navigation are required before Parry Sound can be safely navigated by vessels of large draught. A glance at the general map of North America will show that Parry Sound stands near the shortest line that can be drawn from the western grain districts to Montreal, and this feature was kept in view during the survey, in case it should ever become a transcontinental port.

The shores in the vicinity of the town are suitable for the erection of wharves

sufficient to accommodate a large fleet of heavy draught vessels.

The only lighthouse at present in the approach to Parry Sound, is that on Red Rock, the southernmost islet of the string called on the old chart the "Indian islands." This light is very valuable, not merely as a local light, but for general coastal purposes also. But to render the Sound navigable at night, there would be required in addition to this light, five other lights to serve as ranges.

The sites of the centres of these proposed lighthouses, are marked by lead run into holes drilled into the rocks, close by which are broad arrows. Small beacons are

erected over these marks.

One important result of the survey of this locality, has been the determination of the positions of several overlying shoals dangerous to vessels of large draught.

A systematic sounding off this shore, shows that the dangers of which I had heard various rumours, are neither so shallow or numerous as was supposed, the reason for which is that masters of vessels have given different positions to the same rock.

The captain of a vessel on a route new to him, sees shallow water, guesses the depth over it, and assigns it a position according to the best of his ability on the old small scale-chart. Another man sees the same rock, makes a different estimate of the depth and position, and so in some instances, the same shoal is located in half a dozen different places.

On a shore like the north-east coast of Georgian Bay this uncertainty will endure

until cleared up by a detailed hydrographical survey.

The weather was not as favourable for my work as that of 1890, for though there were not many violent gales, still there was a great deal of wind in the aggregate, and blowing nearly always upon the shore.

The persistency of these on shore winds, will be best understood from the fact, that for a whole month I could not get a favourable opportunity, to make an exami-

nation of some shoal spots, for which half a day would have sufficed.

There was not one hour's calm in the daytime after the middle of September, but anticipating this from past experience, work was reserved in sheltered localities, so

that there was seldom a day in which something could not be done.

The absence of the usual summer rise of the water, was an unusual phenomenon, and whatever was the cause, was attended with serious consequences to shipping, nor merely in the vicinity of my work but in the shallow channels of the lakes generally. I think myself that the low water which has existed for the past four years, culminating in the low dip of the past summer, is only temporary. From records kept by the Public Works Department of Canada at little Current Algoma, and at Milwaukee by United States engineers, it would appear that the water was, between 1881 and 1887, as much above the average level as it is now below it. I think therefore, that during the next few years the water will be up again.

However, as long as we have to rely only upon the fickle memory of the oldest inhabitant there will always be an element of uncertainty as to whether the waters of the lakes are subject to temporary fluctuations, or are steadily lowering their level. In addition to its scientific interest, a knowledge of the movement of the waters of the great lakes, with a view to future commerce may be of great economic importance

in the deepening of harbours, and construction of canals.

I would therefore respectfully suggest that datum Stones be erected, say at Collingwood, Sarnia, Port Colborne and Kingston, similar to that placed at my suggestion in the interest of the survey, by the Department of Public Works, at Little Current, Manitoulin Island. That your agents at the ports mentioned, be instructed to note the height of the water at least once a day during the season of navigation.

At the request of the ship owners of Parry Sound, I laid out certain lines by which vessels can test their compasses, when the necessary beacons are erected.

I returned to Owen Sound on the 23rd of October, and before laying the vessel up, spent a couple of days in the placing of a set of beacons for testing error of compass, on the shores of the broader part of Owen Sound.

These beacons were furnished by the municipality of the town of Owen Sound. The officers in connection with the survey have again shewn their usual zeal, and among the crew there was no single instance of disobedience or insobriety.

I left Owen Sound on the 27th of October, stopping at Toronto to place the Chronometers at the observatory, and on the morning of the 29th arrived in Ottawa.

In accordance with your instructions to make an examination of Burrard Intet, British Columbia, Mr. Stewart left Ottawa on the 2nd of April for that purpose, calling at Owen Sound for instruments and a couple of practised men. In view of its rising importance and date of its last survey, I instructed Mr. Stewart to make a complete re-survey of Burrard Inlet on two inches to the nautical mile, and the harbour of Vancouver on double that scale.

I append Mr. Stewart's Report with which I am perfectly satisfied. The time of my assistants and myself will be fully occupied this winter, in making copies of both surveys for the engraver and revising the "Georgian Bay Pilot."

I have the honour to be, Sir,

Your most obedient servant,

J. G. BOULTON,

Staff Commander, R. N., and Admiralty Surveyor.

#### • BURRARD INLET RE-SURVEY.

KINGSTON, 18th, October 1891.

Sir,—I have the honour to report that according to your instructions I proceeded to Vancouver, B.C. to undertake a re-survey of Burrard Iniet. Upon my arrival there on 21st April I took over a whale-boat loaned by the naval authorities at Esquimalt and erected a tide gauge on the west end of the Canadian Pacific Railway wharf. From 21st April to 2nd July day and night observations were continued for high and low water and a datum found therefrom to which all the soundings were afterwards reduced. This datum is one foot above the zero of the gauge and 13.02 feet below the top of a broad arrow cut in the south west iron pile of the Canadian Pacific Railway wharf. This datum is also the same as the Railway Company Engineers have used for their improvements around the wharves.

From 25th April to 1st July my time was fully occupied in traversing the shore of the Inlet from Point Grey to Port Moody taking in False Creek and part of the North Arm. After the latter date, I started sounding and completed the re-survey on 25th September, when I had the boat repainted and handed her over to the Harbour Master who was to see her placed on board the "Sir James Douglas" to be taken to

Esquimalt.

Twice during the season I had simultaneous comparisons of the Tides taken at Point Atkinson, Vancouver and Port Moody, and ascertained there was quite a difference of time for high water and low water at the two first places but not much at the two last places. The differences however are uncertain as might be expected when one knows the irregularity of the tides on all that coast.

I took observations for magnetic variation of the Compass needle at Point Atkinson, Jerico in English Bay, Port Moody, and at Seymour Creek opposite the village

of Hastings.

During some stages of the tide I found the current very strong all over the Inlet, often too much for boat work even in a large bay like English Bay, where its di ection was very uncertain.

During the season I traversed principally on foot, 75 nautical miles of shore line

and sounded 450 miles.

I have the honour to be, Sir,

Your most obedient servant,

WM. J. STEWART.

Capt. Boulton, R. N., Georgian Bay Survey.

# APPENDIX No. 8

### REPORT OF SIGNAL SERVICE.

QUEBEC, 16th December, 1891.

To the Deputy Minister of Marine, Ottawa.

Sir,—I have the honour to submit the following report as to the service for the season of 1891.

As in preceding seasons the reports have been sent to the Department from the lower part of the River and Gulf of St. Lawrence recording the weather, wind, condition and movement of the ice during the winter months, furthermore the reporting of vessels inward and outward as reported by the agents of the Department.

The last reports of ice from the inside of the Gulf including Meat Cove, West

Part of Cape Breton and St. Paul's Island, were sent on May 6th.

From the entrance to the gulf the last reports of ice were sent on May 11th, from Meat Cove and St. Paul's Island, and from outside the gulf, Low Point, on the 15th May reported, hazy weather, west wind, close packed ice in shore moving southeast.

The latter report shows that the ice remained fifteen days later than in the season of 1890.

From the 1st to the 20th of April as during the preceding winter months three reports per week were secured and forwarded to the Boards of Trade, Montreal, St. John, N.B., and Quebec, and to the Chamber of Commerce at Halifax, N.S., also to the press of Montreal and Quebec; to agents of steamship lines; to the pilots of the St. Lawrence; to the Immigration Agent and custom House and Agent of the Department of Marine, Quebec; also to Messrs H. Fry & Co., Lloyds Agent.

From the 20th April two reports were received and forwarded as above. As instructed by letter of May 29th, 1890, full information as to the weather, wind condition and movement of the ice was sent to Point Esquimaux in the month of March

for the guidance of the sealing schooners.

As in the past two seasons owing to north and north-west winds St. Pierre Miquelon reported no ice seen off that station during the months of April and May.

During the season of navigation up to the close of same, reports were sent to

the news room at North Sydney.

As in the preceding season heavy open and close packed ice was reported from the north shore, Bay des Chaleurs, Anticosti, Magdalen Islands, Meat Cove, Cape Ray and St. Paul's Island during the greater part of the season particularly the latter, owing to the north and north-west winds the ice was driven out of the gulf and incoming vessels meet with no ice with the exception of vessels coming from the south-east of St. Paul's Island.

Incoming vessels met no ice until within the vicinity of the Bird Rocks. The

extreme limit of the ice field being but forty miles north of the Bird Rocks.

Full information was supplied from the Bureau here to the agents at Anticosti, Magdalen Islands, Meat Cove, St. Paul's Island, Cape Ray and to Low Point, C.B., when Sydney Harbour was open, as to the weather, wind and movement and condition of the ice in the River and Gulf of St. Lawrence up to Montreal, for the guidance of any vessel calling for information.

Sydney Harbour remained open until the 3rd of February—ten days later than last season. The harbour was again open on the 15th April, four days earlier than

in 1890.

The harbour of Pleasant Bay, Magdalen Islands, was open on the 9th April, seven days later than last season. Six schooners cleared for the sealing grounds on this date; met with heavy open ice outside.

No information was received as to when the Gut of Canso was open, but on the 26th April the Gut was reported full of ice, and a number of vessels waiting for a

passage.

Owing to heavy close packed ice Esquimaux Point Harbor, north shore, remained closed until the 2nd April, when the senling fleet succeeded in getting out, making sail for the sealing grounds. Most of them proceeded towards the Bird Rocks and St. Paul's Island. They met with poor fares some returning empty, others with 50, and the best fare 300 seals.

The following comprised the fleet with the number of men:-

	Men.
Stella Maris	12
Amelia	12
Marie du Sacré Cœur	12
Eugenie	12
Gleaner	12
Java	10
Labrador	10
Pioneer	10
D. Cronan	10
Marie Anne	10
C.M.G.P	10
Ste. Marie	10
Elizabeth	10
Phenix	8
Acara	8
St. Joseph	6
16 yessels	162

As in the preceding season the shore catch of seals at the Magdalen Islands was good. April 3rd 300 young seals were killed. April 4th 1,400 young harpies and on the 31st of March 300 more, making a total of 2,000. No report was received as to the catch made by the schooners.

# January.

Very little ice made in the River St. Lawrence until the month of January. None in the Gulf until the 1st of this month, when reports from Anticosti, Magdalen Islands, Meat Cove, St. Paul's and Cape Ray reported ice making fast, and the river stations reported heavy close packed ice everywhere. Thermometer 22° below zero. No ice on the North Shore nor on the eastern coast of Cape Breton. During the second week ice appeared in the Bay des Chaleurs, and on the 31st a heavy snowstorm with east wind prevailed on the east coast of Cape Breton.

All stations in the river and gulf reported a heavy snowfall, with north to north-west winds.

### February.

North to north-west winds, with snow, prevailed during the first part of the month. The latter part being comparatively mild with south to south-east winds. All stations with the exception of Cape Ray reported heavy close packed ice as far as could be seen.

#### March.

As reported last year, this month again opened with mild weather, very little snow fell, local rain showers. Thermometer on north shore averaged 34° and on the south shore 42°.

11th inst.-Manicouagan reported field ice close packed, covered with ice.

Cape Ray and St. Pauls reported no ice.

28th inst.—The steam schooner Diver and two schooners came out of winter

quarters.

31st inst.—The steam schooner "Diver, Capt. Fournier chartered by the Customs" Department left port bound for St. Charles Island off Esquimaux Point, in search of the smuggling schooner "Busy," Capt. Bouchard, of Coudres Island. By request of the Customs Department the movements of this schooner were not reported. The month closed with north to north-east winds.

St. Paul's Island and Cape Ray reported no ice but all other stations reported

heavy close packed ice everywhere.

31st.—Cape Ray, reported a steamer outwards for St. John, Newfoundland, fully loaded with scals. No ice in sight.

All harbours on the north shore, closed with heavy close packed ice.

The schooner "Marteau" arrived in Quebec on the 30th instant from Tadoussac loaded with firewood. This is one of the earliest arrivals on record.

# April.

South to south-east winds prevailed in the upper part of the River and Gulf, and strong north-east wind in the lower part; heavy close packed ice in the Bay des Chaleurs, the Cape Breton coast and Magdalen Islands, and none in the upper part of the Gulf up to Father Point. This latter place as well as Tadoussac at the entrance to the Saguenay River was accessible to vessels during the greater part of the winter.

April 3rd.—Cape Ray reported a sealing steamer heavily loaded, bound outwards at 6 a.m.

April 6th-Fox Bay. Anticosti, reported two schooners off there seal hunting. April 9th—Heath Point reported five schooners, distant in the ice, to the east-Wards.

April 10.—Five more schooners left the Magdalen Islands; heavy open ice was reported opposite parts of these islands.

April 10.—Cape Ray reports that the gulf sealing fleet have not been successful,

West-north-west winds kept the ice too far out.

April 11-The Cape Rouge ice moved down, leaving a space of about 1 mile of open water; jammed again; still firm.

April 12.—Meat Cove, C.B., strong south-east winds; inwards, 1 brig.

April 12—Sealing steamer, loaded, passed outwards off Cape Ray.

April 15.—Father Point, to Anticosti and Cape Ray, strong east wind; no ice visible. Magdalen Islands, Meat Cove, St. Paul's Island, heavy close-packed ice everywhere.

April 15—First report from St. Pierre, Miquelon—Clear; cold; strong north-

West wind; no ice.

April 23.—The Cape Rouge ice broke away this day.

## Navigation Open.

April 1.—Schooner "Salmon Queen" arrived up from Murray Bay, and left again on the 3rd instant.

April 2.—The schooner "Maria Stella," with general cargo, left for Malbaie.

April 10.—The S.S. "Alert" came out of winter quarters and moored at the Queen's wharf.

April 18.—The Manicouagan lightship left for station and arrived off the shoals at daylight of the 22nd instant. 149

First departure of steamers from Great Britain bound for Quebec and Montreal.

April 15.—S.S. "Grecian," from London. "Peruvian," from Glasgow. 16

" "Sardinian," from Liverpool. 16 66

"Lake Superior," from Liverpool. 17

17

"Toronto," "
"Alcides,,' from Glasgow. 17

### First Steamer Reported.

April 23.—St. Paul's Island—Clear; north-west wind; no ice; inwards, 8 a.m., S.S. "Charrington."

### First Arrivals of Transatlantic Steamers.

April 26.—The SS. "Charrington," from Messina, 3rd April, for Montreal, reported off St. Paul's Island on the 23rd instant, 8 a.m., arrived in port at 9 a.m. this date. The captain reports fell in with ice 30 miles S.E. of St. Paul's; passed that station and saw a large field of ice at 10 a.m.; steered N.E. 40 miles, thence for East Point of Anticosti; saw very little ice, and none from Anticosti to Quebec.

April 27.—The SS. "Sardinian" from Liverpool, 16th April, arrived in port, 6:30 a.m. on the 27th inst., reports, came up with the ice on the 25th inst., 30 miles below Bird Rocks and got clear of it 20 miles to the westward, saw a large number of seals on the ice. Met no ice from there to Québec.

April 28.—The SS. "Alcides" from Glasgow, 17th April, arrived in port, at 7:30 a.m. 28th instant, reports a detention of two hours off the Bird Rocks caused by

April 29.—The SS." Lake Superior " from Liverpool, 17th April, arrrived in port, at 7.45 a.m. on the 29th instant. Reports that on the 26th instant, during fresh gale from the North-East, with heavy snow, came up with field ice about 40 miles east of Bird Rocks, could not find a passage through. On the 27th, clear weather, steamed about 20 miles north-east and got round the north side of it. Clear passage thence to Quebec.

April 29.—The SS. "Toronto" from Liverpool, 17th April, arrived in port at 8.20 a.m. on the 29th inst., reports had fog from the Banks to the Bird Rocks, where heavy close packed field ice was met with. Was in the ice from 1 oclock Sunday afternoon 26th inst., until 7 a.m. Monday, thus detained 19 hours. No ice thence to Quebec. Saw several vessels in the ice catching seals, which seemed plentiful.

April 28.—Cape Ray reports the arrival there of the Schooner "Magpie" with 900

April 30.—Cape Ray reports. Raining, gale east wind, inwards bark.

April 30.—Amherst Island, Magdalen Islands reports heavy open ice 8 miles wide off that place. SS. "St. Olof" with mails, passengers and cargo from Pictou, N.S., is on the out side of it.

May 2nd.—The SS. "Vancouver," from Liverpool, 23rd April, arrived in Port at

9.30 a.m. reports met no field ice in or outside the Gulf.

May 4th.—Low Point reports the entrance to Sydney Harbour blocked with ice. East wind light close packed ice moving east south east. The steamers "Bonavista" and "Thames" jammed in it fast: got clear of the pack, on the 6th instant.

#### First Outward Transatlantic Steamer.

May 6.—The SS, "Alcides", Capt. Rolls, left port this day bound for Glasgow.

# First Sailing Vessel in Port.

May 7.—The Bark "Nelson," Capt. Sheen, from Barbadoes, 15th April, arrived this day.

Last season the first transatlantic steamer arrived on the 26th April. Same date as the first of this season. The first sailing vessel arrived this season as already stated on the 7th May, and last season the first arrived on the 8th May.

#### Last Steamer Inwards.

The SS. "Greetlands," from Sydney, with coals, arrived upon the 21st November.

#### Last Transatlantic Steamer Outwards.

The SS. "Lake Winnipeg," with general cargo and passengers, left this Port at day light, 24th November, bound for Liverpool.

The American Steam Yacht, left Quebec, 29th November, bound for Halifax and

Boston,

The Steam Schooner "Anna McGee," Capt. J. Caouette, left this Port, 5th December, at 1 p.m., bound for Ellis Bay, Anticosti, to rescue the crew of the Norwegian barque, "Anna," wrecked forty-one miles below that place on the 23rd November. Though unable to go ashore from the schooner, they were successful in getting the crew, consisting of the captain, two mates and eight men, on board, and arrived up on Monday, 14th instant, at 3 p.m.

American tug "Pentagaet" left this port 7th December, but returned in a leak-

ing condition.

# Last Sailing Vessel Outwards.

The ship "America," bound for Greenock, left this port on the 22nd November.

## Straits of Belle Isle.

The first steamer to pass through was the SS. "Cremore," from Hamburgpassed on Tuesday, 30th June. Reports no field ice; some bergs at the entrance to the Straits; some on the Labrador coast, but none on the Newfoundland coast.

The SS. "Escalona," from the Tyne, 13th June, arrived here on the 30th instant. Reports was within seventeen miles of Belle Isle, and found Straits full of heavy

field ice; could not find a passage; came round by Cape Race.

The SS. "Toronto" from Liverpool, 26th June, passed through the Straits. Reports met numerous bergs and heavy Arctic field ice in Straits up to Point Amour,

where ice was close packed.

Fox Bay, Anticosti, 27th June.—The Schooner "Surprise" arrived from the Labrador Coast and Belle Isle. The Captain reports ice very heavy, extending all along the west coast and in the Straits of Belle Isle. The grippe was very prevalent on the coast of Labrador and people had already died from it.

Respectfully submitted,

#### H. J. McHUGH,

Inspector Signal Service.

#### APPENDIX A.

REPORT ON ICE, ETC., IN THE STRAITS OF BELLE ISLE AS NOTED BY THE AGENT AT CAPE BAULD, NEWFOUNDLAND; BELLE-ISLE; FORTEAU; GREENLY ISLAND; CAPE NORMAN AND POINT RICH, NEWFOUNDLAND; FROM DECEMBER, 1890, TO 1ST SEPTEMBER, 1891.

## Belle-Isle.

1890, October 6.—First appearance of snow, two months earlier than last season. Snow again fell, on the 3rd, 4th, 17th, 19th, 23rd, 26th and 29th November.

1890, December 6.—A Newfoundland steamer bound south, last vessel seen in

he Straits.

December 1 to 15.—Variable winds—considerable snow fell during this half of

December, 15.—Slab ice commenced to make, and throughout the remainder of the month there was no ice of any quantity or size, to impede navigation. December 18, 19, 20, 22, 23, 24, 25, 28, 29, 30 and 31 snow fell.

1891, January.—During this month ice made into large sheets and no heavy jam of ice occurred during the month owing to changeable winds; the coldest day, during the month was on the 17th instant, 15° below zero and heavy N.-E. breezes on the 19th, 20th and 21st, being the heaviest for the month.

# Icebergs.

January	2 3 i	n sight
do	5 3	$\widetilde{\mathbf{do}}$
do	9 4	do
do	15	. do

Jannuary, 1st, 3rd, 4th, 12th, 18th, 23rd, 26th, 27th, snow fell in considerable

quantities.

February.—During this month owing to prevailing cold weather the ice made fast at all times for the first part of the month. Mild weather prevailed during the latter part and with W.S.W. winds. A good deal of ice drove out of the Straits on 15 days during the month.

February 20th.—9 A.M., the thermometer registered 22° below zero. This was

the coldest month of the year.

### Icebergs.

Iceberg grounded and remained on White Island, visible nearly all the month. February 1. 3, 6, 10, 11, 14, 16, 18, 19, 22, 27, 28.—Snow fell in small quantities. February 25.—Rain shower: S.S.W. wind.

February 25.—Rain shower; S.S.W. wind.

March.—This month was unusually mild throughout and very little ice until the last week, when E.N.E. winds drove in a fair lot of level-sheet ice.

March 2, 4, 6, 16, 18, 29.—Snow fell.

March 13.—Five steamers to the S.E. sealing.

March 15.—One steamer to the S.E.

March 20.—Two schooners off Quirpon entrance.

March 25.—One schooner to the S.

April.—A good deal of scattered ice in the straits until the 9th, when west winds set in and kept so until the 13th, clearing the straits to the eastward over to Cape Bauld. The sealing schooner "Blooming Queen" called on the 18th, being the first vessel which touched here this spring, reports the sealing steamers as having made good fares, the schooners not doing as well.

March 27.—This schooner, while off White Island, on this date, lost two of her

crew through the capsizing of one of her boats.

April 1.—Both lights started for the season. April 8, 19, 20, 23, 24, 26, 28.—Snow fell.

#### Icebergs.

April	1 to 6	1 ir	ı sight.
do	7	4	do
do	8	6	do
do	9	7	do
do	10	8	do
do	15	2	do
do	16	3	do
do	18	4	do
do	20	$\bar{3}$	do
. do	23		do
pril 3 -	SS "Leonard" and one schooner off Cape Bauld	-	

April 3.—SS. "Leopard" and one schooner off Cape Bauld.

April 4.—Two steamers to S.E.

April 7.—Two steamers to E. April 10.—Three steamers to E.

April 20.—Schooner "Beulah" landed crew of fishermen in Lark Harbour and proceeded south,

May 1 to 6.—Strong east winds; fog and rain. Straits remained full of ice until the 19th, when it moved out by west and south-west winds as far as this island.

May 20—A heavy jam of ice to S. E. Slack ice scattered to the west of here.

May 25.—Some ice from Cape Bauld to Cape Norman. None in sight to E. May 26.—Some ice coming out of the Straits along the south shore—Schr Beulah bound to Lark Harbour.

May 30.—SS. "Nestune" from St. Johns, Newfoundland, anchored at landing. left a fishing crew, reports a good deal of ice to the south.

May 23.—A boat crossed over from Quirpon with the mail.

#### Icebergs.

An average of 40 bergs in sight all the month.

June 1.—Some ice coming out along the Labrador Shore.

June 4.—A good deal of ice coming down out of the Straits west winds.

June 9.—Schooners "Beulah"—" Harmony" and "Columbia" bound south.

June 15.—Ice slack to the east.

June 17.—SS. "Greenland" bound west. 20 schooners in the ice to the west. June 19.—SS. "Kite" bound west.

June 21.—Ice seattered—3 schooners, bound west. 7 schooners to east.

June 22.—Ice heavy. One 2 masted SS. outside eastern edge of ice.

June 24.—13 schooners bound N.

June 26.—S. S. Benagar of Liverpool bound for Pictou anchored off landing. Ice coming out to the east.

June 28.—Wet ice to the west. One schooner anchored in cove.

July 4.—100 schooners bound north; one Thompson liner bound out at 4 a.m.

July 8.—One 2 masted steamer bound in.

July 10.—2 p.m. one Donaldson steamer bound in. 100 schooners to the south

No ice seen after this but an average of 35 Icebergs were noticed on and off this and last month.

August	1	8	Icebergs seen.
do	2		do
do	3	6	do
do	4	5	do

#### Cape Bauld.

This station, being separated from Belle Isle by a few miles only, experienced similar weather throughout the season, but owing to prevailing west north-west winds the ice hugged the shore.

#### Cape Norman.

As at Belle-Isle and Cape Bauld, the first snow fell here early in October, but did not remain; snow again fell in November, 1890. It began to melt in latter part of April.

January 6, 1891.—Slob ice making, the Straits being closed in March, April, and up to the 27th May. Snow fell fifteen days in January, eleven days in February,

six days in March, five days in April, four days in May, one day in June.

May 31.—No ice to be seen.

June 3.—First inward-bound steamer passed.

June 9.—First Outward steamer.

June 17.—Straits full of ice; no open water to be seen.

June 20.—Straits full of ice.

June 24.—No ice seen in the Straits after this date—with the exception of icebergs which continued numerous until September. None after that month.

June 16 to 25.—Twenty-four and thirty icebergs seen daily.

July 1 to 30.—An average of eighteen bergs seen daily.

July 5.—Fifty-five bergs in sight.

July 10.-Fifty-four bergs in sight.

August 1 to 30.—An average of four daily for sixteen days.

September 1st to 30.—An average of two per day during twelve days—the last two being seen on the 30th.

# Forteau and Greenly Islands.

The reports from these two stations are very similar, it will be sufficient to give details of one.

#### Forteau.

November 2, 1890.—First snow fell  $6\frac{1}{2}$  inches during the month,  $20\frac{1}{2}$  inches in December, 10 inches in January, 1891, 35 inches in February,  $17\frac{1}{2}$  inches in March, 4 inches in April, 3 inches in May and 1 inch in June.

The lowest temperature was experienced on February 27th, the thermometer

going to 27° below zero.

	M	aximum.	Minimum.
January, 1891	12th	30°	17th20°
February, 1891	28th		21st-27
March, 1891		40	11
May, 1891		<b>50</b>	30
April, 1891		42	15
June, 1891		60	40
July, 1891	24th	<b>42</b>	10
December, 1890		35	. 7

December 15 1890.—Slob ice covered the fishing grounds: all nets had to be taken up.

January and early part of February, 1891.—Heavy sheet ice covered the straits

6 to 7 inches thick.

February and March.—Heavy ice and bergs from the north.

April.—On to 3rd July straits jammed with ice, with the exception of a few days.

May 29.—One schooner bound east.

June, 3-SS. "Neptune," first steamer from Newfoundland, came from south-east.

#### Cape Ray, Newfoundland.

The first snow fell in December and eighteen days in January; no ice during this month, snow fell fifteen days in February.

February 13.—Slob ice, first formed.

February 14 to 28.—Light ice. Distant and inshore north-west winds prevailed.

March 1 and 2.—Ice moving to south-east.

March 3 to 16—No ice in sight. March 7, 17 and 27th.—Snow fell.

March 17th to 27th.—Light ice in shore and in sight moving south-east.

April 4, 8.—Snow fell.

May 8.—Heavy snow storm with strong north-west winds. The only snow that fell during this month.

No ice seen in April or May.

May 1—First steamer bound for the St. Lawrence passed in 3rd May, three steamers.

Respectfully submitted.

H. J. McHUGH,

Inspector Signal Service.

QUEBEC, December 1891.

APPENDIX "B." THERMOMETER Readings at Belle Isle from December 1890, to April, 1891.

Ď	ЕСЕМЕ	ER, 18	890.	.J	ANUA	RY, 18	91.	F	<b>E</b> BRU.	ARY, 1	891.	. 3	Макси, 1891. А		Apri	PRIL, 1891.			
Date.	9 a.m.	4 p.m.	9 p.m.	Date.	9 a.m.	4 p.m.	9 p.m.	Date.	9 a.m.	4 p.m.	9 p.m.	Date.	9 a.m.	4 p.m.	9 p.m.	Date.	9 a.m.	4 p.m.	9 p.m.
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			rature a.m.							tempe eb., 9				emper ch, 9				emper ril, 9	
	21st, Dec., 9 a.m. 17th Jan., 9 a.m. 20th Feb., 9 a.m. 3rd March, 9 p.m. lighest temperature 19th Dec., 4 p.m. 16th Jan., 9 a.m. 26th Feb., 9 a.m. 8th March, 9 a.m.		rature a.m.	Highest temperat're 13th April, 9 p.m.															

The sign (-) before figures denotes below zero.

MICHAEL COLTON, Light-keeper.

Respectfully submitted,
H. J. McHUGH,
Inspector, Signal Service.

QUEBEC, December, 1891.

# APPENDIX

# TELEGRAPH, SEMAPHORE AND SIGNAL RIVER AND GULF

SOUTH SHORE OF THE

	i				from	<b>-</b>	
Signal Stati	ons. Telegraph Offices.	Light House.	Flag Station.	Semaphore Station.	Marine Miles Quebec.	Telegraph Co. Working L	ines
1 L'Islet	Tel. Office		Flug		41	Great North-Western Co	
2 Rivière du Lou	10 do	Light House.	do	ļ	95	do do	U
3 Father Point.	do	, <b>d</b> o	do		157	dο	
4 Little Metis	<b>d</b> o	તું			197	do	
5 Matane	do	do				do	
6 Cape Chatte	do	do	do	j	230		
7 Martin River.	do	do					• •
8 Cape Magdales 9 Fame Point	ndo	do		]	288 318		
0 Cape Rosier	do	do			339		• • •
Cape Rosier	uo	60	do		าอย	do	• • •
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3 Pointe de Mon	ts do	Light House.	do		224	do do	
4 Egg Island	do	do	do		246	do do	
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Cave Despair	Tel.Office	Light House	Flore		979	Great North-Western C	
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7 Pointe Escumi	nacTel. Office	Light House.	Flag .		450	Dom. Govt. and G.N.W	. Ca
1		<u> </u>	<u> </u>		l	ISLANI	
8 West Point	Tel Office	Light House.	Flag		328	Dom. Govt. and G.N.W.	C
9 South West Po	int do	do .	do		358	do do	. 00
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1 Heath Point	do	do	do		428	do do	
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1 Heath Point 2 Grosse Isle 3 Amherst Island 4 Meat Cove	do Tel. Office do Tel. Office	do Light House Light House	Flag do .		428 467 471 529	do do do MAGDA.  D. Govt., W. U. & G. N. W do do CAPE BRE7  D. Govt., W. U. & G. N. W	7. Co FON 7. Co
1 Heath Point. 2 Grosse Isle 3 Amherst Island 4 Meat Cove 5 Low Point	do Tel. Office do Tel. Office	Light House	Flag do .		428   467   471   529   575	do do do MAGDA.  D. Govt., W. U. & G. N. W do CAPE BRET  D. Govt., W. U. & G. N. W do do	TON TON TOUL
1 Heath Point. 2 Grosse Isle 3 Amherst Island 4 Meat Cove 5 Low Point	do Tel. Office do Tel. Office do	Light House	Flag . do		428   467   471   529   575	do do  MAGDA  D. Govt., W. U. & G. N. W do do  CAPE BRE7  D. Govt., W. U. & G. N. W do do  ST. PAU	7. Co
4 Meat Cove 5 Low Point 6 Main Station.	do Tel. Office do Tel. Office do	Light House	Flag .	Semaphore	428   467   471   529   575   528	do do  MAGDA:  D. Govt., W. U. & G. N. W do CAPE BRET  D. Govt., W. U. & G. N. W do ST. PAU  D. Govt., W. U. & G. N. W	7. Co

C.

# STATIONS, MARINE DEPARTMENT, CANADA.

OF ST. LAWRENCE. RIVER ST. LAWRENCE.

25c, & 1c.   Oct. 28, 79   Mrs. J. B. E. Fortin   L'Islet   L'Islet   Que.   \$50	Rate per ten words and additional words.	Date when Established.	Name of Agent.	Post Office.	County.	Province.	Salary per Annum from Marine De- partment.
Nov. 16, 81. L. T. Piuze.   Rivière du Loup (en bas.)   Temiscoutata   do   50   do   Nov. 17, 79   Jules Martin   Little Metis   do   do   50   do   Nov. 17, 79   Jules Martin   Little Metis   do   do   50   do   Nov. 17, 79   Designatins.   Matane   do   do   50   do   Sept. 19, 79   Trefic Oté   Cape Chatte   Gaspé   do   50   do   Sept. 23, 79   Jean Gauthier   Martin River   do   do   50   do   Oct. 14, 80   James Ascah   Fox River   do   do   50   do   Oct. 14, 80   James Ascah   Fox River   do   do   50   do   Oct. 20, 79   J. F. Sasseville   Cape Magdalen   do   do   50   do   Oct. 20, 79   J. B. Vien   Cape Rosier   do   do   50   do   Oct. 20, 79   J. B. Vien   Cape Rosier   do   do   50   do   Oct. 19, 83   L. F. Faffard   Pointe de Monts.   do   do   50   do   Oct. 19, 83   L. F. Faffard   Pointe de Monts.   do   50   do   Oct. 12, 86   Paul Coté   Egg Island   do   50   Survey   Surve	950 & 1a	Oct 28 79	Mrs J B E Fortin	L'Islet	L'Islet	Que	<b>\$</b> 50
do   Nov. 22, 79   John McWilliams   Father Point   Rimousk   do   50	do	Nov. 16, '81.	L. T. Piuze	Rivière du Loup (en bas).	Témiscouata		50
do	do	Nov. 22, '79.	John McWilliams	Father Point	Rimouski		
Cape   Cape		Nov. 17, '79.	Jules Martin	Little Metis	do		
do		Nov. 5, 79.	P. Desjardins	Matane	Goupó		
Cape Magdalen   do   do   50		Sept. 19, 79.	Tean Cauthier				
do   Oct. 14, '80   James Ascala   Fox River   do   do   50		Oct. 9. 79.	J. F. Sasseville	Cape Magdalen			
Cape Rosier.   Go   Go   So	do	Oct. 14, '80.	James Ascah	Fox River	do	do	
40c. & 2c.   June 1, 83   Dorelas Tremblay.   Port Neuf (en bas)   Saguenay   Que   \$50	do	Oct. 20, '79.	J. B. Vien	Cape Rosier	do	do	50
40c. & 2c.   June 1, 83   Dorelas Tremblay.   Port Neuf (en bas)   Saguenay   Que   \$50	RIVERS	T. LAWRE	NCE.			<u> </u>	1
do   Aug. 15, 83   P. O. Bonenfant   Manicouagan   do   50	Ter v Bre S					1	
do   Aug. 15, 83   P. O. Bonenfant   Manicouagan   do   50	40c. & 2c.	June 1, '83."	Dorelas Tremblay	Port Neuf (en bas)	Saguenay	Que	<b>\$</b> 50
Oct. 12, '86.   Paul Coté   Egg Island   do   50	do	Aug 15 '83	P O Bonenfant	Manicouagan		do	
OF THE GULF.   25c. & 1c.   June 17, '80   James Beck   Cape Despair   Gaspé   Que   \$50	do	Oct. 19, '83.	L. F. Faffard	Pointe de Monts	j	do	
25c. & 1c.   June 17,   80   James Beck   Cape Despair   Gaspé   Que   \$50	do	Oct. 12, 86.	Paul Cote	Egg Island	i	ao	50
Runswick   Runswick	OF THE	GULF.					
Runswick   Runswick				G			
Anticosti Id. viá Gaspé   Que	25c. & 1c do	June 17, '80. May 22, '80.	Auguste Bertrand		do		
Sh.05 & 6c.   Oct.   1,   81   Auguste Malouin   Anticosti Id. viá Gaspé   Gaspé   Que	BRUNSW	ICK.	. 87 %			1	
\$1.05 & 6c. Oct. 1, '81. Auguste Malouin. Anticosti Id. viá Gaspé. Que do Oct. 18, '80. E. Pope. do do do do do do do do do do do do do	40c. & 2c	July 2, '85.	Henry Phillipps	Pointe Escuminac	Northumberland	N.B	\$50
do   Oct. 18, 80.   E. Pope   do   do   do   do   do   do   do   d	ANTICOS	STI.		1			<u>-</u>
do   Oct. 18, 80.   E. Pope   do   do   do   do   do   do   do   d							
Magdalen Id. vid Pictou.   Gaspé   Que.	\$1.05 & 6c.	Oct. 1, '81.	Auguste Malouin	Anticosti Id. viâ Gaspé	Gaspé		1
SLANDS   Sl.   Thomas Gagne   Go   Go   Go   Go   Go   Go   Go   G	· તું	Oct. 18, '80.	E. Pope	12.0			
SLANDS     Slands   Slands     Slands     Slands     Slands     Slands     Slands   S	do	July 27, 81.	Thomas Carrá	do			
\$1.05 & 7c. Aug. 17, '80. A. Le Bourdais . Magdalen Id. viû Pictou. Gaspé . Que do . NOVA SCOTIA.  NOVA SCOTIA.  30c. & 2c. Nov. 7, '81. A. R. MacDonald . Meat Cove, C.B Victoria . N.S. do . Aug. 1, '31. J. G. Peters . Low Point, C.B Inverness . do . \$50  ISLAND.  50c. & 3c. 1890 . S. C. Campbell . North Sydney, C.B . Victoria . N.S NDLAND.	ao	July 20, 61.	I nomas tragne		40	uo	
Nova Scotia   Nov. 7, '81   A. R. MacDonald   Meat Cove, C.B.   Victoria   N.S.   do   Sto	ISLANDS	3					
30c. & 2c.       Nov. 7, '81.       A. R. MacDonald       Meat Cove, C.B.       Victoria.       N.S.         do       Aug. 1, '31.       J. G. Peters.       Low Point, C.B.       Inverness.       do       \$50         ISLAND.         50c. & 3c.       1890       S. C. Campbell.       North Sydney, C.B.       Victoria.       N.S.         NDLAND.	\$1.05 & 7c. do	Aug. 17, '80. June 11, '81.	A. Le Bourdais William Cormier	Magdalen Id. vid Pictou do N.S	Gaspédo	Que do	
ISLAND.         50c. & 3c.       1890       S. C. Campbell       North Sydney, C.B       Victoria       N.S.         NDLAND.	NOVA SO	COTIA.					·
ISLAND.         50c. & 3c.       1890       S. C. Campbell       North Sydney, C.B       Victoria       N.S.         NDLAND.	30c & 2c	Nov. 7, '81.	A. R. MacDonald	Meat Cove, C.B	Victoria	N.S.	
50c. & 3c.   1890   S. C. Campbell North Sydney, C.B Victoria   N.S   NDLAND.	do	Aug. 1, '31.	J. G. Peters	Low Point, C.B	Inverness	do	<b>\$50</b>
NDEAND.	ISLAND.						
	50с. & 3с.	1890	S. C. Campbell	North Sydney, C.B	Victoria	N.S.	
\$1.05&10c, Nov. 3, 82, E. R. Rennie	NDLAND	).					
	\$1.05&10c.	Nov. 3, 82	E. R. Rennie	. Cape Ray		Nfld.	\$50

# APPENDIX No 9.

REPORT OF THE SUPERINTENDENT OF GOVERNMENT RIVER POLICE AT THE PORT OF QUEBEC FOR THE SEASON OF 1891.

Quebec, November, 1891.

The force was further reduced this season to 18 men all told, that the expenditure might be kept within the amount of the revenue collected from the shipping for its support, owing to the great falling off in the number of sailing and other ocean vessels it required strict economy to arrive at such a result. Unless the number of vessels coming to this port annually increases, the number of constables need not be augmented. The principal duty the force is called upon to perform, is to prevent desertion and crimping. I regret to say the mode resorted to by ship masters to obtain seamen to make up their crews thwarts the action of the

Police in the performance of their duty.

That it may be understood how desertion is openly encouraged, I shall endeavor to explain the system adopted here to obtain sailors. A vessel arrives in the Port of Quebec. Soon after a portion of her crew are induced by crimps to desert. Will do so. When this vessel is ready for sea, being short of men, the master calls for a crimp and bargains with him to supply them; the crimp brings men to the shipping office where they are duly shipped and sign the articles, but they fail to go on board the vessel, which has dropped down the stream from her loading berth and only awaits the men to proceed to sea. During this time the crimp has watched his opportunity, secured the required number of seamen from a freshly arrived ship and holds them all ready. The captain who has just lost some men suspects they are in the outward bound vessel, he calls for the assistance of the police: a careful search is made, his deserters are not found, but as soon as the Police return to port, the crimp puts out from some hiding place with his boat and puts the men on board, and the vessel at once proceeds to sea. These last men having replaced the ones who signed articles and did not come on board, as the captain has the right to take substitutes. Owing to searcity of men, blood money, as it is styled, a bonus per man to be paid the crimps supplying them has ranged from \$5 to \$25 each. Cases are reported where the crimps got the bonus money and advance pay of each seamen they shipped, thereby pocketing \$35 to \$40 per man, who were simply stolen from one vessel and put on board another. It is said that two ship captains comparing notes found out that they had actually bought up each other's seamen.

When spoken to about this matter, ship-masters and others appear unable to offer any remedy for this nefarious practice, and I regret to say it has become a custom. Consequently the duties performed by the Quebec Harbour Police have not resulted much in preventing crimping and desertion, and so long as seamen are scarce in all American ports, and the shipping finds no other means of procuring men, and continue to resort to the present system, the Police will be almost powerless.

On the 14th November there being but three or four vessels in port, and no longer any inducements for desertions, eleven constables were paid off, the duties for the rest of the season performed by the four officers, engineer of steamer, the whole being disbanded on the 30th November with the exception of the engineer who will remain a few days longer to lay up the engine, &c., as customary.

I have the honour to be, Sir,

Your obedient servant,

J. U. GREGORY,

Superintendent Quebec Harbour Police. 158

# APPENDIX No. 10.

Statement relating to Wharves under control of Department of Marine on 30th June, 1891.

(Rules established for the Government of Wharves 12th June, 1889.)

Locality.	Wharfinger.	. Date of Appointment.	Remuneration Allowed.	Amount deposited to credit of Receiver General.
Ontario.		1		\$ ets.
Coekburn Island.	Alfred Monck	May 30, 1889.	25 p.c. of collections	41 98
Goderich	Vacant			
Inverhuron. Kingsville.	do		25 p.c. of collections	201 43
Morpeth	Richard Wade	April —, 1885.	25 do	41 76
Rondeau	Richard Wade W. R. Fellows	Dec. 17, 1888.	25 do	40 80
Sault Ste. Marie			\$100 per an. of collections	806 74 20 00
Southampton	Don. Ward	June 4. 1891.	25 p.c. of collections	Nil.
Wiarton.	H. R. A. Eby	Dec. 10, 1890.	25 do	Nil.
				1,152 71
Quebec.				1,102 /1
A	•			
Anse St. Jean	Vacant do			
Berthier.	Chas. Bouffard	. March 24, 1890.	25 p.c. of collections	23 25
Carleton	Jos. Cauchon	. June 4, 1889.	\$50 per an. of collections.	142 70
Cascades. Chicoutimi	Vacant			
Isle aux Grues	Jos. Painchaud	Feb. 17, 1890.		Nil.
Lacolle	B V. Navlor	July 2. 1886.	25 do	18 66
Les Eboulements	Vacant	T. 1. 15 1000	05	7 40
L'Islet Murray Bay	Vacant	Feb. 14, 1890.	25 p.c. of collections	7 40
New Carlisle	John C. Hall	. June 4, 1889.	25 p.c. of collections	258 77
Port Daniel	John Enright	. Sept. 11, 1890.	1850 per an. of collections.	105 28
Pointe aux Origneaux Rivière Ouelle	Vacant			
raivière du Loub	do			
Alphonse de Bagotville.	· do			•
ote. Cecile du Bic	do			
St. Jean d'Orléans St. Laurent d'Orléans				
Tadousac	do			
Trois Pistoles	dο			
				556 06
Nova Scotia.		1		
Arisaig	Vacant			
Avonport.	Robert Shaw	Nov. 23, 1888	25 p.c. of collections	Nil.
Darrington	Vacant			
Bayfield Belliveau's Cove	Edward Kandall	Aug. 25, 1888	. 25 p.c. of collections	83 17 Nil
Broad Cove Marsh.	Vacant	Aug. 20, 1888	. zo do	Nil.
Brooklyn	F. T. Gardiner	Oct. 20. 1882	20 p.c. of collections	
Canada Creek. Cape Cove.	C. E. Eaton	Nov. 23, 1888 Aug. 2, 1889	. 25 do 25 do	14 24 50 94

# STATEMENT relating to the Wharves, &c .- Continued.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount deposited, to credit of Receiver General.
Nova Scotia—Continued.	•			\$ ets.
Chipman's Brook	Jas. Misaner	Nov. 23, 1888.	25 p.c. of collections	10 93
Church Point	Fred. Belliveau	Sept. 15, 1888.		111 10
Cow Bay			105"	2,250 55 Nil.
Delap's Cove	W. R. McCaul.	Nov. 28, 1889.	25 do	Nil.
Digby,	H. B. Short	Jan. 9. 1891.	25 do	573 02
Eagle Head	Nathan Leslie	Jan. 9, 1889.		Nil.
East Bay	Donald McInnis (Ron-	1 15 1000		
Grand Narrows, Victoria Co. do Cape Breton		April 5, 1886. Aug. 25, 1888.	50 do 25 do	Nil. 27 32
	E. A. McNeill	Nov. 6, 1888.	25 do	Nil.
Hall's Harbour	Sydney Roscoe	Nov. 23, 1:88.	25 do	Nil.
Hampton	Judson Foster	Aug. 25, 1888.	25 do	24 52
Harbourville	C. O. Cook	Nov. 23, 1888.		40 30
Maitland, Hants Codo Yarmouth Co	J. W. Raymond	Sept. 5, 1888.	25 do	117 46
Margaretsville	T J Downie	April 14, 1680.	25 do 50 do	35 00 84 31
Meteghan Cove.	H. T. Deveau.			132 01
	Urbain Doucette	Jan. 31, 1883.	20 do	180 28
Militia Point	Alex. McFayden	March 21, 1889.	25 do	5 00
Morden	Wm. Minnis	Nov. 23, 1888.	25 do	20 02
Oak Point	T. E. Bigelow	June 3, 1876.	33g do	302 08
Ogilvie	Thompson Tipping	Nov. 25, 1888.	25 do	3 28
Pickett's Wharf	Andrew Bishop.	Dec. 24, 1884	25 do	44 74 130 97
Pictou Island	Vacant		l	100 01
Plympton	W. K. Smith	Aug. 8, 1890.	25 p.c. of collections	11 28
Point Brulé	David Stevenson	Nov. 23, 1888.	25 do	Nil.
Port George	Jas. E. Slocomb			Nil.
Port Hood	Alex McDougald	July 21, 1890	25 p.c. of collections	142 80
Port Hood Island.	Vacant			142 00
Port Lorne	Samuel Beardsley	Aug, 25, 1888.	25 p.c. of collections	33 55
Salmon River	J. M. Deveau			Nil.
	J. T. Saulnier	Aug. 25, 1888.	<b>25</b> do	25 40
Sheet Harbour, East and West River	M. McFarlane	May 20 1890	25 do	31 14
Tancook Island	Vacant	1	20 (10	91 14
Tracadie	J. M. Hall.	Nov. 6, 1888.	25 p.c. of collections	Nil.
Tusket Wedge	Jas. Cothreau	Feb. 16, 1889.	25 do	Nil.
	Wm. Brown	Feb. 11, 1889.	100	10 01
West Pubnico White Point	N. A. D'Entremont	Jan. 9, 1889.		5 50
winter Committee	Infanta Went	Nos.	25 do	Nil.
New Brunswick.				4,535 69
De des Le	1	Tl. 7 *00=		
	Angus Renaud Vacant		25 p.c. of collections	Nil.
Campbellton	do		25 p.c. of collections.	
Dalhousie.	W. J. Smith	June 27, 1891	25 n.c. of collections	Nil.
Hopewell Cape	Wm. Hamilton	April 9, 1890.	25 do	62 37
St. Louis	M. Barriault			0 53
Duines Edmand Island				62 90
Prince Edward Island.				
Annandale	James Taylor	July 2. 1885	25 p.c. of collections	78 31
Bay View	Joseph Harrington	Oct. 2. 1885.	25 do	16 49
Belfast	Thos. McLennan	July 21, 1890.	25 do	90 74
Brush Wharf		Sept. 18, 1885.	lor 1	138 03
Campbell's Cove			1 <b>25</b> do	Nil.
		.60		

# STATEMENT relating to the Wharves, &c.—Continued.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount deposited to credit of Receiver General.
P. E. Island-Con.				\$ ets.
Chapel Point	Ronald McCormack	Sept. 18, 1885.	25p.c. of collections	30 00
China Point				8 01
Clifton	Wm McKay	Sept. 22, 1886	25 do	7 52
Crapaud and Victoria Pier.				93 65
Georgetown.				68 02
Hickey's Wharf				Nil.
Higgins' Shore.		2000 200, 2000		
Hurd's Point	B. Robblee	Oct. 6. 1888.	25 p.c. of collections	35 02
Kier's Shore	H. S. McNutt	Nov. 3. 1885.	25 do	45 22
Lewis Point.	Jos. A. Macdonald	April 15, 1891.	25 do	86 73
McGee's Wharf		110, 10, 10, 1		00.0
Mink River	Edward Henderson	July 2 1885	25 p.c. of collections	Nil.
Montague, Lambert and	Dawara Hematroom	July 2, 1000.	20 proc or concornant	2.121
Stevens Piers	Peter Keith	May 5, 1890.	25 do	109 92
Murray Harbour	W. Sharam			12 96
Nine Mile Creek	Edward Harrington			Nil.
North Cardigan, Newport.				32 40
Pinette.	Hector D. Morrison	Sept 18 1885		15 00
Pownal.	Alex McRae	Oct. 2. 1885		55 21
St. Mary's Bay.				51 61
Souris.	B. McEachern	June 3. 1884		84
South Rustico, Oyster Ber	i Nie Buenerii	o dire 0, 1001.	20	01
Bridge	Jos Doucette	Oct. 2, 1885	25 do	34 46
Sturgeon River				44 32
Tignish River	Ben Gaudet	Sept. 5. 1888	25 do	Nil.
Vernon River	J. G. McKenzie	Oct. 19. 1885	25 do	97 72
West Point	Vacant			0, 12
Wood Island	M. H. McMillan	May 16, 1889	25 p.c. of collections	17 24
				1 160 49
			'	1,169 42

#### RECAPITULATION.

OntarioQuebec	\$1,152 71 556 06
Quebec Nova Scotia New Brunswick	4,535 69
Prince Edward Island	

Total wharfage dues collected...... \$7,476 78

 $\operatorname{Add}\mathbf{--Fees}$  received by undermentioned Harbour masters in excess of remuneration allowed :—

Harbour Master.	New Richmond, Que	<b>\$</b> 1	50
do	St. John's, Que		
do ·	Cape Canso, N.S		
	Halifax, N. S		50
do `	International Pier, N.S	4	00
do	Yarmouth, N.S.	3	00
do	Chatham, N.B	64	00
do	St. Andrew's, N.B	10	50
do	Nanaimo, B.C	65	90

329 00

Total revenue from Wharves and Harbours..... \$7,805 78

N. B.—With exception of Cow Bay and Digby, wharfingers are not required to forward returns of collections till end of calendar year. This statement only shows amounts received by Department and placed to credit of Receiver-General up to 30th June, 1891. At several wharves marked "Vacant," appointments have been made since 30th June.

## APPENDIX No. 11.

## 54-55 VICTORIA.

Снар. 36.

An Act respecting the Shipping of Live Stock.

[Assented to 30th September, 1891.]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:-

1. This Act may be cited as "The Live Stock Shipping Act."

2. In this Act, unless the context otherwise requires,—

(a.) The expression "Minister" means the Minister of Marine and Fisheries;

(b.) The expression "inspector" means an inspector for the purposes of this Act only;

(c.) The expression "certificate" means a certificate issued under and for the

purposés of this Act only;

(d.) The expression "ship" means any vessel used in navigation; and the expression "ship carrying live stock" means any ship employed in carrying live stock from any port or place in Canada to any port or place out of Canada, not being a port or place in the United States of America, or in Newfoundland, or in St. Pierre or Miquelon, or in Bermuda, or in any of the West Indian Islands, or in Mexico, or in South America.

3. The Governor in Council may make rules and regulations for the health, security and safe carriage of live stock on ships; and such rules and regulations shall be published in the Canada Gazette, and shall have the force of law from the date of their publication or from such later date as is therein appointed for their

coming into force.

4. The Governor in Council may appoint inspectors and determine the remuneration to be paid them out of the fees collected under the provisions of this Act; and any fees collected by an inspector in excess of the amount of the remuneration so determined shall be paid over by him to the Minister of Finance and Receiver General, to form part of the Consolidated Revenue Fund of Canada:

(2.) At any port for which no inspector has been appointed under this Act, the port warden duly appointed by the Governor in Council shall be ex officio the

inspector:

(3.) At any port at which there is no port warden so appointed and for which no inspector has been appointed under the provisions of this Act, the chief officer of

customs at such port shall be ex officio the inspector:

(4.) Every inspector shall, as soon as may be after the thirty-first day of December in each year, furnish to the Minister a written statement of the fees collected by him under the provisions of this Act during such year and of the manner in which he has disposed of them.

5. The Governor in Council may establish a fee to be paid on each head of live stock shipped on any ship carrying live stock; and no officer of customs shall grant a clearance to any such ship with live stock on board until such fee has been paid.

6. Every certificate issued by an inspector shall be in triplicate, one of which shall be delivered to the master or agent of the ship, one to the chief officer of customs of the port from which such ship clears, and one shall be retained by the inspector.

162

7. No officer of customs shall grant a clearance to any ship carrying live stock until he receives the certificate of an inspector, certifying the number of live stock such ship is adapted to carry, as well as the number actually on board for the intended voyage, and that such ship is seaworthy, and that the arrangements for carrying such live stock are approved of by him, and also, if such live stock is carried on the upper or spar deck, that the shelters or fittings are sufficiently strong and substantial to ensure the safety of such live stock for the voyage, and that all the requirements of the rules and regulations at the time in force, respecting the health, security and safe carriage of live stock on ships, have been complied with:

(2.) Every person who sends or attempts to send, or is a party to sending or attempting to send, and every master who takes or attempts to take such ship to sea, without having first obtained the aforesaid certificate, shall be guilty of a misdemeanour; and the ship shall also be liable to a penalty of one thousand dollars, and may be seized and detained by any chief officer of customs, whenever or where-

ver found in Canada until such penalty and the costs of seizure are paid:

(3.) A prosecution under this section shall not be instituted except by or with the consent of the Minister:

(4.) A misdemeanour under this section shall not be punishable upon summary

conviction.

8. When any ship carrying live stock has complied with the foregoing requirements, and obtained a clearance at any port or place in Canada, and, not having on board as great a number of live stock as her certificate allows her for the intended voyage, proceeds to another port or place in Canada to complete her cargo of live stock, the master of such ship shall notify the inspector, before clearing, of his intention so to do; and it shall then be the duty of the inspector at the first port of clearance to notify the inspector at the port at which the ship is to complete her cargo of live stock, of the master's intention, the number of live stock on board, and the number allowed to be carried by the certificate for the intended voyage:

(2.) In such case the ship, upon her arrival at the port at which her cargo of live stock is to be completed, shall not take on any live stock until the accommodation for such additional stock has been inspected and approved of by the inspector of the port, who shall certify that the additional live stock shipped on board such ship does not cause the number on board to exceed the number allowed by the certificate for the intended voyage, and that the arrangements for carrying such

additional live stock are approved of by him:

(3.) No officer of customs shall grant a clearance to any such ship for the additional live stock until he has received the inspector's certificate referred to in

this section:

(4.) Any master of a ship who fails to comply with the requirements of this section, or who sails or attempts to go to sea without having complied with the requirements of this section, shall incur a penalty of one thousand dollars, and such ship shall be liable for such penalty, and may be seized and detained by any chief officer of customs wherever and whenever found in Canada, until such penalty and the costs of the seizure are paid.

9. The master of any ship which proceeds to sea, or attempts to proceed to sea, with a greater number of live stock on board than is allowed by her certificate for the intended voyage, shall incur a penalty of one thousand dollars, and such ship shall be liable for such penalty, and may be seized and detained by any chief officer of customs wherever and whenever found in Canada, until such penalty and the

costs of the seizure are paid.

10. All penalties recovered under the provisions of this Act shall be paid over to the Minister of Finance and Receiver General, to form part of the Consolidated

Revenue Fund of Canada.

11. Nothing in this Act contained shall be deemed to modify or affect in any way the provisions of the Acts thirty-fourth Victoria, chapter thirty-three, intituled An Act to provide for the appointment of a Port Warden for the Harbour of Quebec; thirty-sixth Victoria, chapter eleven, intituled An Act to amend the Acts relating

to Port Wardens at Montreal and Quebec; and forty-fifth Victoria, chapter forty-five, intituled An Act to amend and consolidate the Acts relating to the office of Port Warden for the Harbour of Montreal; or of chapter eighty-five of the Revised Statutes, intituled An Act respecting Port Wardens; but the provisions herein-before contained shall, as respects the ports to which the said Acts respectively apply, be construed as enacted in addition to and not in derogation of the said Acts.

# REGULATIONS RESPECTING THE SHIPPING OF LIVE STOCK FROM CANADA.

Pursuant to the authority vested in the Governor in Council by the third section of the Act respecting the shipping of Live Stock, 54-55 Victoria, chapter 36, intituled "An Act respecting the Shipping of Live Stock," the following Regulations are prescribed for ships engaged in the transportation of live stock from any port or place in Canada to any port or place out of Canada, not being a port or place in the United States of America, or in Newfoundland, or in St. Pierre or Miquelon, or in Bermuda, or in any of the West India Islands, or in Mexico, or in South America.

Interpretation.—In these rules the expression "cattle" means bulls, oxen, cows, and heifers one and two years old.

### APPLICATION FOR INSPECTION.

No. 1. The master, owner or agent of every ship intending to take on board live stock for transportation from Canada, shall, if such ship requires to be inspected under the provisions of the Act hereinbefore mentioned, apply for inspection in writing to the inspector of the port at which the live stock is to be shipped, whereupon the inspector will take the steps necessary to inspect the vessel, and determine whether she is a safe, seaworthy and suitable ship for the transportation of live stock on the voyage intended.

If the inspector approves of the vessel, he should notify the owner, master or agent, that he may proceed to fit up the ship as required by these regulations, but if the vessel has been previously fitted for the transportation of live stock, in a manner not consistent with these regulations, the inspector shall require compliance

with these requirements in all respects, before issuing his certificate.

#### SPACE.

No. 2. Fat cattle carried on the upper or spar deck or any other deck, must be given a space of 2 feet 8 inches clear in width by 8 feet clear in length each, and not less than 6 feet 3 inches in height (but pens for sheep shall be not less than 7 feet in height divided into two compartments 3 feet 6 inches in height each) and in no case shall more than four head of cattle be allowed in each pen except at the end of a row where five may be allowed together—provided, however, that five cattle, each 1,000 lbs. weight or under, commonly known as "stockers," may be carried in a pen instead of four fat cattle. As regards space for sheep, not more than eight or nine sheep will be counted equal to one fat ox, according to the discretion of the inspector. Cows in calf are to be given the same space as fat oxen.

#### DECKS.

No. 3. Cattle shall not be carried on more than three decks; and every deck on which cattle are carried must be provided with sufficient ventilation as hereinafter prescribed.

## UPPER DECK FITTINGS.

No. 4. Stanchions, Wooden.—Stanchions must be of good sound spruce timber, not less than 3 by 5½ inches, placed at proper distances from centres, against 164

ship's rail and secured to the rail by a hook of not less than  $\frac{5}{8}$  inch wrought iron with nut and screw. If the bulwarks are open the foot of stanchions must be secured by filling pieces 2 x 3 inches placed outside of rail stanchions, to which the outside planking shall be nailed, and the whole secured by through bolts and nuts. A piece of 2 x 3 inches or 2-inch plank shall be fastened to outside of stauchion and run up to underneath rail to chock stanchion down. Outside stanchions shall extend up sufficient height to form stanchions for a hand-rail where necessary for the protection of the seamen. If the bulwarks are not open, the foot of the stanchions shall be secured by a bracing of 2 x 3 inch sound lumber from the back of each stanchion. Outside stanchions at top of pen shall be properly secured to fore and aft stringer beams or plates not less than 5½ x 2 inches. Inside stanchions must be placed directly in line without board stanchions, to be set up so that the 5%inch way of the stanchions shall set fore and aft, and properly secured at top to fore and aft stringer beams or plates not less than  $5\frac{1}{2} \times 2$  inches, firmly secured at foot to deck and flooring to keep from lifting.

Stanchions, Iron.—These may be used in place of wooden stanchions and should be not less than 2 inches in diameter, set in iron sockets above and below and

fastened with nut and bolt.

Beams.—Beams or rafters must be of good sound lumber, 2 by 6 inches, suitably placed, to run clear across the ship where practicable. Should any house or deck fittings be in the way, then butt up closely to same. These beams shall be shouldered on the stanchions and made secure with chocks nailed or otherwise properly fastened to stanchions.

Angle-iron Frames.—Angle-iron frames fitted from side to side on top deck, 5

feet apart, may be used instead of wooden stanchions and beams.

Head or Breast Boards.—Head boards shall be not less than  $1\frac{1}{2} \times 12$  inches of good sound lumber, and well secured on the pen side of the stanchions. A double stanchion to secure head-board shall be set up at each end of pen. A bolt of iron  $\frac{1}{3}$ -inch in diameter shall pass through the double stanchions and head-board, secured by a nut and screw. All head-boards shall have holes bored through them at proper distances, to tie the animals.

Foot Boards.—Foot boards shall be of the same material as head boards, properly

nailed to stanchions on the inside of same.

Division Boards. Division boards shall be of 1½-inch x 12-inch sound lumber, fitted perpendicularly and arranged so that they divide the animals into pens of four, or at end of row into pens of five.

Flooring.—Flooring for the deck shall be of sound 1 inch boards, laid fore and aft on scantlings 2 x 3 inches laid athwartships on the deck at 18-inch centres, and

the whole well secured.

It is optional with the owners whether they permit sheathing to be used on their ships with wooden decks, or whether they allow footlocks to be secured to the

deck. But on iron decks it is absolutely necessary (if permanent footlocks are not down) to sheath them before putting down the footlocks in order to fasten same.

Footlocks.—Footlocks shall be of good sound spruce or pine lumber, or hardwood, 1½ x 3 inches, laid fore and aft of ship, properly secured to sheathing or deck, placed 17, 16, 22 and 16 inches apart (the first one distant 17 inches from the trough, poiled when provided with the pine to deck strips and trough), nailed when practicable with 4-inch nails through into deck strips and braced by similar locks placed athwart 18 inches apart and nailed through to deck

Outside planking.—All the outside planking on open and closed railed ships, must be properly laid fore and aft of ship and nailed to the backs of stanchions, and battened, after the 1st November. Nothing less than 11-inch spruce or pine is to be

used for this purpose.

Planking of Shelter Deck to be erected on Upper Decks.—The planks or boards to be nailed on this deck should be not less than 1-inch sound lumber 12 inches wide, laid on purlins, with 4 inches of space between the boards; the space to be fitted with a block 4 x 1 inch at back and front plates or stringers, and at the purlins to give additional support to the second covering, which is to be of boards of the same dimensions, laid over the 4-inch openings of lower boarding.

#### UNDER DECK FITTINGS.

Stanchions.—Stanchions shall be of good sound spruce lumber not less than 3 by 5½ inches, set up at proper distances from centres so that the 5½-inch way of same shall stand fore and aft and jammed in tight between the two decks, properly braced on head and from side to side of ship; this bracing shall be of 2 x 3 inch spruce or pine and be properly butted against each stanchion. Where it is found impracticable to run these braces across ship, by reason of hatches, &c., coming in the way, then they shall be well braced from hatch coamings and from the obstruction, which prevents running braces from side to side. The heads of these stanchions shall be braced fore and aft by 2 by 3 inch pieces well nailed on each stanchion and running fore and aft close up to the lower edge of the ship beams and butted at each end of compartment and against themselves, or chocked in underneath beam and well nailed to heads of stanchions. If upper and lower decks are wood then the stanchions set up between decks may be secured by well cleating to each deck by heads and heels of same.

Head or Breast Boards, Foot Boards, Division Boards, Flooring and Footlocks shall be of the same dimensions as those on the upper deck and fastened in the same manner, and shall have holes bored at proper distances to tie animals.

Troughs.—Suitable troughs whether on upper or under decks shall be formed on the foot-boards about 12 inches wide, when required. Troughs for sheep must be made water tight.

Casing for Steering Gear.—A suitable casing must be placed over the ship's

steering gear when found necessary.

Alley-ways.—Alley-ways between the pens must not be less than two feet wide, except forward and aft, where they may be not less than 18 inches for a distance of 21 feet 4 inches from the end of the ship inwards, and no feed shall be placed or stowed in alleyways.

## VENTILATION.

No. 5. Each compartment containing cattle must have at least four bell-mouthed ventilators, of not less than 18 inches inside diameter, and with tops exceeding 7 feet in height, two situated at each end of the compartment, and must also be supplied with a sufficient number of fans worked by steam to provide good ventilation for the cattle.

No. 6. No cattle shall be loaded along the alley-ways by engine room unless side of said engine room is covered by 1-inch lumber making a 3-inch air-space between.

No. 7. No cattle shall be loaded on hatches on decks above cattle, nor shall any merchandise, freight or food for cattle be loaded on said hatches, but said hatches shall at all times be kept clear, but cattle may be carried on the lowest hatch provided that a space on such hatch of twelve feet square be at all times kept clear and free, and no cattle shall be carried on any part of the vessel where in ordinary course of navigation they would interfere with the proper management of the vessel or would interfere with the efficient working of the boats.

#### MISCELLANEOUS.

No. 8. Convenient and suitable stowage shall be provided under deck for the feed for cattle; but hay to the extent of 50 lbs. for each head of cattle for consumption in the River and Gulf of St. Lawrence may be stowed on deck properly covered, and must be the first hay used. The inspector must be satisfied as to the quality and quantity of food and water provided for the cattle.

and quantity of food and water provided for the cattle.

No. 9. All vessels will carry not less than 4 hogsheads, of over 100 gallons' capacity, for each 100 head of cattle and these shall be filled with fresh cold water before sailing and re-filled as emptied, unless the vessel is fitted with water pipes

suitably placed and fitted with taps for watering the cattle.

No. 10. Shippers of cattle will require to furnish a foreman and attendants to take charge of the cattle on board ship and there shall be one man, including the foreman, for each 25 head of cattle shipped. Shippers are required to notify the inspector at least twelve hours before the sailing of the ship of the name of the foreman to be in charge of their shipment and of the names of the attendants, and must furnish the inspector with satisfactory evidence of their sobriety, experience, ability and general good conduct, and every such foreman and cattle attendant shall sign the ship's articles or agreement before the ship clears on her intended voyage, and be subject to the authority of the master, and the inspector shall see that the eating and sleeping accommodations for the cattle attendants and foreman are as good as the same accomodations provided for the crew of the shp. Every ship's articles or agreement signed by the foreman and attendants shall clearly state the wages to be paid to each. The foreman and attendants must report themselves to the inspector at least six hours before the sailing of the ship.

No. 11. Cattle will be tied with rope not less than 5-inch in diameter, which

shall not be used more than once.

No. 12. False decks on which cattle have been loaded must be removed and the manure and dirt cleaned away before the ship receives another cargo of cattle.

No. 13. The inspector may in case he finds any of the fittings are worn, decayed or appear to be unsound, require the same to be replaced before he clears the vessel. He will also supervise the loading of cattle and see that they are properly stowed and tied, and that all the requirements of these regulations have been complied with.

No. 14. Water condensers shall be on board in good working order and of sufficient capacity to provide eight gallons, every twenty-four hours, of fresh cold water for each head of cattle carried, whether the ship is fitted with water ballast tanks

or not.

No. 15. Live stock shall not be taken on board until the loading of the cargo has been completed unless the consent of the inspector in writing to do otherwise is first obtained.

No. 16. The back of pens are to be lined with one-inch board to the height of four feet, nailed to back stanchions on inside, making the back of the pens flush and smooth, if the inspector deems it necessary.

No. 17. The work throughout must be well nailed and strongly put together,

and to the satisfaction of the inspector.

No. 18. If the ship is not lighted by electric lights, the inspector should see that sufficient ship's lanterns are provided to light between decks, when live stock are carried.

No. 19. Passages must be left so that the scuppers can be reached and kept clean. No. 20. Any dispute arising under these regulations in regard to providing for the health, security and safe carriage of live stok shall be referred to the Minister of Marine and Fisheries, who may decide the matter, or the Minister may refer it to any person considered competent by him and in either event the decision of the Minister or of such person shall be final.

# APPENDIX No. 12.

List of persons to whom rewards have been granted by the Government of Canada, for the year 1891, for gallant and humane services rendered in saving life from shipwrecked Canadian vessels, or by British or Foreign Governments for similar services rendered by Canadian vessels in saving life from shipwrecked British and Foreign vessels for same period.

Manager Manager (Manager Control of the Control of	The second secon		
Names and Designations of Persons.	Nature of Service Rendered.	Date of Service Rendered.	Description of Reward.
M. Heinricks, seaman of the German steamer "Eider."	the "Abbie B" of Windsor,	July 29, '85	\$15 was paid him in 1891 as he could not be traced till then.
Capt. Richard Chirstian, Pat. Christian and Nicholas Chris- tian of the Nova Scotia schr. "Lady of the Lake."	N.S., in 1885. Rescue of 3 men who were in danger of drowning by the capsizing of their boat in New London Harbour, Prince Edward Island, in 1890.	do 18, '90	A silver watch to captain and a binocular glass to each of the men.
<ol> <li>I. Iverson and J. Jerqeusen, seamen of the Norwegian brig "Svea."</li> </ol>	Assisting in the rescue of the master and crew of the "Warren W." of Charlottetown, P. E. Island, in 1887.	Dec. 24, '87	\$7 to Iverson and \$15 to Jer- qeusen.
David Comline, chief officer, Peter Wrangle, boatswain, James McManus, W. Neil and H. G. Jones, able-bodied sea- men of the British steamer "Discoverer."	Humane and generous services to the shipwrecked crew of the "Rowland," of Charlot- tetown, P. E. Island.	· -	A binocular glass to the chief officer, \$12 to boatswain and \$10 to each of the sea- men.
	Humane and gallant services rendered to the master and crew of the bark "James Martin" of Pictou, N.S.		<b>\$140</b> .
Angus McDonald, Aspey Bay, C.B.	(fallant exertions in rescuing a seaman of the Norwegian bark "Marie" in a storm.		A binocular glass.
Charles Denly, Ralph Clark, James Skelly, Wm. Graham and Wm. Aldrige, fishermen of Collingwood.	Rescuing 2 men whose boat had capsized.	Nov. 25, '90	\$5 to each man and a letter of thanks.
Pedro Juan Zaraqosa, Captain, Miquel Slovet and Juan de la Bora, seamen of the Spanish schooner "Joven Clario."			A gold medal to the master \$15 to each of the men.
Capt. Peter Graham, Dr. E. P. McLean, David Fraser, Wat- kin Williams, James McGla- shan and Alcide Proudrot.	Humane and gallant exertions in rescuing 4 of the crew of	1	A binocular glass presented to each one.
Life boat crew of Browver- shaven, Holland.	Gallant exertions in rescuing the Master and crew of the "Dunrobin," of Windsor, N. S., near Browvershaven, Holland.		Gold medal to skipper of boat, and \$80 to crew.
Mr. William W. Clarke, •of Annapolis, N.S.	Gallant exertions in rescuing a man who fell overboard from the tug "Weatherspoon" at night, in Annapolis Basin, Nova Scotia.		A binocular glass.
	168	•	•

List of Persons to whom Rewards have been granted, &c.—Concluded.

Names and Designations of Persons.	Nature of Service Rendered.	Date of Service Renewed.		Description of Reward.
William Funnell, of Gananoque, Ontario.	Gallant exertions in rescuing a boy from drowning, who had fallen into the Gananoque River.		<b>23</b> , '9	0 A silver watch.
Howard Smith, of Cape Sable, Nova Scotia.	Gallant exertions in rescuing a man from drowning whose boat had upset in a rough place.		— '8	ð do
and crew of life-boat at White- head, Nova Scotia.	Rescuing crew of the stranded schooner "Sunbeam," at Whitehead, N.S.		1, '9	0 \$45.
crew of life-boat at Blanché, Nova Scotia.	" Plymouth Rock."		,	0 \$40.
of life-boat at Port Stanley, Ontario.	schooner "E. G. Benedict."			
Mr. Jesse O'Brien, of Green Bay, Ontario.	Dived in 16 feet of water and brought to the surface a boy of eight years, who had been in the water of West Bay, Manitoulin, for 20 minutes.	i	<b>'9</b>	1 Presented with the Roya Humane Society's bronz medal.
barque " Galathea."	Rescued master and six men of the 'brigantine "Louisa Coipel," Yarmouth, N. S., abandoned at sea.			
Jos. Himmelman, of La Have, Nova Scotia, a boy of 10 years of age.	Risked his life in an attempt to save a fellow school boy, who was drowned in La Have River, N.S.		19, '9	1 Royal Humane Society' Testimonial on vellum.
French barque "Emile," of Havre.	Rendered services to the cap- tain and crew of the brigan- tine "Alice," of Windsor, N.S.	İ	•	0.A gold watch to the captain
R. J. Devlin and Walter Dicks, of Ottawa.	Rescued a boy from drowning in the Rideau Canal.	Nov.	2, '9	O Royal Humane Society' Testimonial on vellum.
	The crew of the American		10, '9	O A gold watch presented by the Government of th United States to Captain Mahoney.
Captain E. H. O'Neal, of the "Aldborough."	Services rendered to the crew of the German vessel "Mar- cobrunner," which stranded in October, 1889.	:	— <b>'</b> 8	39 A gold watch with mono gram and portrait awarded by the German Emperor.
Captain R. L. Salter, of the "Marlborough," of Windsor, N.S.	Rescuing crew of American	Mar.	2, '	Gold medal awarded by th President of the United States.

# **APPENDIX**

## Being a Statement relative to the Life-boat Stations

Stations.	Established.	Coxswain.	Number of Crew.	Salary of Coxswain.	Wages of Crew.	Value of Boat.
Blanche, N.S	Sept. —, 1889.	W. A. B. Smith.	6		\$1.50 each drill, twice a month.	<b>\$</b> 575
Cape Sable, N.S	,	Light-keeper	No organ-			• • • • •
Cobourg, Ont	Nov. 7, 1882.	D. Rooney	ized crew.	\$75 p. annum and \$1.50 for each drill.	\$1.50 each drill, twice a month.	575
Collingwood, Ont Devil's Island, N.S.	1885. Re-organized	P. Doherty Fredk. Edward	6 6	do	do do	575 575
Duncan's Cove, N.S. Goderich, Ont		R. E. Monk Wm. Babb	6 6	do do		575 575
Herring Cove, N.S.		James Dempsey.	No organ			
Mud Island, N.S		Jacob Pitman	ized crew.	\$80	:	
Pelée Island, Ont		A. Henning	6	\$75 p. annum and \$1.50 for each drill.	\$1.50 each drill, twice a month.	575
Pictou Island, N.S	Nov. 23, 1889.	D. McLean	6	do	do	575
Poplar Point, Ont	April 20, 1883.	L. Spafford	6	do	do	550
Port Hope, Ont	Nov. 6, 1889.	C. R. Nixon	6	do	do	620
Port Mouton, N.S	Nov, 1889.	J. Maxwell	. 6	do	. do	575 •
Port Rowan, Ont	Oct. 19, 1883.	J. W. McCall.	.} 6	do	. do	
Port Stanley, Ont	June 25, 1885	Wm. Berry	6	do .	. do	575
•		:		: i		
		1	70	Ì		

No 13.

# maintained by the Dominion Government in Canada.

Description of Boat.	Equipment.	Where Built.	Expenditure for Fiscal Year ended 30th June, 1891.	Services rendered during the Season of 1891.
bailing, 25 feet over all, 8 feet beam, Dobbins' pattern. Metallic life-boat, 16 feet keel 5 feet beem	boat-house. Ordinary outfit Full equipment, as required in regulation boat-house.	N.S.  Goderich, Ont.	••••	The American schooner "Plymouth Rock" was totally wrecked on Blanche Island, N.S., on 11th Dec., 1890. The life-boarcrew at Blanche station rescued the captain, cook and 14 fishermen from the wreck.
keel, 6 feet beam. Fishing boats and doreys (not Govt. property). Self-righting and self- bailing, 25 feet over all, 7 feet beam, Dobbins' pattern. do Self-righting and self- bailing, 26 feet over all, 7 feet beam, Dobbins'	do do  Full equipment  Full equipment, as required in regulation boat-house.  do	do Goderich, Ont. New York.	369 00  131 70 230 61	bour in a storm on the 31st
do	do  do  Full equipment and boathouse.  do	Goderich, Ont. Dartmouth, N.S. Buffalo, U.S. Goderich, Ont.	84 98	

## STATEMENT relative to the Life-boat Stations

· Station.	Established.	Coxswain.	Number of Crew.	Salary of Coxswain.	Wages of Crew.	Value of Boat.
Sable Island, N.S	1885.	Supt. Humane Establishment.		of Humane	ntendent and staff Establishment.	es.
Scatterie, N. S	1885. Re - organized, 1890.	Jas. N. Brown	6	\$75 per ann. and \$1.50 for each drill.	\$1.50 each drill, twice a month.	
Seal Island, N.S	1880.	Light-keeper	No organ- ized crew.			
St. Paul's Island, N.S.		Supt. Humane Establishment.				
Toronto, Ont	March 1, 1883.	Wm. Ward	6	and \$1.50 for	\$1.50 each drill, twice a month.	575
Wellington, Ont	do 17, 1883.	H. McCullough.	6	each drill. do .	. do	1,400
. •						
Whitehead, N.S	June 6, 1890.	H. P. Munroe	6	do .	. do	575
Yarmouth, N. S	1886. Re -organized, 1889.	R. Carroll	6	do .	. do	575

## Besides above mentioned Life-boats, Life-

Father Point	1875. E. Chamard		\$5 per annum.	 128
Isle aux Grues	1875. J. Painchard		; do	 128
Kamouraska	1875 R. Leblanc			
L'Islet	1875. J. B. Dussault			
Murray Bay	1875. Achille Gagné.			
Rivière du Loup	1882. D. Raymond		do	
*Rivière Ouelle	1886. G. Mercier		do	
Ste. Anne	1875. P. Lafrance	1	do .	
St. Jean Port Joli	1875. L. D. Babin		. do	
Trois Pistoles	1885. D. Damour			
	]	1	1	<u> </u>

<sup>\*</sup>This canoe was first stationed in 1875, but was removed to Rivière du Loup in 1882, it being considered more serviceable at the latter place. In 1886 a new canoe was built and stationed at this place.

## maintained by the Dominion Government in Canada—Concluded.

·				
Description of Boat.	Equipment.	Where Built.	Expenditure for Fiscal Year ended 30th June, 1891.	Services rendered during the season of 1891.
above, Dobbins' pat- tern; one ordinary life- boat fitted with air-tight compartments; one me- tallic life-boat; one surf boat, and one large	•		\$ ets.	
despatch boat, schooner rigged, equipped for sea going. Self-righting, &c., same as others, Dobbins' pattern, and clinker built ships' life-boat, 21 feet keel.	Full equipment and boat- house.			
Wooden life-boat, 25 feet long, 6 feet beam, fitted with air-tight compartments.  Two surf boats, one 25 ft. over all, 6½ ft. beam, the other 23 ft. long, 4		Halifax, N.S		
ft. 8 in. beam. Self-righting, &c., same as others, Dobbins' pat- tern. do	Full equipment and boathouse.	Goderich, Ont. Buffalo, U.S		The American schooner, "Owa
				seo," of Detroit, Mich., receive assistance from the Wellingtor Ont., life-boat crew on the 30t Aug., 1891. The "Owaseo was found to be in distress an partially disabled.
do	do	Dartmouth, N.Sdo		
canoes are stationed in P	rovince of Quebec, as unc	ler.		
	12 paddles, 2 boat-hooks, painter and boat-house do	Quebec do		
**************************************	do do do do do	do do do do		
*****	do do do	do do		

## SUPPLEMENT

OF THE

TWENTY-FOURTH ANNUAL REPORT OF THE DEPARTMENT OF MARINE BEING FOR THE FISCAL YEAR ENDED 30TH JUNE, 1891.

# REPORTS

OF THE

CHAIRMAN OF THE BOARD OF

# STEAMBOAT INSPECTION

THE

TORONTO, MONTREAL, QUEBEC AND PICTOU

# HARBOUR COMMISSIONERS,

THE PILOTAGE AUTHORITIES.

THE HARBOUR AND SHIPPING MASTERS, CERTAIN PORT WARDENS, TOGETHER WITH STATEMENT OF WRECKS AND CASUALTIES AND LIST OF REWARDS FOR SAVING LIFE,

CHIEFLY UP TO THE

31st DAY OF DECEMBER, 1891.

PRINTED BY ORDER OF PARLIAMENT.



## OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST EXCELLENT MAJESTY 1892

# SUPPLEMENT.

OTTAWA, 20th June, 1892.

Hon. CHARLES H. TUPPER,

Minister of Marine and Fisheries.

SIR,—I have the honour to submit herewith supplement to the twenty-fourth annual report of the department, being for the year 1891, containing the report of the Chairman of Steamboat Inspection, the reports of the harbour commissioners for Toronto, Belleville, Montreal, Quebec, Three Rivers and North Sydney; the reports of the pilotage authorities, of harbour and shipping masters and port wardens, together with statement of wrecks and casualties, and Inspection of Sailing Ships Act.

I have the honour to be, sir,

Your obedient servant,

WM. SMITH,

Deputy Minister of Marine.

## CONTENTS.

Engineer & St.	L 4 m					Page.
Harbour Commission	boatsoners. Report of—		• • • • • • •		• • • • • • • • • • • • • • • • • • • •	142
Montreal						163
Toronto						195
Three Rivers .			. <b></b> .	<i></i>		206
_ North Sydney.				<i></i>		211
Harbour Masters, l	ist of					235
Magnetic Observato	ory, Kingston	<b></b> .		<i>.</i>		294
Masters and Mates	······					148
Merchant Shipping	<del>_</del>					
	pection, West Ontario I					
do	East Ontario	do	•			
do	Montreal	do			· · · · · · · · · · · ·	
do	Quebec	do				
do	Maritime Prov.					
do	Manitoba, Kee	watin	and N. W	. Territor	ries Division.	115
do	British Columb	ıa Div	rision	• • • • • • • •		117
Number of ves	sels added to the Domi	nion .	• • • • • • •	• • • • • • •		125 -
	sels broken or laid up					
Mossand ca	sualties	• • • • •	• • • • • • •	• • • • • • • •		251
Pilotage A 11		• • • • •	• • • • • • • •	• • • • • • •	· · · · · · · · · · · · ·	244
Pilotage Authority,	, report of—					-
do Bran	ch Pilotsyed Pilot Fund			• • • • • • • •		10
do Deca	yed Pilot Fund	• • • • •		• • • • • • • •		17
Quebec	d Pilot Fund	• • • • •			• • • • • • • • • • •	27
do Decaye	a Phot Fund					33
	· · · · · · · · · · · · · · · · · · ·					
Sydney C B	· · · · · · · · · · · · · · · · · · ·	• • • •	• • • • • • • •			41
St. Mary and	Lisaamba					45
County Charle	Liscombe					46
Alberton Dist	rict, P.E.I.	• • •	• • • •			48
Miramichi		· · · · ·				
Bathurst		• • • • •				53
Nanaimo						54
New Westmin	ster					56
Victoria.						58
Port Warden, repor	rt of—					
Montreal	· · · · · · · · · · · · · · · · · · ·				<i>.</i>	. 215
$\mathbf{Quebec} \ldots \ldots$	• • • • • • • • • • • • • • • • • • • •					219
Burrard Inlet						$\dots 222$
Victoria						227
Pictou						228
Sydney, C.B.						229
St. Andrews						230
North Sydney						231
Port Hawkesb	oury					232
Charlottetown						234
onipping and disch	arging of seamen					240

## APPENDIX No. 1.

HARBOUR COMMISSIONERS OF MONTREAL, SECRETARY'S OFFICE, MONTREAL, 19th January, 1892.

WILLIAM SMITH, Esq.,

Deputy Minister of Marine,

Ottawa.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, as the pilotage authority, to transmit, for the information of the Honourable the Minister of Marine and Fisheries, the following report of the pilotage district of Montreal for the year ended 31st December, 1891.

Towards the end of April, Pilots Hubert A. Bélisle, Augustin Naud and Cyrille Bélisle, having reached the age of 65, were brought before the commissioners for examination, as required by the Pilotage Act, when it was decided to be inexpedient to renew

their licenses, and to superannuate them as from the 1st May.

On the 23rd June Pilot Athanase Dufresne, aged 57, tendered his resignation on account of failing health, and his physician certified that it would not be safe for him to continue piloting vessels; in view of which his name was placed on the list of superannuated pilots, as from 1st August.

The four vacancies thus created were filled by the licensing as pilots of Apprentices Arthur Briére, J. S. Labranche, Alexis Perrault and N. Côme Dufresne; the first three

on 28th April and the last on 23rd June.

Pilot George Dufresne, who, at the close of 1890, was under suspension on account of drinking habits, was reinstated on 28th April with a very special caution, the commissioners being satisfied that he had reformed.

The accompanying statement gives the names, earnings, &c., &c., of all the pilots

for the past season.

The total amount of pilotage dues therein shown was received from the following services, viz.:—

British.

Steamships	2.950	66 94 \$52,200	60
Foreign.			
Steamships	. \$2,631 978	75 82	
			57
Total		<b>\$55,811</b>	17

Mr. Cyrille Bélisle, jr., of Deschambault, was granted an apprentice pilot's license on 20th October.

The following list shows the name, age and residence of each apprentice pilot now serving his time under this authority:

No.	Name.	Age.	Residence.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Nadeau, J. B. Naud, Aubert. Bouillé, Narcisse Léveillé, Joseph. Sauvageau, Josephat. Dussault, Napoléon. Perron, Sévère. Arcand, Barthélemi Bellisle, Prudent. Arcand, George. Toupin, Constant. Perrault, George. Bélisle, Arthur. Bélanger, Charles. Pleau, J. E. Hamelin, Théodule. Perrault, Anthyme. Raymond, J. N. Bélisle, Cyrille.	37 31 28 29 29 28 27 25 25 25 21 22 27 22 27	Lévis. Deschambault. do Batiscan. Deschambault. do Lachevrotière. Deschambault. Lachevrotière. Three Rivers. Deschambault. do Lotbinière. St. Anne de la Pérade. Grondines. Deschambault. do do

There were during the season several groundings of vessels, but no one of them was of a serious nature.

On 18th May the s.s. "Athens," while in charge of Pilot Joseph Pleau, went aground just below the new Maisonneuve Pier, within the harbour of Montreal, when approaching her berth there.

An enquiry was held at Captain Robertson's request, when the commissioners, after hearing the evidence, decided that the pilot was deserving of censure in that he had not informed himself as to the approach to this new wharf before assuming charge of a vessel for that part of the harbour; but, in view of the fact that the channel was not as fully buoyed as it will be when the pier is completed, they agreed that the charge be disposed of by a caution and reprimand.

On the 3rd September the ship "Tobique," in charge of Pilot Gédéon Groleau, and in tow of the steam-tug "Lord Stanley," also went aground just below the Maison-

Captain McLaren laid a complaint against the pilot and an investigation was ordered to be held, but owing to the non-attendance of the vessel's officers at the same the case had to be dismissed.

The captain afterwards, by letter from Batiscan, explained his non-appearance, but it was then too late under the law to reopen the enquiry.

On the 14th September the s.s. "St. Asaph," in charge of Pilot Jean Arcand, when coming to anchor took a sheer and went aground to the northward of the channel below the Varennes Curve.

At the enquiry, the commissioners, after hearing the evidence, severely reprimanded the pilot for attempting to anchor in an unsuitable part of the channel, and also for unskilful handling of the steamship a week later, when a large red spar buoy was carried away by the vessel's propellor, as she was leaving the Maisonneuve Pier.

On 13th October Pilot Damase Caien was suspended to the end of the year, for having gone on board the s.s. "Newminster" early on the morning of the 6th October under the influence of liquor, and thereby caused annoyance to the agent and captain, and loss of time in looking for another pilot for the vessel.

The maintenance of the buoys and beacons by the Sincennes-McNaughton line was carried out during the season to the general satisfaction of the commissioners.

The tariff of pilotage is the same as has been in force since 5th March, 1877.

The following is an extract from it:-

Quebec to Montreal, and vice versa.	Upwards.	Downwards.
	\$ ets.	\$ ets.
Pilotage of vessels in tow of steamers, for each foot of draft of water	2 00	2 00
do propelled by steam do do	2 50	2 50
do under sail do do	4 20	2 80
Moving a vessel from one wharf to another in the harbour at Montreal, or from the harbour into the Lachine Canal.	5 00	5 00

The amounts received and expended by the harbour commissioners, as pilotage authority of the district, apart from their receipts and disbursements in trust for the Montreal Decayed Pilot Fund, of which the annual report and statements were sent you on 12th instant, certified by Messrs. Riddell & Common, chartered accountants, were as follows:—

#### Received.

From four pilots, the fee for their license as pilots (\$10 each)\$	40	00
From two apprentice pilots, the fee for their license (\$5 each).	10	00
· _		

## Expended.

To Messrs. Abbotts, Campbell & Meredith, for pro-			
fessional services	\$ 32	00	
To 20 copies Pilotage Act	2	00	
To Theo. Robinson, printing, stationery, &c	21	62	
To Charles Garriepy, services as pilot agent at Quebec	600	00	
do allowance for postage	5	00	
.•		<b>\$660</b>	62

The deficiency of \$610.62 was made up out of the harbour revenue.

I have the honour to be, Sir,

Your obedient servant,

ALEXANDER ROBERTSON,

Secretary.

STATEMENT showing the Number of Branch Pilots for and above the Harbour of Quebec, on the Active List, on the 31st December, 1891, their Age, Residence, Number of Pilotages, Earnings, and whether employed on Special Service or on Tour de Rôle.

Employed on Special Service or on Your de Rôle.		Allan Line. Tour de Rôle (superannuated June 23). Allan Line; member Pilot Committee, '91	Intercolonial Coal Co. Beaver Line; member Pilot Com'ttee, '92	Allan Line. Dominion Line. Thos. Fraser and Co. Tune Role; cautioned and reprimanded	Donaldson Line.	Dominion Line; mem. Pilot Com'ttee, '92 Tour de, Rôle; suspended from Oct. 13 to	entl of year.  Tour de Rôle : mem. Pilot Committee, '91. McLean, Kennedy & Co. Mas. & R. McLea. Tour de Rôle	Harling, Ronald & Co. R. Reford & Co.; President Pilot Committee, 1891: re-elected for 1892.	S. S. "Petunia" to Sept. 11; afterwards on Tour de Rôle for balance of season.	Beaver Line. Tour de Rôle. Doninion Line. F C. Henshaw; Sec. Pilot Committee, '92. R. Reford & Co. Allan Line. Black Diamond Line.
Total Earnings.	ee cts.	1,667 67 191 66 1,333 86		1,463 35 1,360 40 661 40 531 19	1,559 33	1,238 94 448 47	740 81 1,223 13 1,176 42	856 66 1,448 47		1,699 35 628 13 1,241 22 1,453 73 1,096 14 1,602 48 1,529 75
Earnings to inter-mediate ports.	cts.	29.68		53 25		68 25	. 116		224 66	188 93 21 56
Earnings to Montreal.	e cts.	1,667 67 191 66 1,244 19	1,30 1,130 1,681 24	1,463 35 1,360 40 661 40 477 94	1,559 33	1,238 94 380 22	676 81 1,223 13 1,059 79	856 66 1,448 47		1,699 35 628 13 1,241 22 1,266 80 1,074 58 1,602 48 1,529 75
Total No. of trips.		82°88	888	2222	31	ន្តន	2883	228	83	<u> </u>
No. of trips to inter- mediate places.	In. Out	2		- : : : <del></del>	:			- : :	ت د	
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ALEXANDER ROBERTSON,
Secretary.

HARBOUR COMMISSIONERS' OFFICE, MONTERAL, 19th January, 1892. HARBOUR COMMISSIONERS OF MONTREAL,

SECRETARY'S OFFICE, MONTREAL, 12th January, 1892.

WILLIAM SMITH, Esq.,
Deputy Minister of Marine,

Ottawa.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, to transmit herewith, for the information of the Honourable Minister of Marine and Fisheries, the usual statements of (1) Receipts and Disbursements of the Montreal Decayed Pilot Fund for the year ended 31st December, 1891, and (2) Assets belonging to the Fund at 31st December, 1891.

The following is an abstract of the former:-

## Receipts.

2,777	
2,589	94
5,367	09
4,319	21
1,047	88
	2,589 5,367 4,319

During the year three of the pensioners died, namely, Dame L. Narcisse Bouillé (née Hortense Proulx) on 21st February, Dame Eusèbe Toupin on 29th May, and Dame L. Narcisse Bouillé (née Marie Anne Arcand) on 7th October.

On 21st April pilots Hubert A. Belislé, Augustin Naud and Cyrille Bélisle were superannuated on account of age and infirmity, and their names were placed on the list of pensioners as from 1st May.

On 23rd June Pilot Athanase Dufresne made application to the commissioners to be superannuated on account of failing health, and his name was also added to the list of pensioners as from 1st August.

On 28th April the commissioners decided that the pension of all superannuated pilots who had served about thirty years should be increased from \$300 to \$360 per annum, the increase to date from 1st May.

There are now on the list eight old pilots at \$360 per annum, and fourteen widows, of whom eleven receive \$149.32, two \$128.00 and one \$117.32. per annum.

I have the honour to be, sir,

Your obedient servant,

ALEXANDER ROBERTSON,

Secretary.

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EXANDER ROBERTSON, Treasurer, in Account with the Decayed Pilotage Fund.	1891.			do 4 do Ac	10 10	5 do	5 do		do 5 do L. L   do 5 do Nar	do 5 do La Narcisse Bouillé née Hortense Proulx.		do 5. do Jas. Leandre Dussereau, Sorel	do 5	do 5	<del>-</del>	Mar. 6 Riddell	do 24	By Pensions paid to the following for three months ended	Widow Olivier Abelle, Mor	do 1 do Hubert Lemay do	do 4. do Sévère Bellisle, Deschambaultdo Zépherin Boudreau, Three Rivers	4do	4 do	do 4 do	do 4. do Adolphe Life, Boulscan do 4. do Zépherin Mayrand, Contreceur do 4. do Edouard Naud, Sorel	Carried forward
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ALEXANDER ROBERTSON, Treas		Balance from December, 189 Six months' interest due 1st	the city of Montreal consolidated lund, Viz., \$5,000, 5 per cent stock	Poundage collected at Batiscan in 1890 per Collector H. M. Customs, Three Rivers.	Harbour of Montreal coupons, due 5th January—	36-43 = 8 × 65.00 = 5	$81 = 1 \times 60.00 =$ $81 = 1 \times 100.00 =$	= 3 × 30.00 = = 6 × 25.00 = = 6 × 25.00 = = 7 × 25.00 =	$64-172 = 9 \times 20.00$	Thinky dues for May from Collector H M Chatoma	Montreal	Toundage (additional) on SS. "Greetlands "down-	Pilot Honore Dussault, poundage on Bk. "Primus,"	Montreal to Pierreville; draft, 14 feet Pilot Damase Caven mandage on SS "Joseph I.	Colby," from Montreal to Quebec; draft, 5 feet 9	Tri	. 0		Montreal coupons, due 5th July—	Series M, Nes. 154-156 = 3 × \$32.50 = \$97.50 do N do 36-43 = 8 × 65.00 = 520.00	P do $81 = 1 \times 60.00 = 10$ R do $90 & 102 = 2 \times 15.00 = 10$	R do 117-119 = $3 \times 30.00$ The do 217-45-49 = $6 \times 25.00$	F do 164-172 = 9 × 20.00 =	= 00.0z × z = 0z.52 00	Pilot Cléophas Auger, poundage on U.S. steamer	Carried forward
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ALEXANDER ROBERTSON, Treasurer, in Account with the Decayed Pilotage Fund-Concluded.

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e cts.	:	428 71	3 00	0 62	454 66 2 38	459 56	1 21	348 14	ţ	70 62 203 00	320 22			36 36	2 38 1 13 1 17	44 94
	Brought forward	Finity dues for July, from Collector H. M. Customs, Montreal Pilot Liboire Perranit, poundage on American yacht	back Pilot C. Brunet, poundage on American steamer	- # SO	Filot Arthur Brière, poundage on pilotage of H.M.S. "Tournaline," from Quebec to Montreal; draft, 19 feet 1 inch	uity dues for September, from Collector H. M. Customs, Montresl.  Customs, Montresl.	Tron Chicago to New York; draft, 8 feet 8 inches. Trinity dues for October, from Collector H. M. Cus-	toms, Montreal  B. Vanasse, Collector H. M. Customs, Three Rivers. anacount of noundage collected at Three		Trinity dues for November, from Collector H. M.	F. L. King, Master U. S. steamer "Pentagoet" to	Mathieu, Collector H. M. Customs, Sorel, amount of pilotage collected at Sorel, from 30th Novem-	Der, 1630, to 1st December, 1631, as per statement dated 1st December	Charles Garriepy, Montreal, pilotage agent at Quebec, poundage on-	H.M.S. "Tourmaline" down. Ship "Carin" to Batiscan up. do "Progress" do	Interest from Montreal City and District Savings Bank on money at deposit during the year at 3 per cent
	_	To Trinity Mo	back Pilot C.	vid Trinity	Pilo		Trinit	다. 첫 번 없	<b>E</b>		F. I	Jos.	ਨ 'ਚ 	Charle		Int
,	1891.	July 31 To Trinity dues for July,  Montreal  Aug. 13 Pilot Libore Persault	bac 18. Pilot (	31 Trinity	Pilo	do 30 Trinit Oct 19 Pour			<b></b>	do 30	Dec. 3 F. L.	7 Jos. 1	ਨ ਦ 	12 . Charle		31 Interes

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 	By Pensions paid to the following for three months ended  2. Widow Olivier Abelle, Montreal 2. do Hubert Lemay do 2. do David Mathieu, Grondines 2. do Olivier Raymond, Montreal 3. Augustin Naud do 4. do Raise Beaulry, Sorel 4. do Zépherin Boudreau, Three Rivers 4. do Zépherin Boudreau, Three Rivers 6. do David Bouille, Deschambault. 6. do Louard Boulle, Deschambault. 7. do Louard Boulle, Deschambault. 8. do David Boulle, Deschambault. 9. do Lépherin Mayrand, Contrecœur 9. do Zépherin Mayrand, Contrecœur 9. do Zépherin Mayrand, Contrecœur 9. do Edouard Naud, Sorel 9. do George Raymond, Deschambault. 9. do George Raymond, Deschambault. 9. do Hubert A. Bellisle do 9. do Athanase Dufresne do 9. Postage no pensions for six months to 31st December, 9. Balance to January, 1892.	Total	ALEXANDER ROBERTSON, Treasurer.
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		6,438 41	
		Total	Montreal, 31st December, 1891. srified—Riddell & Common, Auditors. Montreal, 12th January, 1892.

# HARBOUR COMMISSIONERS, MONTREAL, TRUSTEES DECAYED PILOT FUND.

## STATEMENT OF THE FUND.

Nos.	Series.					·						\$	cts.
		! {		Λ	<b>I</b> ontre	al <b>H</b> arl	our	Debent	ure	8.			
154-156	. M	(Due	5th	January,	1894)	interest	$6\frac{1}{2}$	per cent	, 3	×	1,000	3,000	00
36-43	. N	( do	5th	July,	1894)	do	$\frac{6\frac{1}{2}}{6}$	do	8	×	2,000	16,000	00
81 20 and 102	. I <b>P</b>	( do	5th	do	1896)	do	6	do	1	×	2,000	2,000	
					1906)	do	6	ďο			500	1,000	
117-119					1906)	ďο	6 5 4	фo	3	×	1,000	3,000	
21 and 45-49					1915)	do	þ	do	þ	×	1,000	6,000	
164-172					1917)	do do	4	do do	9	X	1,000	9,000	
189-190		( ao	ətn	do	1918)	uo	*	uo	2	^	1,000	2,000	•
				City	of M	ontreal (	Cons	solidated	F	ın	d.		
165	.	(Due	1st	July, 1910 Montreal	) inter	est 5 pe	r ce	nt, 50 ×	10	Ю. В	ank at 3 per cent	5,000	00
				est							are per cent	2,119	20
	1	1			Total						. <b></b>	49,119	20

## ALEXANDER ROBERTSON,

Treasurer.

MONTREAL, 31st December, 1891.

We hereby certify that we have examined the entries for the year 1891, as recorded on preceding pages, and have found them to agree with vouchers on fyle; also that debentures and certificates covering the sum of \$49,119.20, as enumerated on statement above, have this day been submitted for our inspection.

RIDDELL & COMMON, Auditors.

MONTREAL, 12th January, 1892.

# APPENDIX No. 2.

# QUEBEC HARBOUR COMMISSIONERS' REPORT AS PILOTAGE AUTHORITY FOR THE YEAR 1891.

(Under 36 Victoria, Chapter 54.)

QUEBEC, 2nd January, 1892.

Hon. CHAS. H. TUPPER,
Minister of Marine and Fisheries,
Ottawa.

Sir,—In compliance with the requirements of the Pilotage Act, 36 Victoria, chapter 54, section 4, I have the honour to submit the following report from the Quebec Harbour Board as pilotage authority for the year 1891.

#### SERVICE OF PILOT STATIONS.

The operations of the year began on the 21st of April by the despatch of pilot schooner No. 2 with eight pilots.

On the 2nd of May sixteen left on schooner No. 5, and on the 16th of same month twenty-one by schooner No. 1.

From 9th May to 25th May fifty-five were despatched to the pilot stations over the Intercolonial Railway.

As usual, all the pilot stations have been provided with pilots during the season through the Intercolonial Railway and the pilot schooners, and the service has been performed to the satisfaction of the commissioners.

#### OLD PILOTS.

Under section 36 of the Pilotage Act, all the old pilots, thirteen in number, who had attained the age of sixty-five and over, were brought before the pilotage authority, before the opening of navigation, in order to establish whether they could or could not continue in the exercise of their duties for the ensuing year. They were all found to be able to perform their duties, and their licenses were consequently renewed for one year.

#### PILOTS SUPERANNUATED.

Two pilots, Jean Chassé and F. X. Dallaire, have been pensioned, at their own request, during the year.

Dallaire had attained the age of seventy-five and had been fifty years in active service, and Chassé was of the same age and had been forty-eight years in active service.

### TRIALS.

Seven pilots have been brought before the pilotage authorities during the season of navigation, six of them on complaints lodged by shipmasters, and one, the grounding of s.s. "Eveline" on White Island, under 45 Victoria, chapter 32, section 4, by the commissioners themselves. In the above cases six were found guilty, and in one the charge was declared not proven.

One of the pilots who was tried during the year (Jean A. Lachance, No. 123) lodged an appeal against the judgment condemning him. The Superior Court dismissed the appeal

the appeal with costs, and sustained the commissioners' judgment.

A statement annexed to this report conveys all the particulars as to the nature of the complaint and the result of the investigation in each case.

#### APPRENTICE PILOTS.

One apprentice pilot, Hermenegilde Paquet, was accidentally killed, about the 25th November last, by falling into the hold of the s.s. "Tiber," Captain Jean Delisle, at Little Bay, Newfoundland.

This leaves eight names on the present list, only six of which are to be counted,

the two others, through their long absence, being considered dead.

As stated in the last report, these six apprentices cannot be admitted to pass their examination before the number of pilots is reduced to 125, as provided for in section 8 of 45 Victoria, chapter 52.

## COMPLAINTS AGAINST PILOTS AND PILOTAGE SERVICE.

During the year three complaints coming under this heading have been lodged—two from masters of vessels, the "Adriane" and "Kommander Svent Foyne," and the third from the Department of Marine, Ottawa, complaining that the pilot of the s.s. "Alert" had demanded \$10 more than the authorized rates, and asking that his conduct in thus asking additional pilotage dues should be investigated.

In the first two cases mentioned, that of the "Adriane" and "Kommander Svent Foyn," satisfactory explanations have been received from the pilot board, and in the matter of the complaint against the pilot of s.s. "Alert," it was decided that the com-

missioners had no jurisdiction.

#### EXAMINATION OF MOUTH OF RIVER ST. CHARLES.

The examination commenced last fall and discontinued on account of the lateness of the season at the mouth of the St. Charles River, where it was claimed that the s. s. "Oregon" had touched or struck some obstruction in the fairway, was resumed this summer, and after the most careful search no obstruction of any kind was found to exist.

At the request of the commissioners a buoy has been placed by the Department of Marine on the edge of shoal Beauport Flats, about one and a half miles below the Louise Embankment, and generally supposed to be the spot upon which the Dominion mail s. s. "Oregon" struck last fall.

### NIGHT SIGNALS.

It is remarkable that up to this year there has not been a night signal for safe entrance to the port of Quebec. The serious accident to the Dominion line mail s. s. "Oregon," fall of 1890, called attention to the fact, and this summer a series of experiments have been made by the harbour commissioners to overcome this drawback, resulting at last in success. A range signal has been established by means of a strong red light on the eastern end of the Louise Embankment, and two similar ones on the battery at top of Dog Hill, which affords a safe guide at night to all vessels entering and leaving the harbour.

### PILOTAGE RATES.

The earnings of the pilots for and below the harbour of Quebec, not having averaged during the past three years the minimum required by law, i.e., the amount of six hundred dollars, in accordance with the provisions of the "Pilotage Act" (section 15 of chap. 80, Revised Statutes of Canada), the commissioners during the month of June re-enacted the by-law allowing the seven and a half per cent increase in pilotage rates. This was sanctioned by His Excellency the Governor General in Council on the 26th day of June, and will remain in force for three years from that date.

#### PERIODICAL EXAMINATION OF PILOTS.

At the request of representatives of the shipping interests at Montreal, the Department of Marine wrote the commissioners at the close of last year as to the necessity of

instituting a periodical examination in regard to the efficiency of the pilots on the active list for and below the harbour of Quebec. After giving this question careful consideration, the commissioners decided that under the present pilotage laws they had no power to make this examination. Correspondence on this subject annexed.

#### DEATHS

One pilot has died during the year, David F. Pelletier. He was thirty-nine years old and had been in active service since 1876.

### DIRECTORS OF THE CORPORATION OF PILOTS.

At their annual meeting, held the 10th day of December instant, the pilots reelected the following directors to their corporation for the ensuing year:—Messrs. Joseph Fortier, Auguste Despres, Laurent Godbout, Joseph Philippe Couillard, Jean Baptiste Tremblay and Jean Baptiste Talbot; and at a meeting of the new board held the following day Mr. Joseph Fortier was unanimously re-elected president.

Annexed to the present report are various statements, not therein alluded to, which contain all the information yearly conveyed to your department by the commissioners

in their capacity of pilotage authority.

I have the honour to be, sir,

Your obedient servant,

JAS. WOODS,

Secretary-Treasurer:

Correspondence re "Periodical Examinations of Licensed Pilots on Active List."

OTTAWA, 22nd December, 1890.

SIR,—The representatives of the shipping interests at Montreal have recently laid before the department, the necessity for instituting a periodical examination in regard to the efficiency of the pilots on the active list for and below the harbour of Quebec. I have to request that this matter may be brought under the notice of the harbour commissioners for their report, and that you will inform me as to the number of pilots on the active list at present of the age of sixty-five years and upwards.

I am, sir, your most obedient servant,

WILLIAM SMITH.

Deputy Minister of Marine.

The Secretary, Harbour Commissioners, Quebec.

HARBOUR COMMISSIONERS' OFFICE, QUEBEC, 19th January, 1891.

WM. SMITH, Esq.,

Deputy Minister of Marine,

Ottawa.

SIR,—In reply to your letter of 22nd ultimo, stating "that the representatives of the shipping interests at Montreal had recently laid before the department, the necessity of instituting a periodical examination into the efficiency of the pilots on the active list for and below the harbour of Quebec."

I am directed to say that the commissioners are of opinion that they have no right as the "Pilotage Authority" to make such an examination, and I enclose herewith a

copy of a letter received from our legal advisers confirmatory of this decision.

I remain, sir, your obedient servant,

JAMES WOODS,

Acting Secretary-Treasurer.

QUEBEC, 5th January, 1891.

JAMES WOODS, Esq.,

Secretary-Treasurer, Quebec Harbour Commissioners, Quebec.

DEAR SIR,—I am in receipt of your favour of the 3rd inst., and have carefully perused the "Pilotage Act" with a view of advising the commissioners as to whether they have the power to order a periodical examination of pilots under their jurisdiction, and of withdrawing their branches from such of the pilots as should, upon examination prove to be incompetent.

The powers of the harbour commissioners in the premises are contained in the Revised Statutes of Canada, chapter 49, section 15, and in so far as the matter under inquiry is concerned, are covered by sub-sections (a) (f) (i) and (j). These sections read

as follows:—

Subject to the provisions of this Act or any Act for the time being in force in its pilotage district, every pilotage authority shall have power from time to time, by by-law confirmed by the Governor in Council, to do all or any of the following things within its district, that is to say:

(a.) To determine the qualification in respect of age, time of service, skill, character

and otherwise required of persons applying to be licensed as pilots.

(f.) To make regulations for the government of the pilots licensed, and the masters and mates, if any, holding certificates from such pilotage authority, and for insuring their good conduct and constant attendance to an effectual performance of their duty, on board and on shore, and for the government of apprentices, and (elsewhere than in the pilotage district of Quebec) for regulating the number of apprentices.

(i.) To provide for the compulsory retirement of licensed pilots having attained the age of sixty-five years, subject to the provisions contained in section thirty-two of this

Act.

(j.) To provide for the compulsory retirement of licensed pilots proved on oath before the pilotage authority to be incapacitated by mental or bodily infirmity, or by habits of drunkenness before attaining the age of sixty-five years.

I understand sub-section (a) to be limited to the determining of the qualifications of persons applying to be licensed in the first instance or for a removal of license after

attaining the age of sixty-five years, as provided in section 32 of the Act.

Sub-section (f) empowers the commissioners to make regulations for the government of the pilots licensed, and for insuring their good conduct and constant attendance to and effectual performance of their duty, on board and on shore. It appears to me that a periodical examination of the qualifications of the pilots could be ordered by bylaw, as being regulations for the effectual performance of their duty, nevertheless, the question is not free from doubt.

Sub-section (j) of course provides for certain specific incapacities, but the enforce-

ment of the section requires the passing of a by-law.

It is possible that by-laws covering all these points have been passed by the commissioners, but as I am not informed upon this point, I mention the fact to avoid an

uncertainty as to the course to be followed.

The vague nature of the representations of the Montreal Shipping interest leaves one in some doubt as to the cause of their complaint. If it be mental or bodily infirmity, or habitual drunkenness, the case is clearly covered by such section (j) If it be the age, that is covered by sub-section (i) If it be ignorance or general incapacity not coupled with specific vice, I am in some doubt whether after a pilot has been once licensed the commissioners have power under sub-section (f) to take away that license.

I remain, yours truly,

GUSTAVUS G. STUART.

STATEMENT showing the Number of Pilots for and below the Harbour of Quobec on the Active List, on the 31st December, 1891; the Number who Retired, struck off the Active List or Died during the Year; the Number Temporarily Suspended; the Number who were unable to Serve; the Number in charge of the Government Steamers, &c., &c.

Casualties and Remarks.		To his relief since 20th August.	On pension from 15th March.	op op	One of the Directors, re-elected. On his p-nsion.	Allan Line, pilot.	Sick during 39 days.	Black Diamond Line.	Allan Line.	do Master of S. S. "Miramichi."	One of the Directors, re-elected.
Number of Pilotages effected.	Моуакев.	00444	404	w O 4 0	000	m 64 6	N 63 65	404.	4 00 00 01	200	40488
er of Pile effected.	Outwards.	4-644	404	408%		4 II o	0 60 10	4 <sup>2</sup> 1∞ .	4420	17,	00444
Numb	Inwards.	40004	40.4	404	*00	4 II °	0 4170	2112	0 <b>4</b> 5	11.	4047070
Residence.		St. Valier St. John, Orleans Quebec Ste. Fetronille, Orleans St. John, Orleans	Garthby, WolfSt. Laurent, Orleansdo	Quebec Cacouna Green Island	Quebec.	St. Laurent, Orleans	Lauzon, Lévis St. Paul's Bay	St. John, Orleans  Quebec  St. John, Orleans	do Crane Island Trois-Pistoles St. Michel. Bellechasse	do do Quebec	Lauzon, Lévis St. John, Orleans do do do
Age.		75 73 73	525	23.34 24.55	3368		885	288	2262	22.22	28824
Name.		Régis Ménard Joseph Pouliot Jean Dugas Édouard Genest Joseph Dick	George Audet dit Lapointe François Dallaire David Bouffard.	Antoine Lapointe. Jean Chasse François Dumas. Gilbart Beilbarecom	Jos. Phil. Coullard Julien Dion.	Antoine Gobeil	Victor Demers Joseph Plante	Louis Thivierge Charles Francis Brown. Paul Páquet.	Georga Toulot Georga Dornand David Danour Charles Vézna	Numa LachanceAnnibal Baquet	o oceph oravier Auguste Couillard Després Jean-Bte, Pouliot, Jean Gobeil Joseph Páquet
	<b>Мит</b> рет.	H0845	<b>∞</b> ∞	\$21£	127	122	186	ន្តន្តន	រ <b>ង</b> នន	887	******

STATEMENT showing the Number of Pilots for and below the Harbour of Quebec, &c.—Continued.

Casualties and Remarks.		Kansa Line. Suspended to 1st September, 1892. Dominion Line. Inspector of Government light. One of the Directors, re-elected. Dominion Line. Master of Saguenay station. Master of S. S. "Tiber." Employed by a collier. Allan Line. Thomson Line. Employed by a collier. Captain of S. S. "Druid." Allan Line. Captain of S. S. "Druid." Employed by a collier. Allan Line. One of the Directors, re-elected. Allan Line. Gaptain of S. S. "Druid." Allan Line. One of the Directors, re-elected. do
Number of Pilotages effected.	Movages.	
er of Pil effected.	.abrawtuO	34084440808484040a8800840440H810000000
Numbe	.abrawnI	00004rv440rv00rvrv04r04848rvr0114rv088000r
Residence.		Quebec. St. John, Orleans Guebec. St. John, Orleans St. Laurent, Orleans St. John, Orleans St. John, Orleans St. John, Orleans Guebec. St. John, Orleans St. John, Orleans Guebec. St. John, Orleans Guebec. St. John, Orleans St. John, Orleans Guebec. St. John, Orleans Guebec. St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans Guebec St. Michel, Bellechasse do do do do do do do do do do do do do
	Age.	\$\$\frac{1}{2}\$
Name.		Louis Edmond Morin  Moise Lachande  Achille Damour  Cyrille Lapointe Joseph Puliot  Joseph Pouliot  Laurent Godbout  Adeline Pouliot  Bart. Thos. Chouinard  Laurent Godbout  Adeline Pouliot  Bart. Repin dit Lachance  Damine Eugene  Jos. Pepin dit Lachance  Joseph Pouliot  Bart. Repu dit Lachance  Joseph Pouliot  Nazaire Curodeau  Nazaire Curodeau  Nazaire Curodeau  Nazaire Curodeau  Nazaire Curodeau  Nazaire Curodeau  Napoléon Rioux  Jean Delisle  Ray. Baquet dit Lamontagne  Fra. Xav. Lamarre  Moise Pouliot  Paul Gobell.  Charles Rymond  Victor Vézina  Louis Honorius Lachance  Louis Robert Demers  Joseph G. Dupil  Jean-Bte. Tubot  Joseph G. Dupil  Jean-Bte. Tubot  Joseph Fortter  Joseph Fortter
Number.		\$

	Employed by a conter.  Black Diamond line.  Captain of pilot schooner No. 2 all season.  Captain of ss. "Greatland."  Allan line.  Thomson line.	Died on the 4th June. Donaldson & Ross line. Employed by a collier.  Allan line. Sick during 22 days. Dominion line.	Master of Red Island lightship.  Master of Red Island lightship.  Employed by a collier.  Master of pilot schooner No. 1.	Master of ss. "Polino."  Donaldson & Ross line.  Master of pilot schooner No. 5.  Under suspension till 1st August.
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400000400044	3400000000	+O4×44×44	O 4 4 2 2 4 4 2 1 2 1 1	440470700704
		,, ,, ,,	<u> </u>	<del>-</del>
St. Michel, Bellochasse St. Laurent, Orleans Montreal Mourteal Moutes St. John, Orleans Trois-Saumons St. Michel, Bellechasse Quebec, Gobolin Lévis St. John, Orleans	St. Joseph, Levis Ste. Joseph, Levis Bienville, Levis Ste. Luce, Rimouski Quebec St. John, Orleans St. Michel, Bellechasse St. John, Orleans St. Pétronille Orleans	Journal Levis Quebec. St. John, Orleans Notre-Dane, Levis St. John, Orleans St. Laurent, Orleans Quebec. Ste. Anne Lapocatière Ste. Pétronille, Orleans.	Trois Pistoles Cap St. Ignace. St. John, Orleans do Ste. Luce, Rimouski. Ste. Petronille, Orleans. St. Michel, Bellechasse. Notre-Dame, Levis.	Ste. Luce, Kimouski St. Lucent, Orleans St. John, Orleans St. Michel, Bellechasse. Quebec L'Islet St. Jean Port Joli Notre-Dame, Lévis
		re-	sse.	
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al, Bent, Ont, Ont, Onless Orless I, Bell I.	Lévis Lévis Rin Orles Orles	hevis Orlegi Orlegi Liap	oles gnace. Orles Rim nille, I, Bel	nt, Orles Orles J, Bel do Port, L
St. Michel, Bellochasse. St. Laurent, Orleans Montreal. Lau.con, Lévis Lau.con, Orleans Trois-Saumons. St. John, Orleans St. Michel, Bellechasse. Juebec. Bienville, Lévis. St. John, Orleans	Monureal. St. Joseph Bienville, Ste. Luce, Juebec St. John, St. John,	Lauzon, Lévis. Juebec. Juebec. Juchis, Orleans. St. John, Orleans. St. John, Orleans. St. Laurent, Orleans. St. Laurent, Orleans. St. Laurent, Orleans. Ste. Refrontile, Orleans.	s. Pist St. Ig Sc. Ig Cohn, dd Luce, Petro Petro Wiche re-Dan	Ste. Luce, Kimouski St. Laurent, Orleans St. John, Orleans St. Michel, Bellechasse douebec L'Islet St. Jean Port Joli Notre-Dame, Lévis
St. Jan. Lan. Lan. Lan. Lan. Lan. Lan. Lan. L	<u> </u>	K. S. S. S. S. S. S. S. S. S. S. S. S. S.	SON SON SON SON SON SON SON SON SON SON	Not Not Not Not Not Not Not Not Not Not
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Ande Lapo Pepin Ile Gr Voël ariste ariste Aroclbo Couill	Trefficer Pare Lav Sans Noe	The Day of the Control of the Contro	ias T.  e. Co. Illetie. Is Phi sonave onave Bail Riou tave Otion.	us Jou abrece achan Pouli Laro Lac udrea Koen Koen
Cyrille Audet dit Lapointe. Joseph Lapointe Pierre Pepin dit Lachance. Théophile Gourdeau. Jean Evariste Adam Alfred Larochelle. Théophile Corrivaau. Elizar Godbout George Coulllard Després	Incoule Federal art Lactance. Adoille Treffé Simard Jean-Bte. Patoine Narcisse Lavoie Joseph Emilio Couillard Adélard Sansterre Adélard Sansterre Onésime Noël	Japican Daniargeon David F. Pelletier. Tos. FrsXav. Pernier. Cous Honoré Lapierre. Coush Honoré Lapierre. David Arthur Bouffard lean Théophile St. Laurent Jacques Georges Dugas. Joseph Yictor Gourdeau.	Louis alias Trefflé Delisle Jean-Ble. Couillard. Gus. Pelletter Jos. alias Philéas Langlois Nazaire Delisle J. E. Bonaventure Lavoie. Adjutor Baillargeon. Sanuel Rioux Chs. Octave Clavet Paul Lachance.	Arcaduus Jouvin. Léon Labrecque. Paul Lachance. Joseph Pouliot. Joseph Larochelle. Adjutor Lachance. Fra. Gaudreau. Arthur Koenig. Eugène Auctil. David Dumas.
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1.			
Number of Pilotages effected.	Casualties and Remarks.	Donaldson & Ross line.  Absent part of the season.  Employed by a collier part of the season.  Employed by Dominion line.	Under suspension from 21st July, to 1st June, 1892. Employed by a collier part of the season. Employed by a collier all the season.
otages	Movages.	○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○	H 23 23 45 80
Number of Pilotages effected.	Outwards.	よろうよびらてらちょうもようのより以よりらみょよもよるの	18244
Numbe	.abrawaI	なちょうびちょよようちょよよしょるのうりひょうようかっちゅ	225724
	Residence.	St. Laurent, Orleans St. John, Orleans Lislet do Lislet Go St. John, Orleans Guebec. Ste. Pétronille, Orleans St. Taurent, Orleans St. Taurent, Orleans St. Laurent, Orleans St. Laurent, Orleans St. Laurent, Orleans St. Laurent, Orleans St. John, Orleans St. John, Orleans Green Island St. John, Orleans Green Island St. John, Orleans St. John, Orleans Berthier. St. John, Orleans Berthier. St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans St. John, Orleans	St. John, Orleans St. Michel, Bellechasse do St. Paul's Bay St. John, Orleans
	Age.	£8888888888888888888888888888888888888	ខន្ទន់ខ្ល
	Name.	Joseph Lachance Paul Pkquet. Alphonse Pouliot Elzear Normand. Jean Bernier Joseph Paquet Joseph Paquet Joseph Paquet Joseph Patura Joseph Vezina. Joseph Vezina. Joseph Vezina. Fred. Boulfard Jules Asselin Prudent Marmen Lucien Lachance Lucien Lachance Affred Dion Camille Bernier Moise Boult Affred Boult Affred Raymond Affred Raymond Joseph H. Talbot Loseph H. T	Joseph Emilien attas Enile La- chance Alphonse Asselin Edmond Larcchelle Joseph Plante
	Number.	822882888888888888888888888888888888888	<del>*</del>

JAMES WOODS, Secretary-Treasurer. HARBOUR COMMISSIONERS' OFFICE, QUEBEC, 2nd January, 1892. 888 Paul *alias* Napoléon Pouliot Arthur Doiron. Adélard Bernier 3223

#### QUEBEC HARBOUR COMMISSION.

STATEMENT of Trials held, during the year 1891, before the Quebec Harbour Commissioners, under the authority of the Pilotage Act, 36 Vic., chap. 54, and 45 Vic., chap. 32, sec. 4.

Names of Pilots Tried.	Nature of Complaints.	Date of Trials.	Result.
Nazaire Curodeau	Causing a collision between barques "Ferdinand" and "Canova," on the		Not proven.
Emile Lachance.	For having, on the 1st June, grounded the s.s. "Eyeline" on White Island.	July 3 & 21	the 1st June, 1892.
Joseph Gravel	For having caused a collision between s.s. "Thames" and barque "Stralsund."	Aug. 13 & 20	Found guilty. Condemned in costs of case.
Moïse Lachance	For having caused the s.s. "Bengar" to ground on White Island reef, on the 15th August.	Sept. 3	Found guilty. Suspended to the 1st September, 1892.
Jean A. Lachance	For causing brigantine "Buda" to collide with breakwater.	do 24	Found guilty. Fined \$10 and costs.
	For causing barque "Jane" to collide with breakwater.		costs.
Laurent Larochelle	For having caused the s.s. "Bjorgvin" to touch on a reef near Goose Island, on the 15th October.	Oct. 29	Found guilty of an error of judgment; but the ship having received no damage, was only condemned in the costs of case.

Certified,

JAS. WOODS, Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE, Quebec, 2nd January, 1892.

## QUEBEC HARBOUR COMMISSION.

LIST of Apprentice Pilots acting immediately under the Quebec Harbour Commissioners' Pilotage Authority, on the 31st December, 1891.

No.	Names.	When	indentured.	Remarks.
3 4 5 6	George Dugal Ernest Nolet Adélard Vézina Jean-Baptiste Pouliot Joseph Thivierge Leonidas Lachance. Eudore Langlois FrsXav. Eustache alias Wm. Doiron	May do do do	11, 1871	It is stipulated in the indentures of those apprentices that they will not be admitted to pass their examination before the number

Certified,

JAS. WOODS, Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE, Quebec, 2nd January, 1892.

#### QUEBEC HARBOUR COMMISSION.

MEMORANDUM REGARDING THE OPENING AND CLOSING OF NAVIGATION AND THE FORMA-TION OF ICE IN THE HARBOUR OF QUEBEC, FOR THE YEAR 1891.

Schooner "Maria Stella," with firewood from lower parishes, arrived in port the 29th March

The ice in the tidal basin and wet dock broke up on the 27th March, and schooner "Diver" left her winter quarters.

The River St. Charles and Orleans ice broke up and cleared on the 20th April.

Steamboat "Canada," of the Richelieu and Ontario line, arrived in port the 27th April.

The first ocean steamer, s.s. "Sardinian," arrived on the 27th April, and the second, the s.s. "Toronto," on the 29th April.

The first ship, barque "Nelson," arrived in port 7th May. The last ocean mail steamer, s.s. "Circassian," left port the 18th November.

The last freight steamer, s.s. "Greetlands," left port the 30th November. The last sailing vessel, barque "America," left port the 20th November.

The tug steamer "Pentagoet" arrived from Montreal the 3rd December.

On the 17th of December both the River St. Charles and the two basins were frozen over.

JAS. WOODS,

Secretary-Treasurer.

HARBOUR COMMISSIONERS' OFFICE, QUEBEC, 2nd January, 1892.

#### REPORT OF THE DECAYED PILOT FUND OF QUEBEC FOR THE YEAR 1891.

Quebec, 31st December, 1891.

Sir,-I have the honour to forward herewith a statement of the receipts and expenditure of the Decayed Pilot Fund of Quebec for the year 1891; also a similar statement of the accounts of the Corporation of Pilots for the present year.

The total receipts of the Corporation of Pilots for the year amounted to \$113,850.33 and the total expenditure to \$21,338.09, leaving a net balance of \$92,512.24 to be distributed between 146 practising pilots, giving a net dividend to each of \$633.34.

One hundred and thirty-four foreign vessels paid \$17,247.73. Seven hundred and thirty-seven British vessels paid \$96,602.60.

I have the honour to be, sir,

Your obedient servant,

F. X. DION,

Secretary-Treasurer

WM. SMITH, Esq., Deputy Minister of Marine, Ottawa.

STATEMENT of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, during the year 1891.

RECEIPTS.	\$	cts.	\$ ets.
To Balance of 1890 Percentage on contributions of Pilots. Interest on investments Interest, Savings Bank	3,169 8,139 3,073 58	56	14,441 27
EXPENDITURE.			
By Pensions. Relief Sundry expenses Salaries Deposit in Savings Bank Balance on hand		33 25 00 00	14,441 27
PILOTS RELIEVED BY THE FUND.			
David F. Pelletier, died 4th June, 1891		66 67	33 33
Amount paid to each during the year from 1st November, 1890, to the 1st November, 1891.—Paid from 1st January, 1891, to the 31st December, 1891.			
Twenty Pilots at \$100.			
Frédéric Bernier, died 7th March, 1891. Thomas Duprés Marcel LeBel Laurent Larochelle. Hilaric Jouvin Pierre Lapierre. Gabriel Lachance. François Noël. Jean Pouliot. Joseph Pepin Laurent Tremblay François Vézina J. Bte. Bernier, died 1st April, 1891. George Sansterre. Thomas Simard, died 4th August, 1891 Dominique Girard Louis Dugal J. Bte. Talbot Jean Chassé, superannuated 15th March, 1891 F. X. Dallaire do do	100 100 100 100 100 100 100 100 100 40 100 70 100 100 100 6	73 000 000 000 000 000 000 000 0	1,782 28
Eight Pilots at \$92.			·
Dominique Verreault. Louis Fontaine Isaïe Marticotte Pierre Lemieux, died 25th February, 1891 Edouard Labrèque François Thivierge Jean Coulombé, died 11th September, 1891 Julien Dion, arrears. do year	9: 9: 2: 9: 9: 7: 2:	2 00 2 00 2 00 2 00 9 39 2 00 2 00 9 50 5 00 0 00	683 89
90			

Statement of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—Continued.

PENSIONERS AT THE EXPENSE OF THE FUND—Continued.	\$ cts.	\$	ct
Seven Pilots at \$84.			
rançois Godreau flovis Anctil. braham Després tlexis Vézina s. Oliver Leclerc, died 17th November, 1891. Bte. Paquet, died 1st June, 1891 tmable St. Laurent.	84 00 84 00 84 00 84 00 87 96 49 00 84 00	556	9
Two Pilots at \$82.			
oseph Lavoie vide Dick	82 00 82 00	164	. (
Three Pilots at \$80.			
X. Corriveau lançois Pelletier antoine Roussel	80 00 80 00 80 00	240	• (
One Pilot at \$76.			
X. Ménard, died 14th March, 1891	28 08	28	. (
Three Pilots at \$73.			
rierre Charest. éandre Raymond	73 00 73 00 73 00	219	
One Pilot at \$47.			
ames Forbes.	47 00	47	•
Widows of Pilots.			
Twenty-three Widows at \$58.			
Vidow of J. Bte. Dion.  do Charles Brown.  do Louis Joseph Lavoie  do Charles Pouliot.  do Louis Laprise.  do Maximin Caron.  do Alexis Pelletier.  do Pierre Pepin.  do Alex. Vaillancourt.  do Magloire Délisle.  do Edouard Marcoux  do Charles Bernier.  do Paul Langlois  do Alexis Délisle  Charles Bernier.  do Paul Blouin.  Delierre Rep. died 26th November 1890.	58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00 58 00		

STATEMENT of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—Continued.

PENS	SIONERS AT THE EXPENSE OF THE FUND—Continued.	\$ cts.	\$ ets
	Widows of Pilots—Continued.		
	Eighteen Widows at \$55.		
Widow of do do do do do do do do do do do do do	Pierre Ruelland. Paul Larochelle. Joseph Raymond. Jean François Lamarre. Robert Demers Pierre Laprise Michel Morin F. X. Delisle. Michel Guénard. Barthélemi Lachance. Hubert Dumas. Cyprien Langlois Jean Lavoie Pierre Gourdeau (M.C.), arrears. do do on account. F. X. Lachance Joseph Morency. Narcisse Forgues. Pierre Lemieux, superannuated 25th February, 1891.	55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00 55 00	070, 070
			972 28
Widow of do do do do do do do do do do	Fourteen Widows at \$54.  Michel Fournier Paschal Dick Pierre Gourdeau (A. F.) Bénonie Normand Damase Babin Amable Genest, arrears do year. Frs. Rioux. Nicholas Fortin. Gabriel Plante Eustache Doiron Joseph Lapointe J. E. Adam J. Bte. Paquet, superannuated 1st June, 1891 Edouard Demers.	54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00 54 00	<b>751 5</b> 0
	Thirteen Widows at \$52.		
Widow of do do do do do do do do do do do do do	Félix Caron David Cinq-Mars Jean Giroux Pierre Gourdeau (A.N.) Joseph Dupil Pierre Curodeau J. Bte. Tremblay Magloire Mercier Louis Crépault, arrears do on account Célestin St. Pierre Alexis Roy Antoine Boucher Vital Charest.  Thirteen Widows at \$50.	52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00 52 00	676 <b>0</b> 0
337°.3			
Widow of do do do do do	Edouard Chevalier, died 3rd March, 1891 Thomas Dick. Dennis Glynn Wm. Irvine, arrears do year. Fabien Langelier.  30	16 67 50 00 50 00 12 50 50 00 50 00	

Statement of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—Continued.

PENS	SIONERS AT THE EXPENSE OF THE FUND—Continued.	\$ cts.	\$	cts
2 1110				
	WIDOWS OF PILOTS—Concluded.			
Tr	Thirteen Widows at \$50—Continued.			
Widow of do do do do do do do	J. Bte. Laroche.  Henri Noël. A. Lavoie (L.M.). Frederick Simpson Joseph Simpson Pierre Ross, arrears. do year.  Amable Fournier, arrears do on account.  Julien Langlois.	50 00 50 00 50 00 50 00 50 00 12 50 50 00 12 50 37 50 50 00	64:	1 67
	Thirteen Widows at \$48.			
Widow of do do do do do do do do do do do do do	Germain Caron, on account.  Jean Dion Jean Pelletier C. F. Koenig Ovide Lachance. L. Langlois (E.D.) Antoine Michaud, arrears. do on account. Pierre Normand, died 7th March, 1891 David Petitgrew, arrears do year Benjamin Pineau. John Simpson, died 15th November, 1890 Jos. Levesque, arrears. do year Frs. Côté.	24 00 48 00 48 00 48 00 48 00 48 00 12 00 16 80 12 00 48 00 48 00 2 00 12 00 48 00 48 00 48 00	53	4 80
	Five Widows at \$40.		00	1 00
Widow of do do do do do	Paul Blouin. Célestin Côté. P. Desrosiers, arrears do year F. X. Lachance. Edouard Tourgeon	40 00 40 00 10 00 40 00 40 00 40 00	01	0.00
	Six Widows at \$34.		21	0 00
Widow of do do do do do	f Jacques Dandurand André Keable Guillaume Morency Pierre Rouleau Henri Verreault David Pelletier, superannuated 4th June, 1891	34 00 34 00 34 00 34 00 34 00 13 90	18	3 90
	Ten Widows at \$32.			
Widow of do do do do do do do do do do do do do	f Fabien Caron  Magloire Côté, arrears do year Antoine Fortier L. Langlois (A R.), arrears do do year Thomas McNeil Antoine Raymond George Simard, on account Louis Thivierge. Alfred Turgeon Alexis Vézina	32 00 8 00 32 00 32 00 32 00 32 00 32 00 32 00 32 00 32 00 32 00 32 00		

STATEMENT of Moneys received and disbursed by the Corporation of Pilots for the Decayed Pilot Fund of Quebec, &c.—Concluded.

PENSIONERS AT THE EXPENSE OF THE FUND—Concluded.	\$ cts.	\$ cts
TWELVE CHILDREN.		•
David Charest, infirm (1), arrears.  do do year  Hil. Couillard do (1), arrears  do do on account  Thos. Boutin do (1).  P. Toussaint do (1).  F. Dupuis do (1).  N. Fortin do (1), on account.  Joseph Jahan do (1).  P. S. Laprise (3)  Isaac Forbes, infirm (2).	3 75 15 00 18 75 11 25 15 00 15 00 7 50 15 00 37 48 27 48	181 21
RECAPITULATION OF PENSIONS.		9,368 13
20 pilots at \$100.  8 do at 92.  7 do at 84.  2 do at 82.  3 do at 80.  1 do at 76.  3 do at 73.  1 do at 47.	1,782 28 683 89 556 96 164 00 240 00 28 08 219 00 47 00	
23 widows at \$58.  18 do at 55.  14 do at 54.  13 do at 52.  13 do at 50.  13 do at 48.  5 do at 40.  6 do at 34.  10 do at 32.  115 widows.  12 children at \$15, \$12.50, \$10.	1,167 56 972 28 751 50 676 00 641 67 534 80 210 00 183 90 328 00	9,368 13
STATEMENT OF FUND.		
Moneys loaned	53,352 71 4,300 00 232 56	57,885 27
To be deducted: Arrears of pensions due at this date		224 63
		57,660 64

F. X. DION,

Secretary-Treasurer.

Quebec, 31st December, 1891.

We, the undersigned, certify to having made a minute examination of the books and accounts of the Decayed Pilot Fund of Quebec, and of having found them correct.

VICTOR VÉZINA THÉOPHILE ST. LAURENT Auditors.

THOS. BOISSINOT, Accountant.

F. X. Dion in current account with the Corporation of Pilots of Quebec, to the 31st December, 1891.

RECEIPTS.	\$ cts	. \$ c
Po Balance of 1890	717 45 500 00	
Customs, Montreal. do Three Rivers. do Chicoutimi do Tadousac. do Escoumains do Sorel.	54,015 66 1,351 75 523 13 184 67 97 14 2,975 48	
Received on account National Bank \$ 139 20 Paid on loan 108 50  Pilotage collected at Quebec	30 70 54,671 80	- 113,850 3
To Fines. Lost time	240 00 1,220 88	1,460 8
EXPENDITURE.		116,528 6
By Schooners' expense	1,854 59 368 88 2,201 83 2,471 66 405 73 1,708 07 611 67 505 90 600 00 320 00 225 00	
Indemnity for the Saguenay station. Schooners' shares Pilotage refunded for difference of water. Decayed Pilot Fund. Salaries of employees  Reserve fund Dividends	520 00 34 90 7,959 86 1,550 00	21,338 ( 500 ( 94,080 (

F. X. DION, Secretary-Treasurer.

QUEBEC, 31st December, 1891.

We, the undersigned, certify to having made a minute examination of the books and accounts of the Corporation of Pilots, Quebec, and of having found them correct.

VICTOR VÉZINA,
THÉOPHILE ST. LAURENT,

Auditors.

THOS. BOISSINOT, Accountant.

## APPENDIX No. 3.

REPORT OF THE PILOTAGE AUTHORITY OF ST. JOHN, N.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

Office of the Pilotage Authority,
District of St. John, 8th January, 1892.

Sir,—I have the honour to hand you herewith the annual returns of pilotage for this district, for the year ending 31st December, 1891.

I have the honour to be, sir,

Your obedient servant,

J. U. THOMAS,

Secretary.

## RECEIPTS AND EXPENDITURE for Year ending 31st December, 1891.

	Amount.	Total.
Receipts.	\$ cts.	\$ cts
Licenses to 32 pilots, at \$5	160 00 60 00 1,794 49 2 50 27 50 256 05	2,300 54
Expenditure.	[	
Pensions to 4 pilots.  do 6 widows.  do 2 children.  J. A. McMillan, stationery, &c  Auditing accounts for 1890.  Office rent, 1 year.	485 00 512 00 40 00 24 10 25 00 100 00	
Interest on deposit in Dominion Savings Bank.	800 00 256 05	2,242 15
By balance		58 39
Total		2,300 54

RETURN of Vessels arriving at the Port of St. John, paying pilotage, for the Year ending 31st December, 1891.

	Number.	Total.
Schooners Brigs and brigantines. Ships. Barks and barkentines. Steamers Amount of pilotage received.	314 24 20 103 66 529	\$ cts
British.  Schooners. Brigs and brigantines. Ships. Barks and barkentines. Steamers.	102 18 16 69 52	
Amount of pilotage received	257	14,076 50
Foreign.		
Schooners. Brigs and brigantines. Ships. Barks and barkentines. Steamers  Amount of pilotage received.	212 6 4 34 14 270	9,394 43

RATES of Pilotage in force 31st December, 1891, for the Pilotage District of St. John.
ON ALL SAILING VESSELS.

Inward—1st District.  2nd do  3rd do  Outward—To Partridge Island  Down the bay (not compulsory).	1 75 do do 2 25 do do 1 25 per foot.
Transporting—100 tons and under	2 00 3 00 4 00

#### ON ALL STEAMERS.

Inward—1st District		2 00 2 50 3 00 1 75 2 75	per foot do do per foot do	draught of do do	water.
Transporting—100 tons and under	•••••			\$2 00	

Pilots Licensed for the Pilotage District of St. John, for the Year ending 31st December, 1891.

Name.	Age.	Residence		Remarks.
Thomas Traynor	38	St.John, N. I	B	
S. Rutherford.	59	do		
Edward J. Fletcher	64	do		
Jos. Doherty	45	do		
J. L. C. Sherrara	57	do		
James Doyle.	55	do		
Henry Spears	40	do		
John Thomas	43	do		
James Murray	50	do		
Henry Thomas.	60	do		1
John Sproul	55	do		
Richard Scott	40	do		
Patrick Conlin	41	do		
James Reed.	45	do		
John Spears	42	do		ł L
Charles Daley.	55	do	.,,	
William Lahey	62	do	- 7.	
Richard Cline.	66	do		
Jas. McPartland	57	do		
Jas. S. Spear	46	do		
T. J. Stone	38	do	• • • • • • • • • • • • • • • • • • • •	!
Jas. E. Mantle.	45	do	• • • • • • • • • • • • • • • • • • • •	1
William Quinn.	44	do	• •	1
Philip G. Dordy	51	do		
William Miller.	40	do	• • •	
Alfred Cline	34	do		
William Scott.	35	de	• •	1
Bartholomew Rogers	34	do		
James Bennett	34	do		
Martin Spears	34	do		
Robert Thomas	50	do	• •	
John McAnulty.	52		ĽŔ	Licensed for Musquash only.

J. U. THOMAS, Secretary.

St. John, N.B., 31st December, 1891.

## APPENDIX No. 4.

## REPORT OF THE HALIFAX PILOTAGE COMMISSIONERS FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

HALIFAX, N.S., 9th January, 1892.

DEAR SIR,-I beg leave to transmit for the information of the Department the annual returns of the Pilotage authority of the District of Halifax, viz. :-

Statement of Receipts and Expenditure.

Statement of Superannuation Fund.

Statement of Net Earnings of Pilots.

Return of Vessels Inward, British and Foreign.

Return of Vessels Outward, British and Foreign.

List of Licensed Pilots.

Respectfully, &c.,

Your obedient servant,

J, TAYLOR WOOD,

Secretary and Treasurer.

A. 1892

## STATEMENT of Receipts and Expenditure for the Year ending 1891.

Expenditure.	\$	cts.
'o Paid auditor for 1890	30	00
Secretary's salary for 1890	600	00
Office rent, fuel and taxes	332	
Printing, cleaning office and sundries	126	
Surplus at Cr. of Pilotage Fund	4,624	00
Receipts.	5,712	80
By Cash on hand, January 1, 1890	735	87
Dominion 4 per cent stock.	1,000	
Deposit Savings BankOutward pilotage (on vessels having no pilots).	1,842	
Outward pilotage (on vessels having no pilots).	1,120	
5 per cent commission Interest on 4 per cent Dominion stock	973	
Interest on 4 per cent Dominion stock	40	00
	5,712	80
By surplus at Cr. of Pilotage Fund	4,624	40

E. and O. E.

J. TAYLOR WOOD,

Secretary.

#### STATEMENT of Superannuation Fund.

	\$	cts
By Cash, Savings Bank, January 1, 1891 Special deposit, Union Bank, January 1, 1891 Cash, Union Bank, January 1, 1891	3,468	66
Special deposit, Union Bank, January 1, 1891	915	
2 ner cent collected during 1891	123 463	
2 per cent collected during 1891. Interest, Savings and Union Banks.	143	
Less—Paid family late Pilot Smith	5,113	77
10 00	90	00
Cr.	5,023	77
By Balance, Savings Bank, December 31, 1891	3,590	04
By Balance, Savings Bank, December 31, 1891	1,137 296	
· · · · · · · · · · · · · · · · · · ·	5,023	77
Increase for the year	518	78

E. and O. E.

## J. TAYLOR WOOD,

Secretary.

RETURN of Vessels entered Inward at the Port of Halifax, N.S.,, from 1st January to 31st December, 1891, subject to compulsory pilotage dues.

Schooner.	Brigantine.	Brig.	Barque.	Ship.	Steamer.	Tonnage.	Amount of Pilotage dues
124	119	4	18	3	389	595,189	\$ cts. 12,398 50
			FOF	REIGN.			•
13	2	0	189	1	91	89,731	2,025 62
137	121	4	207	4	480	684,920	14,424 12

Return of Vessels entered Outward at the Port of Halifax, N.S., from 1st January to 31st December, 1891, subject to compulsory pilotage dues.

Schooner.	Brigantine.	Brig.	Barque.	Ship.	Steamer.	Tonnage.	Amount of Pilotage dues
8	19	3	27	3	391	585,298	\$ cts. 6,397 42
			FO	REIGN.		<u>'</u>	
6	1	0	189	1	90	90,796	1,129 60
14	20	3	216	4	481	676,094	7,527 02

#### LIST of Pilots of the Port of Halifax.

umber	Name.	Residence.	Ag
1	John Fleming	Ketch Harbour.	7
2	William Fleming	Halifax	-
3	James Holland	Duncan's Cove	
4	William Baker.		
5	Bernard Gallagher		
ŏ	Daniel Martin	Ketch Harbour	
7	Joseph Reno		
8	Patrick Haves		
ğ	Hugh Munroe		
1ŏ	Jeremiah Holland.	Duncan's Cove.	
îĭ	Edward Bayers		
12	James Hanrahan	Ferguson's Cove.	
13	Wm. Beazley.	do	
14	John Haves	Halifax	
15	James Spears		
16	John Beazley	Halifax	
17	Charles Glazebrook		
18	Charles F. Martin		
<b>1</b> 9	William White	Ferguson's Cove.	
20	Thomas Haves	Herring Cove.	
21	Thomas Reno		
22	Charles Martin		
23	Henry Lattee		
24	John Johnson.	Rear Cave	
25	James Conway.		
26	James Fleming	Kotah Harbour	

Total net earnings of pilots for 1891, \$17,899.97, and \$688.46 net earnings of each man.

J. TAYLOR WOOD,

Secretary.

Halifax, 31st December, 1891.

## APPENDIX No. 5.

REPORT OF THE PILOTAGE AUTHORITY FOR THE DISTRICT OF PICTOU FOR THE YEAR ENDED 31st DECEMBER, 1891.

PORT OF PICTOU, N.S., 31st December, 1891.

Sir,—I have the honour to submit to you the pilotage returns for this port, for year ending 31st December, 1891.

Regulations are the same as when last reported.

Pilot No. 5 found employment on shore, therefore did not make use of branch license during season.

Commissioners had not occasion to meet in session during season just past.

I am, sir, your obedient servant,

W. H. NOONAN, Secretary, P.A.P.D.

RECEIPTS and Expenditures of all monies received by or on behalf of the Pilotage Authority in respect of pilots or pilotage.

RECEIPTS.	\$	cts.
Received pilotage dues as per statement do from 11 pilots, renewing bonds do from Capt. Bacquet (license) Balance due secretary	2,780 11 40 45	89 00 00 47
Expenditure.	2,877	36
Paid pilots for pilotage do secretary's salary. do office rent and fuel, remitted, for 1891 Balance due secretary from last year	2,589 200	39 00
Balance due secretary from last year	87	97
	2,877	

#### Memorandum of Earnings of Pilots for 1891.

No.	Name.	Amou	nt.
1	Alex. T. Powell	<b>\$</b>	cts.
	James Fraser	61	00
4	Bryant Rodgers Wm. A. Cooke	424	8 00 1 99
5	Angus McDonald Henry H. Powell		6 00
7	Chas. A. Cooke	515	
8	Geo. W. Powell Danl. S. Smith	112	00 3 22
10	Danl. McLeod	114	1 00
11	Angus Smith	406	65
	Total	2,589	39

## PILOTAGE Dues for season ending 1891.

Total amount received for pilotage dues for season ending 1891	\$ (	ets.	\$	cts.
Of this amount:—		• • •	2,780	89
Received from steamships	1,791			
Received from sailing ships	989	66	0.700	00
Of this amount:— Received from British ships	2,233	79	2,780	89
Received from British ships Received from foreign ships	547		0.700	90
		-	2,780	89

Certified Masters—Amable Bacquet, steamship "Miramichi." Certified mates—Nil.

## APPENDIX No. 6.

REPORT OF THE PILOTAGE AUTHORITY FOR THE DISTRICT OF SYDNEY, C.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

NORTH SYDNEY, C.B., 28th January, 1892.

SIR,—I have the honour of enclosing returns of the pilotage authority of Sydney for the past year showing arrivals at the different ports in the district, the number of vessels that have arrived which have paid pilotage, the amount paid by British and foreign vessels, the masters licensed, and the names of the different pilots with their ages; also account of receipts and expenditure and statement of account of the pilotage authority, from which you will notice \$300 has been withdrawn from the amount in deposit bearing interest.

I have the honour to be, sir,

Your obedient servant,

W. PURVES,

Sec.-Treasurer, P. A. of North Sydney.

WM. SMITH, Esq., Deputy Minister of Marine, Ottawa.

NAME and Age of every Pilot for the District of Sydney, C.B., for the year 1890.

Νο.	Name.	Age.	No.	Name.	Age.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	John Brown John Curran John Curran John Petrie Con. Mullins D. McGillvary W. Ratckford J. Cann J. Mullins T. Shannahan A. Ratchford J. Fraser J. McGillvery A. McNeil H. D. McGillvery J. D. McGillvery J. Carroll, jun	61 53 40 41 48 47 50 41	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	G. Brown L. Connell J. Carroll. D. Petrie J. McNeil P. Burke J. Shannahan P. Young. W. Brown. T. Ratchford G. Townsend J. B. McGillvary T. Lyng. J. Fraser Thos. McNeil. J. T. Laffin	34 34 38 38 39 38 39

STATEMENT of Arrivals paying Pilotage and Pilotage received in the District of Sydney, C.B., during the year 1891.

#### PORT OF SYDNEY.

Class of Vessels.	No.	Tonnage.	Amount.
British steamers Foreign do British sailing vessels. Foreign do	4	76,880 7,986 6,885 385	\$ cts
Total tonnage	125	92,136	
British vessels			2,113 00 231 00
Total pilotage			2,344 00
PORT OF INTERNATIONAL MINES  British steamers Foreign do British steiling vessels	. 89	111,807 6,965 2,907	
British sailing vessels Foreign do  Total tonnage		121,798	
British vesselsForeign do			3,485 00 342 00
Total pilotage			3,827 00
PORT OF VICTORIA MINES.  British steamers.  Foreign do  British sailing vessels.  Foreign do  Total tonnage.	. 112	31,934 2,992 9,980 399 45,305	1 010 0
British steamers	50 4 . 112	2,992 9,980 399 45,305	1,252 00 408 50
British steamers Foreign do British sailing vessels. Foreign do  Total tonnage.	112	2,992 9,980 399 45,305	408 5
British steamers. Foreign do British sailing vessels Foreign do  Total tonnage.  British vessels Foreign do	112	2,992 9,980 399 45,305	408 5
British steamers Foreign do British sailing vessels. Foreign do  Total tonnage.  British vessels. Foreign do  Total pilotage.	. 450 4 . 112	2,992 9,980 399 45,305	408 5
British steamers. Foreign do British sailing vessels. Foreign do  Total tonnage.  British vessels. Foreign do  Total pilotage.  PORT OF NORTH SYDNEY.  British steamers. Foreign do	. 4 50 4 . 112 	2,992 9,980 399 45,305 	408 5
British steamers. Foreign do British sailing vessels. Foreign do  Total tonnage.  British vessels. Foreign do  Total pilotage.  PORT OF NORTH SYDNEY.  British steamers. Foreign do British sailing vessels. Foreign do	. 4 50 4 . 112 	2,992 9,880 399 45,305 	1,252 00 408 50 1,660 50 3,987 00 1,177 50

#### RECAPITULATION.

Ports.	No. of Vessels.	Tonnage.	Amount.	
North Sydney Victoria International Sydney	341 112 122 125	155,991 45,305 121,798 92,136	\$ cts. 5,164 50 1,660 50 3,827 00 2,344 00	
Totals	700	415,230	12,996 00	

#### MASTERS LICENSED.

No.	Names.	Class.	Vessel.	Amount.
2 3 4 5 6 7 8 9	P. Lachance D. Fraser J. Fraser J. B. Barlow C. E. Ormston J. McPhail H. W. Gould. A. Richardson	do do do Schooner Steamer do Schooner Steamer	St. Pierre Polino. Coban Bonavista Newfold M. Millard Cacouna Thornholm Cyrene Harlan E. Stewart. Total	\$ cts. 20 00 20 00 20 00 20 00 20 00 10 00 20 00 10 00 10 00 20 00 10 00

## STATEMENT of Receipts and Expenditure, Pilotage Authority of Sydney, C.B., 1891.

RECKIPTS.	\$ cts.	8	cts
Licenses and bonds Boats  Masters' licenses  Total pilotage	96 00 12 00 190 00 12,996 00	13,294	00
Exprediture.	10.017.00		
Paid pilots by collectors do collectors do relief fund do office parts and feel	12,217 00 643 00 136 00		
do books and printing do books and printing	45. 00 150 00 27 17		
do telegrams and postage	14 10 100 00	13,332	27
Excess of expenditure		38	27

Dr.	STATEMENT of account, Pi	lotage A	uthority	of Sydney, C.B., 1891.	Cr.
		\$ cts.			\$ cts
May 10	Widow Daley	20 00 20 00 20 00 20 00	Dec. 31	Relief collected, 1891 Interest on deposit Balance Withdrawn from deposits	136 00 16 00 4 20 300 00
	Pilot Doyle	50 00 25 00 20 00		withdrawn from deposits	300 00
Aug. 19 Nov. 10		20 00 10 00 20 00 10 00			
Dec. 4	do Madore	20 00 10 00 10 00			
	Exchange Refunded pilots Over-expenditure. Balance last year	7 14 12 00 38 27 798 79			
Dec. 31.	Pilot Mullins	25 00			
1892.		456 20	<u> </u>		456 20
Jan. 1	Balance brought down	4 20		On deposit	300 00

W. PURVES,
Secretary-Treasurer.

NORTH SYDNEY, C.B., 28th January, 1892.

## APPENDIX No. 7.

PILOTAGE RETURNS FOR THE PILOTAGE DISTRICT OF ST. MARY'S AND LISCOMBE, IN THE COUNTY OF GUYSBOROUGH, PROVINCE OF NOVA SCOTIA, DOMINION OF CANADA, FOR THE YEAR ENDING 31st DECEMBER, 1891.

Pilot No. 1, EDWARD QUINN.

		,				
Name of Ship.	Rig.	Place of Registry.	Tonnage.	Inward.	Outward.	Total.
Daisy J. G. C.	Barquentine	Dominion	465 30 40 525	\$ cts.  11 00 2 10 2 80 14 00	\$ cts. 13 00 2 80 16 00	\$ cts 24 00 2 10 5 60 30 00
	Pilot No	. 2, John Byrnes	•			
Gazelle. Moonlight. Dominion	do	do	253 33 97	2 31 4 00	9 00 2 31	9 0 4 6 4 0
						17 62
	Pilot No. 3	, Alfred McDan	IEL.			
Hutchen BrosGazelle	Barquentine	Dominion	492 253	7 00		13 0 7 0
Committee						20 0

#### WILLIAM PRIDE,

Secretary to the Commission.

To the Department of Marine, Ottawa.

## APPENDIX No. 8.

PILOTAGE RETURN FOR THE PILOTAGE DISTRICT OF THE COUNTY OF CHARLOTTE, N.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

St. Andrew's, N.B., 31st December, 1891.

SIR,—Annexed please find pilotage returns for the district of the county of Charlotte, N.B., for the year ended 31st December, 1891.

I am, sir,

Your most obedient servant,

C. E. O. HATHEWAY,

Commissioner and Secretary.

Wm. Smith, Esq.,
Deputy Minister of Marine,
Ottawa.

PILOTAGE RETURNS for the District of the County of Charlotte, N.B., for the year ended 31st December, 1891.

Licensed Pilots.	Age.	Residence.	District licensed for.
Cline, Wellington Boyd, Joseph Boyd, John Britt, Patrick	50 years. 56 do 64 do 59 do	Parish of West Isles do Campobello do Dufferin Town of St. Andrew's	County of Charlotte. do do do

#### Pilot Boats licensed.

Pilot schooner "Frederick Taylor," 121 tons, Joseph Boyd, master.

Amount of Pilotage collected by Pilots for current year.

Name of Pilot.	British Vessels.	Foreign Vessels.	Total.
Cline, Wellington Boyd, Joseph Boyd, John Britt, Patrick, not acting	\$ cts. 262 00 255 00 35 50	\$ cts. 10 00 165 00 138 10	\$ cts.
, ,	552 50	313 10	865 60

Receipts and Expenditure by Pilotage Authority.			
License for one pilot boat	\$5	00	
Regulation	3	00	
License to one pilot	6	00	
			<b>\$14</b> 00
Charges.			
Stationery and postage	\$1	00	
Stationery and postage	4	00	
Secretary at St. Andrew's		00	
			<b>\$14</b> 00

#### Rates of Pilotage in the District.

First longest	pilotage	distance.	inwards	or outwards.	\$2.25	per foot	draft of water.
TITO TOTICOS	Priougo.	arounico,	111 11 001 000	0_ 0 40 41 410,	<b>#</b> ~	POL LOGO	didioot wast.

 Second
 do
 do
 \$1.60
 do

 Third
 do
 do
 \$1.50
 do

To or from Campobello, 20 cts. per foot less than above rates.

Fourth pilotage distance, inwards or outwards, \$1 per foot draft of water.

From 1st of November to 1st of April, 20 cts. per foot in addition to above rates,

To or from ballast ground and St. Andrew's harbour, vessels up to 300 tons, \$2.50; above 300 tons, \$3 each.

River pilotage inside St. Andrew's Bay, vessels up to 200 tons, \$4 each; over 200 tons and up to 300 tons, \$5 each; over 300 tons and up to 400 tons, \$6 each; over 400 tons, \$8 each.

To or from St. Andrew's Bay to any loading place outside St. Andrew's Bay and within the county, vessels under 200 tons, \$6 each; 200 to 300 tons, \$8; 300 tons and under 400, \$10 each; 400 tons and upwards, \$12 each.

#### C. E. O. HATHEWAY,

Commissioner and Secretary.

St. Andrew's, N.B., 3st December, 1891.

## APPENDIX No. 9.

REPORT OF THE PILOTAGE AUTHORITY FOR THE DISTRICT OF ALBERTON, P.E.I., FOR THE YEAR ENDED 31st DECEMBER, 1891.

#### OFFICE OF PILOT COMMISSIONERS,

ALBERTON, P.E.I., 6th January, 1892.

Age.

Hon. C. H. TUPPER,

Minister of Marine, Ottawa.

Name of Pilot.

SIR,—The following is the report of the pilotage authority for a portion of Prince County, P.E.I., for the year ending 31st December, 1891.

George Wells, Alberton	26
	34
John W. White do 2	23
James Ellis, Bideford, lot 12, did not report.  Pilots licensed for general service throughout the district:—	
Earnings of Pilots.	
George Wells \$ 58 8	35
Charles Gallant	
John W. White 54 1	.6
Total 184 6	

Those amounts have been collected by the pilots individually, and all from British vessels.

WM. P. REID, Chairman,
T. E. BIRCH,
JOHN P. BRENNAN,
Pilotage Commissioners

## APPENDIX No. 10.

REPORT OF THE PILOTAGE AUTHORITY FOR THE DISTRICT OF MIRAMICHI, N.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

Office of Pilot Commissioners, Newcastle, Miramichi, N.B., 10th December, 1891.

SIR,—I have the honour to enclose herewith the annual report of the pilotage authority of this district for the year ended 31st December, 1891.

I have the honour to be, sir,

Your obedient servant

R. R. CALL, Secretary-Treasnrer.

WILLIAM SMITH, Esq.,
Deputy Minister of Marine, Ottawa.

## MIRAMICHI Pilots in account with R. R. Call, Secretary-Treasurer.

189	1.	Dr.	\$	cts
do Aug. Sept. do Nov. do do do	18 18 18	Rent of pilot master's office.  P. Howlan, building a boat.  Interest on money borrowed to pay for service.  Rent of store for seine and fishing gear.  W. C. Huston's account for printing Miramichi Steam Navigation Co., fares, pilots.	10 10 5 20 10 25 10 4 6 100	70 47 58 64
		Cr.	9,721	32
Nov. do do do do	25 25 25 25 25	By amount collected pilotage, inwards.       \$ 4,203 99         do       do outwards       4,707 83         do       removals.       473 50         do       extra services.       36 00         do       earned by pilots outside pilotage.       300 00	9,721	32

## RATES of Pilotage chargeable at Miramichi on all vessels, British and Foreign.

	1.	cts.
When inward bound	. 2	25 per foot
And in addition to the above for all vessels propelled wholly or in part by steam	. 0	02 per ton.
When outward bound	2	00 per foot
For every vessel taken to sea after the 1st day of November a bonus of	. 4	00 1
For the removal and mooring of vessels—	1	
Not exceeding 100 tons.	. 1	50
Not exceeding 100 tons. do 200 do	. 2	00
do 300 do Exceeding 300 tons	3	00
Exceeding 300 tons	4	ŏŏ
And where the distance of removal exceeds 4 miles 50 per cent to be added to the rate	. `	••

## NATIONALITY of vessels piloted inwards for the year 1891.

Nationality.	Number.	Nationality.	Number.
British. Swedish and Norwegian Italian Austrian United States Russian	63 41 24 7 6 4	German. French Spanish Total	

PILOTAGE returns for the Pilotage District of Miramichi, N.B., for the year ended 31st December, 1891.

Class of Vessel.	Number.	Number.
Vessels reported inwards—		
British steamers do sailing vessels. Foreign steamers. do sailing vessels.	9 54 2 85	
Vessels reported outwards—	10	150
British steamers do sailing vessels Foreign steamers do sailing vessels	48 2 85	
Vessels removed— British steamers	3 14	145
Foreign steamers do sailing vessels	55	72
Vessels, extra service— British steamers do sailing vessels	8	
Foreign steamers	1	
Pote 1	\$ cts.	•
Otal amount of pilotage inward— British steamers	431 17 1,331 79 71 67 2,369 36	4,203
Otal amount of pilotage outward— British steamers	301 50 1,349 00	,
f'oreign steamersdo sailing vessels.	3,006 33	4,707
otal amount of removals— British steamers	24 00 81 50	
r'oreign steamers	368 00	473
otal amount for extra services— British steamers	32 00	
do sailing vessels		

## PILOTAGE returns for the Pilotage District of Miramichi, N.B., for the year ended 31st December, 1891—Concluded.

#### LIST of Pilot Boats licensed.

No.	Names of Boats.	Tonnage.	Captains.		When Licensed.		When Licensed.
13 14	May Queen	25 25·57	Angus McLean John McCullam. Patrick Nowlan. Robert J. Walls	do	1878 1878	do	1891. 1891. 1891. 1891.

# STATEMENT showing the yearly expenditure by the Pilots on account of the Pilot Schooners during the past five years.

No.	Names of Schooners.	1887.	1888.	1889.	1890.	1891.
13 14	May Queen	454 77	463 35 474 36 379 71 334 00	420 64 504 90 434 38 370 47	375 13 423 60 465 93 321 27	379 71 432 39 473 48 346 33
	Totals	1,428 56	1,651 42	1,730 39	1,585 93	1,631 91

R. R. CALL, Secy.-Treasurer.

## APPENDIX No. 11.

REPORT OF THE PILOTAGE AUTHORITY OF BATHURST, N.B., FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

Owing to the absence of the commissioners no meeting was held at which the report could be submitted.

EDWARD HICKSON, Secretary.

## APPENDIX No. 12.

REPORT OF THE PILOTAGE AUTHORITY OF NANAIMO, B.C., FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

Nanaimo, 5th January, 1892.

The Honourable

The Minister of Marine and Fisheries.

SIR,-Accompanying, find pilotage returns of the Nanaimo Pilotage Authority for the year ending 31st December, A.D. 1891, in accordance with the Pilotage Act, 1886.

I am, Sir,

Your obedient servant,

- \$24,344 26

C. C. McKENZIE,

Acting Secretary.

PILOTAGE Returns—(a & b) Names and ages of Pilots, &c.

Name.	Ages.	Service.	Remarks.
John Sabiston, sen.  John Sabiston, jun.  Daniel Morrison  James Peter Bendrodt  Jas. Christensen	65 38 51 31 50	Harbour District do do do	Under suspension for 3 months
Full do	for p		10 per diem.
Pilotage dues from Br	itish s	hips do	
Total pi	ilotage	dues	\$23,136 00
(e). Receipts and expendit	ure :		
		RECEIPTS.	
Balance from 1890 Pilotage dues to 31st Pilot license	Decem	ber, 1891	23,136 00

#### EXPENDITURE.

Paid Pilot Sabiston, sen	4,454	88		
Sabiston, jun	4,454			
Morrison	4,454	88		
$\mathbf{Bendrodt}$	4,454	88		
Christensen	3,588	86		
Commissioners	460	00		
Treasurer	165	00		
Secretary	165	00		
Rent	120	00		
Incidental expenses	84	85		
			\$22,403	23
Balance for 1892		• • •	\$ 1,941	03

E. QUESNELL,

 ${\it Chairman}.$ 

C. C. McKENZIE,

Acting Secretary

NANAIMO, 5th January, 1892.

## APPENDIX No. 13.

REPORT OF THE YALE AND NEW WESTMINSTER PILOTAGE AUTHORITY, FOR THE YEAR ENDED 31st DECEMBER, 1891.

VICTORIA, B.C., 9th January, 1892.

The Honourable

The Minister of Marine and Fisheries. Ottawa.

Sir,—I have the honour to enclose accounts and statements, balance sheets, etc., for the year ending 31st December, 1891, re the Yale and New Westminster Pilotage Authority.

You will notice a new item under head of disbursements, (i.e.) pilotage expense;

this is incurred in the following way:-

All pilotage earned is now handed into office.

(1.) 10 per cent of whole is deducted for office expenses.
(2.) Expenses of maintaining pilot service is paid, (i.e.) master of sloop's salary, crew of sloop's salary, their maintenance, etc.

(3.) If any surplus is over it is divided amongst pilots at end of every quarter. Under old system pilots all paid and maintained their own sloops, and made what they could individually.

I have the honour to be, sir,

Your obedient servant,

C. GORDON JOHNSON,

Secretary New Westminster and Yale Pilotage Authority.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR YEAR ENDING 31ST DECEMBER, 1891. Receints

necespio.		
Balance in bank	10,969	00
Fines	100	
Expenditure.		
Paid pilots	7,335	21
Balance in bank		

#### Balance Sheet for 1891.

Commission account	37	94 90		
Surplus earnings for quarter ending 31st December, 1891	475		2,736	94
Expense account	1,064	94 39	2,736	94

#### For 1891.

No. of License.	Name of Pilot.	Age.	Service.	Remarks.
1	Donald Urquhart	43	Licensed to pilot vessels of any size or description within limits of district.	On sick list.
2	Wm. Ettershank	48		Active.
3	Thos. Bebbington	45		do
4	Geo. W. Robertson	40		On sick list.

Pilotage dues now in force are the same as approved by Order in Council, 20th September, 1890.

## Pilotage collected.

90 Foreig 62 British	n do 1 do	do outwards.	84,758 82,213	tons	$2,687 \\ 2,552$	50 50
				_	\$10,969	00

## C. GORDON JOHNSON,

Secretary Yale and New Westminster Pilotage Authority. VANCOUVER, B.C., 5th January, 1892.

### APPENDIX No. 14.

REPORT OF THE PILOTAGE AUTHORITY OF VICTORIA, B.C., FOR THE YEAR ENDED 31st DECEMBER, 1891.

VICTORIA, B.C., 6th January, 1892.

SIR,—I have the honour to transmit herewith the pilotage returns for the pilotage district of Victoria and Esquimalt, in the province of British Columbia, for the year ending 31st December, 1891, as called for in section 24, chap. 54 of the Act 36 Victoria, and hope the same will reach you in season to be embodied in usual supplement to your annual report, a copy of which I should appreciate when printed and issued.

I have the honour to be, sir,

Your most obedient servant,

EDGAR CROW BAKER,

Secretary-Treasurer Pilotage Authority.

WILLIAM SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

PILOTAGE returns, Victoria and Esquimalt Pilotage District, B.C., 1st January to 31st December, 1891.

#### LICENSED PILOTS.

No.	Name.	Age.	Date of Issue.	Seniority.	Remarks.
2 3 4 5	James McIntosh John Thompson James Ramsey William Meyer Sam. W. Bucknam John Newby.	42 61 41 41	23rd April, 1880 21st Oct., 1889 6th May, 1890	4th Dec., 1878 9th June, 1889 6th May, 1890 6th March, 1891.	Resigned to command str. "Danube," 14th March, 1891. Victoria and Esquimalt district.

N.B.—The foregoing is a list of licensed pilots, who are the only ones who have prosecuted such calling in the above-named district.

There are no masters and mates acting under license from this pilotage authority,

all the certificates previously granted having expired by efflux of time.

Clauses I, II, III, page 213 supplement to 19th annual report, with reductions on pages 200 and 201 (supplement to 21st annual report) apply to this year also.

Same Acts and parts of Acts as last year apply to 1891, and list of exempted vessels and Puget Sound rates remain the same.

=				
CB.	Amount.	\$ cts. 441 01 10,849 27 300 00 40 00 345 55 600 00 783 93	13,359 76	ısurer.
11st December, 1891.	Head of Service.	1891.  1 to Dec. 31 By B. C. Pilots' Division, Puget Sound, surplus do 31 do 31 Fees to commissioners, 12 months.  1 do 31 Board of Examiners, examination fees.  1 do 31 Office expenses: rent, fuel, light, &c.  1 do 31 Secretary-tressurer, 12 months salary.  1 do 31 Balance at credit of pilotage authority.		EDGAR CROW BAKER, Secretary-Treasurer.
t January to 3	Date,	1891. Jan. 1 to Dec. 31 do 1 do 31 do 1 do 31 do 1 do 31 do 1 do 31 do 1 do 31 do 1 do 31 do 1 do 31		
IDITURE, 18	Amount.	\$ cts. 441 01 12,054 75 46 56 52 50 700 00 40 00 25 00	13,359 76	.Commissioners.
RECEIPTS AND EXPENDITURE, 1st January to 31st December, 1891.	Nature of Receipt.	Jan. 1 to Dec. 31 To Balance from last year  do 1 do 31 Pilotage dues under Clause IV  do 1 do 31 American tugs, ‡ pilotage, outwards, as per cash-book  do 1 do 31 Str. "Olympian," ‡ pilotage, outwards, 5 trips do 1 do 31 Examination fees, 2 in number  do 1 do 31 License fees, 1 in number.		Approved and certified correct, R. P. RITHET, ROBERT WARD, THOS. B. HALL.
DR.	Date.	1891.  Jan. 1 to Dec. 31  do 1 do 31  do 1 do 31  do 1 do 31  do 1 do 31  do 1 do 31  do 1 do 31  do 1 do 31  do 1 do 31	59	Approved

### PILOTAGE Dues Collected, 1st January to 31st December, 1891.

Month.	British.	Foreign.	Total.	Remarks.
January. February March April May June July August October November December	536 35 345 60 383 75 266 00 320 60 492 00	\$ cts. 586 75 669 00 691 00 692 50 750 10 782 75 852 50 841 25 690 00 743 25 637 50 550 90 8,487 50	\$ cts. 727 75 898 85 807 50 942 00 1,016 45 1,319 10 1,198 10 1,225 00 956 00 1,063 85 1,129 50 770 65	N.B.— The total, \$12,054.75, does not include a sum of \$752.50 collected from the Puget Sound steamers, or \$45.50 collected from various American tugs for half pilotage, outwards.

### APPENDIX No. 15.

Steam Vessels inspected for the year ended 31st December, 1891 WEST ONTARIO DIVISION.

Name of Vessel.	Number of Passengers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspection Fees paid.		Remarks.		
		1	892.		\$ (	ts.			
Alberta	500	Mar.	20	2,282	190 8	56	Screw,	passenger.	
Athabasca	500	dο	21	2,269	189	52	do	do	
Minnie Kidd	64	April	1	18	6 -	14	do	passenger ferry	
Dolphin		do	2	13	6	04	do	tug.	
Lewis Shickluna		do	3	16	6 :	28	do	do	
John Hunter		do	4	32	7 1	56	do	dredge tug.	
Arlington	100	do	4	23	6 8	84	do	passenger ferry	
Manitoba.	500	do	7	2,616	217	28	do	passenger.	
Rosedale		do	8	1,507	125	56	do	freight.	
Heather Bell		do	9	20	6 (	60	do	fishing tug.	
City of Midland	400	do	13	748	57 5	84	do	passenger.	
G. P. McIntosh		do	14	58	9 (	64	do	fishing tug.	
Fred. A. Hodgson	1	do	13	63	10	04	do	tug.	
Bob. Foote		do	14	40	8 :	20	do	fishing tug.	
Ethel		do	14	13	6	04	do	do	
Welcome		do	14	21	6	68	do	do	
Grace Darling	1	do	14	28	7 :	24	do	do	
Manitou	300	do	15	497	47	76	Paddle	, passenger.	
Anderson		do	15	16	6	28	Screw,	fishing tug.	
Rover		do	15	51	9	00	do	do	
Garnet		do	15	19	6	<b>52</b>	do	do	
Alert.		do	17	47	8	76	do	tug.	
W. A. Rooth	1	do	17	52	9	16	do	do .	
Maggie			18	37	7	96	do	do	
Inez.		do	18	59	9	79	do	do	

STEAM Vessels Inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Vessel.  Number of Passengers allowed.		Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
		1892.		\$ cts.	
Erin	• / • • • • • • • • • • • • • • • • • •	April 17	51 <b>2</b>	45 96	Screw, freight.
Hector		do 17	43	8 44	do tug.
Jane Armstrong		do 18	45	8 52	do do
Clinton		do 17	430	39 40	do freight.
S. Neelon		do 20	46	8 68	do tug.
Wales	•• ••••	do 17	350	33 00	do \ freight.
Sir S. L. Tilley	10	do 20	1,178	102 24	do passenger and
Celtic	60	do 23	698	63 84	freight. do do
Lake Michigan		do 23	573	50 84	do freight.
Macassa	539	do 23	459	44 72	Twin screw, passenger.
Canada	30	do 23	644	59 52	Screw, passenger and
Northern Belle	250	do 14	322	49 04	freight. do passenger.
Atlantie	318	do 14	683	62 64	do do
Baltic	307	do 14	1,324	113 92	Paddle, passenger.
Favourite	333	do 24	491	47 28	Screw, passenger.
Hiawatha		do 24	39	8 12	do tug.
Pacific	310	do 14	918	81 44	do passenger.
Lothair		do 22	413	37 96	do freight.
Saginaw		May 1	357	33 56	do wrecking tug.
Lurline		do 1	66	10 28	do pleasure yacht.
City of Dresden	40	do 2	194	23 52	do passenger and
Willie Scagel	• • • • • • • • • • • • • • • • • • •	do 2	22	6 76	freight. do tug.
Esperanza	 	do 4	17	6 36	do pleasure yacht.
Chicora	872	do 5	931	82 48	Paddle, passenger.
Kathleen.	183	do 4	391	39 28	Screw, passenger and
United Empire	396	do 6	1,961	164 88	freight. do passenger.
Sovereign		do 6	613	54 04	do freight.
St. Magnus	25	do 8	853	76 24	do passenger and
Union	130	do 8	267	29 36	freight. Paddle, passenger, ferry
Prowett Beyer	• • • • • • • • • • • •	do 9	10	11 60	Screw, fishing tug.
Modjeska	720	do 13	455	44 40	Twin screw, passenger.
Mazeppa	300	do 12	146		Screw, passenger.

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Cert	Date cificate pires.	Gross Tons.	Tonnag Dues and Insp tion Fees pa	ec-	F	temarks.
		1	892.		\$	cts.		
Abeona		May	13	46	8	68	Screw,	pleasure yacht.
Cibola	1,176	do	11	961	84	88	Paddle,	passenger.
Mascott	128	do	15	49	8	92	Screw,	essenger.
John Hanlan	172	do	15	37	7	96	do	do
Sadie	377	do	15	154	20	32	Paddle,	passenger.
Glenrosa	40	do	12	63	10	04	Screw,	passenger.
Wenona		do	12	161	20	88	Paddle enger	and screw, pass-
Emulator	.	do	19	25	7	00	Screw,	
Viola		do	26	68	10	44	do	pleasure yacht.
C. H. Merritt	340	do	20	122	17	68	do	passenger.
Canadian	340	do	21	231	26	48	Paddle	passenger.
Mayflower	1	do	21	189	23	12		do
Primrose	. 900	do	21	189	23	12		do
Truant	1	do	21	23	$\epsilon$	84	Screw,	passenger.
Island Queen	1	do	21	23	6	84	d	lo
Jessie L. McEdwards	ì	do	21	21	(	<b>2</b> 8	(	lo
Gertrude		do	21	76	11	l <b>08</b>	,	lo
Kathleen	i	do	21	110	16	80	(	lo
W. M. Alderson	!	do	22	122	17	7 <b>68</b>	Twin s	crew, passenger
Mocking Bird	į.	Oct.	15	38		8 04	Screw,	passenger.
Shawanaga	1	May	23	96	1	2 66	Screw,	tug
Agnes	ļ		26	23	:	6 84	do	
Maud L	1		27	14		6 <b>2</b> 0	do	
A. W. Crawford	1	- 1	27	51		9 16	do	•
J. H. Jones.	1	do	28	208	2	1 72	Screw,	fishing.
Mary Arnott	1	cert	tificated	. 8	3	5 64	do	tug.
P. Cress	i		28		3 1	0 04	do	freight.
Phœnix			29	37	7	7 96	do	tug.
Spray	1	-	<b>29</b>	. 1	5	6 <b>2</b> 0	do	tug.
Orillia	1		e 5	1	5 1	.8 80	do	passenger.
Southwood	1	do	5	. 19	9	6 62	2 do	do
Longford	1	do	5	.  5	3	9 24	do	do

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892,		\$ cts.	
Gypsy		June 6 '	20	6 60	Screw, pleasure yacht.
Comet	 	do 6	20	6 60	do tug.
Imperial	200	do 9	245	27 60	do passenger.
Muskoka	40	do 15	99	12 92	do do
Nipissing	343	do 15	275	30 00	Paddle, passenger.
Oriole	40	do 15	75	11 00	Screw, passenger.
Dauntless		do 16	8	5 64	do tug.
Rosseau		do 16	53	9 24	do tug.
Bertha May		do 16	20	6 60	do tug.
Kenozha	200	do 17	191	23 28	do passenger.
Lake Joseph		do 17	28	7 24	do tug.
Edith May	• . • • • • • • • • • • • • • • • • • •	do 17	45	8 60	do freight.
Mink	40	do 17	13	6 04	do passenger.
Jennie Wilson		do 18	7	5 56	do tug.
Ontario	• • • • • • • • • • • • • • • • • • • •	do 18	11	5 88	do tug.
Sunbeam		do 18	4	15 96	do pleasure yacht.
Onagonah	25	do 18	19	6 52	do passenger.
Kate Murray		do 19	3	10 48	do tug.
Naiad		do 19	29	7 32	do pleasure yacht.
Eurydice	554	do 22	590	55 <b>2</b> 0	Paddle, passenger.
Mary A. Laughlin	•••••	do 23	23	6 84	Screw, tug.
Equal Rights	<b></b>	do 24	6	5 46	do tug.
Bruce		do 25	16	6 28	do tug.
Mabel	<b></b>	do 25	11	5 88	do tug.
Minnehaha		do 26	32	7 56	do tug.
Eagle	14	do 26	12	5 96	do passenger.
Ostella	Not	registered.			
Alford Morrell	• • • • • • • • • • • • • • • • • • • •	June 26	40	8 76	do tug.
Chieftain	Not	certificated	40	8 20	do passenger.
Couchiching	do	do	105	13 40	do tug.
Rambler	do	do	14	6 12	Twin screw, tug.
Brothers	'	July 15			Screw, fishing tug.

STEAM Vessels Inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.			Remarks.
		:	1892.		*	cts.		
Kakabeka		July	15	113	17	04	Screw,	freight.
Three Friends		do	16	97	12	84	do	fishing tug.
Salty Jack		do	.16	45	8	60	do	tug.
Mary Ann	· • • • • • • • • • • • • • • • • • • •	do	17	86	11	96	do	tug.
Kate Marks		do	17	54	9	32	do	do
Minota	Not	regis	tered				do	do
R. Kendrick	40		27	. 15	6	20	do	passenger.
Enterprise	40	Nov.	1891. 30	148	19	84	Twin s	crew, passenger.
Siesta			1892. 27	3	5	24	Screw,	pleasure yacht.
Sea Flower		do	<b>2</b> 8	7	5	56	do	do
Lillie	Not	certi	ficated	50	9	00	Screw,	passenger.
Queen	20	July	29	7	5	56	do	do
Minota		do	29	29	7	32	Pleasu	re yacht.
Camilla				54			do	do
Rival		Aug.	6	125	15	00	Paddle	, tug.
Meteor		do	6	337	34	96	do	freight.
		do	6	45	8	60	Screw,	tug.
Houghton		do	7	49	8	92	Twin s	crew, tug.
Vixen	i e	do	7	68	10	44	Screw,	tug.
Delight	1	do	7	26	7	08	do	do
*** -		do	10	42	8	36	do	do
Hattie Vinton	l	do	10	55	9	40	do	do
Bertha Endress		do	10	32	7	56	do	do
Edgar P. Sawyer	1	do	11	52	9	08	do	do
Othello		do	11	8	12	40	do	fishing tug.
Annie Clark	(	do	12	51	9	08	do	do
Clara Hickler	l .	do	12	42	8	36	do	tug.
W. L. Davis		do	13	46	8	68	do	do .
Fred Davidson	i e	do	25	43	8	46	do	do
Home Rule	l	do	25	3	5	26	do	do
Maud	. 29	do	25	18	6	44.	do	passenger.
	1	1		1	1		1 .	- 3

### STEAM Vessels Inspected, &c. - West Ontario Division - Continued.

Name of Vessel.	Number of Passengers allowed.	of Passengers Cert		Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.			Remarks.
		1	1892.		8	cts.		
Adrelexa		Aug.	26	15	   6	20	Screw,	pleasure yacht.
Severn	• • • • • • • • • • • • • • • • • • • •	do	26	44	8	<b>52</b>	do	tug.
Waubaushene		do	27	97	12	76	do	tug.
May Flower	• • • • • • • • • • • • • • • • • • • •	do	27	14	6	12	do	do
John William	• • • • • • • • • • • • • • • • • • • •	do	27	14	6	12	do	do
Eva Belle		do	27	10	5	80	do	fishing tug.
Severn Belle	•••••	do	27	8	5	64	do	tug.
H. L. Lovering		do	28	55	9	40	do	do
Tender	22	do	28	31	7	40	do	passenger.
Pocahontas	• • • • • • • • • • • • • • • • • • • •	do	29	32	7	56	Paddle	, tug.
Lansdowne	300	do	29	1,571	133	68	do	Ry. car ferry.
Great Western	300	do	29	1,080	94	40	do	do
International	• • • • • • • • • • • • • • • • • • • •	Sept.	16	82	11	56	Screw,	tug.
Monarch	332	do	18	2,017	169	36		passenger and
Seguin	20	do	28	818	73	44	freig Screw,	passenger and
George Douglas	•••••	Oct.	6	42	8	36	freig Screw,	nt. tug.
Fanny Arnold		do	8	73	10	84	do	do
P. S. Hiesordt		do	8	45	8	60	do	do
Clara	••••	do	9	12	5	96	do	fishing tug.
Starlight	· · · · · · · · · · · · · · · · · · ·	do	9	16	6	28	do	tug.
James Clark		do	10	48	8	84	do	fishing tug.
John Harrison		do	10	44	8	<b>52</b>	do	tug.
Frank Reed		do	12	34	7	<b>72</b>	do	do
Uncle Jim	••••	do	12	11	5	96	do	do
P. M. Campbell		do	13	49	8	92	do	do
Yacht Maida	Not	certi	ficated	3	5	24	do	do
Maggie May		Oct.	14	46	8	68	do	do
James Storey	• • • • • • • • • • • • • • • • • • •	do	15	49	8	84	do	do
Mary A. Day	Not	certi	ficated	45	8	60	do	fishing tug.
Port Elgin Queen		Oct.	23	37	7	56	do	do
Mascot		Nov.	13	21	6	<b>68</b>	do	do
Alpha		ام	14	34	,	32	do	tug.

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Date Certiffcate expires.		Gross Tons.	Tonnage Dnes and Inspec- tion Fees paid.			Remarks.	
		1	1892.		\$	cts.			
Metamora	 	April	29	239	24	12	Screw,	tug.	
Enterprise		do	29	620	54	60	do	freight.	
Ocean	150	do	29	684	62	72	do	passenger.	
Joe Mac		do	30	44	8	44	do	tug.	
Maggie R. Mitchell		do	30	40	8	<b>2</b> 0	do	do	
James Norris		do	30	50	9	00	do	do	
Maggie A. Bennett	1	May	1	34	7	72	do	do	
C. W. Chamberlain		April	30	385	35	80	do	freight.	
Resolute		May	4	139	16	12	do	tug.	
Superior	1	do	4	89	12	12	do	do	
Susan C. Doty	1	do	4	26	7	08	do	do	
Dominion		do	6	478	43	24	do	freight.	
Harvey Neelon	1	do	7	65	10	12	do	tug.	
Ella Taylor	1	do	7	34	7	72	do	do	
Home Rule		do	7	81	11	48	do	do	
Electric		do	8	6	5	48	do	pleasure yacht.	
Mizpah		do	8	18	6	44	do	passenger.	
Queen of the Isles	l .	do	8	40	8	20	do	do	
Chicoutimi	1	do	11	110	16	80	Paddle	, passenger.	
Myles	1	do	13	1,211	101	88		freight.	
Ongiara		do	16	98	12	84	do	passenger.	
J. C. Clark	1	do	6	145	19	60	đo	passenger ferry.	
Kittie Haight		do	19	60	9	80	do	tug.	
Despatch		do	19	33	7	64	do	do	
Thames	I	do	20	82	11	56	Paddle	, passenger.	
City of London.		do	20	79	11	32	do	do	
City of Windsor	1	ł	22	511		78	Screw,		
Maid of the Mist	80		22	62		96	do	freight. passenger.	
Greyhound	1	do	21	337		86	do	do	
Mary		do	25	62		96	do	passenger and	
City of Chatham		do	26	341		28	do	tug.	
Dominion		do	26			04		freight.	

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Nnme of Vessel.	Number of Passengers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	c- Remarks.		
		1	892.		\$ cts.			
Vick		May	26	13	6 04	Screw,	tug.	
Alfred Wilson		do	27	33	7 64	do	do	
Rosamond	••••	do	29	23	6 84	đo	pleasure yacht.	
Carmona	750	June	1	980	86 40	Paddle	e, passenger.	
Campana	300	do	3	1,679	142 32		screw, passenger	
John Milton	200	May	28	93	12 44		freight. , passenger.	
Ruby	40	June	4	72	10 76	do	do	
Snowstorm		 		17	6 36	do	tug.	
Blandina		June	11	46	8 68	do	pleasure yacht.	
Clark Bros		do	9	5	5 40	do	freight.	
Verbena May		do	15	5	5 40	do	tug.	
Sarah E. Day		do	15	5	5 32	do	do	
Clucas		do	17	28	7 32	do	fish tug.	
A. Chambers		do	17	23	6 84	do	tug.	
Sea Gull		do	17	19	6 52	do	do	
Juno		do	17	28	7 24	do	do	
J. W. Steinhoff	413	do	19	312	32 96	do ,	passenger.	
Lillie Smith		do	23	302	29 16	do	freight.	
Jessie	• • • • • • • •	do	23	118	14 44	do	tug.	
Lottie Maud		do	24	10	5 80	do	fish tug.	
Kingfisher		do	25	14	6 12	do	do	
Conservative		do	25	7	5 56	do	do ·	
Uncle John		do	25	7	5 56	do	do	
Nellie May		do	25	11	5 88	do	do	
Ida Bell		do	<b>2</b> 5	6	5 56	do	do ·	
Dan	80	July	3	56	9 48	do	passenger.	
Dixie	100	do	8	37	7 96	do	do	
Nautilus	 	do	10	9	5 72	do	tug.	
Golden City		do	27	35	7 80	do	do	
Ada Alice		Nov.	14	15	6 20	do	passenger.	
International			24	851	76 08		screw, car ferry.	
Huron		do	24	1,052		1	•	

STEAM VESSELS inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Cer	Date tificate pires.	Gross Tons.	Tonna Dues and Ins tion Fees pa	pec.		Remarks.
		1	.892.		*	cts.		
Ontario.		July	13	57	9	56	Screw,	tug.
Interocean	40	June	24	148	19	84	do	passenger and
Byron Trerice	400	July	15	268	29	44	do	freight. do
Ariadne		do	15	38	8	04	do	tug.
Harry Sewell		do	15	25	7	00	do	do
Grace Darling		do	15	26	7	08	do	do
Messenger		do	16	15	(	20	do	do
Arbutus		do	16	49	8	92	do	do
Sea Gull		do	16	41	8	<b>2</b> 8	do	do
E. Windsor		do	17	86	11	88	do	freight.
La Belle		Not c	ertified	75	11	00	do	do
Euna		July	16	6	į	48	do	tug.
Energy		do	17	116	14	<b>2</b> 8	do	freight.
W. S. Ireland.		do	17	105	13	<b>40</b>	do	do
City of Mt. Clemens	1	do	17	102	18	3 16	do	do
Nina		do	17	11		88	do	tug.
Ripple	1	do	17	15		30	do	do
Frankie		do	17	24		92	do	freight and tug.
Juno	L	do	18	210	21	L <b>80</b>	do	freight.
W. F. McRae	š	do	18	46	1	68	do	tug.
Charlton	E .	do	20	261	25	5 88	do	do
Maggie Mason		June	26	56	9	46	do	passenger.
Ivey Alderson	I.	Aug.	4	39		3 04	do	do
Maid of the Mill		do	5∴	8		5 64	do	pleasure yacht.
Zeypher	f .	1	7	19		3 52	do	do
Victoria				3	,	5 25	do	tug.
City of Stratford				4	,	5 32		screw, pleasure
Orion				591	5	2 28	yaci Screw	ıt. , freight.
Florence		do	20	8		5 64	do	passenger.
Mary Louise		do	20	64	10	12	do	do
Excelsior	1	do	20			7 80	do	do
Erastus Wiman			20			32	do	do

STEAM VESSELS inspected, &c. West Ontario Division — Concluded.

Name of Vessel.	Number of Passengers allowed.	Date Certificate expires.		Gross Tons,	Tonnage Dues and Inspection Fees paid.		Romarks.		
		189	2.		8	cts.			
Lady of the Lake		None iss	ued				Screw,	tug.	
Northern	• • • • • • • • • • • • • • • • • • • •	Aug. 21		99	12	92	Paddle		
Ethel May	••••	do 22		4	5	32	Screw,	pleasure yacht.	
Gordon Jerry	•••••	do 28	s	124	14	92		freight.	
Marguerite		None iss	sued	8	8	64	do	do	
Harold Gauthier		Sept. 3	3	9	5	72	do	fish tug.	
Gordon Gauthier		do 3		26	7	08	do	do	
Walter Scott		do 3	3	26	7	08	do	do	
Richard S. King		None is	sued	58	9	64	do	tug.	
Norcross		Sept. 16	3	20	6	60	do	do	
Maggie McLean		do 16	3	37	50	72	do	do	
Copanoning		do 16	;	18	6	44	do	do	
Gertrude A. Rennie		do 16	3 l	14	6	12	do	fish tug.	
Douglas		do 18	3	5	5	40	do	tug.	
Sweet Mary		do 18	3	13	6	04	do	do	
Saucy Jim		do 25	2	93	24	88	do	do	
Isabella	<b></b>	do 25	3	44	8	<b>52</b>	do	do	
Conqueror		do 25	3	25	. 7	00	do	do	
Sonntag		Oct.	1	7	5	56	do	pleasure yacht.	
Arcadia		do	6	23	6	84	do	fish tug.	
W. H. Siebold	 	do (	6	22	6	76	do	do	
Hiawatha		do (	7	163	20	96	do	passenger.	
W. M. German		do	9	28	7	24	do	tug.	
Owen		do	9	103	13	24	do	freight.	
Elgin	\	do 1	5	16	6	28	do	tug.	
Augusta	}	do 2	9	57	9	56	do	do	
Nellie Bly	1	1	0	i	ì	48		fish tug.	
Vera	ļ	Not cer	tified	14		04	1	passenger.	
Rescue	1	Nov. 2		7	l	56		do	
				15,926	-		-	<del></del>	

JOHN DODDS, Steamboat Inspector.

# STEAM VESSELS inspected for the year ended 31st December, 1891. WEST ONTARIO DIVISION.

Name of Vessel.	Number of Passengers allowed.	Certificate		Gross Tons.	Tonnage Dues and Inspection Fees paid.				
		18	92.		\$	cts.			
Michigan	500	Feb.	25	1,730	146	40	Paddle	, car ferry.	
Ontario	500	March	18	1,615	137	<b>2</b> 0	do	do	
Frank Jackman	••.•	do	28	39	8	12	Serew,	tug.	
Acadia	<b>12</b> 5	do	<b>28</b>	806	72	<b>50</b>	do	passenger and freight.	
Норе	200	Dec.	91. 1	170	21	60	do	ferry.	
Telegram	200	April	92. 2	322	<b>3</b> 3	76	do	passenger.	
United Lumberman		do	3	399	36	92	do	freight.	
Africa	<b></b>	do	1	482	43	56	do	do	
Lakeside	491	do	4	348	35	84	do	passenger.	
Persia	150	do	9	757	68	56	do	do	
Tecumseh		do	9	840	72	20	do	freight.	
W. B. Hall	 	do	10	608	53	64	do	do	
L. Shickluna		do	14	626	55	08	do	do	
				8,742	785	38			

(). P. St. JOHN, Steamboat Inspector.

## STEAM VESSELS inspected for the year ended 31st December, 1891. WEST ONTARIO DIVISION.

Name of Vessel.	Number of Passengers allowed.	Date Certificate expires.	Gross Tons,	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ ets.	
Onaping		April 24	256	25 48	Screw, tug.
*Lillie		Not certificat'd			Boiler burned; cause,
Luella	122	May 18	38	8 04	low water. Screw, passenger, ferry.
*Viola		do 26	68	10 44	do pleasure yacht.
4.			362	43 96	

<sup>\*</sup> These vessels are also returned in Mr. Jas. Johnston's list of steamers inspected by him.

W. J. MENEILLEY, Chairman Board of Steamboat Inspection.

Steam Vessels not Inspected for the Year ended 31st December, 1891.

#### WEST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Regis- tered Tonnage.	Dues and Fees.	Why not inspected and class of Vessel	l and class of Vessel.	
			\$ cts.			
Cambia	937	590		Paddle, passenger		
Rupert	512	292		do do		
Kincardine	199	135	,	Screw, freight		
A. H. Jennie	148	108		do do		
Cherokee	179	121		do tug		
Cecebe	11	8		do do		
George Maytham	40	27		do do		
Herbert M	26	18		do do		
Marshall & Murray	16	11		do do		
Mary of Port Stanley	4	3		đo đo		
George Dean	ı	ered.		do do		
Skipper	1	ĭ		do do		
Siskiwit	47	37		do do		
Ontario	1,338	910		do passenger		
Evangeline	1	16		do yacht		
Maud S	14	11		do tug		
C. J. G. Munro	43	31		Screw, tug. Laid up before the expiration	on of	
Algonquin	1,806	1,172	149 48	former certificate. Screw, freight		
Ida	21	6		do yacht		
Revis Belle	8	5		do do		
Halcro	8	5		do do		
Rescue	20	17		do do		
Ranger		5		do do		
Startled Fawn	25	17		do do		
Stella.	9	6		do tug No application.		
Spray of Wallaceburg	47	32		do do		
Myrtle	9	7		do passenger		
Fanny	5	3		do fishing tug.		
Lilly	22	15		do tug		
Sea King.	129	87		do do		
Ocean Lilly.		2		do do		
Minnie Martin	10	7		do do		
	, ,	•	73			

## STEAM Vessels not inspected for the Year ended 31st December, 1891—Concluded. \* WEST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Why not inspected and class of Vessel.					
			\$ cts.						
Butcher Boy	94	64		Screw, tug)					
Edward Blake	13	9		do do					
Rock	14	10	]	do fishing tug					
Purvis	13	9		do do No application.					
Advance	72	49		do do					
Henry Smyth	40	27		do do					
Maganetawan	208	179		do tug					
	6,122	4,051	149 48						

Steam Vessels inspected for the year ended 31st December, 1891.
WEST ONTARIO DIVISION.

Name of Vessel.	Number of Passen- gers allowed.	Da Certif expir	icate	Gross Tons.	Tonna Dues and Ins tion Fees ps	pec-		Remarks.
		189	2.		*	cts.		
Michigan	500	April	7	1,729 80	146	40	Paddle	, car ferry.
Ontario	500	Mar.	18	1,615 40	137	20	,	do
Africa		April	1	482 · 39	43	56	Screw,	freight, all the lakes.
United Lumberman.		do	3	398 · 91	36	92	do	do
Rosedale		do	13	1,506.93	125	56	do	do
Норе	200	Dec.	1	169.96	21	60	do	ferry, Windsor and Detroit.
Atlantic	318	189 April		682 · 63	62	64	do	Collingwood and Sault Ste.
Pacific	310	do	14	918.08	81	44	do	Marie. do
Northern Belle	250	do	14	322 · 21	49	04	do	do
Tecumseh		do	9	839 · 67	72	20	do	all the lakes.
W. B. Hall		do	10	657 · 70	53	64	do	do
Clinton		do	17	430.00	39	40	do	do
Niagara	l	do	18	468 · 00	42	44	do	do
Erin		do	17.	512.22	45	96	do	do
Wales	<b></b>	do	17	350 · 01	33	00	do	do
Sir S. L. Tilley	10	do	18	1,177 77	102	24	do	do
Lakeside	491	do	9	348 24	35	84	do	Toronto and St. Catharines.
Persia	150	dο	18	756 64	68	<b>56</b>	do	all the lakes.
City of Windsor		do	<b>2</b> 2	510.52	48	88	do	Windsor and part on Lake
Lothair		do	22	412.92	37	96	do	Huron. all the lakes.
Lake Michigan		do	<b>2</b> 3	573 28	50	89	do	do
Celtic	60	do	23	698 · 04	65	84	do	do
Macassa	539	dó	23	459.06	44	1 72	do	Toronto and Hamilton.
Acadia	125	ďο	23	806:36	75	2 50	do	Montreal and Chicago.
Athabasca	500	do	27	2,268 63	189	9 52	do	Owen Sound and Port Arthur.
Alberta	500	do	27		190	<b>5</b> 6	do	do
Manitoba		do	28.	1		728	do	do
Algonquin		do	<b>2</b> 8.			9 48	do	all the lakes.
Favorite		do	28.	,		7 28	do	Meaford and Georgian Bay.
Ocean	159	do	29.		1	2 72	do	Hamilton and Montreal.
C. W. Chamberlain.		do	<b>3</b> 0.		1	5 80		Penetanguishene and Geor- gian Bay.

STEAM Vessels inspected for the year, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Da Certi expi	ficate	Gross Tons.	Tonna Dues and Ins tion Fees pa	pec-	Remarks.
		189	99		8	cts.	
Baltic	307	April		1,323 · 77	113		Paddle, Owen Sound and Sault Ste.
Canada	30	May	1	644 45	1		Marie. Screw, all the lakes.
L. Shickluna	ļ	do	2	625 · 81	55	08	do do
Kathleen	183	do	4	391 · 43	39	28	do Killarney and Web Wood.
United Empire	396	do	6	1,960.65	164	88	do Sarnia and Duluth.
J. C. Clark	264	do	6	145 23	19	66	do ferry, Sarnia and Port Huron.
Sovereign		do	6	612.72	54	04	do all the lakes.
Union	130	do	8	266 · 96	29	36	Paddle, Fort Erie and Black Rock.
Dominion		do	8	478 · 13	43	24	Screw, all the lakes.
St. Magnus	25	do	9	852 · 55	76	24	do do
Chicora	872	do	11	930 · 50	82	48	Paddle, Toronto and Niagara.
Cibola	1,176	do	11	961 · 47	84	88	do do
Winonah	100	do	12	160.60	20	88	do and screw.
Glenrosa	40`	do	12	63·18	10	04	Screw, Burk's Falls.
Myles		do	13	1,210.63	101	88	do all the lakes.
Enterprise		do	14	620 · 42	54	60	do do
Manitou	300	do	<b>15</b> .	497 · 11	47	76	Paddle, Midland and Parry Sound.
Ongiara	244	do	16	97 · 77	23	52	Screw, Niagara River.
City of Dresden	40	do	19	193 · 87	12	84	do Lake Erie.
Telegram	200	do	19	320 59	33	76	do do
Thames	300	do	<b>2</b> 0	81.72	11	56	Paddle, London and Sprey Bank.
City of London	300	do	<b>2</b> 0	76 85	11	32	do do
Mazeppa	300	do	<b>2</b> 0	145.59	19	68	Screw, Burlington Bay.
Modjeska	720	do	<b>2</b> 0	454 98	44	40	do do
Greyhound	335	do	21	337 · 03	34	96	do
Mizpah	90	do	21	18 05	6	44	do Toronto Bay.
John Hanlan	172	do	<b>22</b>	36.96	7	96	do do
Canadian	340	do	22	230 · 51	26	<b>4</b> 8	Paddle do
Mascotte	128	do	<b>22</b>	48.94	. 8	92	Screw do
Sadie	377	do	<b>22</b>	154.18	20	32	Paddle do
Luella	122	May	<b>22</b>	37.83	8	04	Screw, Toronto Bay.
C. H. Merritt	340	do	23	121·58 76	17	<b>68</b>	do Victoria Park.

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Dat Certific expire	cate	Gross Tons.	Tonnag Dues and Insp tion Fees pa	ec-	Remarks.
		1892	2.		8	cts.	
Gertrude	163	May 2	23	75 54	11	80	Screw, Toronto Bay.
Kathleen	200	do s	23	109.82	16	80	do do
Truant	100	do :	23	23 · 31	6	84	do do
Arlington	100	do s	23	23 · 37	6	84	do do
Island Queen	100	do s	23	23 · 31	6	84	do do
J. S. McEdwards	116	do :	23 .	21 · 40	6	68	do do
Chicoutimi	278	do s	25	110 · 47	16	80	Paddle, Victoria Park.
Joe Milton	200	do :	28	93.30	12	44	Screw, Port Stanley and Lake Erie
Campana	300	June	3	1,678 · 79	142	32	do all the lakes.
Minnie Kidd	64	do	4	. 17.60	6	44	do Toronto Bay.
Southwood	40	do	5	18.78	6	6 <b>2</b>	do Lake Couchiching.
Orillia	234	do	6	134 51	18	80	do do Simcoe.
Longford	40	do	5	53.29	9	24	do do do
Carmona	750	do	6	976 · 93	86	40	Paddle, Toronto and Grimsby.
Imperial	200	do	10.,	245 10	27	60	Screw, Meaford and Wiarton.
Maid of the Mist	80	do	13	61 · 97	9	96	do Niagara River.
W. M. Alderson	200	do	16	121 09	17	68	do Port Dover and Lake Erie.
Kenozha		do	17	191.53	23	<b>2</b> 8	do Muskoka Lakes.
Mink	40	do	18	13.32	6	04	do do
Onaganoh	25	do	18	18.73	6	<b>52</b>	do do
Edith May	40	do	18 .	44.88	8	60	do do
Oriole	40	do	19	74.79	11	00	do do
Muskoka	40	do	<b>2</b> 0	98.98	12	92	do do
Nipissing	343	do	<b>2</b> 0	275.45	30	00	do do
Eurydice		do i	22 .	589 · 89	55	20	Paddle, Toronto and Wilson.
J. W. Steinhoff		do	22	311 · 80	32	96	Screw, Lake Ontario.
Lillie Smith		. do	23.	302 31	29	16	do all the lakes.
City of Chatham	553	do	24	340.54	35	28	do Chatham and Windsor.
Interocean		do	24	147 · 83	19	84	do Wallaceburg and Sarnia.
International	300	do	24.	850 92	76	08	do car ferry.
Huron	500	do	24.	1,052.41	92	16	do do
Maggie Mason	40	do	<b>26</b>	. 55·77 77	g	46	do Burlington Bay.

STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Da Certii expi	ficate	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
		189	92.		\$ cts.	
Eagle	14	July	1	12.36	5 96	Screw, at Parry Sound.
City of Midland	400	do	1	748 · 41	67 84	do Collingwood and Georgian
Equal Rights				5.73	5 40	Bay. do not certificated.
Dan	80	July	6	56.08	9 48	do Toronto and the Parks.
Dixie	100	do	8	39.72	7 96	do Novie Island and Black River
Mocking Bird	40	do	12	38 · 02	8 04	do Thunder Bay.
Chieftain		No c		40.00	8 20	do Rat Portage, not certificated.
Kennina		d		41.86	8 36	do equipment insufficient.
Shamrock		d	0	79.84	11 40	do do
Winnipeg		d	0	25 · 22	7 00	do do
Kakabaka		d	o	112.67	17 04	do Thunder Bay.
May Flower	900	July	20	189 · 40	23 12	Paddle, Toronto Bay.
Juno		do	<b>2</b> 9	209.50	21 80	Screw, all the lakes.
Ruby		do	<b>30</b>	72.22	10 76	do Port Stanley.
Lillie	40	do	31	49.53	9 00	do Barrie and Big Bay Point.
Queen	20	do	31	6.63	5 56	do on Lake Simcoe.
Mary	75	Aug.	4	61 · 52	9 96	do
Nautilus	.	do	4	8.65	5 72	do equipment insufficient.
Orion		do	11	590.99	52 28	do all the lakes.
Ivey Alderson	87	do	12	38 · 67	8 04	do Long Point Bay.
Ada Alice	64	do	14	15.43	6 20	do Toronto Bay.
Florence	. 13	do	<b>20</b> .	8 42	5 64	do Muskoka Lakes.
Mary Louise	40	do	20	63 · 62	10 12	do do
Excelsior	40	do	20	34.62	7 80	do do
Erastus Wiman	34	do	20	53.53	9 32	do do
Meteor	.	do	28	180 72	34 96	Paddle, all the lakes.
Lansdowne	300	do	<b>29</b>	1,570 90	133 68	do car ferry.
Great Western .	300	do	29.	1,080 33	94 40	do do
Enterprise	289	Nov.	30.	148 19	19 84	Screw, Lake Simcoe.
R. Kendrick	. 40	Sept	. 9.	14.96	. 6 20	do do .
Primrose	. 900	do	8.	189:40	23 12	Paddle, Toronto Bay.
Monarch	332	do	18.	2,017.41	169 38	Screw, Sarnia and Duluth.

78

#### STEAM Vessels inspected, &c.—West Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ cts.	
Seguin	20	Sept. 28	818 · 07	73 44	Screw, all the lakes.
J. H. Jones			208 · 42	21 72	do Georgian Bay.
Hiawatha	300	Oct. 14	162 · 62	20 96	do ferry at Sarnia.
Fender	22	do 30	30.20	7 40	do Georgian Bay.
Maud	29	do 30	18.26	6 46	do do
Vera			13.52	6 04	do Rondeau Bay.
Rescue	20	Nov. 26	7 · 23	5 56	do on Toronto Bay.

THOS. HARBOTTLE,

Hull Inspector.

# Steam Vessels not inspected for the year ended 31st December, 1891. WEST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks. Why not inspected and class of Vessel.
Rupert	511 97	292 · 48		Not running.
Kincardine	198 · 67	135 · 10	 	đo
Ontario	1,103-91	750.95		do
Myrtle	9.40	7.45		do
Cambria	937 · 26	637 · 34		do

THOS. HARBOTTLE,

Hull Inspector.

STEAM Vessels inspected for the year ended 31st December, 1891.

EAST ONTARIO DIVISION.

EAST UNTARIO DIVISION.										
Name of Vessel.	Number of Passen- gers allowed.	Date Certifica expires		Tonnage Dues and Inspection Fees paid.	Remarks.					
		1892.		\$ cts.						
Pierrepont	415	April 1.	251.98	28 16	Paddle, passenger.					
Maud	390	do 1.	292.81	31 44	do do					
Hero	475	do 2.	342.12	45 36	do do					
Traveller		do 18.	207 · 52	21 64	do tug.					
John A. Macdonald.		do 4.	273.00	26 84	do do					
D. K. Van Allen		do 8.	317 95	30 44	Screw, freight.					
Scotia		do 11.	458.33	41 64	do do					
D. D. Calvin		do 13.	749.53	65 00	do do					
William Johnston		do 13.	80.65	11 48	do tug.					
Reliance	25	do 14.	239·14	27 12	Twin-screw, freight and passenger					
Resolute	25	do 14.	371.86	37 76	do do					
Ella Ross	300	do 15.	324 · 88	34 00	Paddle, passenger.					
Nile		do 15.	96 30	12 68	Screw, freight.					
Nora	35	do 15.	28.13	7 24	do passenger.					
Emma Munson		do 16.	32.63	7 64	do tug.					
Rescue		do 16.	52.29	9 16	do do					
Armenia	275	do 17	109.99	16 80	do passenger.					
Deseronto	85	do 17.	67 91	10 44	do do					
Armenia		do 17.	642.67	56 44	do freight.					
Chieftain		do 18	434.68	39 80	Paddle, tug.					
Niagara		do 18.	468.00	42 44	Screw, freight.					
James A. Walker		do 23.	183.58	19 72	do tug.					
David G. Thomson.		do 23.	185 05	19 80	Twin screw, tug.					
Glengarry	10	do 23.	494.83	47 60	Screw, freight and passenger					
Jessie Hall		do 23.	56.54	9 56	do tug.					
Glide		do 23	77 90	11 24	do do					
Alexandria	450	do 24.	863 · 15	77 04	Paddle, passenger.					
Empress of India	680	do 24	579.05	54 32	do do					
Rideau Belle	50	do 30.	130.59	18 48	Screw do					
Hiram A. Calvin		May 1	300.00	29 00	Paddle, tug.					
Princess Louise	240	do 5.	114.88	17 20	Screw, passenger.					

STEAM Vessels inspected for the year &c.—East Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Cert	Pate dificate dires.	Gross Tons.	Tonna Dues and Ins tion Fees pa	pec-		Remarks,
		15	 392.		8	cts.		
Olivia Gordon		May	7	36.07	-	88	Screw,	tug.
H. F. Bronson		do	11	137 · 12	15	96	Twin-	screw, tug.
Active	1	do	11	345 88	32	68	Screw,	
Lorelie.		do	11	44.29	8	52	do	passenger.
Myra	i	do	12	73 21	10	84	do	tug.
Mona	1	do	13	24.87		00	do	do
Sandy		do	14	29 57	7	32	do	do
H. C. Curtis.		do	14	36.19		88	do	do
A. B. Cook		do	14	34 · 17	7	72	do	do
Geraldine	1	do	15	17.90	6	44	do	yacht.
John Haggart		do	18	201 60	24	16	do	passenger.
Col. By	1	do	19	9.31	5	72	do	tug.
Sunbeam		do	21	111 · 89	16	96	Paddle	e, passenger.
Golden City		do	21	68.02	10	45	Screw	do
Mary Ellen		do	22	44.50	8	60	do	do
Time:		do	22	13.81	6	12	do	tug.
Lily		do	23	16.01	6	28	do	do
Edmond		do	25	39·10	8	12	do	do
Reindeer	165	do	26	58 · 29	9	64	do	passenger.
Varuna	225	do	26	134 · 04	18	72	do	do
Spartan	375	do	27	1,168 92	101	52	Paddle	e do
Eliza Bonar	1	do	29	25.68	7	08	Screw,	tug.
Nellie Cuthbert	100	do	29	59.03	9	72	do	passenger.
Annie Gilbert	35		30	19.00		60	do	do
D. P. Dey	1		ertified	11 · 26		88	do	tug.
Saxon		40	0.4	180 90	19	48		freight.
Ranger		19	92. 2	13.83		12	do	tug.
Titania		do	3	16.83		36		yacht.
Maggie May		18	91.	29.03		32		freight.
Khartoum			30	62.71		04	do	do
Kherenow	ŀ		92. 4	47.78		84		yacht.
Thistle			3	36.02		88		fishing tug
,,				81	•			

STEAM Vessels inspected, &c. - East Ontario Division - Continued.

		inspected, a			
Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.  Tonnage. Dues and Inspec- tion Fees paid.		Remarks.
		1892.		\$ cts.	
Nellie	25	June 5	6.82		Screw, passenger.
Corsican	400	do 6	1203 24	104 24	Padddle do
North King	525	do 9	872.95	77 84	do do
Robert Anglin		do 10	97.18	12 76	Screw, freight.
Freemason		May 23	104 82	13 40	do do
Antelope	1	June 13		6 60	do passenger.
Pomona		do 18	4.88	5 40	do yacht.
Echo	1	do 18	6.06	5 48	do do
Corella	1	do 18	3.81	5 32	do do
Zeila		do 19	3.40	5 24	do do
Island Queen	1	do 19	98.09	12 84	do passenger.
Spray	1	Not certified	4.19	5 32	do yacht.
Ingomar	<b> </b>	June 20	18.21	6 44	do do
Dream		do 22	12.16	5 96	do do
City of Belleville	250	do 20	101 · 17	16 08	do passenger.
Triton.		do 23	11.11	5 88	do do
Fearless	50	do 24	46.38	. 8 68	do do
Dorothy		do 24	10.09	5 80	do yacht.
South Eastern		do 25	395 · 31	39 60	Twin-screw, passenger.
Transit	450	Not certified	140 · 81	19 20	do do
Caribou	250	June 26	144 · 19	19 52	Screw, passenger.
Umbria		do 27	42.98	8 44	do tug.
Crandella	400	do 30		39 28	paddle, passenger.
Siesta	40	July 2	14.96	6 20	Screw do
Naiad		do 3	17.55	6 44	do yacht.
C. F. Dunbar		do 6	1	7 64	do tug.
Vega		do 14		5 56	do yacht.
Beaver		į.	l	6 44	do passenger.
Daisy	1	do 17	ł	5 56	do do
Pearl	1	do 18	1	5 64	do do
Sunbeam	1	July 18		6 08	
Alice Ethel		do 20	1		Paddle, passenger.
	•		0.0	, , , , , ,	· · · · · · · · · · · · · · · · · · ·

82

STEAM Vessels inspected, &c.—East Ontario Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
	ļ	1892.		\$ cts.	
Dominion	<b></b>	July 21	45.88	8 68	Paddle, tug.
70		do 21	33.60	7 72	Screw do
Waterwitch	20	do 22	9.20	5 72	do passenger.
Myrtle	]	do 22	27 · 46	7 16	Paddle, tug.
Zetta Bruce	25	do 23	8.75	5 72	Screw, passenger.
Stranger		do 23	28.00	7 24	do tug.
Mary Louise	l .	do 24	10.00	5 80	do passenger.
Express	i	do 24	3.90	5 32	do tug.
Dawn	40	do 25	20.20	6 60	do passenger.
Esturion	325	do 27	118.36	17 44	Paddle do
Maple Leaf	70	do 27	26.08	7 08	Screw do
Beaubocage	150	do 28	129.00	18 32	Paddle do
Bella Fair		do 29	6.60	5 56	Screw, tug.
St. Julian		Aug. 7	19.92	6 60	do yacht.
		1891.	į		
Marquis of Lorne		Dec. 30	20.19	6 60	do do
		1892.			
Sarah Daly		Aug. 18	24.61	7 00	do tug.
Albert Wright	.]	do 19	29.00	7 32	do do
Grenada	. 175	do 19	57.00	9 56	do passenger.
Ivy		Not certified	7.43	5 56	do do
Princess Louise	ī	Aug. 19	26.36	7 08	do do
Gilbert		do 20	. 40.83	8 28	do tug.
Alert	. 40	do 21	. 49.83	9 00	do passenger.
Alaska	. 100	do 21	. 48.74	8 92	do do
Enterprise		do 26	. 60.38	9 80	Paddle, tug.
Elsie Ross		. do 27	9.83	5 80	Screw, yacht.
Mayflower	1	do 26	. 4.20	5 32	do tug.
Tropic	35	do 28		5 72	do passenger.
Bluebell		do 29		5 80	do freight.
Outlet Queen		ì	ł	6 44	do fishing tug.
Ventura $10a-6\frac{1}{2}$	1	. do 1	.  6·77 83		do yacht.

#### STEAM Vessels inspected, &c.—East Ontario Division—Concluded.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.		Remarks.	
		1892.		-	\$	cts.	,	
Bertha		Sept.	2	17 · 64	6	44	Screw, yacht.	
Daisy		do 1	l5	4.89	5	40	do do	
Prince Edward		do :	16	18.22	6	44	Centre-wheel, ferry.	
Golden Eye	171	July	18	287 · 60	31	04	Paddle, passenger.	
Ometa				18.68	6	52	Screw, yacht.	
Alberta	. ,	1891. Dec.	30	68.00	10	44	Centre-wheel, freight.	
Water Lily		1892.	26	95.09	13	80	Screw, freight.	
Total				17200 34	2,115	33	•	

#### EDWARD ADAMS, Steamboat Inspector.

## STEAM Vessels not inspected for the year ended 31st December, 1891. EAST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks.  Why not inspected and class of Vessel.		
			\$ cts.			
Anna	7.89	6.49		Not employed; screw, tug.		
Utica	52.00	39.00		do do passenger.		
Pioneer	28.07	19.09		do do do		
Mary Ellen	81 · 20	51.16		do paddle, tug.		
Anglo-Saxon	69.01	43 41		do do		
Mary Ethel.	98 61	56.13		do centre wheel, ferry.		
Water Lily	4.00	4.00		do screw, tug.		
Belle Amelia	3.80	2.60		do do		
	334 · 58	221 88				

EDWARD ADAMS,
Steamboat Inspector.

# Steam Vessels inspected for the year ended 31st December, 1891. EAST ONTARIO DIVISION.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks
		1892.		\$ cts.	
Pierrepont	415	Apr. 1.	251.98	28 16	Paddle, passenger.
D. R. Vanallen	1	do 8.	317 95	30 44	Screw, freight.
D. D. Calvin	í	do 13.	749 · 53	65 00	do do
Reliance	25	do 14.	239 · 14	27 12	Twin-screw, passenger.
Resolute	25	do 14.	371.86	37 76	do do
Maud	390	do 1.	292 · 81	31 44	Paddle do
Hero	475	do 2.	342 12	35 36	do do
Armenia		do 17.	642 67	56 44	Screw, freight.
Scotia	••••	do 11.	458 33	41 64	do do
Armenia	275	do 17.	109 99	16 80	do passenger.
Deseronto	85	do 17.	67 · 91	10 44	do do
Ella Ross	300	do 15.	324 · 88	34 00	Paddle do
Alexandria	450	do 24.	863 · 15	77 04	do do
Glengarry	10	do 23.	494 83	47 60	Screw do
Empress of India	680	do 24.	579.05	54 32	Paddle do
Rideau Belle	50	do 30.	130 · 59	18 48	Screw do
Princess Louise	240	May 5.	114 88	17 20	do do
John Haggart	250	do 18.	201 60	24 16	do do
Sunbeam	200	do 21.	111.89	16 96	Paddle do
Golden City	175	do 21.	68.02	10 45	Screw do
Mary Ellen	130	do 22.	44.50	8 60	do do
Undine		Not issued.	13.81	6 12	do outfit not complete.
Reindeer	165	May 26.	58.29	9 64	do lassenger.
Varuna	225	do 26.	134 · 04	18 72	do do
Spartan	375	do 27.	1,168 92	101 52	Paddle do
Queen of the Isles	100	do 15.	40.22	8 20	Screw do
Nellie Cuthbert	100	do 29.	59 03	9 72	do do
Annie Gilbert	30	do 30.	19.00	6 00	do do
Saxon		1891. Sept. 15.	180.90	19 48	do freight.
Nellie	25	1892. June 5.	6.82	5 56	do passenger.
Corsican	400	do 6	1203 24	104 24	Paddle, do

STEAM Vessels inspected, &c.—East Ontario Division—Continued.

Name of Vessel.	Number of Passengers allowed.	Cert	ate ificate pires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		10	200			
Nr1 77'	FOR	Ì	392.	050.05	\$ ets.	D. J. II.
North King	525	June	9	872 95	77 84	Paddle, passenger.
Antelope	40	do	13	19.59	6 60	Screw do
Island Queen		do	19	98.09	12 84	do do
City of Belleville	Į.	do	20	101 · 17	16 08	do do
Triton	1	do	23	11.11	5 88	do do
Fearless	50	do	24	<b>46·3</b> 8	8 68	do do
Southeastern	700	do	25	395.31	39 60	Twin screw, car ferry.
Transit	450	Not i	ssued	140.81	19 20	do repairing.
Caribou	250	June	26	144 19	19 52	Screw, passenger.
Crandella	400	do	30	266 20	29 28	Paddle do
Siesta	40	July	2	14.96	6 20	Screw do
Lorelei	100	May	11	44 · 29	8 52	do do
Beaver	75	July	17	18.00	6 44	do do
Daisy	60	do	17	7 · 20	5 56	do do
Pearl	16	do	18	7.70	5 64	do do ,
Jumbo	100	do	18	13.40	1 06	Scow do
Rice Lake	230	do	18	44 · 41	3 55	do do
Ark	192	do	18	48 · 20	3 84	do do
Byron Trerice	400	do	<b>1</b> 5	268 · 04	29 44	Screw do
Lindsay	. 575	do	22	75.00	6 00	Scow do
Paragon	400	do	23	71.00	5 68	do do
Zetta Bruce	. 25	do	23	7.75	5 72	Screw do
Alice Ethel	. 175	do	20	71.75	10 76	Paddle do
Water Witch	20	do	22	9.20	5 72	Screw do
Mary Louise	. 40	do	24	10.00	5 80	do do
Luella	90	do	<b>2</b> 5	20.00	1 60	Scow do
Consort	. 110	do	<b>25</b>	16.50	1 28	do do
Dawn	. 40	do	25	20.20	6 60	Screw do
Chemong	. 400	do	27	103.23	8 24	
Poloma		do	28		9 76	
Esturion	1	do	27		17 44	
Beaubocage			28		1	
•	,	•		86		

#### STEAM Vessels inspected, &c.—East Ontario Division—Continued.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.	
		1892.		\$ cts.		
Maple Leaf	70	July 27	26.08	7 08	Screw, passenger.	
Princess Louise	100	Aug. 19	26.36	7 08	do do	
Grenada	175	do 19	57 · 00	9 56	do dó	
Ivy		Not issued	7.43	5 56	do No certificated master.	
Alaska	100	Aug. 21	48.74	8 92	do passenger.	
Alert	40	do 21	49.83	9 00	do do	
Billow	175	do 26	40.00	3 20	Scow do	
Tropic	35	do 28	8.86	5 72	Screw do	
Nora	35	April 15	28 · 13	7 24	do do	
Rescue	• • • • • • •	Not issued	52 29	9 16	do Outfit not complete.	
Prince Edward	Ferry	Sept. 16	18.22	6 44	Centre-wheel, ferry.	
Golden Eye	.171	July 18	287 · 60	31 04	Paddle, passenger.	
City of Peterboro'	385	do 20	49.50	3 96	Scow do	
Otonabee	200	do 20	49.00	3 92	do do	
Total			13747 · 18	1,505 78		

#### THOMAS DONNELLY, Steamboat Inspector.

# STEAM Vessels not inspected for the year ended 31st December, 1891. EAST ONTARIO DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks. Why not inspected and class of Vessel.		
Utica	52.00	39.00	None	Not employed,	passenger.	
Pioneer	28.07	19.09	do	do	do	
Mary Ethel	98.61	56.13	do	do	centre-wheel	forry.
Total	178.68	114 · 22				

STEAM Vessels inspected for the year ended 31st December, 1891.

MONTREAL DIVISION.

Name of Vessel.	Number of Pas- sengers allowed.	Cert	Date tificate pires.	Gross Tons.	Tonnage Dues and Inspec tion Fees paid.	1
1		1	892.		\$ ct	3.
Welshman	Crew	April	<b>25</b>	143	16 44	Screw, freight.
Longueuil	850	do	27	365	37 20	Ferry, steamer, paddle.
Charlotte	Crew	do	27	59	9 72	Screw, tug.
Union	40	do	28	75	11 00	do passenger.
Ottawa	200	do	28	116	17 28	Paddle do
H. F. Bronson	Crew	do	28	72	10 76	Screw, tug.
Dauntless	<b>d</b> o	do	28	342	32 36	Paddle do
H. Robinson	do	do	28	61	9 88	Screw do
Pattie	do	do	29	272	26 76	Paddle do
J. L. Murphy	do	do	30	173	18 84	Screw do
G. H. Pesley	do	do	30	102	13 10	do do
Pembroke	do	do	30	162	17 96	Paddle do
Albert	do	May	1	217	22 36	do do
Monitor	do	do	1	333	32 64	do do
G. B. Pattee	do	do	1	30	7 40	Screw do
E. Davis	25	do	1	37	7 96	do passenger.
Janet Craig	50	do	2	12	5 96	do do
Mansfield	50	do	3	121	17 68	do do
Archie Stewart	Crew	do	4	80	11 40	do tug.
G. A. Harris	do	do	4	87	11 96	do do
Ada	<b>d</b> o	do	4	28	7 24	do do
Empress	do	do	5	677	62 16	Paddle, passenger.
Dolphine	do	do	5	70	10 60	Screw, tug.
G. H. Notter	do	do	5	14	6 12	do do
1000 I. Rambler	50	do	5	20	6 60	do passenger.
E. G. Laverdure	100	do	5	54	9 32	do do
Birdie Jones	22	фo	6	2	5 16	do do
Ottie	Crew	do	6	5	5 40	Screw, pleasure yacht.
Sir Hector	do	do	6	40	8 20	do tug.
John Heney	do	do	6	19	6 52	do do
Monarque	do	do	8	136 88		Paddle do

Steam Vessels inspected for the year ended 31st December, 1891—Continued.

MONTREAL DIVISION.

	1						
Name of Vessel.	Number of Pas- sengers allowed.	of Pas- Sengers Certificate expires.		Gross Tons.	Tonna Due and Ins tion Fees pa	s pec-	Remarks.
		1	892.		8	cts.	
Antelope	Crew	l	8	82	11	56	Screw, pleasure yacht.
Florence	do	do	9	62	9	96	do do
E. B. Eddy	do	do	9	72	10	76	do do
Laprairie	999	do	13	523	49	84	Paddle, ferry, Montreal and Laprairie.
Coban	40	do	16	1,063	93	04	Screw, passenger and freight, Montreal
Filgate	658	do	20	263	29	04	and Newfoundland. Paddle, passenger.
Cuba	125	do	23	931	82	48	Screw, freight and passenger.
Agnes McMahon	Crew	do	23	82	11	56	do tug.
${\bf Nosbonsing.} \dots \dots$	do	do	24	25	7	00	do do
$Booth\dots\dots$	do	do	24	234	23	72	Paddle do
Sparrow	<b>d</b> ი	do	24	25	7	00	Srcew do
Minnie Bell	do	do	26	22	6	76	do .do
Pearl	do	do	26	5	5	40	do yacht.
Vesta	<b>d</b> o	do	26	14	6	12	do do
Grain Elevator No. 9	do	do	28	172	18	76	do
do do 11	do	do	28	169	18	52	do
do do 12	do	do	<b>28</b>	183	19	64	do
do do 7	do	do	<b>2</b> 8	170	18	60	do
do do 6	do	do	28	170	18	60	do
Maude	350	do	29	269	29	52	Paddle, passenger.
Princess	445	do	29	579	54	32	do do
Prince of Wales	500	do	<b>2</b> 9	610	56	80	do do
Alma Munro	125	do	29	891	79	28	Screw, freight.
Ida		June	1	247	27	76	do do
Hiram Easton	Crew	dο	2	34	7	72	do tug.
John R. Booth	do	do	3	132	15	56	do do
Grain Elevator No. 1	do	do	4	83	11	64	do
do do 10	do	do	4	173	18	84	do
Harry Bate	do ∶	do	4	254	28	32	do freight.
Gatineau	300	do	8	293	31	44	Paddle, passenger.
Olive	200	do	9	213 89	25	04	Screw, passenger.

STEAM Vessels inspected, &c.—Montreal Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.		Remarks.	
		18	392.		<b>\$</b> c	ts.		
Spoon Dredge No. 4.	Crew	Jan.	12	100	13 (	90 j		
St. Peter	do	do	12	43	8 4	14	Screw; Montreal harbour tug.	
Spoon Dredge No. 7.	do	do	12	100	13 (	00		
Plover	do	do	12	43	8	44	do do	
Sovereign	700	do	13	637	58 :	96	Side-wheel, passenger.	
Winderness	Crew	do	16	35	7 :	80	Screw, pleasure yacht.	
Nanca	do	do	16	30	7	40	do do	
Cultivateur	100	do	17	152	20	16	Centre-wheel, ferry,	
Reliance	50	do	19	78	11	24	Paddle, passenger.	
W. F. Logie	Crew	do	20	17	6	<b>3</b> 6	Screw; Montreal harbour tug.	
Georgiana	do	do	<b>20</b>	53	9	24	do do	
St. Louis	do	do	22	34	7	72	do do	
Dredge No. 2	do	do	22	100	13	00	do do	
do 1	do	do	22	100	13	00	do do	
do 3	. do	do	22	100	13	00	do do	
Spoon Dredge No. 1	. do	do	<b>22</b>	100	13	00	do do	
Ishamay	. do .	do	22	7	5	56	Screw, pleasure yacht.	
High Rock	. do .	. do	23	7	5	56	Screw, tug.	
Montmorency	do .	do	23	18	6	44	do	
Squan	. do .	. do	23	22	6	76	do	
Agnes	. 50	do	23	29	7	32	Screw, passenger.	
River Bell	. Crew	. do	24	. 14	6	12	Screw, tug.	
Rockland	. do .	. do	24	. 78	11	24	do	
Aid	. do .	. do	24	. 25	7	00	Paddle, tug.	
Mouche-à-Feu	. 50	do	24	. 20	6	60	Paddle, passenger.	
Bonito	30	do	24	. 17	6	36	Screw, passenger.	
Glide	. 100	do	<b>2</b> 5	. 80	11	40	do	
John	. 50	do	<b>2</b> 5	. 35	7	80	Paddle, passenger.	
Belmont	329	do	26	. 133	18	64	do	
T. H. Nasmith	Crew	. June	27	49	8	92	Screw; Montreal harbour tug.	
Calumet	. do .	. do	27	. 40	8	20		
Silver Spray	. do .	. July	2			40	do do	
				9	0			

STEAM Vessels inspected, &c.—Montreal Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspection Fees paid.		Remarks.
		18	392.		8	cts.	
Garnet	242	July	3	152	20	16	Paddle, passenger.
Chaffey	50	do	4	42	8	36	Screw, passenger.
Swan	60	do	6	24	6	92	do
Dandy	Crew	do	6	46	8	68	Screw, tug.
Owens	do	do	6	156	17	48	Paddle, tug.
Tim Doyle	do	do	10	20	6	60	Screw, tug.
Lady of the Lake	700	do	13	607	56	56	Paddle, passenger, Lake Magog.
John A	Crew	do	14	19	6	<b>52</b>	Screw, tug.
Mayflower	75	do	14	18	6	44	Screw, passenger.
Alexandria	Crew	do	15	53	9	24	Screw, pleasure yacht.
Charlemagne	do	do	18	76	11	08	Screw, tug.
Rigeaud	do	do	21	46	8	68	do
Wm. Paul	do	do	<b>22</b>	7	5	56	do
Gertie	do	do	22	17	6	36	do
W. C. Francis	do	đο	27	37	7	96	do
Cacouna	do	do	<b>28</b>	1,451	124	08	Screw, freight; Montreal & Saguenay
Volunteer	do	Aug.	3	5	5	40	Screw, pleasure yacht.
John Fraser	100	do	4	118	17	44	Paddle, passenger.
Meteor	125	do	5	132	18	56	Screw, passenger.
Clyde	60	do	6	29	7	32	đo
Argo	100	do	6	154	17	32	Paddle, passenger.
D. A. Martin	Crew	do	6	47	8	76	Screw, passenger.
Toneata	35	do	7	14	6	12	do
Emerrillon	25	do	<b>7</b>	15	6	20	do
Charlotte	25	do	7	14	6	1.2	do
Mattawan	60	do	7	22	6	76	do
H. Bonnefant	25	do	12	22	6	76	do
St. Ann	l .	Aug.	18	25	7	00	Screw, tug.
Grain Elevator No. 13		do	<b>2</b> 6	178	19	24	do
_	do		<b>2</b> 6		19	48	do
do 4	do	Sept.	8	188	20	04	do
Shickluna	do	do	11	i	10	28	do

#### STEAM Vessels inspected, &c.—Montreal Division—Continued.

Name of Vessels.	Number of Pas- sengers allowed.	Da Certi	Date rtificate cpires.		Tonnage Dues and Inspection Fees paid.		Remarks.
		189	92.		\$	cts.	
Hudson	Crew	Sept.	16	158	17	64	Paddle, tug.
Bonavista	50	do	17	1,306	112	48	Screw, freight and passenger, Mont-
Eljm	Crew	do	18	108	13	64	real and St. John, Nfld. Screw, tug.
Hall	300	do	24	247	27	76	do passenger.
Maggie R. King	Crew	Oct.	1	27	7	16	do tug.
Grain Elevator No. 1	do	do	2	165	18	20	do do
. do 5	do	do	2	80	11	40	do do
Denis	do	do	2	14	6	12	do do
Mildred	do	do	14	15	6	20	do passengers.
				20,496	2,392	68	-

JOHN BURGESS, Steamboat Inspector.

STEAM Vessels not inspected for the year ended 31st December, 1891.

MONTREAL DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees,	Remarks. Why not inspected and class of Vessel	
			\$ cts.		
I. O. B.	45	26	8 60	Laid up before inspected.	
D. McLaughlin	22	24	6 76	do do	
Dora.	48	44	Dues not paid.	Not employed.	
Lottie.	10	9	do	do	
George H. Millen.	11	7	do	do	
Vermont	206	117	do	do,	
John.	203	99	do	do	
C. Anderson	105	64	do	do	
Chipmunk	20	13	do	do	
Mountain Maid	118	62	do	do	
Percy	7.	5	do .	do	
H. M. Mixer	21	9	do	do	
Transfer	619	395	do	do	
Dansherada	46	31	do	do	
Castor	54	36	do	, do	
Powerful	254	160	do	do	
J. K. Ward	23	15	do	do	
Sandy	29	20	do	do	
	1,841	1,133	15 36		

JOHN BURGESS, Steamboat Inspector.

STEAM Vessels Inspected for the year ended 31st December, 1891.

QUEBEC DIVISION.

		1				
Name of Vessel.	Number of Passen- gers allowed.	of Passen- gers Certificate expires.		Tonnage Dues and Inspec- tion Fees paid.	Remarks.	
				\$ cts		
Paribonka, for the	. 289	Not certified	144	10 76	Paddle, passenger, on Lake St. John.	
year 1888. Paribonka, for the	289	do	144	19 52	do do do	
year 1889. Paribonka, for the year 1890.	289	do	144	19 52	do do do	
Undine, for the year 1890.	40	do 1891.	17	9 36	Screw, passenger, Roberval and Gde. Deschene.	
Ida, for the year 1890		Nov. 25	5	5 40	Screw, Quebec harbour tug.	
Diver		do 25	85	11 80	do wrecking schooner.	
Lévis	350	do 25	156	20 48	do ferry, Quebec and St. Romuald.	
Miramichi	300	do 25	727	66 16	do passenger, Quebec and Pictou.	
Contest	150	Not certified 1892.	231	26 48	Paddle, mail tender, Rimouski.	
Rivière du Loup	150	Aug. 12 1891.	173	21 84	do ferry, Boucherville and L'Assomption.	
Sorel	300	Nov. 25	158	20 64	do ferry, Sorel and St. Thomas.	
Mouche-à-feu	300	do 25	214	25 12	do do Sorel and Berthier.	
Terrebonne	450	do 25	601	56 08	do passenger, Montreal and Contrecœur.	
Berthier	700	do 25	1,101	96 08	do passenger, Montreal and Three Rivers.	
Chambly	600	do <b>2</b> 5	647	59 76	do passenger, Montreal and Chambly.	
Quebec	800	do 25	3,056	252 48	do passenger, Quebec and Mont- real.	
Canada	800	do <b>2</b> 5	2,009	168 72	do passenger, Montreal and Chi- coutimi.	
Hochelaga	775	do 25	418	41 44	do ferry, Hochelaga and Boucher- ville.	
Polino	30	Dec. 1	807	72 56	Screw, passenger and freight, Montreal and foreign ports.	
Bohemian	500	Nov. 25	1,138	99 04	Paddle, passenger, Montreal and Cornwall,	
Trois Rivières	1,900	do 25	1,710	144 80	do passenger, Montreal and Que- bec.	
Cultivateur	750	do 25	362	36 96	do passenger, Montreai and Sorel.	
South	450	do 25	349	35 92	do ferry, Quebec and Lévis.	
North	450	do 25	289	31 12	do do do	
Otter	123	Dec. 1	198	23 84	Screw, passenger and freight, Quebec and gulf ports.	
Beaver	70	do 10	147	19 76	do passenger and freight, Montreal and Gaspé.	
Hubert Larkin	,		49	8 92	do Quebec harbour tug.	
Stormy Petrel	ł	Fee not paid			do do do	
Etoile	591	Nov. 25	560	52 80	Paddle, passenger, Quebec and St. Jean Deschaillon.	
St. Louis	541	do 25	428	42 24	do passenger, Quebec and St. Jean Deschaillon.	
St. Croix	541	do 25	455 9.1	43 60		

94

STEAM Vessels Inspected, &c.—Quebec Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate		Gross Tons.	Tonnage Dues and Inspection Fees paid.		Remarks.	
		1891.			\$	cts.		
Algerian	400	Nov.	25	912	81	00	Paddle	, passenger, Montreal and To-
Passport	400	do	25	1,034	90	72	do	ronto.  passenger, Montreal and Toronto.
Magnet	735	đo	25	1,029	90	32	do	ferry, Montreal and Island of St. Helen.
Corinthian	400	do	25	1,062	82	96	do	passenger, Toronto, Montreal and Chicoutimi.
Thornholm	ļ	June	392. 1	1,816	153	<b>2</b> 8	Screw,	freight, Montreal and Sydney.
Lake		do	1 391.	145	16	60	do	gulf and river tug.
Brothers	526		25	262	28	96	Paddle	e, passenger, Quebec and St. Ann.
Montmagny	516	do	25	351	36	08	do	passenger, Quebec and Berthier below.
Orleans	475	do	25	181	22	48	Screw,	ferry, Quebec and Island of Orleans.
Anna McGee	ļ	do	25	60	9	80	do ·	wrecking schooner.
Saguenay	773	do	25	687	62	96	Paddle	e, passenger, Quebec and Chi-
Frank			· . • • • •	58	9	64		wheel, river tug.
Jacques Cartier	300	do	<b>2</b> 5	143	19	44	Paddle	e, passenger, Quebec and Chi-
Florence		····	 892.	133	15	64		wrecking schooner.
Pilot	350	Sept.	18 891.	426	42	08	do	winter ferry, Quebecand Lévis.
Ida			25	26	7	08	do	harbour tug.
Mersey		do	<b>2</b> 5				. do	do
Lord Stanley		do	<b>2</b> 5	276	30	08	do	gulf and river tug.
Victor		do	<b>2</b> 5	35	7	80	do	Quebec narbour tug.
Aurelia		do	<b>25</b>	32	7	56	do	do do
Dauntless		do	25	81	11	48	do	do <b>d</b> o
Lady Belleau	.	do	<b>25</b>	81	11	48	do	wrecking schooner.
Conqueror		do	<b>2</b> 5	233	23	64	do	gulf and river tug.
Jessie R. Souter	Fee not	paid	for this	year			. do	Quebec harbour tug.
Hope	.	Dec.	<b>2</b> 5	20	(	60	do	do do
Randolph		do	25	16		<b>2</b> 8	do	do do
Hunkeedore	. Fee not	paid	for this	year:			. do	do do
Osprey	.	Dec.	<b>2</b> 5	10	1	5 80	do	do do
Flora			25	50		9 00	do	do do
Newfoundland		June	892. 1	918	8:	1 44	do	freight, Montreal and Sydney.
Two Brothers		Dec.	891. 25	23	•	6 84	do	Quebec harbour tug.

### STEAM Vessels inspected, &c.—Quebec Division—Continued.

				,	
Name of Vessel.	Number of Passen- gers allowed.	Datc Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
		1891.		\$ cts.	·
St. George	Crew	Nov. 25	13	6 04	Screw, harbour tug.
St. Roch	do	do 25	18	6 44	do do
Montreal	800	do 25	2,211	184 88	Paddle, passenger, Quebec and Mon-
Rhoda	Crew	do 25	182	19 56	treal. Paddle, Quebec harbour and river
Beaver	do	do 25	273	26 84	Side-wheel, river tug.
Commodore Holiwell	do	do 25	10	5 80	Screw, harbour tug.
Fairy	do	do 25	16	6 28	do do
Mayflower	do	do 25	13	6 04	do do
Five Brothers	do	do 25	10	5 80	do do
John Young	do ,	do 25	163	18 04	Paddle, river tug.
L'Ami		Fee not paid			Screw, harbour tug.
Blandford	Crew	Nov. 25	65	10 20	Paddle, river tug.
C. H. Parnell	do		17	6 36	Screw, harbour tug.
Acadian	Freight		931	79 48	do freight, Montreal and Pictou.
Batiscan	Crew	1891. Nov. 25	40	8 20	Side-wheel, river tug.
Relief	do	do 25	381	35 48	Screw, gulf and river tug.
Alma	Not regist			 	do river tug.
Albani	Crew	1892. July 25	58	9 64	do pleasure yacht.
Lillie H	do	1891. Nov. 25	19	6 52	do harbour tug.
C. W. Jonces	do	do 25	38	8 04	do do
Thames	30	1892. July 10	1,683	142 64	do passenger and freight, Mon
Polaris	400	Sept. 19	533	50 64	do winter ferry, Quebec and
Greetlands	80	July 27	1,091	95 28	do passenger and freight, Mon-
Como	100	1891. Nov. 25	75	11 00	treal and St. John, Nfld. Paddle, ferry, Three Rivers and
Lens	For the ye	ar 1886	22		Nicolet. Screw, river tug; paid for 1886.
Gagnon	Not regist				do pleasure yacht.
Bourgeois	200	1892. Aug. 14	170	21 60	Paddle, ferry, Three Rivers and St.
Glacial	145	do 14	109	16 72	Grégoire. Screw, ferry, Three Rivers and Ste.
Lucie		Laid up	25	14 00	Angèle. Stern-wheel, river tug; paid for 2
St. George	Crew	1891. Nov. 25		14 80	years. Side-wheel, river tug; paid for 2
Arthur	Fee not pa	id; laid up	 		years. Side-wheel, river tug.
Maud	_	_	50	9 00	
			96		

STEAM Vessels inspected, &c.—Quebec Division—Concluded.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
		1891.		\$ cts.	
Doucet					Screw, steam yacht.
Pilgrim	455	1891. Nov. 25	262	28 96	Paddle, passenger, Quebec and St.
Activity	Crew		15	6 20	Nicholas. Screw, harbour tug.
Vega	250	1891. Nov. 25	132	18 56	Screw, ferry, Quebec and Island of
Albion	Crew		7	5 56	Orleans. Screw, river tug; paid for 1890.
Isle aux Noix		Fee not paid			do river tug.
Champion	1	do			do gulf and river tug.
Queen		1892. Sept. 19	367	37 36	do winter ferry, Quebec and Lé-
Cultivateur	750	1891. Nov. 25	362	36 96	
Ida	Crew	Fee not paid	 		Sorel.
Swan	do	do		ļ	
Paribonka	289	Certificate	144	19 52	Paddle, passenger, on Lake St. John.
Undine	40	not issued.	17	9 36	Screw do Roberval and
Thor	Crew	1891. Nov. 25	322	30 76	Grande Décharge, Lake St. John. Paddle, river tug.
Kinogami	do	do 25	21	6 68	Screw do
Forest	do	do 25	26	7 08	do do
Admiral	350	1892. Oct. 1	682	62 56	Paddle, passenger, Dalhousie and
Vulcan	40	do 1	22	6.76	Gaspé. Screw, ferry, Dalhousie and Flouret.
Frances	60	do 1	19	6 52	Paddle do Campbellton and Cross Point.
Christiana	Crew	1891. Nov. 25	57	9 56	Paddle, river tug.
Oak Bay	do	do 25	27	7 16	do do
${\bf McNaughton} \dots \dots$	do	do 25	137	15 96	Screw, gulf and river tug.
Swallow	do	do 25	9	5 72	do harbour tug.
Anglesea	do	do 25	153	17 24	Side-wheel, gulf and river tug.
Almanda	do	do 25	11	5 88	Screw, river tug.
Marie Louise	do	Fee not paid	 		Side-wheel, river tug.
St. Louis	do	do			Screw, river tug.
Belle	do	1891. Nov. 25	51	9 08	do <sup>*</sup> do
Asilda	do	do 25	24	6 92	do do
Ed. Arpin	25	do 25	5	5 40	do passenger, yacht.
Canadian	Crew	do 25	26	7 08	do river tug.
Richelieu	do	do 25	33	7 64	do do

#### STEAM Vessels inspected, &c.—Quebec Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.			Remarks.
		1891.		<b>\$</b> 0	cts.		
James	Crew	Nov. 25	125	15 (	00	Paddle,	river tug.
Rodolphe	do	do 25	116	14 5	28	дo	do
Vesta	do	do 25	4	5	32	Screw	do
Lena	For the ye	ar 1887	22	5 8	88	do	do
do	do	1888	22	5 8	88	do	do
do	do	1889	22	6 7	76	do	do
do	do	1890	22	6 1	74	do	do
Total			38,093 5	3,799	<u> </u>		

JOS. SAMSON,

Inspector.

#### STEAM VESSELS not inspected for the year ended 31st December, 1891.

Name of Vessel.	Gross Tonnage.	Regis- tered Ton- nage.	Dues and Fees.	Remarks. Why not inspected and class of Vessel.
			\$ cts.	
Maggie Bell	372	226	Not paid.	Not received.
Patrick Murphy	10	4	do	do
Robert Stoker	14	2	do	do
W. Ross	14	10	do	do
Dot	10	1	do	do
Chicoutimi			do	Not registered and not received.
Victory	55	37	do	Not received.
Lena	22		do	do
Jehanne B	17	9	do	do
	514	289		

JOS. SAMSON, Steamboat Inspector.

Steam Vessels inspected for the year ended 31st December, 1891.

QUEBEC AND MONTREAL DIVISION.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.		Gross Tons.	Tonnag Dues and Insp tion Fees pa	ec-	Remarks.
		18	891.		<b>\$</b>	cts.	
Chambly	600	Nov.	25	647	59	76	Paddle, passenger, Montreal and
Mouch-à-feu	300	do	25	214	25	12	Chambly. Paddle, ferry, Sorel and Berthier.
Goul	300	do	25	158	20	64	do Sorel and St. Thomas.
Canada	800	do	25	2,009	168	72	Paddle, passenger, Montreal and Chi-
Berthier	700	do	25	1,101	96	08	
Terrebonne	450	do	25	601	56	08	Rivers.  Paddle, passenger, Montreal and Con-
Trois-Rivières	1,000	do	25	1,710	144	80	tre-cœur. Paddle, pass., Montreal and Quebec.
Polino	30	Dec.	1	807	72	56	Screw, pass. and freight, Montreal and
Quebec	800	Nov.	25	3,056	252	48	foreign ports. Paddle, pass., Quebec and Montreal.
Hochelaga	775	do	25	418	41	44	Paddle, ferry, Hochelaga and Bouch-
Ed. Arpin	25	do	25	5	5	40	erville. Screw yacht, Sorel and Lake St. Peter.
Jacques-Cartier	300	do	25	143	19	44	Paddle, pass., Quebec and Chicoutimi.
Bohemian	500	do	25	1,138	99	04	do Montreal and Cornwall.
Longueuil	850	do	25	365	37	20	Paddle, ferry, Montr'l and Longueuil.
Laprairie	997	do	<b>2</b> 5	523	49	84	do do Laprairie.
Alma Murow	125	Oct.	1	891	79	28	Screw, pass. and freight, Montreal and
Cuba	125	do	1	931	82	48	Chicago. do do do
Princess	443	Nov.	25	579	54	32	Paddle, pass., Montreal and Carillon.
Maud	350	do	25	269	29	52	do do Ottawa.
North	450	do	<b>2</b> 5	289	31	12	Paddle, ferry, Quebec and Lévis.
South	450	do	<b>25</b>	349	35	92	do do
Otter	123	Dec.	1	198	23	84	Screw, passenger and freight, Quebec
Corinthian	400	Nov.	25	1,062	92	96	and gulf ports. Paddle, passenger, Toronto, Montreal
Orleans	475	do	<b>2</b> 5	181	22	48	
Lévis	350	do	•25	156	20	48	Orleans. Screw, ferry, Quebec and St. Romuald.
Miramichi	300	do	<b>2</b> 5	727	66	16	Screw, passenger and freight, Montreal
Contest	150	do	25	231	26	<b>4</b> 8	and Pictou. Paddle, mail tender, Rimouski.
Montmagny	516	do	<b>2</b> 5	351	36	08	Paddle, passenger, Quebec and Ber-
Brothers		do	25	262	28	96	thier (below). Paddle, pass., Quebec and Ste. Ann.
St. Louis	541	do	<b>2</b> 5	428	42	24	do do St. Jean
Etoile 10a—7½	591	do	25	560	52	80	Deschaillon. do do do

STEAM Vessels inspected, &c.,—Montreal and Quebec Division—Continued.

						_	
Name of Vessel.	Number of Pas- sengers allowed.	Cert	Pate ificate pires.	Gross Tons.	Tonna, Dues and Insp tion Fees pa	pec-	Remarks.
		18	392.		8	cts.	
Beaux	70	ĺ	10	147			Screw, passenger and freight, Quebec, Montreal and Gaspé.
G. G. Thornholme	Freight.	June	1	1,816	153	28	Screw, freight, Montreal and Sydney.
Saguenay	- 773	Nov.	25	687	62	96	Paddle, pass., Quebec and Chicoutimi.
Algerian	400	do	25	912.5	81	00	do Montreal and Toronto.
Passport	400	do	25	1,034	90	72	do do
St. Croix	541	do	25	445	43	60	do Quebec and St. Croix.
Acadian	Freight.	June	1	931	79	48	Screw, freight, Montreal and Pictou.
Newfoundland	do	do	1	918	78	44	do do Sydney.
Vega	250		891. 25	132	18	56	Screw, ferry, Quebec and Island of
Belmont	329	do	25	133	18	64	Orleans. Paddle, passenger, at 1000 Islands.
Prince of Wales	500	do	25	610	56	80	do pass., Montfeal and Carillon.
Magnet	735	do	<b>2</b> 5	1,029	90	32	do ferry, Montreal and Island of
Gatineau	300	do	25	293	31	44	St. Helen. Paddle, passenger, Montreal and Val-
Swan	60	Dec.	1	24	6	92	leyfield. Screw, pass., Prescott and Kingston.
Thames	30	July	392. 10	1,683	142	64	do and freight, Montreal
Cultivateur	750	Nov.	891. 25	362	36	96	and Sydney. Paddle, pass., Montreal and Sorel.
Bonarista	50		892. 14	1,306	112	48	Screw, passenger and freight, Mon-
Ida	25	do	14	247	27	76	screw, passenger and freight, Mon-
Coban	40	do	15 891.	1,063	93	04	and Ottawa. Screw, passenger and freight, Mon-
Filgate	658	Nov.	25 892.	263	29	04	treal and St. John, Nfld. Paddle, passenger, Montreal and Beau-
Lady of the Lake	700		15	607	56	56	harnois. Paddle, pass., Newport and Magog.
Mayflower	75	do	16 891.	18	6	44	Screw, pass., on Lake Massawippi.
Le Cultivateur	100		25	152	20	16	~
Chaffee	50	do	<b>2</b> 5	42	8	<b>3</b> 6	Catharine. Screw, ferry, Valleyfield and Lançaster
E. G. Laverdure	100	do	25	54	9	32	Screw, passenger, Ottawa River and
1000 Island Rambler.	50	do	<b>2</b> 5	20	6	60	Rideau Canal. Screw, ferry, Ottawa and Hull.
Mansfield	50	do	25	121	17	68	do New Edinburgh and Gatineau Point.
Empress	800	do	25	677	62	16	
Birdie Jones	22	do	<b>2</b> 5	2	. 5	16	Screw, passenger, Ottawa River and Rideau Canal.
Pearl	25	do	25	5	5	40	Screw, pleasure, Ottawa River and
Agnes	50	do	<b>2</b> 5	29	7	32	Rideau Canal. Screw, ferry, Buckingham and High
		•		100	ď		Falls.

STEAM Vessels inspected, &c.—Montreal and Quebec Division—Concluded.

		F	-,			_	
Name of Vessel.	Number of Pas- sengers allowed.	Cert	late ificate pires.	Gross Tons.	Tonna, Dues and Insj tion Fees pa	pec-	Remarks.
-					\$	cts.	
Mouche à feu	50	Nov.	25	20	6	60	Centre-wheel, ferry, Thurso and Clar-
Glide	100	do	25	80	11	40	Screw, ferry, Calumet and Hawkes-
Bonito.	30	do	25	17	6	36	bury. Screw, ferry, Calumet and L'Orignal.
John	50	do	25	35	7	80	Centre-wheel, ferry, Carillon and Point
Sovereign	500	do	25	637	58	96	Fortune. Paddle, pass., Montreal and Carillon.
Cacouna	Freight.	July	892. 24	1,451	124	08	Screw, freight, Montreal and Glen
Harry Bates	do .	do	24	254	28	32	Screw, freight, Montreal and Perth.
Reliance	50	Nov.	891. 25	78	11	24	Paddle, ferry, Lachine and Caughna-
Greetlands	80	July	892. 27	1,091	95	<b>2</b> 8	waga. Screw, passenger and freight, Mont- real and St. John, Nfld.
Montreal	800	Nov.	891. 25	2,211	184	88	Paddle, pass., Quebec and Montreal.
John Fraser	100	Aug.	892. 4	118	17	44	Screw, passenger, Lake Nipissing.
Meteor	125	do	5	132	18	56	do Lake Temiscamingue.
Argo	100	do	6	154	17	32	Paddle, passenger do
Clyde	60	do	6	29	7	32	Screw do do
D. A. Martin	60	Not o	ertified				
Toneata	35	Aug.	7	14	6	12	do do do
Lotta	25	Not o	ertified	10	5	80	do do do
Mattawan	60	Aug.	7	22	6	76	do do do
Charlotte	25	do	7	14	6	12	do do do
Emerillion	25	do	7	15	6	<b>2</b> 0	do do do
Union	40	do	8	75	11	00	Screw, ferry, Pembroke and Allumette
Ottawa	200	do	8	116	17	28	Island. Paddle, passenger, Pembroke and Des
Ed. Davis	25	do	10	37	7	96	Joachims. Screw, ferry, Quyon and Fitzroy.
Janet Craig	50	do	10	12	5	96	do Sand Point and Bristol.
Bonenfant	25	do	12	22	6	76	Centre wheel, ferry, Charlemagne and
Rivière du Loup	150	do	12	173	21	84	Bout de l'Isle. Paddle, ferry, Boucherville and L'As-
Bourgeois	200	do	14	170	21	60	somption. Paddle, ferry, Three Rivers and St.
Glacial	145	do	14	109	16	72	Screw, ferry, Three Rivers and Ste.
Como	100		391. 25	75	11	00	Angèle. Paddle, ferry, Three Rivers and Nicolet
Pilgrim	455		25	262	28	96	Paddle, pass., Quebec and St. Nicolet.
Pilot	350		892. 18	426	42	08	Screw, winter ferry, Quebec and Lévis.
Polaris	400	do	19	533		64	do <b>d</b> o
				10	1		

STEAM VESSELS inspected, &c. - Montreal and Quebec Division - Continued.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
		1891.			
Queen	350	Sept.19	367	37 36	Screw, winter ferry, Quebec and Lévis.
Peribonca	289	Not certified	144	19 52	Paddle, pass., on Lake St. John, Que.
Undine	40	do	17	9 36	Screw, pass., Roberval and Grande
Admiral	350	Oct. 1	682	62 56	Décharge. Paddle, pass., Dalhousie and Gaspé.
Vulcan	40	do 1	22	6 76	Screw, ferry, Dalhousie and Florent.
Francis	60	do 1	19	6 52	Paddle, ferry, Campbellton and Cross Point.
Peribonca			144	19 52	Paddle, passenger, on Lake St. John.
do			144	19 52	do do
do			144	19 52	do do
do			144	10 76	do do
Total			46,340	4,432 48	

PIERRE W. BRUNELLE.

Hull Inspector.

Steam Vessels not inspected for the year ended 31st December, 1891.

QUEBEC AND MONTREAL DIVISION.

Name of Vessel.	Gross Tonnage.			Remarks.  Why not inspected and class of vessel.
			\$ cts.	
Ida.	6	4	Not paid	Not registered.
Swan			do	do
Ripple			do	do .
Lena	1	14	Do not know	Not employed.
Albion	7	4	if paid.	She did not carry passengers.
C. Anderson	105	64	Not paid	Not employed.
Canada Atlantic	618	395	do	do
Mountain Maid	118	62	do	do
Powerful	254	160	do	do
Almeric	•		do	do and not registered.
St. Louis	i		do	đo do
Richelieu	33	22	7 64	She did not carry passengers.
Canadien	26	17	7 08	do do
Dora,	48	44	Do not know if paid.	do do
Total				

PIERRE D. BRUNELLE,

Hull Inspector.

STEAM Vessels inspected for the year ended 31st December, 1891.

MARITIME PROVINCES DIVISION.

Name of Vessel.	Number of Pas- sengers allowed.	Date Certificate expires.		Gross Tons.	Tonnage Dues and Inspection Fees paid.		Remarks.	
		189	92.		\$	cts.		
Goliah		Feb.	21	146 83	16	76	Screw,	tug.
Dominion	150	do 189	17	594 · 80	55	52	do	passenger and freight.
LaTour	75	Dec.	15	154 · 43	20	32	do	do
Harlaw	75	189 Feb.	17	451 · 36	44	08	do	do
Marina	<b> </b>	do :	20	32.14	7	56	do	tug.
Yarmouth	350		27	1,432 · 16	122	56	do	passenger and freight.
Halifax	400	189 Sept. 3		1,738 45	147	04	do	do
City of St. John	130		1	709 · 12	64	72	Paddle	do
Alpha	25	April		306.91	32	48	Screw	do
Coila		Mar.	19	325 45	34	00	do	freight.
Collector			18	52.02	9	16	do	lighter.
St. Olaf	150	Dec. 189	91. 16	305 · 27	32	40	do	passenger and freight.
Electra	75	do	1	106.96	16	56	do	do
A. C. Whitney		April		62.67	10	04	do	tug.
Rescue		do	2	124 · 09	14	92	do	wrecker.
Ralph E. S		do	2	27 · 82	7	24	do	fish-boat.
Sir C. Ogle	200		24	126.09	18	08	Paddle	, passenger ferry.
May Queen	330		91. 10	539 · 40	51	12	do	passenger and freight.
Springfield	160	do	16	232 · 73	26	56	Stern-	wheel, passenger.
Star	200		10	461 · 03	44	88	Paddle	do
Champion		April	92. 16	190 · 14	20	20	do	tug.
Lillie Glasier		do	16	209 · 31	21	72	do	do
Hero		do	16	127 60	15	5 16	do	do
Admiral		do	16	158 · 20	17	64	do	do
Ada G		do	17	102.08	13	3 16	do	do
New City		do	17	78·38	11	24	Screw	do
Captain	<b></b>	do	17	68.43	10	44	do	do
Hercules			17	87·11	11	96	do	do
David Weston	480	Dec.	1	765 · 15	69	20	Paddle	, passenger and freight.
Bertha	ļ		18	29.79	7	32	Screw,	tug.
Soulanges	250	Dec.		318.37	33	3 44	Paddle	, passenger.

Steam Vessels inspected for the year, &c.—Maritime Provinces Division—Continued.

	,				,
Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ cts.	
Ouangondy	300	April 22	294 · 75	31 52	Paddle, passenger ferry.
Sea King	l .	April 20	128.63	15 32	Screw, tug.
City of Monticello	l .	do 28	1,033 65	90 64	Paddle, passenger and freight.
Норе		do 18	305.77	29 40	do tug.
Blue Hill	I	1891. Dec. 1	195.83	20 60	Twin-screw, passenger.
Scotia		1892. April 27	44.58	8 36	Screw, tug.
Chester		do 27	79.50	11.32	do do
Avon	130	do 23	66.66	10 12	do passenger, ferry.
Acadia	150	do 27	74 21	10 92	do do
Hiawatha	300	do 27	229 79	26 40	.do passenger and freight.
Havana		do 27	470.98	45 68	do freight.
Anticosti	t	do 28	19.00	6 52	do fish boat.
Dartmouth	1	do 24	311 · 23	32 88	Paddle, passenger, ferry.
Mic-Mac	300	do 24	150.63	20 00	do do
Clifton	150	1891. Dec. 10	138 · 21	19 04	Stern-wheel, passenger and freight.
Acadia St. John	400	do 12	621 · 44	57 68	Paddle, passenger.
Bessie and Harry		1892. May 13	22.00	6 75	Screw, water boat.
Egerton	1	do 8	112 · 10	13 96	Paddle, passenger, ferry.
Alice	I .	do 18	15.77	6 28	Screw, temporary ferry.
Daisy		do 18	10.74	5 80	do tug.
St. Lawrence		do 18	50 82	10 20	do do
Elfin		do 20	122.42	17 76	do passenger, ferry.
Wm. Aitken	1	do 20	74.87	11 00	do tug.
Heather Belle	1	do 20	283 · 34	30 56	Paddle, passenger.
Fred. M. Batt		do 21	59.90	9 72	Screw, tug.
Montague	250	do 22	129.55	18 32	Paddle, passenger, ferry.
Eldon	1	do 22	37.91	8 04	Screw, tug.
St. Lawrence	500	do 18	845.61	75 60	Paddle, passenger.
Princess of Wales	1	1891. Dec. 31	935 · 54	82 80	do do
William		1892. May 25	210 · 02	21 80	Screw, freight.
F. C. Batt	40	do 25	Ì	7 56	do passenger, ferry.
Alameda		do 26	l	7 72	do tug.
			10	5	

STEAM Vessels inspected, &c.—Maritime Provinces Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons,	Tonnage Dues and Inspection Fees paid.	Remarks.
•		1891.		\$ cts.	
Fastnet	50	June 13	337 · 91	35 04	Screw, passenger and freight.
Arcadia	15	Dec. 1	61.64	9 96	do passenger.
Northumberland	400	June 9	1,245 · 43	108 40	Turn screw, passenger and freight.
Dorcas		do 11	215 · 34	22 20	Screw, freight.
Lenora		do 12	5.00	5 40	do yacht.
Amanda Green		do 16	19.63	6 52	do tug.
Maggie M		do 17	65.78	10 20	do do
Tourist		do 17	. 11.78	5 88	do tug and yacht.
Fannie		do 17	33 · 44	7 64	do do
Winnie		do 17	12.46	5 96	do do
W. E. Wroom	24	April 17.	10.05	5 80	do passenger, ferry.
Lillie.		June 18.	71.64	10 76	do tug.
St. John		do 18.	47 28	8 76	do do
Dirigo		do 18	70.13	10 60	do do
Bellisle		Not issued.	155.14	20 40	Stern-wheel, passenger.
Fred Clinch		June 19.	23.87	6 84	Screw, tug.
Enterprise	40		72.33	10 76	Paddle, passenger, ferry.
Richard Doane		1892. June 19.	70.46	10 60	Screw, tug.
Fanchon		do 20.	95.66	12 60	do do
Florence ville	270	do 20.	. 185 14	22 80	Stern-wheel, passenger.
Eva Johnston		do 20.	. 15.77	6 28	Screw, tug.
Ada		. do 22.	3.66	5 32	do yacht.
Bismarck		. do 22.	. 49.04	8 92	Paddle, tug.
Melbourne		do 22.	. 4.00	5 32	Screw, yacht.
Mascott		. do 23.	. 70.50	10 60	do tug.
St. Andrew		. do 23.	. 76.64	11 08	do do
St. George		. do 23.	. 160.57	17 80	Paddle do
Miramichi	. 60	do 23.	. 75.18	11 00	do passenger.
Nelson	. 100	do 24.	. 64.34	10 12	Screw do
St. Nicholas	. 60	do 24.	. 60.20	9 96	do do
Grip		. do 24.	. 4.81	5 40	do tug.
Sybella H	. 160	do 24.			Paddle, passenger, ferry.
			10	)6	

STEAM Vessels Inspected, &c.—Maritime Provinces Division—Oontinued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ cts.	
Sarcelle	 	June 24.	21.86	6 68	Screw, tug.
Loyalist		do 25.	17 59	6 44	Paddle, tug.
Laura	1	do . 25	13.55	6 12	Screw do
Bridgetown		do 25.	14.66	6 20	do do
ъ.		do 25	11.66	5 96	Paddle do
Lady Dufferin	75	1891. Dec. 10.	47.48	8 76	Paddle, passenger and ferry.
Marion		1892. June 26.	11.57	5 96	Screw, yacht.
Bessie	i	do 26.	5.18	5 40	do fish boat.
Моріа	ł	do 27	25.00	7 00	do tug.
East Riding	i	do 27	85 55	11 00	Paddle do
Squirrel	1	do 29	13.11	6 04	Screw do
Arbutus	!	do 30.	46.75	8 76	do passenger.
Aid		July 2	98.55	12 92	do wrecker.
Neptune	ľ	do 6.	71.15	10 68	do tug.
G. D. Hunter	1	do 8	67.97	10 39	do do
Norman	1	do 8.	46.87	8 68	do do
Flushing	1	do 9	257 · 09	28 56	do passenger.
Wee Laddie	1	do 9.	16.60	6 28	do tug.
Ellida		do 13.	37.52	8 04	do yacht.
J. B. Hamblin		do 15.	31.71	7 56	do freight.
Shame		do 16.	75.11	11 00	do tug.
Lunenburg	200	do 17	265 · 55	29 28	do passenger.
John L. Cann		do 21.		16 36	do tug.
Freddie V		do 21.		7 08	do do
Weymouth	1	do 13.		20 32	do passenger.
W.W. Weatherspoon		do 14	1	9 72	do do
May Queen	100	do 25.		19 36	Paddle do
Merrimac		do 25.		85 80	Screw, tug.
Marion.	300	do 27		46 29	Paddle, passenger.
Peerless	200	do 27		15 52	Screw, passenger and ferry.
M. & E. Rudderham.	200	do 28	1	7 64	Screw, tug.
Zaidee.		do 25		6 44	

STEAM Vessels inspected, &c.—Maritime Provinces Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Certi	ate ificate pires.	Gross Tons.	Tonnage Dues and Inspe tion Fees paid	·c-	Remarks.
		18	891.		\$ c	ts.	•
Elinor M. Cates		June	29	58.81	6 4	14	Screw, tug.
Neptune	50	Dec.	30	138 · 69	19 0	)4	Paddle, passenger.
Gladiator		July	392. 30	70 · 40	10 €	30	Screw, tug.
Magnolia	175	do	31	260 · 30	28 8	30	Paddle, passenger.
Lennox	100	Aug.	1	66.29	10 2	28	do do ferry.
Rimouski	70	July	<b>30</b>	124.70	18 (	00	Screw do
Arrow		Aug.	12	10.02	5 8	80	do tug.
Southport	300	July	13	239 92	27 9	20	Paddle, passenger, ferry.
Highland Mary		Aug.	17	73.73	10 9	92	Screw, lighter.
Robbie Burns		do	17	88.93	12	12	do do
Salvor		do	17	44.93	8	60	do do
Carroll	300	do	20	1,372 29	117	76	do passenger and freight.
Tangent	.,	do	22	35.74	7	80	Twin-screw, tug.
Quiddy		do	29	30.59	7	<b>4</b> 0	Paddle do
Halifax	. 450	do	31	338 42	35	04	do passenger, ferry.
Glencoe	. 60	do	13	32.21	7	56	Screw do
Evangeline		Not	issued	78.74	11	32	do passenger.
David Duncan		Sept.	. 11	20.59	6	68	do tug. Pass. ferry temporary.
Island Gem		. do	12	15.62	6	<b>2</b> 8	do fish boat.
Yuba		. Not	issued.	12.04	5	96	do passenger.
Carrie		. Sept.	. 14	14.83	6	12	do fish boat.
St. Michael		. do	16.	39.20	8	12	do tug.
La Have		. do	17.	49.37	8	92	do do
May Flower	<b> </b>	. do	17.	5.92	5	48	do fish boat.
Fairy		. do	18.	5.07	5	<b>40</b>	do tug and water boat.
Mascott		. do	20.	22.88	1	84	do tug.
St. Pierre	60	do	26.	496 44	46	68	do passenger and freight.
Delta	. 10	Oct.	12.	873 · 21	69	84	do freight.
Argus		. Not	issued.	. 26.74	Nil.		do tug (revenue).
Bridgewater	200	Oct.	20.	. 207 · 79	24	64	do passenger.
Maple Leaf	. 150	do	<b>22</b> .	. 129.06	15	32	Paddle do ferry.
M. A. Starr		do	27.	. 244·32 10		32	Screw, freight.

STEAM Vessels Inspected, &c.—Maritime Provinces Division—Concluded.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1891.		\$ cts.	
Halifax (2nd inspec-	400	Oct. 12	1,738 45	147 04	Screw, passenger.
tion). Jessie Gray		Nov. 6	76.00	11 08	Stern-wheel, tug and lighter.
Henry Hoover	l .	do 11	54.64	9 40	Screw, tug.
Gambrinus		do 18	28.36	7 24	do do
Yarmouth (2nd inspection).		Not yet issued.	1,432 16	122 56	do passenger and freight.

DOUGLAS STEVENS,
Steamboat Inspector.

## Steam Vessels not inspected for the year ended 31st December, 1891. MARITIME PROVINCES DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks. Why not inspected and class of Vessel.
			\$ cts.	
Atlas	15.79	10.74		Laid up; tug.
Alida	64.18	29.52		do do
Boston	1,694 · 50	733 · 77		Not yet inspected; passenger and
Chebucto	108:33	65.28		freight. Laid up; ferry, passenger.
Canada				Not called for; Government dredge.
Dream	44.51	30.27		do do cutter.
Gipsy	16.70	11.37		Laid up; tug.
Geo. McKenzie		ļ		Not called for; dredge.
Henrietta	19.12	13.01		Laid up; tug.
L. Boyer	60.00	49.00		Away from port; tug.
Leon	19.82	13.48	l. <b></b>	Laid up; tug.
Mary Anne	25.38	17.26		do do
Marguerite	19.66	12:30		do yacht.
Mary Odell	22.55	13.18		do fish boat.
Meadow Flower	6 56	4.46		do do ·
Northern Light	393 · 00	267 · 00		do Government steamer.
New Dominion				Not called for ; Government dredge.
Peri	11.77	8.00		Laid up; tug.
Pinafore	25.86	14.67		do passenger.
Storm King	107 · 87	73.35		Not called for; tug.
St. Lawrence				do dredge.
St. Louis	497 · 00	3.38		Out of district; tug.
Winnie	3.00	1.82		Laid up: do
Worcester	1,332.56	796 · 37		Out of district; passenger.
Water Boat	6.17	2.02		Laid up; water boat.
Willoughby	. 6.41	3 87		do tug and fish boat.
Zuleika	12.38	7.70		Not called for ; yacht.
Zulu	17.60	12.25		Laid up; tug.
	1. 30	1	l	ar, sug.

DOUGLAS STEVENS, Steamboat Inspector.

STEAM Vessels inspected, &c.—Maritime Provinces Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ cts.	
May Flower	180	Oct. 15	392.05	39 36	Screw, passenger.
Zantic		do 16	14.16	6 12	do tug.
Wanda S		Not issued	10.44	5 88	do do
Western Extension	336	Oct. 20	424 00	41 92	Paddle, ferry, passenger.
Kingsville		do 20	36.56	7 88	Screw, tug
Bessie Ardilla.			11.17	5 38	do do
Novelty		Not issued .	42.66	8 36	Paddle do
Victor	1		45·51	8 60	do do
Rusler	1		77 · 47	11 16	do ferry, passenger.
C. M. Winch			87.72	11 96	Screw, tug.
			1,141.77	146 62	

W. LEE WARING,
Steamboat Inspector.

A. 1892

STEAM Vessels inspected, for the year ended 31st December, 1891.

MARITIME PROVINCES.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspection Fees paid.	Remarks.
	ĺ	1891.		\$ cts.	
Acadia	400	Dec. 12	621	57 68	Passenger and freight.
Alpha	25	April 11	211	32 48	do do
Acadia	150	do 23	74	10 92	do do
Avon	130	do 23 1891.	64	10 12	Ferry service.
Arcadia	15	Dec. 1	64	9 96	Passenger and freight.
Arbutus	80	July 3 1891.	46	8 76	Ferry service.
Blue Hill	100	Dec. 1 1892.	195	20 60	Passenger and freight.
Boston	320	Feb. 27	1,694	143 52	do do
Bridgewater	200	Oct. 22	207	24 64	do do
Coila	None	Mar. 24	325	34 00	Freight.
Carroll	300	Sept. 24	1,372	117 76	Passenger and freight.
City of Monticello	350	April 28 1891.	1,033	90 64	do do
City of St. John	130	Dec. 1	709	64 72	do do
Clifton	150	do 12	138	19 04	do do
David Weston	480	do 10	765	69 20	do do
Dartmouth	750	April 24	311	32 88	Ferry service.
Dorcas	None	July 7	215	22 20	Freight do
Delta	6	Oct. 12	873	77 84	do do
Dominion	150	Mar. 16 1891.	594	55 52	Passenger and freight.
Electra	75	Dec. 1 1892.	106	16 56	do do
Egerton	165	April 6	112	13 96	Ferry service.
Elfin	200	May 20	122	17 76	do do
Enterprise	40	Dec. 10 1892.	92	10 76	do do
Flushing	250	July 17	257	28 56	Passenger and freight.
F. C. Batt	40	May 26	32	7 56	Ferry service.
Florenceville	270	July 25	185	22 80	do do
Fastnet	50	May 29	337	35 04	Passenger and freight.
Glencoe	40	Aug. 13	32	7 56	Ferry service.
Goliah	50	1891. Dec. 31	146	16 76	do do case of emergency.
Hiawatha	300	1892. May 14	229	26 40	Passenger and freight.
Heather Belle	250	do 20			do do
			11	4	

STEAM Vessels inspected, &c.—Maritime Provinces Division—Concluded.

Name of Vessel.	Number of Passen- gers allowed.	D Cert	ate ificate pires.	Gross Tons.	Tonna Dues and Ins tion Fees pa	ec-	Remarks.
		18	392.		8	cts.	
Harlaw	75	Feb.	<b>2</b> 0	415	44	08	Passenger and freight.
Halifax	400	Oct.	12	1,738	147	04	do do
do	450	Sept.	17	338	35	04	Ferry service.
Havana		Dec.	5	470	45	68	Freight.
Lennox	100	Aug.	3	66	10	28	Ferry service.
La Tour	75	Feb.	<b>2</b> 8	152	20	32	Passenger and freight.
Lady Dufferin	75	June	25	66	8	76	Ferry service.
Lunenburg	200		7	265	29	28	Passenger and freight.
May Queen	330	Dec.	391. 10	539	51	12	do do
M. A. Starr			392. 27	244	27	<b>52</b>	Freight.
Miramichi	60	June	24	75	. 11	00	Passenger and freight.
Mic-Mac	300	April	24	150	20	00	Ferry service.
Marian	300	July	30	478	. 46	24	Passenger and freight.
May Queen	100	do	31	142	19	36	do do
Maple Leaf	150	Oct.	23	129	. 18	32	Ferry service.
Mayflower	180	do	7	392	39	36	Passenger and freight
Montague	250	May	22	129	18	32	Ferry service.
Magnolia	175	July	31	260	28	80	Passenger and freight.
Northumberland	400	June	20	1,255	108	40	do do
Neptune	50	Aug.	3	138	19	04	do do
Nelson	100	June	24	68	10	12	Ferry service.
Onangondy	300	July	2	294	31	50	do
Peerless	200	do	31	94	15	52	do
Princess of Wales	400	May	23	935	82	80	Passenger and freight.
Rimouski	70	July	30	124		00	do do
Sybella	160	June	24	47		60	Ferry service.
St. Olap	150		91. 16	305	32	40	Passenger and freight.
Soulanges	250	do	10	318	.33	44	đo đo
Springfield	160	do	10	232	26	56	do do
Star	300	do :	10	461	44	88	do do
St. Lawrence	560	18 May :	92. <b>23</b>	675	75	60	do do
St. Pierre	60	Sent.	26	496	47	68	do do

STEAM Vessels inspected, &c.—Maritime Provinces Division—Continued.

	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons,	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ ets.	
Sir C. Ogle	200	April 24	126	18 08	Ferry service.
Southport	300	May 20	186	27 20	do
St. Nicholas	60	July 24	60	9 96	do
Yarmouth	350	Dec. 9	1,432	122 56	Passenger and freight.
Weymouth	120	July 13	153	20 32	do do
William		May 25	152	21 80	Freight.
W. M. Weatherspoon	50	July 14	59	9 72	Ferry service.
W. E. Vroom	24	April 17	10	5 80	do
Western Extension.	336	Nov. 2	424	41 92	do
Total			22,559	2,590 98	

#### CHARLES R. COKER,

Dominion Inspector of Hulls, &c.

STEAM Vessels not inspected for the Year ended 31st December, 1891.

MARITIME PROVINCES DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks.
			\$ cts.	
Chebucto	108	65		Laid up; ferry service.
Bellisle	155	97		do passenger service.
Evangeline	78	53		do ferry service.
Yuba	12	8		Ferry service; will inspect her as soon as possible.
Total	353	223		

#### CHARLES R. COKER,

Dominion Inspector of Hulls, &c.

Steam Vessels inspected for the year ended 31st December, 1891.

MANITOBA, KEEWATIN AND NORTH-WEST TERRITORIES DIVISION.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.		\$ cts.	
Hazle		April 25	7 52	5 64	Screw, fishing tug.
Miles		do 25	63 · 04	10 04	do do
Glendevon	25 (deck)	do 25	104 05	16 32	do freight and passenger.
D. L. Mather		May 4	103.32	13 24	do tug.
Keewatin		do 5	41 · 25	8 28	do do
Cruiser		do 5	11.59	5 96	do do
Mary Hatch		do 6	121 · 18	14 68	do do
Caro		do 7	14 47	6 12	do do
Queen		do 8	31 · 64	7 56	do do
Thistle		do 9	23 · 33	6 84	do fishing tug.
Athabasca		June 4	166.73	21 36	Stern-paddle, freight.
Grahame		do 19	332 · 18	34 56	do do
Wrigley	1	do 30	90.04	12 30	Screw, freight.
Harry Montgomery	1	Aug. 17	3.65	5 32	do fishing boat.
Aurora	١ .	May 1	224 · 50	26 00	Paddle, passenger and freight.
Millie Howell		do 16	24·11	6 92	Screw, fishing boat.
Red River	35 (deck)	June 14	166 · 47	21 28	do freight and passenger.
Sultana	l .	May 16	1	36 64	do do fish freezer.
Colvile	35 (deck)	June 3	164 41	21 12	Twin-screw, passenger and freight.
Ripple	}	cate issued	9.83	5 80	Paddle, excursion boat.

EDMUND R. ABELL, Steamboat Inspector.

## STEAM Vessels not inspected for the year ended 31st December, 1891. MANITOBA, KEEWATIN AND NORTH-WEST TERRITORIES DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks.  Why not inspected and class of Vessel.
			\$ cts.	
Marquette	149.07	93 · 92		Stern paddle; not in use.
Lady Ellen	18 57	12.63	6 52	Screw; fishing boat; failed to meet.
Princess	530.58	<b>2</b> 89·48		Paddle; not in use.
Mountain Belle	0.90	·86	5 08	Screw; pleasure yacht; too far distant from office, without special orders from Department, to inspect her (at Banff).
Alice Sprague	98 49	62.05		Stern paddle; not in use.
Marquis	753.76	474.87		do at Prince Albert, N.W.T. Has not been in the water this season.
Northcote	461.34	290.65		
North-West	425 · 00	305.00		do do do
Saskatchewan	336·84	<b>2</b> 12·21	34 96	Screw; Lake Manitoba. Have not been notified as ready for inspection, nor yet where to find the vessel.
Ogema	62.05	42.20	9 96	Screw; fishing tug; failed to meet.
Antelope	142·61	107 · 73	19 44	Paddle; excursion boat; on Red River; not in use, water being too low.
Angler		10.99		Screw; fishing tug; not ready for inspection before I went north, and on my return the vessel was not on the fishing grounds; there- fore failed to meet.
Victoria				Screw; tug; dredge tender; Government
Sir Hector			! 	

EDMUND R. ABELL, Steamboat Inspector.

STEAM Vessels inspected for the year ended 31st December, 1891.

BRITISH COLUMBIA DIVISION.

Name of Vessel.   Date of Formation   Date of Series allowed.   Date of Series of Series allowed.   Date of Certificate expires.   All Inspect Precession.   Remarks.   Remarks.			1	i	1	
Islander	Name of Vessel.	of Passen- gers	Certificate		Dues and Inspec- tion	Remarks.
Robt. Dunsmuir.   230.75   8 00   Special inspection.   Hope.   Jan. 12   78.49   11 32   Screw.   Screw.   Special inspection.   Dreadnought   Jan. 15   30   8 12   Screw.   do yacht   do yacht   do yacht   do yacht   do yacht   do do yacht   do do yacht   do do yacht   do do do yacht   do do do yacht   do do do do do do do do do do yacht   do do do yacht   do do do do do do do do yacht   do do do do do do do yacht   do do do do do do do do do do do do do			1892.		\$ ets.	
Hope.	Islander	500	Jan. 5	1,495 · 29	127 60	Twin-screw.
Hope.	Robt. Dunsmuir			230.75	8 00	Special inspection.
Dreadnought.         Jan. 15.         30         8 12         Screw.           Enterprise.         do 23.         2 95         5 24         do yacht           Emma.         25 do 29.         35         7 80         do           Barbara Boscowitz.         150 do 30.         269 08         29 52         do           Surrey.         50 Feb. 9.         263         29 04         Catamaran ferry.           Gladys.         70 do 10.         146         19 68         Stern-wheel.           Earl.         20 Oct. 24.         74 78         11 00         Screw.           K. de K.         25 Feb. 14.         61 67         9 96         Paddle.           Burt.         do 16.         13 05         6 04         Twin-screw.           Stella         16 32         5 00         Special inspection.           Millie.         March 3.         9 24         5 72         Screw.           Adelaide.         do 4.         25 55         7 08         Stern-wheel.           Clara Port.         do 4.         25 55         7 08         Screw.           Fairy Queen.         40 do 19.         70 87         10 68         Screw.           Georgie.         April 1.				78.49	11 32	Screw.
Enterprise	Falcon			52.44	5 00	Special inspection.
Emma         25         do 29         35         7 80         do           Barbara Boscowitz         150         do 30         269 08         29 52         do           Surrey         50         Feb. 9         263         29 04         Catamaran ferry           Gladys         70         do 10         146         19 68         Stern-wheel           Earl         20         Oct. 24         74 78         11 00         Screw           K. de K         25 Feb. 14         61 67         9 96         Paddle           Burt         do 16         13 05         6 04         Twin-screw           Stella         16 32         5 00         Special inspection           Stella         March 3         9 24         5 72         Screw           Adelaide         do 4         151         20 08         Stern-wheel           Clara Port         do 4         25 55         7 00         Screw           Fairy Queen         40         10 19         70 87         10 68         Screw           Georgie         April 1         32 16         7 56         do           Clyde         do 3         67 87         20 88         Two years' dues ; twin-screw	Dreadnought		Jan. 15	30	8 12	Screw.
Emma         25         do 29         35         7 80         do           Barbara Boscowitz         150         do 30         269 08         29 52         do           Surrey         50         Feb. 9         263         29 04         Catamaran ferry           Gladys         70         do 10         146         19 68         Stern-wheel           Earl         20         Oct. 24         74 78         11 00         Screw           K. de K         25 Feb. 14         61 67         9 96         Paddle           Burt         do 16         13 05         6 04         Twin-screw           Stella         16 32         5 00         Special inspection           Stella         March 3         9 24         5 72         Screw           Adelaide         do 4         151         20 08         Stern-wheel           Clara Port         do 4         25 55         7 00         Screw           Fairy Queen         40         10 19         70 87         10 68         Screw           Georgie         April 1         32 16         7 56         do           Clyde         do 3         67 87         20 88         Two years' dues ; twin-screw	Enterprise		do 23	2 95	5 24	do yacht
Surrey.         50         Feb.         9.         263         29         4         Catamaran ferry.           Gladys.         70         do         10.         146         19         88         Stern-wheel.           Earl.         20         1891.         74.78         11         10         Screw.           K. de K.         25         Feb.         14.         61.67         9.         Paddle.           Burt         do         16.         13.05         6.04         Twin-screw.           Stella         16.32         5.00         Special inspection.           Millie         March 3.         9.24         5.72         Screw.           Adelaide         do         4.         151         20.08         Stern-wheel.           Clara Port.         do         4.         25.55         7.08         Screw.           Fairy Queen.         40         do         18.25         7.00         Stern-wheel.           Tepic.         40         do         19.70.87         10.68         Screw.           Georgie.         April 1.         32.16         7.56         do         Two years' dues; twin-screw.           Rainbow.         75		i	do 29	35	7 80	do
Gladys.         70         do 10         146         19 68         Stern-wheel.           Earl         20         Oct. 24         74 78         11 00         Screw.           K. de K         25         Feb. 14         61 67         9 96         Paddle.           Burt.         do 16         13 05         6 04         Twin-screw.           Stella         16 32         5 00         Special inspection.           Millie         March 3         9 24         5 72         Screw.           Adelaide         do 4         151         20 08         Stern-wheel.           Clara Port         do 4         25 55         7 08         Screw.           Fairy Queen         40 do 18         25         7 00         Stern-wheel.           Tepic         40 do 19         70 87         10 68         Screw.           Georgie         April 1         32 16         7 56         do           Clyde         do 3         67 87         20 88         Screw.           Rainbow         75 do 6         207 21         24 56         Screw.           North Star.         do 16         84 16         11 72         do           Caledonia         14 do 21 <td>Barbara Boscowitz</td> <td>150</td> <td>do 30</td> <td>269 08</td> <td>29 52</td> <td>do</td>	Barbara Boscowitz	150	do 30	269 08	29 52	do
Earl. 20 Oct. 24	Surrey	50	Feb. 9	263	29 04	Catamaran ferry.
Earl	Gladys	70		146	19 68	Stern-wheel.
R. de K   25   Feb. 14   61 67   9 96   Paddle	Earl	20	Oct. 24	74.78	11 00	Screw.
Stella       16 32       5 00       Special inspection.         Millie       March 3       9 24       5 72       Screw.         Adelaide       do 4       151       20 08       Stern-wheel.         Clara Port       do 4       25 55       7 08       Screw.         Fairy Queen       40 do 18       25       7 00       Stern-wheel.         Tepic       40 do 19       70 87       10 68       Screw.         Georgie       April 1       32 16       7 56       do         Clyde       do 3       67 87       20 88       Two years' dues ; twin-screw.         Rainbow       75 do 6       207 21       24 56       Screw.         North Star       do 11       8 11       5 64       do         Daisy       15 do 16       84 16       11 72       do         Caledonia       14 do 21       237       26 96       Stern-wheel.         Buzz       do 23       12 59       6 04       Screw.         Constance       25 do 24       49 52       9 00       do         April 1       307 88       32 64       Swin-screw         Screw       Screw       Screw       Screw	K. de K	25		61 · 67	9 96	Paddle.
Millie       March 3       9 24       5 72       Screw.         Adelaide       do 4       151       20 08       Stern-wheel.         Clara Port       do 4       25 55       7 08       Screw.         Fairy Queen       40 do 18       25       7 00       Stern-wheel.         Tepic       40 do 19       70 87       10 68       Screw.         Georgie       April 1       32 16       7 56       do         Clyde       do 3       67 87       20 88       Two years' dues; twin-screw.         Rainbow       75 do 6       207 21       24 56       Screw.         North Star       do 11       8 11       5 64       do         Daisy       15 do 16       84 16       11 72       do         Caledonia       14 do 21       237       26 96       Stern-wheel.         Buzz       do 23       12 59       6 04       Screw.         Constance       25 do 24       49 52       9 00       do         Spratt's Ark       do 23       307 88       32 64       Swin-screw.         Oriole       do 24       4 15       5 32       Screw, yacht.         Florence       do 25       59 44       <	Burt		do 16	13.05	6 04	Twin-screw.
Adelaide       do 4.       151       20 08       Stern-wheel.         Clara Port       do 4.       25 55       7 08       Screw.         Fairy Queen       40 do 18.       25       7 00       Stern-wheel.         Tepic       40 do 19.       70 87       10 68       Screw.         Georgie       April 1.       32 16       7 56 do       do         Clyde       do 3.       67 87       20 88       Two years' dues; twin-screw.         Rainbow       75 do 6.       207 21       24 56       Screw.         North Star       do 11.       8 11       5 64 do       do         Daisy       15 do 16.       84 16       11 72 do       do         Caledonia       14 do 21.       237       26 96       Stern-wheel.         Buzz       do 23.       12 59       6 04       Screw.         Constance       25 do 24.       49 52       9 00 do         Nagasaki       25 do 24.       15 13       6 20 do         Spratt's Ark       do 23.       307 88       32 64       Swin-screw.         Oriole       do 25.       59 44       9 80       Stern-wheel.	Stella			16.32	5 00	Special inspection.
Clara Port       do 4       25 55       7 08       Screw.         Fairy Queen       40 do 18       25       7 00       Stern-wheel.         Tepic.       40 do 19       70 87       10 68       Screw.         Georgie       April 1       32 16       7 56       do         Clyde       do 3       67 87       20 88       Two years' dues ; twin-screw.         Rainbow       75 do 6       207 21       24 56       Screw.         North Star       do 11       8 11       5 64       do         Daisy       15 do 16       84 16       11 72       do         Caledonia       14 do 21       237       26 96       Stern-wheel.         Buzz       do 23       12 59       6 04       Screw.         Constance       25 do 24       49 52       9 00       do         Nagasaki       25 do 24       15 13       6 20       do         Spratt's Ark       do 23       307 88       32 64       Swin-screw.         Oriole       do 25       59 44       9 80       Stern-wheel.	Millie		March 3	9.24	5 72	Screw.
Fairy Queen       40       do       18.       25       7 00       Stern-wheel.         Tepic.       40       do       19.       70.87       10 68       Screw.         Georgie.       April 1.       32.16       7 56       do         Clyde.       do       3.       67.87       20 88       Two years' dues; twin-screw.         Rainbow.       75 do       6.       207.21       24 56       Screw.         North Star.       do       11.       8.11       5 64       do         Daisy.       15 do       16.       84.16       11 72       do         Caledonia.       14 do       21.       237       26 96       Stern-wheel.         Buzz       do       23.       12.59       6 04       Screw.         Constance       25 do       24.       49.52       9 00       do         Nagasaki.       25 do       24.       15.13       6 20       do         Spratt's Ark.       do       23.       307.88       32 64       Swin-screw.         Oriole.       do       25.       59.44       9 80       Stern-wheel.	Adelaide		do 4	151	20 08	Stern-wheel.
Tepic.         40         do         19.         70.87         10.68         Screw.           Georgie.         April         1.         32.16         7.56         do           Clyde.         do         3.         67.87         20.88         Two years' dues; twin-screw.           Rainbow.         75         do         6.         207.21         24.56         Screw.           North Star.         do         11.         8.11         5.64         do         do           Daisy.         15         do         16.         84.16         11.72         do           Caledonia.         14         do         21.         237         26.96         Stern-wheel.           Buzz         do         23.         12.59         6.04         Screw.           Constance         25         do         24.         49.52         9.00         do           Nagasaki.         25         do         24.         15.13         6.20         do           Spratt's Ark.         do         23.         307.88         32.64         Swin-screw.           Oriole.         do         24.         4.15         5.32         Screw, yacht.	Clara Port		do 4	25 55	7 08	Screw.
Georgie.         April 1.         32 16         7 56         do           Clyde.         do 3.         67 87         20 88         Two years' dues; twin-screw.           Rainbow.         75 do 6.         207 21         24 56         Screw.           North Star.         do 11.         8 11         5 64         do           Daisy.         15 do 16.         84 16         11 72         do           Caledonia.         14 do 21.         237         26 96         Stern-wheel.           Buzz         do 23.         12 59         6 04         Screw.           Constance         25 do 24.         49 52         9 00         do           Nagasaki.         25 do 24.         15 13         6 20         do           Spratt's Ark.         do 23.         307 88         32 64         Swin-screw.           Oriole.         do 24.         4 15         5 32         Screw, yacht.           Florence.         do 25.         59 44         9 80         Stern-wheel.	Fairy Queen	<b>.4</b> 0	do 18	25	7 00	Stern-wheel.
Clyde       do       3       67.87       20.88       Two years' dues; twin-screw.         Rainbow       75       do       6       207.21       24.56       Screw.         North Star       do       11       8.11       5.64       do         Daisy       15       do       16       84.16       11.72       do         Caledonia       14       do       21       237       26.96       Stern-wheel.         Buzz       do       23       12.59       6.04       Screw.         Constance       25       do       24       49.52       9.00       do         Nagasaki       25       do       24       15.13       6.20       do         Spratt's Ark       do       23       307.88       32.64       Swin-screw.         Oriole       do       24       4.15       5.32       Screw, yacht.         Florence       do       25       59.44       9.80       Stern-wheel.	Tepic	40	do 19	70.87	10 68	Screw.
Rainbow       75       do       6       207 21       24 56       Screw.         North Star.       do       11       8 11       5 64       do         Daisy       15       do       16       84 16       11 72       do         Caledonia.       14       do       21       237       26 96       Stern-wheel.         Buzz.       do       23       12 59       6 04       Screw.         Constance       25       do       24       49 52       9 00       do         Nagasaki       25       do       24       15 13       6 20       do         Spratt's Ark       do       23       307 88       32 64       Swin-screw.         Oriole       do       24       4 15       5 32       Screw, yacht.         Florence       do       25       59 44       9 80       Stern-wheel.	Georgie		April 1	32 16	7 56	do
North Star.       do       11       8·11       5 64       do         Daisy.       15       do       16       84·16       11 72       do         Caledonia.       14       do       21       237       26 96       Stern-wheel.         Buzz       do       23       12·59       6 04       Screw.         Constance       25       do       24       49·52       9 00       do         Nagasaki.       25       do       24       15·13       6 20       do         Spratt's Ark       do       23       307·88       32 64       Swin-screw.         Oriole       do       24       4·15       5 32       Screw, yacht.         Florence       do       25       59·44       9 80       Stern-wheel.	Clyde		do 3	67 · 87	20 88	Two years' dues ; twin-screw.
Daisy       15       do       16       84 16       11 72       do         Caledonia       14       do       21       237       26 96       Stern-wheel         Buzz       do       23       12 59       6 04       Screw         Constance       25       do       24       49 52       9 00       do         Nagasaki       25       do       24       15 13       6 20       do         Spratt's Ark       do       23       307 88       32 64       Swin-screw         Oriole       do       24       4 15       5 32       Screw, yacht         Florence       do       25       59 44       9 80       Stern-wheel	Rainbow	75	do 6	207 21	24 56	Screw.
Caledonia.       14       do       21.       237       26       96       Stern-wheel.         Buzz       do       23.       12       59       6       04       Screw.         Constance       25       do       24.       49       52       9       00       do         Nagasaki.       25       do       24.       15       13       6       20       do         Spratt's Ark       do       23.       307       88       32       64       Swin-screw.         Oriole       do       24.       4       15       5       32       Screw, yacht.         Florence       do       25.       59       44       9       80       Stern-wheel.	North Star	 	do 11	8.11	5 64	do
Buzz	Daisy	15	do 16	84 16	11 72	do
Constance         25         do 24.         49·52         9 00 do           Nagasaki         25 do 24.         15·13         6 20 do           Spratt's Ark         do 23.         307·88         32 64         Swin-screw.           Oriole         do 24.         4·15         5 32         Screw, yacht.           Florence         do 25.         59·44         9 80         Stern-wheel.			do 21	237	26 96	Stern-wheel.
Constance         25         do 24         49 52         9 00         do           Nagasaki         25         do 24         15 13         6 20         do           Spratt's Ark         do 23         307 88         32 64         Swin-screw.           Oriole         do 24         4 15         5 32         Screw, yacht.           Florence         do 25         59 44         9 80         Stern-wheel.	Buzz	 	do 23	12:59	6 04	Screw.
Spratt's Ark       do       23       307 88       32 64       Swin-screw.         Oriole       do       24       4 15       5 32       Screw, yacht.         Florence       do       25       59 44       9 80       Stern-wheel.	Constance	25	do 24	49.52	9 00	.do
Oriole       do 24       4 15       5 32       Screw, yacht.         Florence       do 25       59 44       9 80       Stern-wheel.			do 24.	15 13	6 20	do
Oriole       do 24       4 15       5 32       Screw, yacht.         Florence       do 25       59 44       9 80       Stern-wheel.	Spratt's Ark	<b></b>	do 23	307 · 88	32 64	Swin-screw.
	Oriole		do 24	4.15	5 32	Screw, yacht.
117	Florence	<b></b>	do 25			Stern-wheel.

STEAM Vessels inspected, &c.—British Columbia Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	Date Certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
		1892.	<u> </u>	\$ cts.	
Wm. Irving	290	April 29	552.88	67 04	Stern wheel.
Badger	·····	May 7	49.93	9 00	Screw.
Alert	20	do 8	43.81	8 52	do
Bon Accord		do 15	84 15	23 44	Two years' dues; stern-wheel.
Comet	12	do 15	85.26	11 80	Screw.
Yosemite	400	do 21	1,525 03	130 00	Paddle.
Swan	<b></b>	do 19	16.95	6 36	Screw.
Lenora		do 19	33	7 64	do
Vancouver		do 22	. 49.96	9 00	do
Minnehaha		do 23	5	5 40	Screw, yacht.
Islander		do 13.	1,495	8 00	Special repairs to boiler.
Skidegate	20	April 24.	- 37:08	7 96	Screw; passenger certificateg ranted
Eliza Edwards	40	June 1.	54 63	9 40	27th August. Screw; passenger certificate granted
Muriel		do 6.	44 · 13	17 04	27th August. Twin-screw; two years' dues.
Winnefred	   ••••	do 6.	12.97	12 08	Screw do
Nora		do 5.	19.43	13 04	do do
Spitfire		do 5.	8	11 28	'do do
R. P. Rithet	250	1891. Oct. 15.	816 69	73 36	Stern-wheel.
Mascotte		1892. June 1	191 · 53	23 36	Twin-screw.
Horseshoe		do 18.	17.71	12 88	Screw; two years' dues.
Clara Young		do 19.	30.75	7 48	Screw.
Joe Adams		do 19.	. 11 89	5 96	do
Delta		do 19.	14.19	6 12	do
Wellington		do 18.	. 16.3	12 56	do two years' dues.
May Queen		do 19.	. 14.10	12 24	do do
Princess Louise	300	do 26	. 931 76	82 56	Paddle.
Florence		do 24.	. 30.41		Screw.
Active	20	do 27.	. 171 74	21 76	do
Iona	25	do 30.	. 52 62	9 24	Twin-screw.
Lois	10	do: 30.	. 25.15	7 00	Screw.
Nagasaki	<b></b>	do 30.	. 15 13	5 00	Special repairs to boiler.
Cutch	1	July 6.		1	Screw.

STEAM Vessels inspected, &c.—British Columbia Division—Continued.

Name of Vessel.	Number of Passen- gers allowed.	լ ու	ficate	Gross Tons.	Tonnag Dues and Insp tion Fees pa	ec-	Remarks.
		100			. 8	cts.	
Duchess	40	189		145.48		20	Stern-wheel; two years' dues.
Galena	80	July		47.64		60	Twin-screw; 3 years' dues.
Surprise	25	do	15				Screw; 2 years' dues.
Id-1	ĺ	do	14			44	do 3 years' dues.
Nelson.		do	16			68	Stern-wheel.
	120	do	25	37.10		96	Oatamaran, paddle.
Dispatch	1	do	18	-,			Stern-wheel.
Lytton.	1	do	20	451 66		16 00	Twin-screw.
Penticton	i	do	21	49.69			
Red Star No. 2	ł .	do	23	36.85	Ì	92	Stern-wheel; 2 years' dues.
Brunette	1	do	27	37.03	•	96	Screw.
Senator	1	Aug.		27:63		24	do ferry.
Velos	1	do	6	72.52	1	84	do
Mamie.	1	do	7	89.60		20	'do
Standard	i	фо	11. /	51.08	] .	08	' do
Mystery		Sept.	3	64.80	1	20	do
Lorne	30	do	10	287 · 96	1	04	do,
Etta White	20	do	16	97.35	12	76	do
Saturna	15	do	16	22 05	6	76	· do
Belle.	1	do	17	66 · 62	10	36	° do
Esperanza	12	do	18	30.88	7	48	do
Blonde		do	17	32.64	7	64	do
Kildonan		do	17	51 41	9	08	do
Eva		do	18	34.99	7	80	do
Nanaimo		do	21	70.79	10	68	Stern-wheel.
Lilly		do	22	33.57	7	72	Screw.
Wilna		do	22	4 04	5	32	do yacht.
Rover		do	22	6.57	5	56	do
Cora		do	24	25.12	7	00	do
Estelle		do	21	84 06	11	72	do
Thistle	26	do	<b>2</b> 8	222 · 36	25	76	do
Lottie		do	29	29.24	7	32	do
Phantom		Oct.	7	46 53		76	do
				, 11	9		

1.5	9 494 9 mm 50 1 2 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	The second second			The second section of
STEAM	Vessels inspected.	Arc - Rritigh	Columbia	Division	Continued
OILLAM	A COOCTO TITODOC ACA	mon	COLUMNIA	~HO161141	

Name of Vesses.	Number of Passen- gers allowed.	Da Certii expi	icate	Gross Tons.	Tonnag Dues and Insp tion Fees pa	ec-	Remarks.
		189	92.		8	cts.	
Chieftain		Oct.	13	64·80	٠,		Screw.
Falcon		do	20	52.44	9	24	do
Isabel	80	do	20.,	445.93	43	68	Paddle.
Delaware	150	do	24	475 20	46	00	Stern-wheel.
Robt. Dunsmuir	85	do	24	231 · 75	26	56	Twin-screw.
Gipsy	<b></b>	do	23	49 63	9	00	Stern-wheel.
Iris		do	22	19.32	6	52	Screw.
Telephone	50	do	23	80.66	11	48	Stern-wheel.
Agnes		do	21	22.70	6	84	Screw.
Earl	20 (deck)	do	23	74.78	11	00	do
Maude	45	do	20.,	174 · 99	22	00	do
Danube		<b> </b>		886 · 84	78	96	do inspection not finished; under
Sunbury		do	<b>3</b> 0	73 36	10	84	alterations. Paddle.
Logger		do	31	18.84	6	52	Logging scow.
Eliza		Nov.	5	7.55	5	64	Screw.
Angerona		do	<b>26</b>	13.79	6	12	do yacht.
Evangeline		do	<b>28</b>	13 86	12	24	do do 2 years' fees and dues.
Stella		Dec.	3	16.32	6	28	do
Comox		do	19	101 · 17	16	08	do
Logger		.]		18:84	5	00	Special, testing boiler.
Kildonan		.		51 · 41	5	00	do after repairs to boiler.
T. W. Carter		do	14	26 94	7	16	Screw, fishing tug.
				18,226 · 63	2,204	18	-

J. A. THOMSON,
Steamboat Inspector.

# STEAM Vessels not inspected for the Year ended 31st December, 1891. BRITISH COLUMBIA DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Why not inspected and class of Vessel.
			\$ cts.	
Bella	8.01	5.61	5 64	Fishing tug at Bella Coola; out of reach when inspector in district.
Morris	11.66	8.04	5 96	Fishing tug up Naas River; beyond reach ex-
Peerless	307 · 47	256.03	32 56	cept at great expense. Not been in service this year.
Cariboo Fly	281 · 82	202.66	30 56	Not in service.
Amelia.	430 · 97	222.08	42 48	do
Alice	54.10	34.09	9 32	do
Red Star, No. 1 or Okanagon	14.81	10 00	6 20	Avoided inspection; reported to Minister
Pilot	183 08	107 16	22 64	Laid up; requires new boilers.
Neel		125 47	26 64	Freight. Up in Alaska when inspector in dis
Mermaid	66 25	44.25	10 28	trict of Skeens River. Not in service.
Eva	6.56	4.13		Fishing tug, Gardner's Inlet; too much ex
Glad Tidings	43 02	27 15	8 44	pense. Missionary service ; laid up.

J. A. THOMSON, Steamboat Inspector, Victoria, B.C.

STEAM Vessels inspected, &c.—British Columbia Division—Continued.

Name of Vessel.   Number of Passen allowed.   Certificate gens allowed.   Certificate gens allowed.   Certificate gens allowed.   Certificate gens allowed.   Section Fees paid.   Remarks.   Remark						
Islander.   500   January   1,495·29   127 60   Twin-screw.	Name of Vessel.	Passen- gers	Certificate		Dues and Inspec- tion	Remarks.
Islander.   500   January   1,495·29   127 60   Twin-screw.				**	_	•
Emma.   25   do   35 00   7 80   Screw.	Talandan (	500		1 405 .00	,	T
Barbara Boscovitz.			'			
Surrey						
Surrey.   50   do   263 00   29 04   Centre-wheel-ferry.						
K de K.   25   do	•					
Earl	•		ĺ			•
Adelaide	K de K	25		61.67	9 96	Paddle-ferry.
Tepic.         40         do         70 87         10 68         Screw.           Fairy Queen         40         do         25 00         7 00         Stern-wheel.           Rainbow         75         April.         207 21         24 56         Screw.           Daisy         15         do         84 16         11 72         do           Caledonia         14         do         237 00         26 96         Stern-wheel.           Nagasaki         25         do         15 13         6 20         Screw.           Constance         25         do         15 00         do         Scow.           U. S. S. Scow, No. 6         100         Cotober         5 00         do         Scow.           Wm. Irving         200         April.         552 88         67 04         Stern-wheel.           Spratt's Ark         20         May         43 81         8 52         Screw.	Earl	20		74.78	11 00	Screw.
Fairy Queen         40         do         25 00         7 00         Stern-wheel           Rainbow         75         April         207 21         24 56         Screw           Daisy         15         do         84 16         11 72         do           Caledonia         14         do         237 00         26 96         Stern-wheel           Nagasaki         25         do         15 13         6 20         Screw           Constance         25         do         1891         October         5 00         do           U. S. S. Scow, No. 6         100         do         1892         49 52         9 00         do           Wm. Irving         200         April         552 88         67 04         Stern-wheel           Spratt's Ark         do         307 88         32 64         Twin-screw           Alert         20         May         43 81         8 52         Screw           Skedigate         20         April         37 08         7 96         do           Comet         12         May         85 26         11 80         do           Yosemite         400         1,525 03         130 00         Paddle <td>Adelaide</td> <td>••••••</td> <td>March</td> <td>151 00</td> <td>20 08</td> <td>Stern-wheel.</td>	Adelaide	••••••	March	151 00	20 08	Stern-wheel.
Rainbow       75       April.       207 21       24 56       Screw.         Daisy       15       do       84 16       11 72       do         Caledonia.       14       do       237 00       26 96       Stern-wheel.         Nagasaki.       25       do       15 13       6 20       Screw.         Constance       25       do       49 52       9 00       do         U. S. S. Scow, No. 6       100       do       5 00       Scow.         do       No. 2       160       do       5 00       do         Wm. Irving       200       April.       552 88       67 04       Stern-wheel.         Spratt's Ark       do       307 88       32 64       Twin-screw.         Alert.       20       May       43 81       8 52       Screw.         Skedigate.       20       April.       37 08       7 96       do         Comet.       12       May       85 26       11 80       do         Yosemite.       400       1,525 03       130 00       Paddle.         Surrey, Special.       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special.       700 <td>Tepic</td> <td>40</td> <td>do</td> <td>70 87</td> <td>10 68</td> <td>Screw.</td>	Tepic	40	do	70 87	10 68	Screw.
Daisy         15         do         84·16         11 72         do           Caledonia         14         do         237·00         26 96         Stern-wheel.           Nagasaki         25         do         15·13         6 20         Screw.           Constance         25         do         49·52         9 00         do           L. S. S. Scow, No. 6         100         October         5 00         Scow.           do         No. 2         160         do         500         do           Wm. Irving         200         April.         552·88         67 04         Stern-wheel.           Spratt's Ark         do         307·88         32 64         Twin-screw.           Alert.         20         May         43·81         8 52         Screw.           Skedigate         20         April.         37·08         7 96         do           Comet.         12         May         85·26         11 80         do           Yosemite         400         1891.         1,525·03         130 00         Paddle.           Surrey, Special         200         May         8 00         Centre-wheel-ferry.           Yosemite	Fairy Queen	40	do	25 00	7 00	Stern-wheel.
Caledonia.       14       do       237 00       26 96       Stern-wheel.         Nagasaki.       25       do       15 13       6 20       Screw.         Constance       25       do       49 52       9 00       do         U. S. S. Scow, No. 6       100       do       5 00       Scow.         do       No. 2       160       do       5 00       do         Wm. Irving       200       April.       552 88       67 04       Stern-wheel.         Spratt's Ark       do       307 88       32 64       Twin-screw.         Alert.       20       May       43 81       8 52       Screw.         Skedigate.       20       April.       37 08       7 96       do         Comet.       12       May       85 26       11 80       do         Yosemite.       400       1,525 03       130 00       Paidle.         Surrey, Special.       200       May       8 00       Paddle.         Yosemite, Special.       700       do       5 00       Scow.         Yosemite, Special.       700       do       5 00       Scow.         do       No. 2       160       do <t< td=""><td>Rainbow</td><td>75</td><td>April</td><td>207 21</td><td>24 56</td><td>Screw.</td></t<>	Rainbow	75	April	207 21	24 56	Screw.
Nagasaki	Daisy	15	do	84 16	11 72	do
Constance         25         do	Caledonia	14	do	237 · 00	26 96	Stern-wheel.
U. S. S. Scow, No. 6   100   October   5 00   Scow.	Nagasaki	25	do	15 13	6 20	Screw.
U. S. S. Scow, No. 6 do No. 2 160 do No. 2 160 do No. 2 160 do Stern-wheel.  Spratt's Ark do 307 88 Alert 20 May 43 81 Skedigate. 20 April. 37 08 Comet. 12 May 85 26 Surrey, Special. 200 May 88 30 Centre-wheel-ferry.  Yosemite, Special 700 do 800 Hare's Scow, No. 1 do No. 2. 160 do 500 Scow.  5 00 do Stern-wheel.  Twin-screw.  Screw.  Screw.  11 80 do Paidle.  Centre-wheel-ferry.  Paddle.  Hare's Scow, No. 1 120 do 5 00 Scow.  400 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  5 00 Scow.  6 7 04 Stern-wheel.  Twin-screw.  Screw.  Screw.  Screw.  Screw.  Screw.  Scow.  6 0 Scow.  6 0 Scow.  6 0 Scow.  6 0 Scow.  6 0 Scow.  6 0 Scow.  6 0 Scow.  6 0 0 Scow.  6 0 0 Scow.  6 0 0 Scow.  6 0 0 Scow.  6 0 0 Scow.  7 0 0 Scow.  8 0 0 Scow.  8 0 0 Scow.  9 0 0 Scow.  9 0 0 Scow.  1 0 0 0 0 Scow.  1 0 0 0 Scow.  1 0 0 0 Scow.  1 0 0 0 Scow.  1 0 0 0 0 Scow.  1 0 0 0 Scow.	Constance	25		49.52	9 00	do
Wm. Irving       200       April.       552·88       67 04       Stern-wheel.         Spratt's Ark       do       307·88       32 64       Twin-screw.         Alert       20       May       43·81       8 52       Screw.         Skedigate.       20       April.       37·08       7 96       do         Comet       12       May       85·26       11 80       do         Yosemite.       400       do       1,525·03       130 00       Paddle.         Surrey, Special.       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special.       700       do       8 00       Paddle.         Hare's Scow, No. 1.       120       do       5 00       Scow.         do No. 2.       160       do       5 00       Scow.         Badger.       100       do       5 00       Scow.         H. G. Ashley's Scow, No. 1.       180       do       5 00       do         H. G. Ashley's Scow, No. 1.       180       do       5 00       do         E. C. Baker's Scow.       180       do       5 00       do	U. S. S. Scow, No. 6	100		 	5 00	Scow.
Wm. Irving       200       April.       552 88       67 04       Stern-wheel.         Spratt's Ark       do       307 88       32 64       Twin-screw.         Alert       20       May       43 81       8 52       Screw.         Skedigate       20       April.       37 08       7 96       do         Comet       12       May       85 26       11 80       do         Yosemite.       400       do       1,525 03       130 00       Paddle.         Surrey, Special.       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special.       700       do       8 00       Scow.         Hare's Scow, No. 1       120       do       5 00       Scow.         do No. 2       160       do       5 00       Scow.         H. G. Ashley's Scow, No. 1       190       do       5 00       Scow.         H. G. Ashley's Scow, No. 1       180       do       5 00       do         H. G. Ashley's Scow, No. 2       180       do       5 00       do         E. C. Baker's Scow.       160       do       5 00       do	do No. 2	160			5 00	do
Alert       20       May       43.81       8 52       Screw.         Skedigate       20       April       37.08       7 96       do         Comet       12       May       85.26       11.80       do         Yosemite       400       do       1,525.03       130.00       Paddle.         Surrey, Special       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special       700       do       8 00       Paddle.         Hare's Scow, No. 1       120       do       5 00       Scow.         do No. 2       160       do       5 00       do         Badger       100       do       5 00       Scow.         H. G. Ashley's Scow, No. 1       190       do       5 00       do         H. G. Ashley's Scow, No. 2       180       do       5 00       do         F. C. Baker's Scow.       180       do       5 00       do	Wm. Irving	200		552 88	67 04	Stern-wheel.
Skedigate.       20       April.       37 08       7 96       do         Comet.       12       May.       85 26       11 80       do         Yosemite.       400       do.       1,525 03       130 00       Paddle.         Surrey, Special.       200       May.       8 00       Centre-wheel-ferry.         Yosemite, Special.       700       do.       8 00       Paddle.         Hare's Scow, No. 1.       120       do.       5 00       Scow.         do No. 2.       160       do.       5 00       do       Steam-scow.         H. G. Ashley's Scow, No. 1.       190       do.       5 00       Scow.         H. G. Ashley's Scow, No. 1.       180       do.       5 00       do         F. C. Baker's Scow.       160       do.       5 00       do	Spratt's Ark		do	307 · 88	32 64	Twin-screw.
Comet.       12       May       85·26       11 80       do         Yosemite.       400       do       1,525·03       130 00       Paddle.         Surrey, Special.       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special.       700       do       8 00       Paddle.         Hare's Scow, No. 1.       120       do       5 00       Scow.         do No. 2.       160       do       5 00       do         Badger.       100       do       5 00       Steam-scow.         H. G. Ashley's Scow, No. 1.       190       do       5 00       do         H. G. Ashley's Scow, No. 1.       180       do       5 00       do         E. C. Baker's Scow.       160       do       5 00       do	Alert	20	May	43.81	8 52	Screw.
Comet.       12       May       85·26       11 80       do         Yosemite.       400       do       1,525·03       130 00       Paddle.         Surrey, Special.       200       May       8 00       Centre-wheel-ferry.         Yosemite, Special.       700       do       8 00       Paddle.         Hare's Scow, No. 1.       120       do       5 00       Scow.         do No. 2.       160       do       5 00       do         Badger.       100       do       5 00       Steam-scow.         H. G. Ashley's Scow, No. 1.       190       do       5 00       do         H. G. Ashley's Scow, No. 1.       180       do       5 00       do         E. C. Baker's Scow.       160       do       5 00       do	Skedigate	20	April	37.08	7 96	do
Surrey, Special.     200     May     8 00     Centre-wheel-ferry.       Yosemite, Special.     700     do     8 00     Paddle.       Hare's Scow, No. 1.     120     do     5 00     Scow.       do No. 2.     160     do     5 00     do       Badger.     100     do     5 00     Steam-scow.       H. G. Ashley's Scow, No. 1.     190     do     5 00     Scow.       H. G. Ashley's Scow, No. 2.     180     do     5 00     do       E. C. Baker's Scow.     160     do     5 00     do	Comet	12	May	85.26	11 80	do
Surrey, Special.     200     May     8 00     Centre-wheel-ferry.       Yosemite, Special.     700     do     8 00     Paddle.       Hare's Scow, No. 1.     120     do     5 00     Scow.       do No. 2.     160     do     5 00     do       Badger.     100     do     5 00     Steam-scow.       H. G. Ashley's Scow, No. 1.     190     do     5 00     Scow.       H. G. Ashley's Scow, No. 2.     180     do     5 00     do       E. C. Baker's Scow.     160     do     5 00     do	Yosemite	400	do	1,525 03	130 00	Paddle.
Yosemite, Special       700 do       8 00 Paddle.         Hare's Scow, No. 1       120 do       5 00 Scow.         do No. 2       160 do       5 00 do         Badger       100 do       5 00 Steam-scow.         H. G. Ashley's Scow, No. 1       190 do       5 00 Scow.         H. G. Ashley's Scow, No. 2       180 do       5 00 do         E. C. Baker's Scow.       160 do       5 00 do	Surrey, Special	200	1891.		8 00	Centre-wheel-ferry.
Hare's Scow, No. 1. 120 do 5 00 Scow.  do No. 2. 160 do 5 00 do  Badger. 100 do 5 00 Steam-scow.  H. G. Ashley's Scow, 190 do 5 00 Scow.  No. 1 H. G. Ashley's Scow, 180 do 5 00 do  E. C. Baker's Scow. 160 do 5 00 do		1	do		8 00	•
do       No. 2       160       do       5 00       do         Badger.       100       do       5 00       Steam-scow.         H. G. Ashley's Scow, No. 1       190       do       5 00       Scow.         H. G. Ashley's Scow, No. 2       180       do       5 00       do         E. C. Baker's Scow.       160       do       5 00       do	• •	1	do		5 00	Scow.
Badger.       100       do       5 00       Steam-scow.         H. G. Ashley's Scow, No. 1.       190       do       5 00       Scow.         H. G. Ashley's Scow, No. 1.       180       do       5 00       do         No. 2.       160       do       5 00       do         E. C. Baker's Scow.       160       do       5 00       do			1	1	1	
H. G. Ashley's Scow, No. 1 H. G. Ashley's Scow, No. 2 E. C. Baker's Scow.  190 do 180 do 5 00 Scow. 5 00 do 5 00 do 5 00 do		1.				-
No. 1		i				
No. 2	_ No. 1	.]	_	}	1	
	No. 2					
		1	1 -		İ	
Florence	r forence	.1 140	ι αο		., 500 2 <b>2</b>	Steam-scow.

STEAM Vessels inspected, &c.—British Columbia Division—Continued,

Name of Vessel.	Number  of  Passen-  gers  allowed.	Date certificate expires.	Gross Tons.	Tonnage Dues and Inspec- tion Fees paid.	Remarks.
Cowper's Scow R. P. Rithet	190 250	1891.  May  October	816 69	\$ cts 5 00 73 36	Scow.
Mascotte	300	1892. June do	191 53 931 76	23 36 82 56	
Active	20 25	do	171 · 74 52 · 62	21 40 9 24	•
LoisCutch	10 150	do July	25 15 324 27	7 00 33 92	
Senator	30 20	August	27 · 63 72 · 50	7 24 10 84	do
Mamie		June	89·60 54·63	12 20 9 40 10 20	
Mystery Lorne Esperanza	40 30 12	September do do.	64·80 287·96 30·88	31 04 7 48	do
Estelle	12 20	do do	84.06	17 72	do Barge for passengers.
Belle	12 26	do do	66 · 62 · 222 · 36	10 36 25 76	Screw.
Etta White	20 80	do October	97·35 445·93	12 76 48 68	Paddle.
Delaware Earl Teleph	150 20	do	475·20 74·78	46 00 11 00	Screw. Stern-wheel.
Telephone	50 85 15	do do September	80·66 231·75 22·05	11 48 26 56 6 76	Twin-screw. Screw.
Maude	45	October.	174·99 101·17	22 00 16 08	do inspection not completed.
	5,603		10,955 · 29	\$1,264 16	-

R. COLLISTER,

Hull Inspector.

## STEAM Vessels not inspected for the year ended 31st December, 1881. BRITISH COLUMBIA DIVISION.

Name of Vessel.	Gross Tonnage.	Registered Tonnage.	Dues and Fees.	Remarks.  Why not inspected and class of Vessel.
			\$ cts.	,
Cariboo Fly	281 · 82	202.66	30 56	Laid up; twin-screw.
Amelia	430 97	222 · 05	42 48	do paddle steamer.
Pilot	183.05	107 · 16	22 64	do screw-tug.
Nell	207 · 97	125 47	26 64	Freight and passenger, at the Skeena
Mermaid	66 · 27	44.25	10 28	River. Laid up; paddle steamer.
	1,170 08	701 · 59	132 60	

R. COLLISTER, Hull Inspector.

STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horse-

Name of Vessel.	Horse-	Class.	Wood or Iron.	Gross Tonnage,	Registered Tonnage.	Where built.	Where and how employed.
i				;	į		:
Glenrosa.	2.13	Screw Wood	Wood	3	<del>2</del>	45 Maganetawan	Passenger, between Burke Falls and Maganetawan.
A. V. Crawford	20.93	ф	· op	21	88	Goderich	Tug boat, Georgian Bay.
Mink	2.13	••••	·· op	13	6	9 Port Carling	Passenger, Muskoka Lakes.
Minota	86. 69	ф	op	83	19	19 Toronto	Pleasure yacht, Lake Simcoe.
Delight.	3.33	op	တု	8	14	14 Bruce Mines	Tug boat, Lake Huron.
25	31.85			182	122		•

JAMES JOHNSTON,

STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horsepower; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.

Name of Vessel.	Horse-power.	СІвав.	Wood, Iron or Steel.	Gross Tonnage.	bereised .egannoT	Where built.	Where and how employed.
Joe Milton	14.2	Screw Wood	Wood	93	33	Port Stanley	63 Port Stanley Passenger and freight, Lake Erie.
Snowstarm	4.03	op	ob	17	10	ф	Fishing tug, Lake Erie.
Victoria	<b>88</b>	do	: •	က	67	2 Port Elgin	Tug, Lake Huron.
City of Stratford	.81	Twin-screw.		4	က	3 Stratford	Pleasure yacht, Avon River.
Sonntag	1.06	Screw	: op	2	īĊ.	5 Toronto	do Lake Ontario.
126	1.2.	do	op	14	12	12 Blenheim	Passenger, Rondeau Bay.
Michigan	166.66	Paddle Steel	Steel	1,730	88	498 Bay City, Michigan	Railway car ferry, Windsor and Detroit.
	189 29		·	1,868	593		
				-			

JOHN DODDS, Steamboat Inspector, West Ontario Division.

STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horsepower, whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.

Name of Vessel.	Horse.	Class.	Wood or Iron.	Gross Tonnage.	berstered .egannoT	Where built.	Where and how employed.	
		:			9		T D D one former Windows and Determit	
Michigan	:	Faddle Steel 1729 80	Steel		428 24	436 Z4 Day City, Michigan	C. f. f. car lerry, willusor and Detroit.	
Joe Milton.		Screw Wood	Wood	96.30	63.45	63.45 Port Stanley	Port Stanley, Lake Erie, fish and tug.	
Glenrosa		op	ob	63 18	42.97	42.97 Maganetawan	On the Maganetawan River, passenger and tug.	
Mink	:		ob	13.32	90.6	9.06 Port Carling	On the Muskoka Lakes, passenger and tug.	
Sonntag		 ф	: op	7.24	4.93	4.93 Toronto	Pleasure yacht on Toronto Bay.	
Minata	:	do	т ор	83.83	19.41	ор	do Lake Simcoe	
City of Stratford		ор		4.01	2.73	2.73 Port Dalhousie	do the Avon River, Stratford.	
Vera	<u>:</u>	do	: မှ	13.52	12.24	12.24 Blenham	Passenger, Rondeau Bay, screw,	
				1954 · 90	653.03			
								_

THOS. HARBOTTLE,

Hull Inspector.

Name of Vessel.	Horse-	Class.	Wood or Iron.	Стова Топпаке.	Registered Tonnage.	Where built.	Where and how employed.
Lorelei.	2.13	Screw Wood	Wood	44 .29	30.12	Kingston	Passenger, Bay of Quinte and River St. Lawrence to
Titania	3.53	ф	-: op	16.83	10.64	do   Yacht.	Yacht.
Bertha.	3.00	op	: જ	17.64	12.00	ф	op
Sunbeam	09.2	Paddle	: op	do 111.89	83.48	83.48 Lakefield	Passenger, waters of Victoria and Peterboro'.
Crrandella	89.6	••••	: op	266 · 20	169.50	169 50 Lindsay	op op
Maggie May	8. 3.	Screw	.: ор	89.6 <del>8</del>	19.74	19.74 Washburn	Freight, Rideau Canal.
	29.12			485.88	325.48		

EDWARD ADAMS, Steamboat Inspector, East Ontario Division.

Statement of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horse!

waters of Victoria and Peterboro'. Passenger, waters of Victoria and Peterboro'. power; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed Where and how employed. Passenger, Bay of Quinté and Prescott. .... Tug, Rideau Canal. ф Yacht. Yacht. 30.12 |Kingston. .... Where built. Lakefield..... Lindsay ..... Kingston ... Washburn. Kingston.. 83.48 10.64 19.74 169.50 15.00 325.48 Registered Tonnage. 485.88 111.89 16.83 20.03 266.20 17.64 44.29 Стова Топпаge. Wood .. Wood or Iron. ф ф ф ę မှ 7.50 Paddle.... 2.13 Screw..... .... ор Paddle... Class. 3.53 Screw ... Screw .. 3.33 63 Horse-power. 9 3.08 20.13 Lorelei Name of Vessel. 55 Berths ..... Titania. .... Sunbeam.... Orandella ... Maggie May....

THOMAS DONNELLY,
Steamboat Inspector, East Ontario Division.

Statement of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horsepower; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed. Towing, Montreal, Quebec and Chambly River. Where and how employed. Passenger and towing on Lièvre River. Freight and passenger on Lièvre River. Towing on Ottawa River. Kingston, Ont., 1891..... 10 Ottawa, 1891..... Sorel, 1891.... Buckingham, 1891 ..... Where built. 18 8 13 121 Registered Tonnage. 83 158 12 335 Gross Tonnage. Side-wheel. Composite. Screw ..... Wood ... Wood or Iron. Wood ф Screw ... Class. 50.26 3.8<sub>6</sub> 65.02Horse power. 6.5 Name of Vessel. Sir Hector..... Hudson .. Squaw...

JOHN BURGESS, Steamboat Inspector.

130

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STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horselpower; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.	Where and how employed.	As a freight boat from Montreal to foreign ports As a Quebec harbour tug As a wrecking sehooner.	TIMMITE A BOURT
	Where built.	1,182 Sunderland	
	Registered Tonnage.	1,182 (13)	
	Gross Tonnage.	1,816 1,182 18 19 19 60	
	Wood or Iron.	Iron Wood	
	Class.	Screw . do do .	
	Horse.	175 9·63 12·33	
	Name of Vessel.	Thornholm.  Lily H.  Anny McGee.	13:

PIERRE D. BRUNELLE,

Hull Inspector.
JOS. SAMSON,
Steamboat Insp., Quebec District.

131

of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horseywer; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.
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Statement of the number of power; whether of		seam Vessels ood or Iron	s added	to the I Gross a	Dominic nd Reg	on during the year ended istered Tonnage; where bu	Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and H orser Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.
Name of Vessel.	Horse-	Class.	Wood, Iron or Steel.	Gross Tonnage.	Registered Tonnage.	Where built.	Where and how employed.
Anticosti	8.17	Screw	Wood	19.00	15.98	Shelburne, N.S., 1891	Fish boat, coasting.
Aid	18.13	ф	op	98.55	67.02	Liverpool, N.S., 1891	Wrecker do
Amanda Green	88 89 89	т ор	ob	19.63	13.37	St. John, N.B., 1891	Tug, St. John, N.B.
Bessie Ardilla	2 00	ф	ob	11.17	22.2	West Isles, N.B., 1890	do Deer Island to Eastport.
Blue Hill	41.86	Twin-screw.	ор	195.83	19.76	Boston, Mass., 1887	Passenger, ferry, Yarmouth to Liverpool.
Collector	18.30	Screw	ob	20.29	32.38	Halifax, N.S., 1891.	Lighter, Halifax Harbour.
C. M. Winch	23.40	op	ob	87.72	49.22	Camden, N.Y., 1872	Tug, Little Glace Bay.
Ellida	12.06	do	Compo-	37.52	25.51	New Glasgow, N.S., 1891	Yacht, coasting.
Fanchon	5.70	Paddle	Wood	99.96	22.09	St. John, N.B., 1891	Tug, St. John River.
Fastnet	09.99	Screw	Iron	337 · 71	154 :56	Glasgow, G.B., 1878	Passenger and freight, Halifax to P. E. Island.
Glencoe	3.33	do	Wood	32.21	24.53	Granville Ferry, N.S., 1891	Granville Ferry, N.S., 1891 Ferry, passenger, Granville to Annapolis, N.S.
Havana	54.17	op	· · op	86.024	245.86	245 86 Hantsport, N.S., 1891	Freight and passenger, Halifax and Newfoundland.
J. B. Hamlin	4.80	op	ob	31.71	21.26	21 56 Providence, R.I., 1891	Freight, Pictou, N.S.
John L. Cann	34.66	op	ob	142.08	09.29	62.60 Yarmouth, N.S., 1891	Tug, Yarmouth, N.S.
Норе	34.13	Paddle	ор	305.77	19.191	Sorel, Que., 1878	do St. John River.
Lunenburg.	26.53	Screw	ор	265.55	113.11	113.11 Mahone Bay, N.S., 1891	Passenger and freight, Halifax and Lunenburg.
Marion.	2.00	op	ob	11.57	7 87	Douglastown, N.B., 1891 Yacht, Miramichi River.	Yacht, Miramichi River.
Maple Leaf		19 20 Paddle	ф	129.06	81.31	Pictou, N.S., 1891	81.31 Pictou, N.S., 1891 Ferry, Pictou and Pictou Landing.

Twin-screw Steel [1,255 43   519 09 Newcastle, G.B., 1891, Wood-Passenger and freight, P. E. Island, Point du Chéne   strait 1882.	Stern-wheel, Wood 232.73 146.00 Lengthened, St. John, 1890 Passenger, St. John River.	Paddle do 77.47 48.81 Newcastle, N.B., 1891 Ferry, passenger, Newcastle ferry.	Twin-screw. do 35.74 24.30 Hampton, King's Co., 1891 Tug, St. John River.		
Newcastle, G.B., stock, 1882.	Lengthened, St. J.	Vewcastle, N.B.,	fanıpton, King's		
60.619	146.00	48.81	24·30 I	.982-92	
1,255.43	232 · 73	77.47	35 . 74	3.945.11 1.982.92	.
Steel	Wood	: op	-: op		
Twin-screw.	Stern-wheel.	Paddle	Twin-screw.		
211.86	25.73	3.33	4.26	19.179	
Northumberland 211.86	Springfield	Rustler	Tangent		

DOUGLAS STEVENS, Steamboat Inspecto

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STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horse-	DOUGH I WINDWING OF TROPS OF TROPS OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROP

•	Cioria.	D	000	OL	laı	1.0	ape	10	(140	102
	Where and how employed.	Pictou, Magdalen Islands and Cape Breton, passenger and freight.	Halifax and Lunenburg, N.S., passenger and freight.	Yarmouth to Argyle, N.S., passenger and freight.	Halifax to P.E.I., passenger and freight.	Ferry, Pictou to Pictou Landing.	do Annapolis to Granville.	Freight boat, Halifax to Newfoundland.	. Charlottetown, P.E.I., to Shediac or Pictou, passenger and freight.	
	Where built.	72 Port Glasgow, G.B	113 Mahone Bay, N.S	97 Boston, U.S	154 Glasgow, 1878	81 Pictou, N.S	24 Granville, N.S	245   Hantsport, N.S	519 Newcastle-on-Tyne	
	berstergest. Tonnage.	72	113	26	154	18	22	245	519	1,305
	Gross Tonnage.	305	265	195	337	129	æ	470	1,255	2,988
	Wood or Iron.	Iron	Wood	op	Stæl	Wood	op	op	Steel	
	Class.	100 A 1 Iron	Am. Record Wood	:				Veritas	do Steel	
	Horse- power.			:	: :		:	:		
	Name of Vessel.	St. Olaf	Lunenburg	Blue Hill	Fastnet	Maple Leaf	134	Havana	Northumberland.	

CHARLES R. COKER,

Dominion Inspector of Hulls, &c.

A. 1892

STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horse-power; whether of Wood or Iron; their Gross and Registered Tonnage; where built, and where and how employed.	Where and how employed.	Lake Winnipeg, freight, and fish freezer do fishing boat. Red River, excursion boat.	
ion diring the year ended egistered Tonnage; where	Where built.	243.13 Selkirk, Man	
Domin and Re	Registered Tonnage.	243·13 (10·99 e·19	260.31
d to the ir Gross	Gross Tonnage.	357·55 16·16 9·83	383.54
els adde	Wood or Iron.	. Wood 357.55 do 16.16 do 9.83	
team Vesse Vood or Irc	Class.	Screwdo	
er of S	Horse-power.	10.80 2.70 2.13	15.63
STATEMENT of the numb power; wheth	Name of Vessel.	Sultana. Angler Ripple.	19

EDMUND R. ABELL, Steamboat Inspector for Manitoba, Keewatin and N.W.T.

55 Victoria.

ded 31st December 1891 their Class and Horse-

			i	BRIT	SH CO	BRITISH COLUMBIA DIVISION.	
Name of Vessel.	Horse.	Class.	. norl to booW	Gross Tonnage.	Registered Tonnage.	Where built.	Where and how employed.
Burt	2.2	Twin-screw, Wood	Wood	13.05	88. 80.	8.88 Victoria	Towing in adjacent waters.
Dreadnought	5.4	tug. Screw, tug	: op	38.65		New Westminster	do and freighting, Burrard Inlet.
Caledonia	0.21	Stern-wheel.	op	237	130	ор	. Freight and passenger, Skeena River.
Comet	9.91	Screw, tug	. op	92.38	28.82	ор	Towing, waters of British Columbia.
981 9Eliza Edwards	14.1	do	op	54.63	37 · 15	Vancouver	Freight and passenger, Vancouver to Fraser River.
Florence	2.2	ф	: op	30.41	17 .80	17.80 Victoria	Cannery service, Skeena River.
Gemimi	5.3	Twin-screw.	- op	8.15	5.55	New Westminster	Pleasure yacht.
Estelle	83	Screw, tug	: છ	84.06	57 . 17	57.17 Nanaimo	Towing, waters of British Columbia.
Minnehaha	8.0	op	qo :	6.72	4.27	4.57 New Westminster.	Pleasure yacht.
Nora	2.1	ор	: op	19.43	13.21	13.21 Port Esrington	Cannery service, Skeena River.
Phantom	2.2	do tug	op	46.53	31.65	Port Madison, Wash., U.S	31.65 Port Madison, Wash., U.S Coal trade, Nanaimo to Victoria.
Iona	5.4	Twin-screw.	- op	52.62	32.79	35.79 Vancouver	Fish and passengers from north to Vancouver.
Lois	4.8	Screw, tug	ob	25.15	17.11	ор	Towing, Burrard Inlet to Victoria.
Nelson	133	Stern-wheel.	-: op	10.96	312.49	Nelson, Kootenay	Freight and passenger, Kootenay Lake.
Surrey.	17	Catamaran .	op	263.26	182.26	New Westminster	do Fraser River ferry.
Penticton	4.2	Twin-screw.	-: op	49 69	33.79	33.79 Okanagan Lake	do Okanagan Lake.
Blonde,	9.9	Screw	op	32.64	22.53	22.53 New Westminster	Towing, Fraser River.

Esperanza	2.1	do   do .   30.88   21.31	do .	8.08	8   21.31	· op	Passengers, Nanaimo to adjacent islands.
Wildman	13.5	do	op	51.41		32.08 Victoria	Towing, Fraser River.
Eva	3.3	op	ob	34.99		24.17 New Westminster	op op
Rover	1.4	op	. ob	6.57		4.47 Nanaimo	do Nanaimo Harbour.
Cora	2.2	do	op	25.12		17.09 Cowichan Lake	do logs, Cowichan Lake.
Galena	3.5	Twin-screw.	op	47.64		Kootenay Lake	33.35 Kootenay Lake Freight and passengers, Kootenay Lake.
[daho daho	1.2	Screw, tug	ob	6.04		4.23 Medical Lake, Idaho, U.S.A Towing, Kootenay Lake.	fowing, Kootenay Lake.
Dispatch	2.1	Catamaran .	ob	37 · 10		23 38 Revelstoke	Snag boat, Columbia River.
Earl	21	Screw, tug	op	74.78		49.86 Vancouver Towing, Fraser River.	Powing, Fraser River.
Sunbury	2.2	nt,pad-	- op	73.36		New Westminster	46.22 New Westminster Freighting, Arms of Fraser River.
Logger	1.5	gle.	. ob	18.84		12.82 Vancouver Gathering logs along beach.	Gathering logs along beach.
Angerona	1.4	Screw, yacht do 13.79	ф :	13.7		9.52 New Westminster Cruising for pleasure.	Cruising for pleasure.
Comox	24.0	Passenger & Steel 101.17	Steel	101 .17		Paisley, Scotland; rivetted at	60.16 Paisley, Scotland; rivetted at Freight and passengers, waters of British Columbia.
T. W. Carter	2.1	Fishing tug. Wood.	Wood.	56.94		17.00 Victoria	San Juan, Vancouver Island.
City of Nanaimo	2.8	Passenger & do 751.37 freight.	-: op	751.3	517 74	Vancouver	517.74 Vancouver Passengers and freight, mainland and Nanaimo.
	297 · 8			2,927	2,927 · 41 1,893 · 43	2	

JAMES A. THOMSON,
Steamboat Inspector.

STATEMENT of the number of Steam Vessels added to the Dominion during the year ended 31st December, 1891; their Class and Horsepower; whether of Wood or Iron; their Gross and Registered Tonnage; where built; and where and how employed.

Lois  Nelson  Surrey.  Blonder  Esperanza  Hildonan  Eva.	4 8 0 0 9 1 10 8 4	Class. Class.  Twin-screw. Wood  do do  Centre-do  Screw do  do  do  do  do  do	23 25 25 17 Cross Tonnage 6 57 49 89 60 17 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Tonnage.  Registered Tonnage.	built.	Where and how employed.  Freight and passenger, in British Columbia waters.  Treight and passenger.  Freight and passenger.  Tug, Fraser River.  Tug, Fraser River.  do  Tug, Manaimo Harbour.
Penticton Burt Dreadnought Caledonia. Comet Eliza Edwards Florence Genuine	2.7 2.5 2.5 5.4 5.4 17.0 16.6 5.3 7.2 7.2 7.2 7.2 7.3	do do  Twin-screw Wood  Screw do  Stern-wheel do  Screw do  do  do  Twin-screw do	 25.12 49.69 13.65 23.70 88.70 54.63 80.41	17.09 33.79 8 88 8 88 130.00 130.00 17.80 17.80	17.09       Cowichan Lake         33.79       Okanagan Lake         8*88       Victoria         New Westminster       39.00         68:55       do         37:15       Vancouver         17:80       Victoria         17:55       New Westminster	Trowing logs, Cowiohan Lake.  Freight and passenger, Okanagan Lake.  Tug; waters of B. C.  Freight and tug, Burrard Inlet.  Freight and passenger, Skeena River.  Tug and passenger, waters of B. C.  Freight and passenger, Vancouver and Fraser River.  Cannery service, Skeena River.  Yacht.

Estelle		29.00	Screw	op -	84.06	57.17	Nanaimo	00  Screw do   84.06   57.17  Nanaimo
Minnehaha		8.0	op	· op	do 6·72	4.57	4.57 New Westminster Yacht.	Yacht.
Nora	:	2.1	op	op	do 19·43		13.21 Port Essington, U.S	Canning service, Skeena River.
Phantom	:	2.2	op	: 9	£6.53	31.65	31.65 Port Madison	Towing, Nanaimo and Victoria.
('alena	:	3.5	Twin-screw.		47.64	38.38	Kootenay Lake	33.35 Kootenay Lake Freight and passenger, Kootenay Lake.
Idaho		1.5	Screw	: op	<b>70.9</b>	4.23	4.23 Idaho, U.S	Towing, Kootenay Lake.
Dispatch	:	2:1	Catamaran .	: e	37.10	23.38	23.38 Revelstoke	Snag boat, Columbia River.
Earl	:	.12	Screw	. ob	74.78	98.61	Vancouver	49.86 Vancouver Towing freight and passenger, waters of B. C.
Sunbury	:	2.2	Paddle	. ob	73.36	46.42	46.42 New Westminster Freight, Fraser River.	Freight, Fraser River.
Logger	:	12	Screw	-: op	18.84	12.82	12.82 Vancouver Gathering logs off the beach.	Gathering logs off the beach.
Angerona	:	4.1	do	op	do   13·79°		9.52 New Westminster	Yacht.
Сотох		:	do Steel 101.17	Steel	101 - 17	60.16	Vancouver	60.16 Vancouver Freight and passenger, waters of B. C.
139		208.3			1963 · 78	1247 · 00		

R. COLLISTER, Hull Inspector. STATEMENT of Steam Vessels lost, broken up or laid up, as unfit for service, in the Dominion during the year ended 31st December, 1891, and where and how employed.

	WEST ONTAR	IO DIVISION.	
Name of Vessel.	Where and how last employed.	Name of Vessel.	Where and how last employed.
Simpatica	Georgian Bay, yacht.	Mary Beck	Georgian Bay, tug.
Othello	Lake Superior, fishing tug.	Lady Katrine	Maganetawan River, tug.
Myrtie	Lake Huron do	Resolute	Georgian Bay, tug.
Sovereign	All Lakes, freight.		
			JOHN DODDS, JAMES JOHNSTON, Steamboat Inspectors.
	WEST ONTAR	RIO DIVISION.	
W. M. Alderson	Port Dover, passenger.	Sovereign	All the lakes, freight.
Inter-Ocean	Wallaceburg and Sarnia, pass.		
			THOS. HARBOTTLE, Hull Inspector.
	EAST ONTAR	IO DIVISION.	
Peerless	Rideau Canal, freight boat.	Eleanor	Kingston to Oswego and Rideau Canal, tug.
	•		EDWARD ADAMS. Steambout Inspector.
	MONTREAL	DIVISION.	
Resolute		H. F. Bronson	Screw, towing about Pembroke
Eva	River. do passenger, in Buckingham	George Millen	
Kate	River. do towing about Bucking- ham River.		River.
	,		JOHN BURGESS, Steambout Inspector.
	MONTREAL	L DIVISION.	
Dagmar (burnt)	Paddle, passenger, Montreal and Ottawa.	Eva (burnt)	Screw, passenger, Buckingham and High Rock.
		PIER	RE D. BRUNELLE, Hull Inspector.
	QUEBEC	DIVISION.	
Champion	Gulf and River, screw, tug.	Bienvenue	Paddle, passenger, Quebec and
Hercules	River, paddle, tug.	Canada	St. Ann. River, paddle, tug.
PIERRE D. BR	UNELLE, Hull Inspector.	JO	S. SAMSON, Steamboat Inspector.

Statement of Steam Vessels lost, broken up or laid up, as unfit for service, in the Dominion during the year ended 31st December, 1891, and where and how employed.

MARITIME	PROVINCES	DIVISION.
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	MARITIME PROV	INCES DIVISION	Ν.
Name of Vessel.	Where and how last employed.	Name of Vessel.	Where and how last employed.
Oscar Wilde	St. John, N.B., tug.	Lady of the Lake	Sydney Harbour, C.B., tug.
Fearless	do do	Maud	Annapolis Basin, N.S., tug.
Fanchon	do do	Heather Belle	Charlottetown and Orwell, P.E.I.,
Joe Edwards	Annapolis, N.S., ferry.	Acadia, St. John	passenger. St. John River, N.B., passenger.
	Dartmouth, N.S., tug.		
Acadia	St. John River, passenger and freight; burnt December, 1891.	Heather Belle	Charlottetown to Crapaud, &c., P.E.I., passenger and freight; sunk by collision.
	<u> </u>	CHAR	LES R. COKER,  Dom. Inspector of Hulls, &c.
MANITO	OBA, KEEWATIN AND NOR	TH-WEST TERR	ITORIES DIVISION.
Glendeyon	Lake Winnipeg, fishing tug; burned on the 6th August, in the Little Saskatchewan River.	it	
	Steamboo		UND R. ABELL, itoba, Keewatin and N. W. T.
	DDIMIGH COLII	MRIA DIVISION.	

# BRITISH COLUMBIA DIVISION.

Kamloops		Nellie Taylor	Coast cruising ; lost.
Lady Dufferin	vice; laid up as unfit. do do	Emma	Towing, coast ; lost.
		Alpha	Freight, Vancouver; burned.
Reliance	Fraser River; laid up as unfit.	Reliance	Fraser River ; laid up.
		Nellie Taylor	Coasting; lost.
	Victoria, passenger service; dis-	Emma	do
	mantled.	<u> </u>	<u> </u>

R. COLLISTER,

Hull Inspector.

List of Certificates of Competency granted to Engineers of Steamboats, for the year ending 31st December, 1891.

			) 	· · · · · · · · · · · · · · · · · · ·	·		
Number of Cer- tificate.	Date of Certificate		of Name.		Address.	Where Examination was Passed.	Fee.
	189	91.					\$ cts.
1078	July	8.	Chas. Ed. Stewart	Second class	Halifax, N.S	Halifax	5 00
1079	do	8	James Scott	Third class	Victoria, B.C	Victoria	5 00
1080	do	8	Thos. F. McKechnie	Fourth class	New Westminster, B.C.	do	5 00
1081	do	8	Alex. Cook	Second class	Point Edward	Sarnia	5 00
1082	do	8	William R. Burnett	Fourth class	Windsor, Ont	Windsor	5 00
1083	do	8	Joseph F. Taylor, jun	Second class	do	do	5 00
1084	do	8	Matthew Hy. Chisholm	do	Milton P.O., Ont	Toronto	5 00
1085	do	8	Abraham H. B. Neff	Fourth class	Humberstone, Ont	do	5 00
1086	do	8	Enoch Chapman	do	Windsor, Ont	Windsor	5 00
1087	do	8	Jonathan Lowry	do	do	do	5 00
1088	do	8	Richard Hy. B. Bridge	Second class	North Sydney, C.B., N.S.	Halifax	5 00
1089	do	8	Wm. Hy. Durham	Fourth class	Homer, Ont	Toronto	5 00
1090	do	8	Jasper Fowler	First class	Victoria, B.C	Victoria	5 00
1091	do	8	John F. Cheyne	Second class	St. John, N.B	St. John	5 00
1092	do	8	Wm. Henry Dewey	Third class	St. Catharines, Ont	Toronto	5 00
1093	do	8	Daniel Donohue	Second class	Toronto, Ont	do	5 00
1094	do	8	Ofof Johnson Swanberg	Third class	Selkirk, Man	Selkirk	5 00
1098	do	8	Wm. K. Simpson	Fourth class	Toronto, Ont	Toronto	5 00
1096	do	8	James Levy	Third class	Winnipeg, Man	Selkirk	5 00
1097	do	8	James Smith	do	Rat Portage, Ont	do	5 00
1098	do	8	Henry Parker	Second class	Toronto, Ont	Toronto	5 00
1099	do	12.	William McCallum	Third class	Goderich, Ont	do	5 00
1100	do	12.	William Hannah	Second class	Halifax, N.S.	Halifax	5 00
1101	do	12.	James Ailles	Fourth class	Mimico Asylum, Ont	Toronto	5 00
1102	do	12.	William Caraty	. do	Waubaushene, Ont	do	5 00
1103	do	12.	John McRae, jun	. do	Meaford, Ont	do	5 00
1104	do	12	Christopher Dragoylovich	Third class	Vancouver, B.C	Victoria	5 00
110	do		John Tumilty		1	1	5 00
1100	do	12.	John J. Weinart	Third class	Toronto, Ont	Toronto	5 00
1107	7 do	12.	Samuel Graham	. do	Victoria, B.C	Victoria	5 00
110	8 do	12.	Robert Steel		do	. do	5 00
				149			

List of Certificates of Competency granted to Engineers, &c.—Continued.

Number of Cer-	Date of Certificate		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	91.					\$ cts.
1109	July	12	Wm. J. Cullum	First class	Victoria, B.C	do	5 00
1110	do	12	Frederick Corkey	Fourth class	Barriefield, Ont	Kingston	5 00
1112	do	12	John Kennedy	do	Garden Island, Ont	do	5 00
1113	do	12	Edward Jas. Taylor	Third class	Kingston, Ont	do	5 00
1114	do	12	John Allen Wallace	Fourth class	Trenton, Ont	Toronto	5 00
1115	do	12	Wm. Julian	do	Port Dalhousie	do	5 00
1116	do	12	Herbert T. McLeod	do	Barrie, Ont	do	5 00
1117	do	12	Jacob York Baker	do	Summerton, Ont	do	5 00
1118	do	12	Elisee Julien	Third class	Pembroke, Ont	Montreal	5 00
1119	do	12	James D. Banks	Second class	Toronto, Ont	Toronto	5 00
1120	do	12	Wm. Noonan	do	Westport, Ont	do	5 00
1121	do	12	Jonathan Taylor	do	Kingston, Ont	Kingston	5 00
1122	do	12	George Fleming	do	do	do	5 00
1123	do	12	Andrew Simmons	Fourth class	do	do	5 00
1124	Feb.	5	Richmond B. Halked	Permit	Vancouver, B.C	Victoria	5 00
1125	do	12	Chas. H. McJunkin	Third class	Yarmouth, N.S	Yarmouth	5 00
1126	do	12	Oliver P. St. John	First class	Toronto, Ont	St. Catharines.	1 00
1127	dо	12	Francis H. Pearsall	Permit	Port Rowan, Ont	Toronto	2 00
1128	Mar.	17	James Summers Adam	Fourth class	Toronto, Ont	do	5 00
1129			George Wm. W. Rankin	do	Owen Sound, Ont	Owen Sound	5 00
1130	do	17	John H. Hewson	<b>d</b> o	do	do	5 00
1131	do	17	David L. Johnstone	Third class	Chatham, Ont	St. Catharines.	5 00
1132	do	17	David Foley	Second class	Toronto, Ont	Toronto	5 00
1133	do	17	Samuel A. Mills	do	do	do	5 00
1134	do	17	Charles A. Farrar	do	Meaford, Ont	Owen Sound	5 00
1135	do	17	Hiram Fred Chute	Third class	Hampton, N.B	Halifax	5 00
1136	do	- 1			_	Victoria	5 00
1137	do	17	James Baird	Second class	Toronto, Ont	Toronto	5 00
1138	do	]	Ed. John O'Dell		do	_	5 00
1139	do	ł	John Burns		Owen Sound, Ont	Owen Sound	5 00
1140	do į	- 1	Wm. Harwood	do	do	<b>d</b> o	5 00
1141	do		Alex. McKenzie		do		

List of Certificates of Competency granted to Engineers, &c.—Continued,

Number of Cer- tificate.			Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	91.					\$ cts.
1142	Mar.	17	Wm. F. Watts	Second class	St. Catharines, Ont	St. Catharines.	5 00
1143	do	17	James Ryan	Fourth class	Newboro', Ont	Toronto	5 00
1144	do	17	Rupert McKay	Second class	Halifax, N.S	Halifax	5 00
1145	do	17	Andrew McLaren	Fourth class	Wiarton, Ont	Owen Sound	5 00
1146	do	17	Oscar Flummerfelt	Second class	St. Catharines, Ont	St. Catharines.	5 00
1147	do	17	Albert Ed. House	Third class	Port Dalhousie, Ont	do	5 00
1148	do	17	Alma Lowder	Fourth class	St. Catharines, Ont	do	5 00
1149	do	17	Wm. Henry Linter.	Third class	do	do	5 00
1150	ďο	17	Anthony Strong	Fourth class	Kingston, Ont	Kingston	5 00
1151	do	17	John W. Hunter	do	do	do	5 00
1152	do	21	George Booth	Third class	do	Toronto	5 00
1153	do	21	Isaac Moudeland	Fourth class	Victoria, B.C	Victoria	5 00
1154	do	21	Wm. Parker	Second class	Kingston, Ont	Kingston	5 00
1155	do	21	John Bolton	Fourth class	do	do	5 00
1156	do	21	Alex. McRae	Second class	Toronto, Ont	Toronto	5 00
1157	do	21	Wm. Chas. Spencer	Fourth class	Kingston, Ont	Kingston	5 00
1158	do	21	Mathew Hayes	Third class	Toronto, Ont	Toronto	5 00
1159	do	21	Eugène Belanger	Second class	Lévis, Que.	Quebec	5 00
1160	do	21	Wm. Phipps	do	Collingwood, Ont	Toronto	5 00
1161	do	21	Alex. Crimstie	do	Glasgow, Scotland	Halifax	5 00
1162	do	21	Andrew S. Foster	do	Yarmouth, N.S	Yarmouth	5 00
1163	do	21	Henry Wilson	Third class	Victoria, B.C	Victoria	5 00
1164	do	21	Lawson B. Cronk	do	Dresden, Ont.	Toronto	5 00
1165	do	21	Geo. Elias Wilson	do	Port Stanley, Ont	do	5 00
1166	do	21	Silas Calder Soules	do	Queensville, Ont	do	5 00
1167	do	21 .	Bertram Meyers	Fourth class	Toronto, Ont	do	5 00
1168		21	Frank White	Second class	do	do	5 00
1169			Edward Wm. Fox	<u></u>	do	do	5 00
1170	i .	21	James H. Ellis	First class		do	5 00
1171			Amos Knox	1		Halifax	5 00
1172			Saml. James Giles	I	1	ļ	5 00
1173	1		Robt. Wm. Moore	1	Hamilton, Ont		]

List of Certificates of Competency granted to Engineers, &c.—Continued.

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Number of Cer- tificate.	Date of Certificate		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
,	189	91.					\$ ets.
1174	Mar.	21	Alex. Barton	Third class	Kingston, Ont	Kingston	5 00
1175	1		l .	Second class	Toronto, Ont	Toronto	5 00
1176	do	21	John McDonald	Fourth class	Hamilton, Ont	<b>d</b> o	5 00
1177	do	21	Constant Hamel	Second class	Lotbinière, Que	Lotbinière	
1178	April	6	Frank H. Tovey	Fourth class	Victoria, B.C	Victoria	5 00
1179			<b>!</b>	Second class	do	do	5 00
1180	do	14	George Crandell	Third class	Lindsay, Ont	Toronto	5_00
1181	do	14	Wm. Wallace Savage	Permit	Toronto, Ont	do	2 00
1182	do	14.,	George H. Shutliffe	do	Gananoque, Ont	Kingston	2 00
1883	June	2	Adelard Lapointe	Fourth class	Village Lauzon, Que	Quebec	5 00
1184	do	2	Hilaire Mercier	do	do Bienville, Que	do	5 00
1185	do.	2	Gimes Bressoni	do	do do	do	5 00
1186	do	2	John McKinnon	do	Charlottetown, P.E.I	Halifax	5_00
1187	do	2	Wm. J. Keimedy	do	Sorel, Que	Quebec,	5 00
1188	do	2	Robt. S. Cunningham	do	New Westminster, B.C	Victoria	<b> </b>
1189	do	2	Erastus H. H. Lovitt	do	Yarmouth, N.S	Halifax.	5 00
1190	do	2	Edward Lloyd	<b>d</b> o	Kentville, N.S	do ,	- 5 00
1191	dο	<b>2</b>	James Heay	Third class	Victoria, B.C	Victoria	5 90
1192	do	2	Sainl. Brunelle	do	Champlain, Que	Montreal	5 00
1193	do .	2.,	George Lumsden	do	Eustache, Man	Selkirk	5 00
1194	do	2.,	Edward Tames	do	Huntsville, Ont	Toronto	5 00
1195	do	2	Alex. Lewis	do	Owen Sound, Ont	do	5 00
1196	do	2	Michel Latulippe	Second class	Village Lauzon, Que	Quebec	5 G0
1197	do	2.,	Achille Michaud	do	St. Sauveur, Que	qo	5 00
1198	do	<b>2</b>	James Morron	do	Halifax, N.S	Halifax	5 00
1199	do	2	Frank DeWolfe Cahan	First class	Yarmouth, N.S	do	5 00
1200		2	Wm. Caro Higgins	Third class	Keewatin, N.W.T	Selkirk	<b> </b>
1201	do	9	Edwd. Abbey	Fourth class	Toronto, Ont	Toronto	5 00
1202	do	16.,	Wm. Moses Hyde	do	Dresden, Ont	do	5 00
1203	40	16.,	Robert Craig	do	Windsor, Ont	do	5 00
1204	1	16	Joseph Boisvert	do	Sorel, Que	Quebec	5 00
1205	do.	16	John Gonyea	Permit	Smith's Falls, Ont	Kingston	2 00

List of Certificates of Competency granted to Engineers, &c.—Continued.

Number of Cer- tificate.			Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	91.					\$ cts.
1206	June	16	Wm. Powers	Permit	Tyendinaga, Ont	Kingston	2 00
1207	do	16	Jerome Young	do	Peterboro', Ont	do	2 00
1208	do	16	Wm. A. McWilliam	do	Kingston, Ont	do	2 00
1209	July	4	Thos. A. Russell	Third class	Toronto, Ont	Toronto	5 00
1210	do	8	George Caister	Fourth class	St. Catharines, Ont	do	5 00
1211	дo	9	George MacGregor	do	Victoria, B.C	Victoria	5 00
1212	do	9	Edwin Verney	do	Toronto, Ont	Toronto	5 00
1213	do	9	John D. Adams	Permit	Parry Sound, Ont	Parry Sound	2 00
1214	do	9	Wm. M. Moore	do	Orillia, Ont	Orillia	2 00
1215	do	9	Arthur Thos. Lowe	do	Port Carling, Ont	Port Carling	.2 00
1216	do	9.,	Martin L. Crandell	do	Port Perry, Ont	Kingston	2 00
1217	do	9	Saml. R. Heenan	do	Cardinal, Ont	do	2 00
1218	do	9.	George Dube	do	Penetanguishene, Ont	P enetanguish-	2 00
1219	do	19	Henry Geddow	do	Kingston, Ont	ene Kingston	2 00
1220	do	20	Clement Montville	do	Thurso, Que	Montreal	2 00
1221	Aug.	1	Thos. Hy. Sheffield	do	West Sutton, Ont	Jackson's Pt.	2 00
1222	do	1	James Summers Adam	do	Toronto, Ont	Roach's Pt	2 00
1223	do	1	Fredk. Rutherford	do	Penetanguishene, Ont		2 00
1224	do	4	Charles Gravelles	do	Bridgeworth, Ont	ene Kingston	2 00
1225	do	5	Frank Massan	do	Lindsay, Ont	Lindsay	2 00
1226	do	5	Fredk. J. Parkin	do	do	do	2 00
1227	do	26	François Tetereau	Third class	Lachine, Que	Lachine	5 00
1228	do	<b>26</b>	Henry Greenway	Permit	Vancouver, B.C	Vancouver	2 00
1229	Sept.	15	Thos. O. Mara	do	Lombardy, Ont	Lombardy	2 00
1230	June	1	Geo. Ed. Burrows	Third class	Barrington, N.S	Barrington	5 00
1231	Dec.	4	Larue Smith	Permit	Blenheim, Ont	Toronto	2 00
1232	do	29	Sandford Donnelly	Third class	Kingston, Ont	do	5 00
1233	do	29	Thos. Crossley	Fourth class	Toronto, Ont	do	5 00
1234	do	29	Geo. Simons	do	Hamilton, Ont	do	5 00
1235	do	29	Napoléon Lecours	Second class	Village Bienville, Que	Quebec	5 00
1236	do	<b>2</b> 9	Harry Brownley	do	Toronto, Ont	Toronto	5 00
1237	do	29	James Wallace	Fourth class	Victoria, B.C	Victoria	5 00
				146			

 ${\bf List~of~Certificates~of~Competency~granted~to~Engineers,~\&c.} \\ - Concluded.$ 

	1891. 238 Dec. 29. 339 do 29. 340 do 29. 341 do 29. 342 do 30.						
Number of Cer.   tificate.	Date of Certificate		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	18	91.					\$ cts.
1238	Dec.	29	Pierre LeBlanc	Fourth class	Carleton, Que	Quebec	5 00
			James Kelly	do	Halifax, N.S	Halifax	5 00
1240	do	29	Robt. R. Harvie	<b>d</b> o	Barrington, N.S	do	5 00
1241	do	29	Joseph H. Londen	do	Creemore, Ont	Toronto	5 00
1242	do	30	Fredk. C. Dougall	do	Victoria, B.C	Victoria	5 00
1243	do	<b>3</b> 0	Thos. S. Moffat	do	do	do	5 00
1244	do	<b>3</b> 0	David L. Rainy	Third class	New Westminster, B.C	do	5 00
1245	do		Edmond C. Shepherd	i		}	5 00
							<u> </u>

# APPENDIX No. 16.

List of Certificates of Competency granted to Masters and Mates, Foreign Sea-going, during the year ended 30th November, 1891.

				·		
Number of Cer- tificate.	Date of Certificat	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	1890.			•		\$ cts.
2811	Dec. 10.	. Harry Gauhroger	2nd Mate	Victoria, B.C	Victoria	5 00
2812	do 26.	. Joseph Frève	Master	Cacouna, Que	Quebec	10 00
2813	do 26.	John A. Ljungherg	Mate	St. John, N.B	St. John	5 00
2814	do 26.	Nelson Smith.	do	, do	do	5 00
2815	do 26.	Perry Ells Knowlton	do	Advocate Harbour, N.S.	do	5 00
2816	do 26.	James L. Mosher	do	Avondale, N.S	Halifax	5 00
2817	do 26.	Lewis Fielden	. dc	Hantsport, N.S	do	5 00
2818	do 26.	. Murray McDonald	. do	Main-à-Dieu	do	5 00
2819	do 26.	Fraser Hunter	Master	Mount Denson, N.S	do	10 00
2820	do 26.	. Adelbert F. McKay	Mate	Barton, N.S	Yarmouth	5 00
2821		Fredk. M. Cosman	Master	Yarmouth, N.S	do	10 00
2822	1891. Jan. 17	. John Pratt	Mate	Cheverie, N.S	Halifax	5 00
2823	do 17	. Richard John Warner	Master	Plympton, N.S	do	10 00
2824	do 4.	. Leander H. Porter	Mate	Lower Granville, N.S	St. John	5 00
2825	Feb. 7	James P. Bendrot	. Master	Victoria, B.C.	Victoria	10 00
2826	do 7	Fredk, W. Blanvelt	. do	Tusket, N.S	Yarmouth	10 00
2827	do 7	Arthur E. Morgan	Mate	Victoria, B.C	Victoria	5 00
2828	do 7	David A. Scott	. do	Windsor, N.S	Halifax	
2829	do 7	. Chas. A. Muggah	. do	Sydney, C.B	do	5 00
2830	do 7	. William Salisbury	Master	River John, N.S	do	10 00
2831	do 7	John W. Baxter	. do	Sheffield, N.S	do	10 00
2832	do 7	James K. Johnson	. Mate	River John, N.S	do	5 00
2833	do 26	Edward R. Dunham	. Master	St. John, N.B	St. John	10 00
2834	do 26	Patk. Ed. McMurray	. do	do	do	10 00
2835	do 26	James S. Osborn	. do 148	do	do	10 00
			140			

List of Certificates of Competency granted to Masters and Mates, &c.—Continued.

/ Number of Certificate.	Date of Certificate		of Name		Address.	Where Examination was Passed.	Fee.
	189	<del></del>					\$ cts.
	Feb.	26	Wm. Henry Carson	Master	St. Martin's, N.B	St. John	10 00
2837		<b>2</b> 6	Albert J. Smith	do	Shediac, N.B	do	
<b>283</b> 8		26	Ed. J. King	Mate	St. John, N.B	do	5 00
2839	40	<b>2</b> 6	Nils G. Thouson	do	do	do	5 00
2840	do	26	Edson S. Crowe	do	Burnt Coat, N.S	do	5 00
2841	Mar.	10	Narcisse J. Porter	do	Tusket Wedge, N.S	Yarmouth	5 00
2842	do		Harry P. Smith	do	Cheverie, N.S	do	5 00
2843		10.	Lloyd D. Vance	Master	Masstown, N.S	Halifax	10 00
2844	do	10	Millidge Mailman	Mate	Bridgewater, N.S	do	5 00
2845	dо	10	Joseph Monteith	Master	Maitland, N.S	do	10 00
2846	do ·	10	Hector Campbell	do	Cape Traverse, P.E.I	do	10 00
2847	do		Frank B. Baker	do	Yarmouth, N.S	do	10 00
<b>2848</b>	do	10	Donald Urquhart	do	Victoria, B.C	Victoria	
<b>2</b> 849	April		Wm. F. Spurr	do	Clements West, N.S	St. John	5 00
2850	do		Nelson A. Withers	do	St. John, N.B	do	10 00
2851	do		Wm. A. Irvine	do		1	10 00
2852	do	_		Mate	Advocate Harbour, N.S.	St. John	5 00
2853	do		Paul Lachance		St. Jean, Que	Quebec	10 00
2854	do		(		Bienville, Que	1	5 00
2855	do		Joseph Délisle		St. Jean, Isle d'Orléans,	•	5 00
2856	do		Adélard Sansterre		Que. St. Michel, Que	1	5 00
2857	do		Win. Caddell	1	Maitland, N.S	1	5 00
2858	do		Wm. C. Sanders	!		1	5 00
<b>2</b> 859			Louis LeBourdais		L'Islet, Que		5 00
2860	Mav		Jacob H. Cummings		Londonderry, N.S	ì	5 00
2861					St. John, N.B		5 00
2862		ĺ	James H. Holmes				3 00
2863			Hugh McMaster				10.00
2864			John A. Mooney		do	do	10 00
[		4	John Joseph Campbell	do		do	10 00
2866	J <sub>une</sub>		Carsten C. Heeshen				5 00
2867			David Fitzpatrick		St. John, N.B	١.	5 00
	uo	1	Wm. H. McKenzie	do 149	do	do	5 00

List of Certificates of Competency granted to Masters and Mates, &c-Continued.

Number of Certificate.	Date of Certificate		Name.	Grade.	Address.	When Examination was Passed.	Fee.
	1891	l. ,					\$ cts.
2868	June	1	Alex. Thompson	Master	St. John, N.B	St. John	10 00
2869	do :	16	Joseph E. Jones	2nd Mate	Wolfville, N.S	Halifax	5 00
2870	do :	16	James B. Kehoe	Master	Maitland, N.S	do	10 00
2871	do :	16	James Dollar	do	Brooklyn, N.S	do	10 00
2872	do :	16	Joseph Delisle	Mate	St. Jean, Isle d'Orleans, Q.	Quebec	5 00
2873	July	7	Henry A. Smith	Master	Yarmouth, N.S	Yarmouth	
2874	do	7	Geo. R. Vickery	do	Pembroke, N.S	do	10 00
2875	do	7	James T. O'Neil	Mate	Port Medway, N.S	Halifax	5 00
2876	do	7	Harry C. Ellis	do	Maitland, N.S	do	5 00
2877	do	7	Fred. N. Malcolm	Master	Cheverie, N.S	do	10 00
2878	do	7	James Lumbard	do	Medford, N.S	do	10 00
<b>2</b> 879	do	13.,	J. Wm. Hamilton	do	St. John, N.B	St. John	
2880	do	13	Wm. Hy. Coonan	do	Harvey, N.B	do	10 00
2881	do	13	Geo. C. Robbins	Mate	Yarmouth, N.S	do	
2882	do	13	Ernest H. Porter	do	Pembroke, N.S	Yarmouth	5 00
2883	Aug.	24	Geo. R. Marstere.	2nd Mate	Summerville, N.S	Halifax	5 00
2884	do	24	John D. McKenzie	Mate	Pictou, N.S	do	5 00
2885			Wm. F. Butler		Halifax, N.S		10 00
2886	do ·	24	Samuel A. Parker	Mate	Walton, N.S	do	5 00
2887	do	24	James W. McKenzie	Master	Pictou, N.S	do	10 00
2888	do	24	John Wilson.	1		Victoria	5 00
2889	Sept.	10	Amos Davison	1		Halifax	10 00
2890	1		Albert Mailman		[]	do	10 00
2891	1		James W. Gould		Canada Creek, N.S	do	10 00
2892	1		James F. Dill.		Newport, N.S	do	5 00
2893			Reginald H. Campbell		Liverpool, N.S	do	5 00
2894	ļ		Enoch H. Sutles		Halifax, N.S	do	
2895	Į		Chas. D. Bowers			do	10 00
2896			David S. Doty	1	Hebron, N.S	Yarmouth	10 00
2897			Henry Nickerson	1	Wood's Harbour, N.S		l
2898			Chas. T. Porter.	1 .	Spencer's Island, N.S	_	
2899	l		Thos. Kiffin			_	10.00
4000	do		I IIIOS. IXIIIII	150	St. John, N.B	do	10 00

List of Certificates of Competency granted to Masters and Mates, &c.—Continued.

Number of Certificate.	Date of Certificate		Name.	Gra	de.	Ad	Address.		Where Examination was Passed.		» <b>.</b>
	189	)1.								<b>\$</b> c1	ts.
2900	Oct.	24	Chas. Gormley	Mate.	• • • • •	Hantsport,	N.S	St. John			٠.
2901	do	24	Henry E. Newman	Master	r	St. John, I	N.B	do			٠.
2902	do	24	John Ed. G. Weston	do		Chatham, 1	N.B	do		10	00
2903	do	24	Raymond L. Holder	do		St. John, 1	N.B	do	••••		٠.
2904	do	24	James W. Calhoun	do		do	•••••	do		10	00
2905	do	<b>2</b> 8	John C. Amberman	do	• • • •	Granville,	N.S	Halifax.		10	00
2906	ďo	<b>3</b> 0	John Ed. Fulton	Mate.	••	Noel, N.S	· · · · · · · · · · · · · · · · · · ·	do	•••••	5	00
2907	Nov.	16	Peter LeBlanc	Maste	r	Arichat, N	.s	do	• • • • • •	10	00
<b>290</b> 8	do	16	Chas. C. Graham	do		Maitland,	N.S	do		10	00
2909	do	16	Wm. Caddell	do		do	•••••	do	• • • • • •	10	00
<b>291</b> 0	do	16	Judson W. Robbins	Mate		Yarmouth,	N.S	Yarmou	ıth	5	0
2911	do	21	John S. Kiffin	do		St. John,	N.B	St. John	1	5	0
2912	do	21	Wm. H. Davis	do		Clifton, N	.s	do		5	0
2913	Dec.	4	Daniel H. Andrews	do		Arcadia, N	.s	Yarmou	ıth	5	0
2914	do	22	Albert Lockett	Maste	r	Carleton,	N.B	St. John	1	10	0
2915	do	22	Thos. Haley	do		do		do		5	0
2916	do	22	Lewis C. Crow	Mate		Noel, N.S		do		5	0
2917	do		Geo. L. Folker	1		}	, N.S	1	•••	5	0
2918	do	22	Pellman Bezanson	. do		do	•••••	do		5	0
2919			James E. Blackadder	1		Wolfville.	N.S	do		5	0

List of Certificates of Competency granted to Masters and Mates of Inland and Coasting Vessels, for the year ending 31st December, 1891.

Number of Certificate.	Da O Certi		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	90.					\$ cts.
710	Dec.	10	Frederick Rogney	Mate	Garden Island, Ont	Kingston	4 00
711	do	10	Alex. Rose.	Master	Midland, Ont	St. Catharines	8 00
712	do	10	Julius Leroux	do	do	dο	8 00
713	do	10	Wm. Seaman	do	Collingwood, Ont	do	8 00
714	do	<b>26</b> .	Frank M. Buck	do	Dorchester, N.S	St. John	8 00
715	do	<b>26</b>	Robt. J. Janes	do	St. John, N.B	do	8 00
716			Norman S. McKinnon	do	Yarmouth, N.B	Yarmouth	8 00
717	189 Jan.		James Findall	Mate	Midland, Ont	St. Catharines	4 00
718	do	3	Frederick Freck	Master	Sault Ste. Marie, Ont	do	8 00
719	do	3	Joseph Granville	Mate	Southampton, Ont	do	4 00
720	do	3	Arthur Clark	Master	Collingwood, Ont	do	8 00
721	do	3	Stephen Saxby	Mate	Hamilton, Ont	Toronto	4 00
722	do	3	Wm. C. Jordan	Master	Collingwood, Ont	St. Catharines	8 00
723	do	3	John McCannel	do	do	do	8 00
724	do	3	John Soden	do	Midland, Ont	₫o	8 00
725	do	3	Michael Brennan	Mate	Kingsville, Ont	do	4 00
726	do	21	Edgar Bigelow	Master	Medford, N.S	St. John	8 00
727	do	21	Thos. Hy. Benwill	do	Cape Chin, Ont.	St. Catharines	8 00
728	do	21	Robt. Cooney	do	Port Dalhousie, Ont	do	8 00
729	do	21	Joseph Noble	do	Goderich, Ont	do	8 00
730	do	21	Wm. Rixon	do	Owen Sound, Ont	do	8 00
731	do	21	Hans Holvorsen	do	do	Toronto	8 00
732	do	21	John Whiteside	do	do	do	8 00
733	dο	21	Robt. Brown	Mate	Kilsyth, Ont	St. Catharines	4 00
734	do	21	Robt. Reynolds	do	Penetanguishene, Ont	do .	4 00
735	do	21	Angus L. Kennedy	do	Stirling Falls, Ont	Gravenhurst	4 00
736	do	21	John Grant	l _	Hamilton, Ont		4 00
737	do	21	Wm. Kitchen	Master	Midland, Ont	do	8 00
738	dο		James Baxter	1	Goderich, Ont	<b>\</b>	8 00
739	Feb.	7	Josephat Sauvageau	do	Deschambault, Que	Quebec	8 00
740	do	7	Leonard W. Morrow	Mate	Victoria, B.C	Victoria	4 00

LIST of Certificates of Competency granted to Masters and Mates, &c.—Continued.

Number of Cer- tificate.	Da of Certif	f	Name.	Grade.	Address.	When Examination was Passed.	Fee.
	189	91.		ĺ			\$ cts.
741	Feb.	7	W. C. P. Clarke	Mate	Victoria, B.C	Victoria	4 00
742	do	7	John G. Ainslie	Master	Owen Sound, Ont	St. Catharines	8 00
743	do	· · ·	Thomas E. Zink	do	Lunenburg, N.S	Lunenburg	8 00
744	do	7	Alex. E. Lindgvist	do	Revelstoke, B.C	Victoria	8 00
745	do	7	Frank German	Mate	Penetanguishene, Ont	St. Catharines	4 00
746	do	7	Alex. McGregor	do	Tiverton, Ont	do .	4 00
747	do	7	James Morrison	Master	Parrsboro', N.S	St. John	8 00
748	do	7	Frank Granville	do	Southampton, Ont	St. Catharines	8 00
<b>74</b> 9	do	7	H. W. Hebb	do	Lunenburg, N. S	Lunenburg	8 00
750	do	7	William Wright	Mate	Toronto, Ont	Toronto	4 00
751	do	18	John McGowan	do	do	do	4 00
752	do	18	Grant G. Horne	do	Wolfe Island, Ont	Kingston	4 00
753	do	18	Malcolm M. Morris	Master	Advocate Harbour, N.S.	St. John	8 00
754	do	18	Colon J. Terrio.	do	West Arichat, N.S	Sydney, C.B	8 00
755	do	18	Thos. A. Currie	do	Golden Valley Harbour, Ont.	St. Catharines	8 00
756	do	20	William D. Graham	do	St. Catharines, Ont	do	8 00
757	do	20	John V. Morrill	Mate	Sarnia, Ont	St. Catharines.	4 00
758	do	20	David McCormack	do	Pelee Island, Ont	do	4 00
759	do	<b>2</b> 0	Joseph Hough.	Master	Port Stanley, Ont	<b>d</b> o	8 00
760	do	<b>2</b> 0	Andrew Walsh	do	St. Catharines, Ont	do	8 00
761	do	20	Alex. McCullough	Mate	Port Dalhousie, Ont	do	4 00
762	do	20	Wm. T. Robertson	do	Owen Sound, Ont	do	4 00
763	Mar.	4.,	Alfred Burritt	Master	Thornbury, Ont	do	8 00
764	do	4.,	James Sutherland	do	Goderich, Ont	do	8 00
763	do	4	Wm. McCracken	Mate	Port Colborne, Ont	do	4 00
760	do	4	Esrom Lewis	Master	Sydney, C.B., N.S	Sydney, C.B	8 00
767	do	4	Joseph N. Berry	do	Granville Ferry, N.S	St. John	8 00
768	do	4	Judson E. Hamilton	. do	Cape Hopewell, N.B	do	8 00
769	do	4.	Christopher Richter	Mate	St. John, N.B	. do	4 00
770	) do	4.	Robert Ivey	do	Owen Sound, Ont	St. Catharines.	4 00
77	do	12.	John James McLaren	. do	St. Catharines, Ont	<b>d</b> o	4 00
77	2 do	12.	Donald Campbell	. do 153	Owen Sound, Ont	Toronto	4 00

List of Certificates of Competency granted to Masters and Mates, &c.—Continued.

Number of Certificate.	Da o Certi	f	Name.	Grade.	Address.	When Examination was Passed.	Fee.
	189	91.					\$ cts.
773	Mar.	12	Thomas A. Nicholson	Mate	Gananoque, Ont	St. Catharines.	4 00
774	. do	12	Thomas M. Harding	do	Yarmouth, Ont	Yarmouth	4 00
775	do	12	Charles F. Lewis	do	Freeport, N.S	do	4 00
776	do	12	Henry Wm. King	do	Toronto, Ont	Toronto	4 00
777	do	12	Alfred Hicks	Master	Pictou, N.S	Kingston	8 00
778	do	12	Robert A. Welsh	do .,	St. Martins, N.B	St. John	8 00
779	do	12	Ezra Forsyth	do	St. John, N.B	do	8 00
780	do	12	Leverett A. Hauselpecker	do	do	do	8 00
781	do	12	John Shane	Mate	Fenelon Falls, Ont	Kingston	4 00
782	do	12	Samuel Wright	do	Owen Sound, Ont	Toronto	4 00
783	April	l . 1	John A. Willett	Master	Main-à-Dieu, C.B	Sydney	8 00
784	do	1	Alfred Langlois	do	Descouse, N.S	do	8 00
785	do	1	Josiah Gosse	do	Victoria, B.C	Victoria	8 00
786	do	1	George R. Longley	Mate	St. Catharines, Ont	St. Catharines.	4 00
787	do	1	Edward Morden	Master	Oakville, Ont	do	8 00
788	dο	1	George Irwin	do	Port Dalhousie, Ont	do	8 00
789	do	1	Thomas A. Martin	do	Owen Sound, Ont	do	8 00
790	do	1	James M. Steeves	do	Dover, N.S	St. John	8 00
791	do	1.,	William Millard	do	Sarnia, Ont	St. Catharines.	8 00
792	do	1	Henry Mecrate	Mate	do	do	4 00
793	do	1.,	Frank Cotton	do	St. Catharines	. do	4 00
794	do.	1.	Williard Stevens	Master	Kingston, Ont	Kingston	8 00
798	do	1	James W. McCoppen	do	Port Colborne, Ont	St. Catharines.	8 00
796	do	1	Robert H. Fleming	. do	St. John, N.B	St. John	8 00
797	do	6	John F. Quinn.	do	St. Catharines, Ont	St. Catharines.	8 00
798	do	6	Danford W. Greenfield	do	River Herbert, N.S	St. John	8 00
799	do	10	Christian Iverson	do	Lunenburg, N.S	Lunenburg	8 00
800	do	10.	Adelard Sansterre	. do	St. Michel, P.Q	. Quebec	8.00
801	do	10.	James Moreau	. do	Port Severn, Ont	St. Catharines.	8 00
802	do	10.	Dennis Mullaney	do	Milford, N.B	St. John	8 00
808	do	14.	Henry Wm. Hatfield	do	Port Grenville, N.S	. Halifax	8 00
804	do	14.	Wm. Hamilton	do	Collingwood, Ont	St. Catharines	8 00

LIST of Certificates of Competency granted Masters and Mates, &c.—Continued.

Number of Cer- tificate.	Da o Certi	f	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	92.					\$ cts.
805	April	14	Colon P. Lawson	Mate	Pelee Island, Ont	St. Catherines	4 00
806	do	14	Fred. Johnson	Master	Midland, Ont	do	8 00
807	do	18	Maurice V. Smith	do	St. John, N.B	St. John	8 00
808	do	18	Wm. Kingston	do	Port Colborne, Ont	St. Catharines	8 00
809	do	18	Jackson Smith	Mate	Palermo, Ont	do	4 00
810	do	18	Henry Mawdesley	Master	Thorold, Ont	do	8 00
811	do	18	Geo. Angus McFarlane	do	Lincoln, N.B	St. John	8 00
812	do	18	Alex. L. Grisdale	do	Port Colborne, Ont	St. Catharines	8 00
813	do	21	Ed. O'Neil	Mate	do	do	4 00
814	do	21	Patrick L. Mooney	Master	Morpeth, Ont	do	8 00
815	do	24	Dennis McMullins	do	Toronto, Ont	do	8 00
816	do	24	Robert C. Irwin	Mate	Montreal, Que	Kingston	4 00
817	do	24	Fenwick P. Shields	do	St. John, N.B	St. John	4 00
818	do	24	Edward Perley	Master	do	do	8 00
819	do	24	John E. Muggah	do	Sydney, C.B., N.S	Sydney, C.B	8 00
820	do	<b>3</b> 0	Wm. Ed. Ryder	do	Lower Granville, N.S	St. John	8 00
821	May	1	August J. Ryerse	Mate	Vancouver, B.C	Victoria	4 00
822	do	1	Cancelled				
823	do	1	Wm. Chas. Playster	Mate	Collingwood, Ont	St. Catharines	4 00
824	do	1	Robert Austin	do	Port Dover, Ont	do	4 00
825	do	1	Ed. John Repath	do	Toronto, Ont	do	4 00
826	do	1	Alfred Covell.	Master	Brighton, Ont	do	8 00
827	do	1	Henry Kerby	do	Dresden, Ont	do	8 00
828	do	1	Hy. S. B. Donaldson	. do	Toronto, Ont	do	8 00
829	do	1	Edward M. Foster	. do	Port Dover, Ont	do	8 00
830	do	12	John Macaulay	. do	Southampton, Ont	. do	8 00
831	do	12	Geo. H. Playter	. do	Collingwood, Ont	. do	8 00
832	do	12	Christopher Wilson	. do	Parrsboro', N.S	St. John	8 00
833	do	12	James Herwin	. do	Sarnia, Ont	St. Catharines	8 00
83-	do	12.	Hugh J. Hagan	. do	St. Catharines, Ont	. do	8 00
835	do	12	Angus J. McNeil	l.	St. John, N.B	1	8 00
836	do	29	James F. Calbick	Mate	Gananoque, Ont	Kingston	4 00

List of Certificates of Competency granted Masters and Mates, &c.—Continued.

Number of Certificate.	Da of Certif	f	Name.	Grade.	Address.	Where Examination was Passed	Fee.
837	189 May		Henry Martin	Mata	Port Dover, Ont	St Catharinas	\$ cts.
838	•		Geo. W. Dean		Fort Erie, Ont	do	4 00
839	do		Paul C. Robinson		Hopewell, N.B.		4 00
840					Georgetown, P.E.I	do	8 00
				Mate		Victoria	4 00
842					Collingwood, Ont		8 00
843			John W. Darling	1	_	do	8 00
844			James Delaney	1	Prescott, Ont		8 00
845			John Driscoll.		do	do	8 00
846			Wm. Lemoine		Penetanguishene, Ont		8 00
847			John W. Maddick			do	
848			Saml. J. McCoppen		Hamilton, Ont	'	8 00
849	1		John Wm. Butler	do	Port Colborne, Opt		4 00
850					Victoria, B.C	!	
851			Freeman F. Holmes	1			8 00
	1		Caleb Spencer		Louisburg, C.B., N.S		8 00
852	ļ		Geo. R. Wood	İ	Port Dalhousie, Ont		8 00
	July		Charles W. Zemke		Lunenburg, N.S		4 00
854		8	"		Yarmouth, N.S		8 00
855			Douglas Brown				4 00
856	i		Victor Clare Smith		1		4 00
857			John Jarrell		j		8 00
858		21		ĺ	Toronto, Ont		8 00
859			John A. Casselman		1		8 00
860	do	21	Archibald Keith	do		•	8 00
861	-		Thomas J. Clark		•	1	4 00
862	Aug.	<b>2</b> 5	James A. King	do	St. Catharines, Ont	do	4 00
863	do	25	Angus Cameron	do	St. John, N.B	St. John	4 00
864	do	<b>25</b>	Joseph Greathead	Master	Southampton, Ont	St. Catharines	8 00
865	do	<b>25</b>	Jno. W. Diament	Mate	Lindsay, Ont	Kingston	4 00
866	Sept.	14	Fred. McKay	Master	Bell Ewart, Ont	St. Catharines	8 00
867	do	14	Edmond Groulx	do	Melochville, Que	Ottawa	8 00
868	do	14	Daniel C. McMorris	do 156	Kamloops, B.C	Victoria	8 00

LIST of Certificates of Competency granted Masters and Mates, &c.—Continued.

Number of Certificate.	Da o Certi	f :	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
							\$ cts.
869	Sept.	14	Eben N. Everett			St. John	8 00
870	do		Antoine Haynes		- ' -	Ottawa	8 00
871	do	14	Absalom Freeman	Mate	Vancouver, B.C	Victoria	4 00
872	do	14	Hector McLean	Master	Orillia, Ont.	St. Catharines	8 00
873	dο	<b>2</b> 8	Geo. T. Shaver	do	Wallaceburg, Ont	do	8 00
874	do	<b>28</b>	G. Fred Marsh, jun	do	Huntsville, Ont	do	8 00
875	do	<b>28</b>	Julius Kauffmann	do	Little Current, Ont	do	8 00
876	do	<b>2</b> 8	Wm. H. Leanhardt	do	Dresden, Ont	do	8 00
877	Oct.	<b>26</b>	Samuel B. Dalton	Mate	St. John, N.B	St. John	4 00
878	do	<b>26</b>	Jacob Wagimah	Master	Garden River, Ont	St. Catharines	8 00
879	do	<b>26</b>	Thos. Salter Guns	Mate	Victoria, B.C.	Victoria	4 00
880	do	<b>2</b> 6 .	Daniel A. Phillips	Master	Dorset, Ont	St. Catharines	8 00
881	do	26	Zepherine Genier	Mate	St. Martins, Que	Ottawa	4 00
882	do	26	Fred. G. Snider	Master	Bruce Mines, Ont	St. Catharines	8 00
883	do	26	Stanley Gillespie	do	Valleyfield, Que	Ottawa	8 00
884	do	26	Henry Savard	do	Roberval Lake, Que	Quebec	8 00
888	do	31 .	Henry Aldenburg	Mate	Windsor, Ont	1	4 00
886	do	31	Richard Glackin	Master			8 00
887	Nov.	16.	Wm. H. Nickett	do	Bruce Mines, Ont	İ	8 00
888	do	16.	François X. Turcotte	1			8 00
889			William Burtch			1	ŀ
896			Amedie Cecile		Papineauville, Que	Ottawa	4 00
89:	}	16.			St. John, N.B		4 00
89		16.		Master		İ	8 00
89	1		. Charles Moody	Mate	Vancouver, B.C	1	4 00
	Dec.		George E. Jacobson	ļ.	1	1	1
89	1		. William John Strong		1		
•	1			1	Port Elgin, Ont		ł
89			John Andrew Cates		Vancouver, B.C	1 .	1
89	1		Wm. Findlay	Í		1	
89	1		. Ecnest Taylor	j	}	1	4 00
89	1		. Alfred M. Wright		. Collingwood, Ont		4 00
90	0 do	29.	. Alexander A. Reppen	157	Victoria, B.C	.  Victoria	. 4 00

# List of Certificates of Competency granted Masters and Mates, &c.—Continued.

Number of Certificate.	Date of Certificate		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	92.					\$ cts.
901	Dec.	29	Chas. W. Henshaw	Mate	Port Carling, Ont	St. Catharines	4 00
902	do	<b>29</b>	Robert Roberts	Master	Departure, B.C	Victoria	8 00
903	do	29	Ethan Morris	do	Advocate Hbr., N.S	St. John	8 00
904	do	29	Prudent Bellisle	do	Deschambault, Que	Quebec	8 00
905	do	<b>2</b> 9	Avery James Howes	do	Sandridge, Ont	St. Catharines	8 00
906	do	<b>2</b> 9	George Guyer	do	Port Elgin, Ont	Southampton.	8 00

List of Certificates of Service granted to Masters and Mates of Inland and Coasting Vessels for the year ending 31st December, 1891.

Number of Certificate.	Da o Certi		Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	91.					\$ cts.
2846	Jan.		George N. Shaw	Master	St. John, N.B	St. John	4 00
2847	Feb.	7	Wm. J. Parsons	do	Halifax, N.S	Halifax	4 00
<b>2</b> 848	do	7	George J. Christie	do	Pictou, N.S	Pictou	4 00
2849	do	7	David Malcom	do	Collingwood, Ont	St. Catharines	4 00
<b>2</b> 850	do	7	Obed. Knowlton	do	Advocate Harbour, N.S.	Parrsboro'	4 00
<b>2</b> 851	do	18	Angus G. Stanton	do	Picton, Ont	Ottawa	4 00
<b>2</b> 852	do	18	Wm. R. Dickson	do	St. John, N.B	St. John	4 00
<b>2</b> 853	do	18	Chipman G. Colwell	do	do	do	4 00
2854	do	18	Robert P. Lister	do	do	do	4 00
<b>2</b> 855	do	20	William P. Holmes	do	Victoria, B.C	Victoria	4 00
2856	Mar.	4	James A. Colwell	do	St. John, N.B	St. John	4 00
2857	do	4	William D. McIntyre	do	do	do	4 00
<b>2</b> 858	do	4	Reuben G. Abbott	do	Lewis Head, N.S	Shelburne	4 00
<b>2</b> 859	do	4.:	George McPherson	do	Pictou Landing, N.S	Pictou	4 00
2860	do	4	Hugh A. Holder	do	St. John, N.B	St. John	4 00
2861	do	4	John W. Knowlton	do	Advocate Harbour, N.S.	Parrsboro'	4 00
2862	do	12	John Fertile	Mate	Bronte, Ont	Toronto	2 00
2863	do	12	Robert Martin	Master	Sheet Harbour, N.S	Halifax	4 00
2864	do	17	Michael G. Terheme	do	New Westminster, B.C	Victoria	4 00
2865	do	31	Bernard Palmatier	do	Picton, Ont	Pictou	4 00
<b>2</b> 866	Apr.	1	James H. McLellan	do	Kempt Shore, N.S	Parrsboro'	4 00
2867	do	1	Duncan McDougall	Mate	Port Dalhousie, Ont	St. Catharines	2 00
2868	do	1	John Gilliam	do	Bronte, Ont	do	2 00
2869	do	1	Cornelius Lynch	Master	Port Robinson, Ont	do	4 00
2870	do	10	John Cragg	do	Dresden, Ont	do	4 00
2871	do	10	Gideon Adams	′ do	Prescott, Ont	Ottawa	4 00
2872	do	10	Thomas Foster	do	Pictou, N.S	Pictou	4 00
2873	do	10	Jacob B. Stoddard	Mate	Mount Denison, N.S	Halifax	2 00
2874	do	10.	Gebhardist C. McHarg	Master	St. John, N.B	St. John	4 00
2875	do	24	James Ed. Hatfield	do	Port Greville, N.S	Parrsboro'	4 00
2876	do	24	Michael Mullins	do	Belleville, Ont	Kingston	4 00

List of Certificates of Service granted to Masters and Mates-Continued.

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Number of Certificate.	C	ate of ficate	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	18	91.					\$ cts.
2877	May		  Samuel Garrett	Master	Smith's Falls, Ont.	Ottowa	4 00
2878	1		Wm. Harris	1	Pictou, N.S.	{	4 00
2879	do		Albert D. Clarke	do	Victoria, B.C	Victoria	4 00
2880	do		Thomas E. Clark	do	Sarnia, Ont.		4 00
2881	do		Isaac Townsend		Louisburg, N.S	1	4 00
2882	do		William E. Cornwall		Toronto, Ont	1	2 00
2883	do		William McGannon	1	Prescott, Ont	1	4 00
2884	do		Charles Hansen.		Guysboro', N.S		4 00
2885	do		Angus McAulay	do	Southampton, Ont		4 00
2886	do		Walter Minaker	do			
	June		Francis A. Smith		Newellton, N.S.	Ottawa	4 00
2888	do		Wm. Blackburn			do	4 00
2889				do	Chicoutimi, Que	-	4 00
	do		Michael McGivan		Cobourg, Ont.		4 00
	July		Francis G. Rudolph	do	1	Halifax	4 00
- 1	June		James W. Rogers	do	New Westminster, B.C		4 00
<b>2</b> 891	do	16	John H. Conlon	do	Walton, N.S.	Halifax	4 00
2892	do	19	John Bonar	do	Belleville, Ont	Ottawa	4 00
2893	July	13	Francis Lauzon	do	Chippawa, Ont	St. Catharines	4 00
2894	do	13	Archibald McDonald	do	Bronte, Ont	do	4 00
2895	do	13	Philip Farrington	do	Picton, Ont	Ottawa	4 00
2896	Aug.	3	Thomas W. Boyne	do	St. Catharines, Ont	St. Catharines	4 00
2897	do	<b>25</b>	Thomas Kimmitt	do	do	do	4 00
2898	do	<b>2</b> 5	Horatio N. Babbitt	do	Kingston, Ont	Kingston	4 00
<b>2</b> 899	do	25	Thos. Sadler	do	Lindsay, Ont	do	4 00
2900	do	<b>25</b>	Jonas Bergman	do	Selkirk, Man	Winnipeg	4 00
2901	do	25	Frank R. Barnhart	Mate	Deseronto, Ont	Kingston	2 00
2902	do		Jonathan Keneer			do	4 00
2903	Sept.	1	Charles A. Thompson		Ottawa, Ont	Ottawa	4 00
2904	do	11	Lochlan McCallum		Carleton Place, Ont	do	4 00
2905	do		Mark H. Bonnell		Hopefield, P.E.I	ļ	4 00
2906	do	1	Oliver Latour	{	Kippawa, Que	- 1	4 00
2907	do	- 1	Peter Jas. Shaw	i		1	2 00
				160	·£y =		_ ~~

# LIST of Certificates of Service granted to Masters and Mates-Continued.

Number of Certificate.	Da of Certif	f	Name.	Grade.	Address.	Where Examination was Passed.	Fee.
	189	1.					
<b>290</b> 8	Sept.	<b>28</b>	John Moore	Master	Carleton Place, Ont	Kingston	4 00
2909	Oct.	<b>2</b> 6	Ainsworth Sturton	do	Chicoutimi, Que	Quebec	4 00
2910	do	26	Chas. Ed. Redden	Mate	Windsor, N.S	Halifax	2 00
2911	do	<b>2</b> 6	John E. Inch	Master	Bruce Mines, Ont	St. Catharines	4 00
2912	do	<b>2</b> 6. ,	Ed. A. Foreshew	do	Cook's Mills, Ont	do .	4 00
2913	do	<b>2</b> 6	Alex, McDonald	do	Uptergrove, Ont	do	4 00
2914	do	<b>2</b> 6	Albert Ballerwell	do	Parrsboro', N.S	Halifax	4 00
2915	Nov.	16	George Dubuc	do	Penetanguishene, Ont	St. Catharines	4 00
2916	do	19	Joseph A. Haws	do	Parrsboro', N.S	Parrsboro'	4 00
2917	Dec.	4	Charles Vessaire	do	Thessalon, Ont	St. Catharines	4 00
<b>291</b> 8	do	4	Andrew J. Jeffry	do	Stratford, Ont	do	4 00
2919	do	4	Lawrence McGrath	Mate	Parrsboro', N.S	Halifax	2 00

List of Certificates of Competency and Service which have been cancelled or suspended during the year 1891.

Number of Certificate.	Name.	Grade.	Cause of Cancellation or Suspension.	Date of Cancellation or Suspension.
				1890.
2140	Joseph Frève	Mate	Passed for higher grade	Dec. 10.
2605	Fraser Hunter	do	Passed	do 15.
2599	F. M. Cosman	do		do 18.
				1891.
2709	John PrattRichard J. Warner	2nd mate		Jan. 12.
2448	Richard J. Warner	Mate		do 12.
2601	Frederick Wm. Blauvelt	do		do 28.
1410 2482	John W. Baxter	Master		Feb. 6.
2827	Arthur E. Morgen	do	Died. Passed for higher grade.	do 6.
2214	Albert J. Smith	do	Passed for higher grade	do 17.
2381	Wm. Henry Carson	do	_ usses and and grade	do 17.
2422	James S. Osborne	do		do 17.
2668	Patrick E. McMurray	do		do 17.
844	John W. Knowlton	do		do 17.
2614 2560	Lloyd D. Venes	do		do 27.
2713	Lloyd D. VanceFrank B. Baker	do		do 27.
2676	Joseph Monteith	do		do 27
72	Edmond Larochelle	Master	Suspended 12 months from	Jan. 27.
<b>259</b> 0	Edmund Mathuring	Mate	do do	do 27.
0504	N. 1 A TTT-11		(Loss of "Napoléon.")	i
2724 2543	Nelson A. Withers	do	Passed for higher grade	Mar. 27.
2644 2644	J. A. Mooney	do	do do	do 27. April 27.
2635	John Jos. Campbell	do	do do	do 27.
2266	Jacob Cummings	i do	do do	do 27.
643	W. H. Larken	Master	Died at sea	
2636	Alex. Thompson	Mate	Passed for higher grade	125 40
1985 2855	Hugh N. McCully	Master	Died	Mar. 16.
2693	Joseph Delisle	Mate	assed for higher grade	June 16. do 3.
2735	James Dollar	l do		do 3.
2606	Inmed I umband	do		do 3.
2583	Geo. R. Vickery	do		do 26.
1727	Geo. R. Vickery. Hy. A. Smith. James T. O'Neil Frederick N. Malcolm. James Wm. M. Hamilton.	do		
1321 2695	James T. U'Nell	do		do 29.
2723	James Wm M Hamilton	do		July 2. Aug. 12.
2725	W. Hv. Coonan	do		Aug. 12.
2661	W. Hy. Coonan	do	1	,
2640	Charles D. Bowers	do		Sept. 2.
2503	Albert Mailman	αο	1	
2728 2941	Amos Davison	do		1,
2741 2746	Charles T. Porter	do		do 12.
2747	David S. Doty	do		do 23.
2567	Henry Nickerson	do		20.
2539	Henry E. Newman	do	· · · · · · · · · · · · · · · · · · ·	Oct. 16.
2667	Raymond L. Holder		Passed for higher grade	do 16.
2666 1016	J. E. G. Letson		Certificate suspended 12 mos. from	75
1016 2743	John A. Chapman John C. Amberman	Mate	Passed for a higher grade	
2402	Peter Leblanc	do	rassed for a higher grade	Oct. — Nov. —
2738	Wm. Caddell	do		1101.
2778	Charles Cox Graham	do		
2767	Albert Lockett	do		Dec. —

# APPENDIX No. 17.

# REPORT OF THE HARBOUR COMMISSIONERS OF MONTREAL.

MONTREAL, 16th February, 1892.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, to forward herewith, for the information of the Honourable the Minister of Marine and Fisheries, statement of the general receipts and disbursements of the trust for the year ended 31st December, 1891.

The revenue from wharfage dues and rentals shows a slight decrease from that of

1890, namely, of \$2,330.39, or less than 1 per cent.

From the harbour master's report it will be seen that there was an increase in the tonnage of ocean vessels, as also of inland vessels, over that of 1890, and that the amount of each class, as also of the total tonnage, was larger than in any previous year.

During the last Session of Parliament an Act was passed which amended the Harbour Commissioners' Acts in respect of the election by the shipping interest of their

representative on the commission.

Under this, 54-55 Vic., chap. 53, the qualification for voting is based on the tonnage consigned to the several owners, or agents, instead of on tonnage dues, which were abolished in 1888.

The first election under the new Act will be held on the 1st August, 1892.

By the same Act the commissioners were given power to borrow one million dollars

for the improvement of the harbour, in addition to their former powers.

During the year a set of seventeen charts of the river from Montreal to the Platon, 35 miles above Quebec, was published, which should be of great value to navigators, showing as they do all the lighthouses, beacons and buoys, as well as the shoals, along the channel.

It has been decided that the set will be sold for the sum of three dollars.

I have the honour to be, sir,

Your obedient servant,

ALEXANDER ROBERTSON,

Secretary.

WILLIAM SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

# HARBOUR COMMISSIONERS OF MONTREAL.

Capital.	38,901 29 83.796 70 48 48 71 84 84 71 84 84 71 84 84 84 71 84 84 71 84 84 84 79 74 84 84 79 74 84 84 79 74 84 84 79 74 84 84 84 79 74 84 84 84 79 74 84 84 84 84 84 84 84 84 84 84 84 84 84	;
Revenue.	466 16 466 16 692 18 692 18 111,036 45 11,036 45 11,036 62 221 68 221 68 224 43 300 11 4 00 1,524 29 4,177 79	•
		100 Car.
Capital.	\$ cts.	_
Revenue.	\$ cts. 229,881 35 25,972 85 2,492 50	014 W
	Bolunce at 31st December, 1890:—  Deposits in Bank of Montreal and cash on hand to man at 1,003 08  Amount due for rental of 1,003 08  Amount due for rental of 1,003 08  Lass-Coupons and a 1,003 08  Value of macadamizing stone, coal, timber, lumber and treenalls, in 18,624 12  Securities and deposit in Montreal City and District Savings Bank, held in trust for Montreal Decayed Pilot Fund.  RECEIPTS.  From Varianged dues on imports \$ 136,291 65  Wharfage dues on imports \$ 3,36,291 65  Gommutation of Richelieu and Ontario  Navigation Co. swharfage dues \$ 9,591 10  Rentals for spaces for piling lumber 1,300 00  do do small offices 1,000 00  Rentals for spaces for piling lumber 1,382 20  do do small offices 1,000 00  Go do small offices 1,001 16  do do scales 1,001 06  From Canadian Pacific Railway Co. rental of wharf tracks.	From Grand Trunk Railway Co., rental of whari bracks
	Capital. Revenue.	Borenne. Capital.  Deposits in Bank of Montreal and cash of Montreal and cash of montreal and cash of montreal and cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where the cash of montreal of where and recently made in 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 and 180 an

1,280 00   Harbour plant, new spoon dredge, No. 1, additional 2,563 69   Harbour plant, new spoon dredge, No. 1, additional 2,563 69   Harbour plant, new spoon dredge, No. 1, additional 2,563 69   Harbour plant, new floating shop, No. 1, additional 2,563 69   Harbour plant, new floating sections 36.39   19,398 13   Harbour of Montreal, Denonville St. ramp, construction of Chart account, drawing and lithographing set of ship channel becayed Flot Fund, pensions to old pilots   1,600 00   Montreal Decayed Flot Fund, pensions to old pilots   1,600 00   Montreal Decayed Flot Fund, pensions to old pilots   1,600 00   1,237 50   Harbour plant, construction of Chart account, g. 2,694 51   1,600 00   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1,237 50   1
4,085 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000 00  1,000
4,085 00 1 25 00 25 00 33 3,000 00 73,000 00 1 279,294 79 263,969 95 263,969 95 543,170 74

# HARBOUR COMMISSIONERS OF MONTREAL, SECRETARY'S OFFICE,

MONTREAL, 23rd January, 1892.

SIR,—By direction of the Harbour Commissioners of Montreal, I transmit you herewith a copy of the Harbour Master's report for the year 1891, with five comparative statements for the past ten years, and a statement showing the nationality of the vessels which arrived in the harbour during 1891, six in all.

I have the honour to be, sir,

Your obedient servant,

ALEXANDER ROBERTSON,

Secretary.

WILLIAM SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

REPORT OF THE HARBOUR MASTER OF THE PORT OF MONTREAL FOR THE YEAR 1891.

CAPTAIN THOMAS HOWARD, HARBOUR MASTER.

HARBOUR COMMISSIONERS OF MONTREAL,
HARBOUR MASTER'S OFFICE,
MONTREAL, 5th January, 1892.

ALEXANDER ROBERTSON, Esq.,

Secretary, Harbour Commissioners of Montreal.

SIR,—For the information of the Board of Harbour Commissioners I beg to submit the following as my annual report for the year 1891, with comparative statements showing the number, tonnage, classification, nationality, greatest number of vessels in port at one time, number and tonnage of sea-going vessels consigned to the different agents, with statements showing the number and tonnage of inland vessels and the greatest

number in port at one time during the past ten years.

Seven hundred and twenty-five (725) sea-going vessels arrived in the harbour during the season of the aggregate tonnage of 938,657 tons; of this tonnage 60,694 tons passed into the canal as against 69,816 in 1890, showing a decrease of 9,122 tons in tonnage into the canal, but an increase of 17,447 tons into the harbour from sea, as compared with the year 1890. Of these vessels 620 were built of iron of an aggregate tonnage of 898,962 tons, and 105 of wood of an aggregate tonnage of 39,695 tons. Of inland vessels there arrived in port 5,268 of an aggregate tonnage of 1,119,484 tons, showing an increase of 106 vessels and in tonnage 152,525 tons; and a total of 5,993 vessels of all classes, and 2,058,141 tons in tonnage, showing an increase of tonnage of vessels of all classes of 160,850 tons. Some of the principal items of exports and imports during the season were:

### EXPORTS.

Lumber.—There were shipped to the United Kingdom 108,636,320 feet, showing a decrease of 70,670,540 feet from the previous year. Of this lumber 103,781,486 feet were shipped from the harbour and 4,854,834 feet from the canal. This great decrease is in a great measure due to the scarcity of tonnage in the fall, and the continuance of political troubles in South America has for the present stopped the shipment of lumber to that country.

Phosphate.—There were shipped 14,735 tons, showing a decrease of 8,853 tons, as

compared with 1890.

Grain.—There were shipped 6,136,996 bushels of wheat; 2,194,811 of corn; 2.000.468 of peas; 778,920 of oats; 814,382 of barley; 2,253,460 of rye; making a total of 14,179,037 bushels, and an increase of 5,369,098 bushels over the previous year.

Flour.—There were shipped in bags and barrels equal to 722,388 barrels, showing

an increase of 275,257 barrels over the previous year.

Cheese.—There were shipped 1,349,993 boxes, showing a decrease of 19,375 boxes. Apples.—There were shipped 306,935 barrels, showing an increase of 146,341 barrels over the previous year.

Cattle and Sheep.—Cattle shipped, 108,947 head and 32,157 sheep, showing a

decrease of 10,631 head of cattle and a decrease of 10,978 sheep.

## IMPORTS.

Coal.—We had from Great Britain 18,713 tons, showing an increase of 1,834 tons; from the United States 184,421 tons, showing an increase of 2,810 tons; making a total of 203,134 tons. From the Maritime Provinces 504,552 tons, showing an increase of 59,102 tons; and a grand total of 707,686 tons, and an increase over the previous year of 53,746 tons; of this coal 581,842 tons were discharged in the harbour and 125,844 tons in the canal.

Cement.—We had 134,331 barrels, showing an increase of 59,102 barrels over the

previous year.

Scrap Iron.—We had discharged in the harbour 16,153 tons, showing a decrease of 11,847 tons from the previous year.

### HARBOUR IMPROVEMENTS.

The extension of the wharves at Hochelaga was well pushed forward during the The new ramp is a great accommodation to those engaged in the coal trade. The wharves and roads were kept in good repair during the season.

> THOMAS HOWARD, Harbour Master.

Certified,

ALEXANDER ROBERTSON, Secretary.

# WEATHER REPORT.

### January.

1st.-East wind; temp. 4 above zero; good ice and good roads. 7 p.m., rain; temp. 38 above; great change in weather.

2nd.—Rain this morning; south wind; temp.

3rd.—Delightful morning; north-west wind; temp., 7 a.m., 8 above zero.

4th.—Fine weather; east wind; temp. zero.

5th.—East wind; temp. 10 above. 6th.—Snow this morning; north wind; temp. 17 above.

7th.—Fine morning; north wind; temp. 23 above.

8th.-North-west wind; temp. 10 above; delightful weather.

9th.—West wind; temp. 10 above; fine. 10th.—West wind; temp. 20 above; overcast. 11th.—Temp. 20 above; west wind. 4 p.m., snow

storm. 12th.-North-west wind; temp. 30; snow and

rain. 9 p.m., temp. 10 above zero.
13th.—North-west wind; temp. zero; blowing

fresh. 8 p.m., 3 below zero.

14th.—East wind; snowing; 8 a.m., temp. 7 below zero.

-Fine morning; south-west wind; 8 a.m., 15th.temp. 4 below zero.

16th.-Fine and clear; east wind; temp., 8 a.m., 7 below zero.
17th.—East wind; temp., 8 a.m., 12 below;

clear weather.

18th.—Fine day; temp. 20 above; west wind.
19th.—East wind; temp. 16 above.
20th.—East wind; temp. 16 above; fine day.
21st.—Fine weather; temp. 17 above.

22nd.—Snow and rain; temp. 26 above. 23rd.—Fine morning; temp. 30 above.

24th.—Fine weather; temp. 31 above; west wind.

25th.—Temp. 32 above; south wind. 26th.—Snowing; temp. 20 above; west wind. 27th.—West wind; temp. 18 above. 28th.—Raining; temp. 15; south wind.

29th.—Cloudy weather; temp. 30; west wind. 30th.—Weather fine; temp. 25; south-east wind.

31st.—Fine day; temp. 20; east wind.

### i February.

1st.—Mild and snowing; temp. 30; east wind. \_\_Tine and cold; temp. 10 above; west wind.

3rd.—Rain all day; temp. 30; west wind.
4th.—Cold; temp. 6 below; west wind.
5th.—Very cold; snow in the afternoon; temp.
14 below; west wind.
6th.—Rain and snow; temp. 8 above; west

wind.

7th.—Fine weather; temp. 20 above; snowing; west wind.

8th.—Snow all day; temp. 15 above; east wind. 9th.—Cloudy weather; temp. 15 above; east wind.

10th.—Thawing to-day; temp. 35; west wind. 11th.—Fine weather; temp. 15; west wind.

12th.—Temp. 20 above; north-east wind. 13th.—Fine weather; temp. 18 above; east

wind.

14th.—Cold morning; 6 below; north-east wind. 15th.—Fine weather; temp. 18; west wind. 16th.—Rain; temp. 40; west wind. 17th.—Fine morning; temp. 15 above zero;

north-east wind. 18th.—Temp. 32 above; west wind.

19th.—Fine weather; temp. 12 above; west wind.

20th.—North-east wind; temp. 15 above.

21st.—Rain; temp. 32; south wind. 22nd.—Fine clear morning; west wind; temp. 27 above.

23rd.—Temp. 12 above; fine weather.

24th.—South-west wind; temp. 30 above; fine. 25th.—Rain; south-west wind; temp. 42. 26th.—Fine weather; temp. 14 above; south

wind.

27th.—Temp. 20 above; north wind; fine day. 28th.—South wind; temp. 19 above; fine.

### March.

1st.—Temp. 6 above; north wind.

2nd.—North wind; temp. 7 above.

3rd.—East wind; temp. 9 above; fine morning. 4th.—Temp. 24 above; snow storm; south-east wind.

5th.—Temp. 29 above; north-west wind; fine morning; great quantity of snow.
6th.—Fine morning; north-west wind; temp.

20 above.

7th.-East wind; temp. 15 above; fine clear

morning.
8th.—Temp. 27 above; west wind.

9th. Rain all day; south-west wind; temp. 35 above

10th.—Fine clear morning; west wind; temp. 20 above.

11th.—South-west wind; temp. 38; fine morn-

ing.
12th.—South-west wind; temp. 40; rain this morning.

13th.-South-east wind; temp. 41; dark and

14th.-West wind blowing a gale; temp. 28 above; snow during the night.

15th.—Fine day; west wind; temp. 18 above. 16th.—West wind; temp. 26 above.

17th.—Fine clear morning; west wind; temp. 10

above. 18th.—South-west wind; temp. 28 above; snow-

ing.
19th.—East wind; temp. 8 above; clear and

cold; splendid sleighing.
20th.—East wind; fine morning; temp. 10 above. 21st.—East wind; temp. 28 above; fine.

22nd.—Fine day; west wind; temp. 40. 23rd.—West wind; temp. 45. 24th.—West wind; temp. 40; snow going fast;

sleighing had.

25th.—Fine day; east wind; temp. 28. 26th.—East wind; temp. 20.

27th.—Fine and sunshine; north-east wind; temp. 32 above.

28th.—East wind; temp. 30; fine morning.

29th.—Fine and sunshine; west wind; temp. 29. 30th.—East wind; temp. 30; fine. 31st.—Temp. 30; fine weather; east wind.

### April.

1st.—Fine and sunshine: temp. 30: north-east wind.

2nd.—Dark morning; south-west wind; temp. 34; ice breaking up in the harbour; river clear at Sorel.

3rd.—South-east wind; temp. 40; snow and rain at 2 p.m.; snow storm. At 5 p.m. water rose and ice moved in the harbour; water, 30 feet 6 inches.

4th.—Temp. 35; north wind; clearing up. 5th.—Cold west wind; temp. 25 at 7 a.m.

6th.-West wind; temp. 28.

oth.—west wind; temp. 20.
7th.—Temp. 40; north-west wind.
8th.—Temp. 27; north wind.
9th.—Temp. 40; fine and clear.
10th.—North-east wind; temp. 4 40; at 1 p.m.

ice shoved in the harbour; water 33 feet 7 inches.

11th.—South-west wind; temp. 45; rain.

12th.—Temp. 45; rain during the day.

13th.—Ice cleared in the harbour last night in

front of the city; temp. 46.

14th.—Temp. 45; east wind; water going down.
15th.—Rain; cold east wind; temp. 37; water

clear of docks.

16th.—North-west wind; temp. 40. 17th.—Fine and bright morning; west wind; temp. 50.

18th.—West wind; temp. 50; steamer "La-prairie" arrived this morning from Boucherville; first arrival; raining.

19th.—West wind; temp. 60; very fine.

20th.— ast wind; temp. 45.

20th.— sas wind; temp. 40.
21st.—Fine day; temp. 45.
22nd.—Temp. 50; east wind.
23rd.—Temp. 40; north-east wind; ice moved at Cap Rouge at — a.m.; s.s. "Polino" left for laws mornings this morning.

24th.—Temp. 40; fine day; north-east wind.
25th.—Snow this morning; temp. 45; steamer
"Canada First," R. & O. N. Co., boat for Quebec.

26th.—North-west wind; temp. 40. 27th.—South wind; temp. 55; at 3.30 p.m., s.s. "Charrington" arrived; first arrival from sea this

season. 27th.—Lachine Canal opened for navigation;

west wind; temp. 38.
28th.—West wind; temp. 35; steamer "Filgate" arrived, 10 a.m.; first boat down the Lachine Rapids.

30th.—Temp. 50; west wind; 5 p.m., first raft of the season from Garden Island passed down.

### May.

1st.—Temp. 50; south-west wind; fine clear morning.

2nd.—West wind; temp. 50.

3rd.—Rain this morning; temp. 50; west wind. 4th.—West wind; temp. 48; rain.

5th.—Frost last night; north-west wind. 6th.—Temp. 45; north-west wind.

7th.—Fine and clear; temp. 45; north wind.

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8th.—Dark morning; temp. 50; north-west
wind.
    9th.—Temp. 50; south wind.
10th.—West wind; temp. 82; west wind.
11th.—East wind; temp. 48; dark morning.
    12th.—Temp. 50; east wind.
13th.—East wind; temp. 50; fine morning.
14th.—Temp. 50; east wind.
    15th.—East wind; temp. 50.
16th.—South wind; temp. 60; rain this morning.
17th.—Frost last night; temp. at 10 a.m., 45.
    17th.—Flost last lingle; temp. 50.
18th.—West wind; temp. 50.
19th.—Temp. 50; west wind.
20th.—Temp. 50; west wind.
21st.—Dark morning; temp. 60; west wind.
    22nd.—Temp. 60; east wind; blowing hard.
23rd.—North-east wind; temp. 45.
24th.—Frost last night; temp. 50 at noon;
fine day.
     25th.—West wind; temp. 55.
     26th.—Rain last night; north-east wind;
temp. 47.
    27th.—North-east wind; temp. at 9 a.m., 44;
frost last night.
28th.—South-west wind; temp. 60.
     29th.—Fine morning; temp. 60; south-west
wind.
     30th.—Temp. 66; south-west wind.
     31st.—West wind; temp. 70.
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1st.—Temp. 70; south wind. 2nd.—North-east wind; temp. 55. 3rd.—East wind; temp. 53; rain. 4th.—North-east wind; temp. 50. 5th.—West wind; temp. 55. 6th.—East wind; temp. 55.
7th.—West wind; temp. 65.
8th.—West wind; temp. 65. 9th.—West wind; temp. 68; smoke on the 10th.—South-west wind; temp. 80. 11th.—Temp. 80; west wind; 5 p.m., rain storm. 12th.—West wind; temp. 70. 13th.—Temp. 70; west wind. 14th.—Temp. 70; west wind. 15th.—North-west wind; temp. 75. 16th.—West wind; temp. 75; at 2 p.m., temp. 88; rain storm. 16th.—Temp. 68; east wind. 17th.—Temp. 68; east wind. 17th.—1emp. 00; bask which.
18th.—East wind; temp. 68.
19th.—Temp. 70; west wind.
20th.—Temp. 70; south-west wind.
21st.—South-west wind; temp. at noon, 90. 22nd.—Rain this morning; temp. 73; south 23rd.—Temp. 75; west wind. 24th.—North-west wind; temp. 63. 25th.—Temp. 70; south-west wind. 26th.—North-west wind; temp. 70. 27th.—East wind; temp. 65. 28th.—Temp. 75; east wind. 29th.—East wind; temp. 70. 30th.—Fine weather; temp. 70; east wind. July.

1st.—Temp. 70; south wind.

2nd.—Rain all day; temp. 70; south-west wind. 3rd.—Temp. 65; south-west wind. 4th.—Rain this morning; temp. 65; southwest wind. 5th.—Temp. 60; south-west wind. 6th.—Temp. 55; showers during the night; south-west wind.

7th.—Temp. 65; west wind. 8th.—North-west wind; temp. 65; rain last night. 9th.—East wind; temp. 75. 10th.—South-west wind; temp. 75.
11th.—North-west wind; temp. 70.
12th.—Temp. 80; west wind.
13th.—West wind; temp. at 4 p.m., 86 in the

shade. 14th.—South wind; showers this morning;

15th.—Rain this morning; temp. 82; southwest wind.

16th.—Temp. 70; west wind; fine weather. 17th.—West wind; temp. 69.

18th.—Temp. 80; west wind. 19th.—Rain all night; temp. 75; west wind.

19th.— Rain all night; temp. 75; wes 20th.—South-west wind; temp. 62. 21st.—Temp. 64; west wind. 22nd.—Temp. 70; south-west wind. 23rd.—Temp. 75; south-west wind. 24th.—Rain this morning; temp. 65. 25th.—Temp. 65; south-west wind. 26th.—Temp. 65; north wind. 27th,—Temp. 60; west wind. 28th.—Temp. 60; west wind. 29th.—Rain all afternoon; temp. 70. 30th.—South-west wind; temp. 70. 30th.—South-west wind; temp. 70. 31st.—West wind; temp. 52.

### August.

1st.—South wind; temp. 65. 2nd.—Temp. 66; north-west wind. 3rd.—Temp. 00; north-west wind.
3rd.—Temp. 70; north-west wind.
4th.—Temp. 65; east wind.
5th.—West wind; temp. 70. 6th.—Temp. 75; west wind. 7th.—West wind; temp. 75. 9th.—South wind; temp. 75.
9th,—Temp. 80; west wind.
10th.—West wind; temp. 80.
11th.—Temp. 80 to 92; rain all night.
12th.—North-west wind; temp. 76. 12th.—North-west wind; temp. 70.
13th.—Rain last night; temp. 70.
14th.—North-west wind; temp. 70.
15th.—South-east wind; temp. 70.
16th.—Temp. 70; west wind; fine weather.
17th.—West wind; temp. 69.
17th.—Temp. 80; west wind 18th.—Temp. 80; west wind. 19th.—Rain all night; temp. 65; west wind. 20th.—South-west wind; temp. 70. 21st.—Temp. 64; west wind. 22nd.—Temp. 70; south-west wind. 23rd.—Temp. 75; south-west wind. 24th.—Rain this morning; temp. 65. 24th.—Rain this morning; temp. 65.
25th.—Temp. 65; south-west wind.
26th.—Temp. 65; north wind.
27th.—Temp. 62; west wind.
28th.—Temp. 73; west wind.
29th.—South-west wind; temp. 55.
30th.—Rain all afternoon; temp. 70; west wind.
31st.—West wind; temp. 63.

# Scptember.

1st.—At 7 a.m., rain storm; 9 a.m., fine; temp. 65; west wind.
2nd.—Temp. 65; west wind; fine.
3rd.—South-west wind; temp. 70.
4th.—Rain; temp. 70; north-west wind.
5th.—East wind; temp. 58.
6th.—South-west wind; temp. 65. oth.—South-west wind; temp. 65. 8th.—Temp. 60; north wind. 9th.—Temp. 49; west wind. 10th.—Temp. 65; west wind. 11th.—West wind; temp. 65.

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12th.—Temp. 66; west wind.
13th.—Temp. 72; west wind.
14th.—North-west wind; temp. 72.
15th.—Temp. 50; north-west wind.
16th.—North-west wind; temp. 60.
17th.—South-west wind; temp. 70.
18th.—Temp. 74; west wind.
19th.—Temp. 60; west wind.
20th.—Temp. 70; west wind.
21st.—South-west wind; temp. 65.
22nd.—East wind; temp. 65.
23rd.—Temp. 70; north-west wind.
24th.—West wind; temp. 70 to 80.
25th.—Temp. 80; west wind.
26th.—North-west wind; temp. 75.
28th.—South-west wind; temp. 75.
29th.—West wind; temp. 75.
30th.—North wind; temp. 75.
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### October.

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1st.—Temp. 51; west wind.
2nd.—West wind; temp. 60; fine weather.
3rd.—West wind; temp. 60; fine weather.
3rd.—West wind; temp. 65; at 3 p.m., temp. 82.
5th.—Temp. 63; west wind.
6th.—North-west wind; temp. 45.
8th.—Temp. 45; frost last night.
9th.—Frost last night; temp. 50 at 8 a.m.
10th.—West wind; temp. 55.
11th.—Frost last night; north wind; temp. 40;
snow this morning.
12th.—Frost; temp. this morning, 44; north wind.
13th.—Temp. 40; north-east wind.
14th.—Rain; temp. 50; south-west wind.
15th.—Temp. 55; south wind.
15th.—Temp. 55; south wind.
16th.—North-west wind; temp. 55.
17th.—Temp. 45; north-west wind.
18th.—Temp. 45; west wind.
20th.—Temp. 45; west wind.
20th.—Temp. 44; east wind; rain storm.
21st.—West wind; temp. 48.
22nd.—Temp. 44; east wind; rain storm.
23rd.—Frost last night; temp. 40.
24th.—North-west wind; temp. 42.
25th.—Temp. 30; frost last night; west wind.
26th.—South wind; temp. 45; rain.
28th.—Frost last night; temp. 30; north wind.
29th.—West wind; temp. 37.
30th.—Frost last night at 9 a.m.; temp. 40 at 10 p.m.; thunderstorm.
31st.—West wind: temp. 50.
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### November.

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1st.—Rain this morning; west wind; temp. 40.
2nd.—Frost last night; temp. 35.
3rd.—North-west wind; temp. 32.
4th.—Temp. 30; west wind.
5th.—East wind; temp. 30.
6th.—Temp. 30; east wind.
7th.—Temp. 28; east wind.
8th.—West wind; temp. 50.
9th.—South wind; temp. 37.
10th.—West wind; temp. 47.
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11th.—Rain; south-west wind; temp. 55.
12th.—Temp. 48; south-west wind.
13th.—West wind; temp. 48.
14th.—North-west wind; temp. 35.
15th.—Temp. 32; west wind.
16th.—South-west wind; temp. 42.
17th.—Rain last night; temp. 55; south wind.
18th.—North wind; temp. 28.
19th.—Temp. 27; south-west wind.
20th.—Temp. 25; south wind.
21st.—Temp. 44; south-west wind.
22nd.—Temp. 50; south-west wind.
23rd.—Temp. 50; south-west wind.
24th.—Rain all night; temp. 45.
25th.—Temp. 38; south-west wind; snowing.
26th.—Temp. 27; s.s. "Greetlands" left port this morning—last sea-going vessel of the season.
27th.—Temp. 42; west wind.
28th.—North-east wind; temp. 20; snow last night.
30th.—Temp. at 8 a.m., 8 above zero.
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### December.

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1st.—West wind; temp. 30 above. 2nd.—West wind; temp. 34.
        2nd.—West wind; temp. 34.
3rd.—Temp. 40; west wind.
4th.—South-west wind; temp. 42.
5th.—Temp. 42; west wind.
6th.—South-west wind; temp. 30.
         7th.—Temp. 30; west wind.
        8th.—Snow all gone; west wind; temp. 38.
9th.—West wind; temp. 36.
        10th.—Temp. 30; west wind.
11th.—Temp. 38; west wind.
12th.—South-west wind; temp. 40.
13th.—West wind; temp. 40.
14th.—North-west wind; temp. 35.
         15th.—East wind; temp. 22 at 2 p.m.; snow
         16th.—Temp. 26; snow and rain; sleighing
   this morning.
 this morning.

17th.—Temp. at 8 a.m., 4 below zero; good sleighing; steamer "Hochelaga" went to winter quarters; close of navigation.

18th.—Temp. 10 above zero; west wind.

19th.—Temp. 30; fine day.

20th.—Fine morning; temp. 25; east wind.

21st.—Temp. 25; east wind.

22nd.—West wind; temp. 33; dark morning.

23rd.—Dark morning; west wind; temp. 45; sleighing all gone: rain this morning.
   sleighing all gone; rain this morning.

24th.—Temp. 32; dark and foggy; west wind.

25th.—'Xmas day: east wind; temp. 36; dark
   weather.
         26th.—South-west wind; temp. 45; rain. 27th.—Fine clear morning; temp. 30; west
         28th.—North-east wind; temp. 15; clear morn-
   ing. 29th.—South-west wind; temp. 33; blowing
   hard.
         30th.—West wind; dark morning; temp. 36;
   blowing hard at 2 p.m.; much colder.
  31st.—North-west wind; temp. at 7 a.m., zero; fine, clear and sunshiny morning; no appearance
  of snow; roads as dry as in midsummer; no ice on
the river.
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(Signed)

THOMAS HOWARD,

Harbour Master.

Certified,

ALEXANDER ROBERTSON, Secretary.

### PORT OF MONTREAL.

Statement showing the Nationality and Tonnage of Sea-going Vessels that arrived in port during the season of 1891 that were navigated by 23,907 seamen.

Nationality.	Number of Vessels.	Tonnage.
British Norwegian German American French Dutch Italian Spanish	684 5 20 11 1 2 1	887,092 4,814 34,409 6,445 900 2,834 872 1,291
Total	725	938,657

THOMAS HOWARD,

Harbour Master.

# PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the Number and Tonnage of Inland Vessels that arrived in port the past ten years, with the greatest number in port at one time.

Years.	Number of Vessels.	Tonnage.	Greatest number in Port at one time.			
1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890.	5,947 5,477 4,808 5,003 5,521 5,367 5,500 5,847 5,162 5,268	848,780 764,721 726,015 724,975 809,819 791,452 863,014 1,069,709 966,959 1,119,484	190 174 161 142 178 189 163 187 167	Sept. 29 do 5 July 9 Oct. 1 Aug. 25 May 31 Aug. 14 do 15 Oct. 20 Sept. 7		

THOMAS HOWARD,

Harbour Master.

### PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the dates of the Opening and Closing of Navigation, first arrival from sea, and last departure for sea, the past ten years.

Years.	Opening of Navigation.	Closing of Navigation.	First Arrival from Sea.	Last Departure for Sea.	
1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890.	do 27	do 16do 18do 7do 4do 23do 14do 29do 3	do 2 do 8 April 30 May 3 do 4 April 27 do 30	do 20. do 20. do 20. do 25. do 28. do 22. do 23.	

THOMAS HOWARD, Harbour Master.

# PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the Number, Tonnage and Classification of Sea-going Vessels that arrived in port from the Maritime Provinces the past ten years.

Years.	Steamships.	Tonnage.	Ships.	Tonnage.	Barques.	Tonnage.	Brigs.	Tonnage.	Brigantines.	Tonnage.	Schooners.	Tonnage.	Total Vessels.	Total Tonnage.
1882 1883 1884 1885 1886 1887 1888 1889 1890	168 191 161 142 175 224 213 184 252 272	164,982 124,377 117,436 150,784 194,028 195,598 173,076	2 1		25 11 8 18 4 11 4 1 1	11,997 2,535 8,676 3,079 998	3 1			1,015 456 2,307 466 342 701 441 170	40 47 41 36 35 52	5,620 3,825 4,814 2,902 3,139 3,375 4,668 3,714	276 256 240	133,554 157,481 208,882 203,952 179,183 239,606

THOMAS HOWARD,

Harbour Master.

# PORT OF MONTREAL.

Number and Tonnage of Sea-going Vessels that were consigned to the following merchants during the season of 1891.

No.	Name.	Steam	Tonnage.	Sail.	Tonnage.	Total Vessels.	Total Tonnage.
2 3 4 5	H. & A. Allan R. Reford & Co D. Torrance & Co Canada Shipping Co. Kingman, Brown & Co McLean, Kennedy & Co. F. C. Henshaw Hy. Dobell & Co. Munderloh & Co. Harling, Ronald & Co Harling, Ronald & Co J. & R. McLea. Anderson, McKenzie & Co. Carbray, Routh & Co. J. G. Sidey Intercolonial Coal Co. Thos. Fraser & Co. David Shaw Masters C. A. Boucher Imperial Government. 6 others, less than 2,000 tons each *16 others, from canal	23 33 44 20 17 29 18 25 14 15 30 4 6	191,168 110,312 102,767 72,891 69,374 36,776 36,093 34,479 34,409 28,556 31,038 20,465 26,516 20,272 15,390 8,851 7,020 1,853	1 5	1.132 1,683 4,400 7,001 872 568 1,644 2,720 3,883 11,711	82 63 45 80 70 28 33 44 20 29 29 26 14 15 34 4 8 8 23 16 91	191,168 110,312 102,767 72,891 70,506 38,459 36,093 34,479 34,409 32,956 31,038 27,466 27,388 20,272 15,390 9,419 7,020 3,497 2,720 2,120 7,593 60,694
	Totals	631	903,043	94	35,614	725	938,657

<sup>\*</sup>This tonnage, 60,694 tons, passed into the canal and returned to the harbour. This has been kept for the purpose of checking tonnage dues, which is now abolished.

THOMAS HOWARD,

Harbour Master.

### PORT OF MONTREAL.

Comparative Statement showing the Number, Tonnage and Classification of Sea-going Vessels that arrived in port the past ten years, with the dates of the greatest number in port at one time each year.

Years.	Steamships.	Tonnage.	Shipe.	Tonnage.	Barques.	Tonnage.	Brigs.	Tonnage.	Brigantines.	Tonnage.	Schooners.	Tonnage.	Total Number of Vessels.	Total Tonnage.	Greatest Number in Port at one time.
1882 1883 1884 1885 1886 1887 1888 1889 1890 1891	379 464 444 441 532 600 532 522 624 631	475,679 605,805 585,397 619,647 736,648 807,491 742,276 763,783 889,189 903,043		2,218 2,792 13,475 8,648 9,634 11,923 13,127	70 83 76 68 68 32 49	49,047 45,560 47,233 43,275 20,218 33,982 19,442	7 3 1 10 2 4 2	1,036 338 3,061 1,118	15 13 23 7 7 10 11 8	2,031 2,631 2,356	101 81 86 75 82 74 101 70	7,432 8,194 7,714 9,882 6,671	660 626 629 703 767 655	554,692 664,263 649,374 683,854 809,699 807,773 782,473 823,165 930,332 938,657	June 27 38 Aug. 13 44 July 15 43 Aug. 18 44 July 21 37 June 27 36 Aug. 14 39 Sept. 3 37

THOMAS HOWARD, Harbour Master.

# HARBOUR COMMISSIONERS OF MONTREAL, SECRETARY'S OFFICE. MONTREAL, 5th April, 1892.

SIR,—I beg to transmit you herewith a copy of the Harbour Commissioners' chief engineer's report on the works for the improvement and maintenance of the harbour of Montreal, for the year 1891.

I have the honour to be, sir,

Your obedient servant.

ALEXANDER ROBERTSON,

Secretary.

WILLIAM SMTH, Esq., Deputy Minister of Marine. Ottawa.

# REPORT ON THE WORKS FOR THE IMPROVEMENT AND MAINTENANCE OF THE HARBOUR OF MONTREAL FOR THE YEAR 1891.

(JOHN KENNEDY, M. INST. C. E., Chief Engineer.)

HARBOUR COMMISSIONERS OF MONTREAL, CHIEF ENGINEER'S OFFICE. MONTREAL, 5th March, 1892.

DEAR SIR,—I beg to submit for the information of the Board of Harbour Commissioners the following report upon the works in the harbour of Montreal, for the year ended 31st December, 1891.

# NEW WORKS.

Section 45 and 46 (Maisonneuve).—The construction of the new pier which was commenced in 1889 was practically finished last autumn. Last summer there was added 286 lineal feet of cribwork below water level on the downstream side of the pier, and 900 lineal feet above water, mainly on the outer end and downstream side. The earth filling and macadamizing of the pier were completed, and the shore filling was also completed as far as at present needed.

The dredging of a basin, on the upper side of the pier, 200 feet wide and 271 feet in depth at low water, was finished, and a basin on the lower side, of irregular shape and of the same depth, was so far dredged as to be ready for use. The quantity dredged

in the two basins last summer is 155,932 cubic yards.

The new pier is 641 feet in length on the upstream side and 480 feet on the lower side with a breadth of 180 feet. The total frontage for vessels at the pier and adjoining short pieces of shore wharf is 1,550 lineal feet.

Sections 42 and 43 (Hochelaga).—Work was resumed early in the spring for the extension of the shore wharf and a length of 365 feet was added to the cribwork under water, and 700 lineal feet to the superstructure. The earth filling behind was also made up to finished level and carried back to connect with the filling made in former

This addition to the wharf extends it to the point where the proposed second pier

is to commence and completes the shore wharf as far as at present ordered.

A sufficient area in front of the wharf was dredged away to give access to the wharf for vessels, but a good deal yet remains to be done to clear it entirely away to deep water in the ship channel. Quantity dredged in 1891, 45,855 cubic yards.

The aggregate expenditures on the new work at sections 41 to 43 Hochelaga and 44 to 46 (Maisonneuve) during 1891 and from the commencement are \$102,697.99 and

\$335,497.35 respectively.

The new wharves at the two places form parts of a general plan for utilizing the space occupied by the shoals at Hochelaga, and together give an increase of two thousand nine hundred and twenty feet of wharf frontage now available.

Sections 35 and 36.—A new double ramp with cribwork retaining wall was built at Denonville Avenue to afford access to the wharves from Notre Dame Street, and neighbouring streets. The roadways of the ramp are thirty feet wide with a gradient of one in fifteen and one in twelve feet eight inches on the up and down stream ends respectively, and of one in sixteen on the transverse portion. The gradients, except at the downstream end are materially easier than those of any other ramp in the harbour, and the ramp has proved of great benefit in the carting of coal cargoes to the Canadian Pacific Railway and other large consumers in the vicinity. The cost, which was much enhanced by disadvantages in making and carrying on of the work subserviently to the traffic on the wharves, is: for timber work, \$12,104.58, and for earth work and sundries, \$7,220.26; total, \$19,324.84. The land for the site of the ramp was expropriated and paid for by the city, and the cost of construction was paid by the harbour commissioners.

Sections 36, 37 and 38.—A part of the wharves which was formerly used for lumber shipments was regraded and macadamized to fit it for general purposes. Cost,

\$4,985.54.

Sections 5 and 6 (Windmill Point).—A little rock dredging was done in spring for the immediate purpose of obtaining stone to repair wharves, but in such a way as also to contribute towards the enlargement of the basin. Expenditure, \$631.37.

Ship Channel in the Harbour,—Two shoals which formed the north side of the ship channel, opposite sections 34 to 37 and which were dangerous to any vessels leaving the harbour and not fully under control, were nearly all dredged away to a depth of 271 feet at low water by an elevator dredge of the ship channel dredging fleet which was loaned by government. Some small portions and detached lumps yet remain to be dredged and that already done requires to be tested in order to complete the work. Cost in 1891 \$11,875.51.

Harbour Enlargement and Flood Protection.—Upon the conclusion of negotiations between the Dominion Government, the city of Montreal and the harbour commissioners for the carrying out of the scheme of harbour enlargement and flood protection, known as plan No. 6, work was commenced upon it. The beginning was made upon the guard pier on the 21st July by placing the harbour commissioners' dredge No. 1, and subsequently Government dredge No. 8, on the north or inner side of the pier and dumping the dredgings mainly on the under-water portion of the pier near its lower end. Later on such dredgings as could be spared and were found suitable were sent from other places, and by the close of the season 73,160 cubic yards had been placed on the Cost in working expenses chargeable to Harbour Enlargement site of the pier. Account, and exclusive of charges for plant and general expenses, \$12,063.53.

### HARBOUR REPAIRS.

Upon the clearing away of the ice in the spring it was found that the cribwork of that part of the island wharf, section 15, which faces St. Helen's Island had slipped into deep water, and the top of the crib work at section 29 had been raised. Beyond this the wharves sustained no serious damoge during winter.

The total cost of maintenance and repairs for the year was \$49,109, which compares

with the cost of previous years as follows :---

1875	<b>\$16,499</b>
1876	35,711
1877	26,077
1878	18,974
1879	
1880	
1881	16,159
1882	
I883	35,768

1884	· · · · · · · · · · · · · · · · · · ·	44,869
1887		64,984
1888		49,520
1889		51,892
1890		56,380
1891		49,109

The following are the principal items of repairs in 1891:-

Section 10 (Windmill Point).—About twenty feet of the lower end of Windmill Point wharf was repaired with new stringers and new top planking, and the mooring posts were reset.

Sections 12 and 13 (Allan Line Berths).—About 200 lineal feet of old cribwork in section 12, which was built about 1889 and had been in bad condition for several years, gave way in September last. The broken part was dredged out and replaced by a new pile wharf which involved a close row of piles at parts of the rear, and land ties 55 feet long at ten feet centres. The adjoining crib work downstream was strengthened by piling in front. Cost \$2,619.11, in addition to dredging.

In section 14 about 100 lineal feet received new stringers and top plank and four

now countersunk mooring posts were put in.

Section 15 (Island Wharf, &c.).—The repair to the pile work of the shore wharf which was begun in the fall of 1890 was completed as soon as possible after the clearing away of the ice last spring. The wharf and railway tracks in the rear being low were raised to the general wharf level at the same time. Cost in 1890 and 1891, \$2,755.16.

For several years past the cribwork of the outer or downstream side of the Island wharf, which was built about 1859, and founded on sloping bottom, has been sinking and slipping outward, and on the clearing away of the ice in spring it was found that it had failed entirely and that the back filling to an average breadth of thirty feet had gone with it. Early in the summer the cribwork was replaced by pilework, with sheet piling and land ties to support the earth filling in rear, and the whole wharf made good.

Parts of the outer side of the Island wharf facing St. Lambert were reinforced by a close row of piles and otherwise repaired. On the inshore side of the Island wharf, on the downstream side of the pier connecting it with the shore, and on the shore wharf itself, the pilework extension which was built in 1878 and 1879 had become so much decayed above water as to be unfit for heavy loads. After the close of navigation this was all strengthened and repaired and a waling piece and fender braces added. Seven new iron countersunk mooring posts were placed in the section. Cost of pilework and repairs, \$7,850.78.

Sections 16 to 19 (Dominion Line Berths, and Richelieu Company's Berths).—The piece of plank road near the revetment wall was renewed, 150 feet of new coping was put on, seven new iron countersunk mooring posts and two new fender posts were put in. At section 18 a slip was cut in the wharf for river steamers, and three new fender posts were put in. On section 19 three new fender posts were put in.

Section 20 (Victoria Pier).—On the upper side of the pier a length of 150 feet was repaired with new stringers, two courses of face timber and new top planking. The lower outer corner damaged by ice was repaired. Six new iron countersunk mooring posts and one ordinary fixed cast-iron mooring post were placed. Cost, \$823.32.

Section 21 (Beaver Line).—Two countersunk iron mooring posts were put in.

Sections 22, 23 and 24.—All the long cast-iron mooring posts were taken up, inspected and reset.

Section 29.—About 150 lineal feet of cribwork broken by ice was repaired with four courses of face timber, new cross ties, back coping and top planking. Cost, \$376.97.

Sections 36 and 37.—Eight new countersunk mooring posts were placed instead of the former oak posts. A new footpath crossing of block stone was laid at the new ramp.

55 Victoria.

Roadways. - Macadamizing stone has been spread on the wharves as follows :--

Section.	Number of Toises.	Section.	Number of Toises.
9		21	23 13 5 19 21 21 14 11

Total toises spread for maintenance of the roadways, as above, 275.

Several of the footpath crossings throughout the harbour have been repaired and raised.

Little ice was left lodged on the wharves above section 18, but below that there was somewhat more than the average quantity. Expenditure in clearing off ice, \$3,196.18.

### HARBOUR DREDGING PLANT AND DREDGING.

The harbour dredging plant in use in 1891 was composed of three spoon or dipper dredges, three derricks and two tugs, with coal barge, scows and a floating shop as detailed in the appended table. Besides these, elevator dredge No. 8, two tugs and six dumping scows were borrowed from the ship channel dredging plant and used during the greater part of the summer.

Dredge No. 6, derrick No. 2 and the two tugs were wintered in Cantin's dry dock, Montreal; the other dredges and two derricks were wintered in the Lachine Canal, on the south side of the island at St. Gabriel Locks; the coal barge and all the scows were

wintered in the canal below the Wellington Bridge.

All repairs were made by the commissioners' own men with exception of work on

some heavy pieces of machinery which was done in neighbouring shops.

The tug "St. Peter" was rebuilt in the more important parts. All below deck was renewed with exception of part of the outside planking. Part of the deck and deck beams, most of the stanchions of the railing and the housing on deck were also renewed. Cost, \$2,760.82.

The tug "St. Louis" was mainly rebuilt also. Nearly everything below deck was also renewed, except part of the outside planking. Some of the deck beams, deck planking and stanchions for the rail were renewed. The boiler furnace was repaired with

new spouting and part new side plates. Cost, \$2,211.18.

Derrick No. 2 had the slides for the forward spuds and the A frame renewed.

Dredge No. 6, the hull of which had become too weak for further service, was merely caulked so as to keep it afloat, and was not fitted up for work during summer.

The other dredges and vessels received ordinary repairs.

No. 1 dipper dredge, the building of which was commenced in 1890, was finished last spring and was set to work in the harbour on the 18th May. Cost, \$39,009.84.

Two flat scows, Nos. 21 and 22, of 85 feet by 25 feet by 7 feet 5 inches over all and of 150 cubic yards carrying capacity, were built last spring for attending the dredges. Cost, \$2,594.18 each.

Two others, Nos. 23 and 24, of 85 feet by 25 feet by 6 feet 9 inches and of 150 yards

carrying capacity, were built during the summer. Cost, \$2,374.29 each.

The hull of the Government elevator dredge No. 3, which was purchased for a floating shop, was fitted up as such last winter and was equipped with the machinery of the old floating shop and some new in addition.

The hull of the old floating shop was sold in the early part of the summer and was subsequently broken up by the purchaser.

The building of new dredging and other plant for carrying out the harbour enlarge-

ment works was ordered by the commissioners in 1891, as follows:-

A large dipper dredge similar to No. 1, by Messrs. Carrier, Lainé & Company, Lévis, Que.

The machinery for three floating derricks, by Mr. John McDougall, Montreal. Hulls for the same by the harbour commissioners' engineer's department.

The machinery and framing of two land derricks by John McDougall, Montreal. Six flat deck scows of 150 cubic yards carrying capacity, by the harbour commissioners' engineer's department.

The construction of all of these, as also of other plant ordered since the close of the

year, is now in an advanced state.

A steam launch 301 feet long with engine of 6 inches by 8 inches was purchased by

the harbour commissioners last autumn.

The harbour dredging fleet was brought into the harbour on the 30th April when released by the opening of the Lachine Canal. No. 4 dredge commenced work on the 5th, No. 7 commenced on the 8th and No. 1, which was somewhat delayed in completion, commenced on the 18th of May.

The elevator dredge which was borowed from Government, was brought up from

Sorel on 26th May and commenced work on the 29th of May.

All worked until 21st November when the elevator dredge was stopped, and returned to Sorel. Dredges Nos. 4 and 7 were stopped on the 27th and No. 1 was stopped on the 28th November. The harbour commissioners' dredging fleet was sent to winter quarters in the Lachine Canal, and the balance of the Government plant was returned to Sorel.

The harbour dredges, derricks, tugs and four scows were laid up in the Lachine Canal about a quarter of a mile below the St. Gabriel Locks, the floating shop and two scows were laid up at the island above St. Gabriel Locks, the coal barge and remaining vessels were laid up in Basin No. 3 near the dredges, and dredge No. 6, which had not been in service during the summer, was hauled out on the island above St. Gabriel locks, in October, to be rebuilt.

The number of days during which the spoon dredges were on duty, reckoning every day except Sundays, from commencing in spring to leaving off in fall, was 1671 days for No. 1, 178 days for No. 4, and 175 days for No. 7, making an aggregate of 5201 days

for the season.

The nominal working time is ten hours per day, which gives a total of 5,205 hours' service, but the actual dredging time, after deducting that lost for repairs, changing position, detention by vessels, short days in autumn and all other causes, was reduced to

4.455 hours, or an average of 85.58 per cent of the gross time of service.

The total outlay for working the commissioners' own fleet, consisting of three spoon dredges, three unloading derricks, two screw tugs and the scows, was \$49,570.78, and this, as usual, represents the entire cost of working the plant and machinery, repairs, outfit, fuel, wages, salaries, insurance and all other outlays except interest on capital and depreciation of plant. It also includes the cost of rebuilding the tugs St. Peter and St. Louis.

The cost of working the borrowed elevator dredge and the tug and scow service for

same was \$14,231.79, making a total outlay of \$63,802.57.

The following are the comparative costs and quantities of dredging for 1891, and for previous years:—

		1	I	
Years.	Cubic yards Dredged.	Total Cost.	Cost per cubic yard, cents.	Remarks.
		*		
1875 1876 1877	151,719 156,082 173,499	68,979 55,462 45,103	45· 35 <sup>5</sup> % 26	
1878	211,731 189,609 186,430	48,748 41,006 46,914	$\begin{array}{c} 23 \\ 21_{100} \\ 25_{100} \\ \end{array}$	
1881	170,764	54,128	$31\frac{69}{100}$	
1882	187,339 9,429	53,598 13,254	28 <sub>100</sub> \$1.40 <sub>100</sub>	Spoon dredges and stone-lifters. Elevator dredges.
1002	196,768	66,852	33,26	Totals and average.
1883	36,538 6,990	17,956 19,385	\$2.77 \frac{38}{100}	Spoon dredges and stone-lifters. Elevator dredge—lifting rock and boulders and clearing up.
1883	43,348	37,341	8614	Totals and average.
1884	125,648 69,494 57,728 36,993	49,468 28,563 25,772 23,259	39 <u>87</u> 41 100 44 62	Spoon dredges and stone-lifters. do do do do do do do do do
1888	73,150 2,077	36,690 1,333	$50_{100}^{16}$ $64_{100}^{18}$	do do do Elevator dredges.
1888	75,227	38,023	50 54	Totals and average.
1889	205,283 9,420	54,574 2,996	$26^{58}_{100} \ 31^{80}_{100}$	Spoon dredges and stone-lifter. Elevator dredge.
1005	214,703	57,570	26,81	Totals and average.
1890	186,670	53,674	28 60	Spoon dredges and stone-lifter.
1891	259,267 43,290	49,571 14,232	$19\frac{12}{100}$ $32\frac{87}{100}$	Spoon dredges. Elevator dredge.
(	302,557	63,803	$21_{\frac{8}{100}}$	Totals and average.

The cost and character of the dredging done in the different parts of the harbour last year are as follows:—All the quantities are scow measurements, and the cost includes towing and unloading the material.

Section 6 (Windmill Point).—A little dredging was done in the basin where the deepening will be useful, but for the immediate purpose of obtaining stone for the road foundations and other wharf repairs; depth of water, 25 feet: quantity dredged, 1,170 cubic yards; material, shale rock; cost, 54 cents per yard.

Sections 12 to 14 (Allan Line Berths).—The part of the cribwork wharf in section 12 which gave way was, with its stone filling, dredged out and the place prepared for repairs. Depth of water about 29 feet; quantity dredged, 3,454 cubic yards, exclusive of timber; material, cribwork, stones and earth; cost, 52 cents per yard.

Several shallow places close to the wharves and throughout the basin which had become shallow by the filling in of rubbish and by scour from elsewhere, as also some places which had never been brought to full depth because of extreme hardness, were dredged out to  $27\frac{1}{2}$  feet or over at low water. Quantity dredged, 3,874 cubic yards; material, sand, mud and hard-pan with many boulders; cost,  $31\frac{1}{2}$  cents per yard.

Sections 14 and 15 (Elgin Basin).—The basin which had become choked with sewage deposit was dredged out to  $27\frac{1}{2}$  feet at low water, the city paying the cost. Some places which were shallow from other deposit, as also from the existence of large boulders, were also cleaned down to full depth. Depth of water, 29 feet; total quantity dredged, 11,497 cubic yards; material, sewage deposit and mud, with some hard-pan and large boulders; cost,  $11\frac{4}{10}$  cents per yard.

Section 15.—The cribwork which fell away at the lower end of the Island wharf, as also its filling and back-filling, were dredged out and the place prepared for repairs. Quantity dredged, exclusive of timber, 360 cubic yards; material, cribwork and stone

filling; cost, \$1.45 per cubic yard.

The basin between the Island wharf and the shore wharf had become shallow in several places, principally alongside the wharves, and was dredged out to  $27\frac{1}{2}$  feet at low water. Depth of water, 29 feet; quantity dredged, 2,700 yards; material, sand, silt and mud; cost, 28 cents per yard.

Section 22.—A number of small shallow spots, chiefly about the lower end of Victoria Pier, were cleaned down to standard depth. Depth of water 30 feet, very strong current in some places; quantity dredged, 4,320 cubic yards; material, sand and gravel; cost, 19 cents per yard.

Section 23—(Commissioners Wharf).—Small quantity of dredging was done in deepening a shallow place in strong current near the wharf. Depth of water 30 feet; material, sand and gravel; quantity dredged, 855 cubic yards; cost, 42 cents per yard.

Sections 41, 42 and 43 (Hochelaga).—Dredging was done in clearing away the shoals in front of the new wharves and a small quantity was also done in preparing foundations for cribwork. Depth of water, 29 to 35 feet; quantity dredged, 45,855 cubic yards; material, sand, gravel, very hard silt and some boulders; cost, 21½ cents per yard.

Sections 45 and 46 (Maisonneuve).—Dredging for the formation of basins on both sides of the new pier, and also for preparing foundations for cribwork. The material dredged was very varied; on the upper side of the basin it was mostly very tough silt with some boulders, on the lower side it was mostly loose dark grey sand very easy to work; depth of water, 29 to 35 feet; quantity dredged, 155,932 cubic yards; cost,  $18\frac{7}{10}$  cents per yard.

Ship Channel through the Harbour.—Two shoals with some small spots on the north side of the main channel, opposite sections 34 to 37, were nearly all cut down to 27½ feet at low water by the Government elevator dredge No. 8. Depth of water, 28 to 32 feet, rapid current; material almost wholly clean boulders, mostly under a cubic foot in

size; quantity dredged, 33,673 cubic yards; cost, 351 cents per yard.

Harbour Enlargement.—Dredging on the Island shoal, alongside the site of the new guard pier (opposite stations 56 to 63), by a dipper dredge, and at the lower end of the shoal by the elevator dredge. Depth of water, 30 to 32 feet; material, hard-pan and tough silt with boulders of all sizes; quantity by dipper dredge, 29,250 cubic yards; cost,  $11\frac{1}{10}$  cents per yard; quantity by elevator dredge, 9,620 cubic yards, costing  $24\frac{1}{2}$  cents per yard.

Appended are tables giving further particulars as to the dredging plant and work

done.

Yours respectfully,

JOHN KENNEDY, Chief Engineer.

ALEXANDER ROBERTSON, Secretary, Harbour Commissioners of Montreal.

# HARBOUR DREDGING.

Statement showing the number of days worked by each drodge and the quantity dredged at each place for the Harbour of Montreal in 1891.

			'ime ervice.	Quan	tity dr	edged.		
Places at which dredges worked.	Vessels	Days.	Total days.	Spoon dredges.	Elevator dredge.	Total cub.	Character of soil.	
Section 5 and 6, Windmill { Point	do do do do do do do	No. 7. No. 7. No. 1. No. 1. No. 7. No. 7. No. 7. No. 1. No. 7. No. 1. No. 4. No. 4. No. 4. No. 4. No. 4. No. 4.	98 <sup>2</sup> 45 25	7 25 17 184 5 10½ 111, 5  974  278½	990 180 3, 454 3,049 825 11,497 360 1,980 720 4,320 855 24,244 7,875 13,736 18,562 103,080 34,290 29,250		3,454 3,874 11,497 360 2,700 4,320 855 45,855 155,932 38,870	Sewage, hard pan and boulders. Tearing up cribwork. Sand, silt and mud. Sand and gravel.  do Sand, gravel, silt and boulders. Sand, tough silt and boulders. Hard pan, silt and
	Totals.			67112	259,267	43,290	302,557	

# ABSTRACT of work done by each dredge in the Harbour of Montreal in 1891.

		Ti:		-	ity dre	1		
Vessels.	Places at which dredges worked.	Days.	Total.	Spoon dredges.	Elevator dredge.	Total	Character of soil.	
Spoon dredge No. 1	Section 13 and 14, Allan's Basin. do 14 and 15, Elgin Basin.	10½ 18¼		3,049 11,497		• • • • • • • • • • • • • • • • • • • •	Hard pan and stones. Sewage, hard pan and	
	do 21 and 22, Military Basin Station 56 to 63, Guard Pier	11½ 45		4,320 29,250		•••••	boulders. Sand and gravel. Hard pan, silt and boulders.	
	Section 41 to 43, Hochelaga	414		,			Sand, gravel, silt and boulders.	
Spoon dredge No. 4	do 45 and 46, Maisonneuve.  Section 5, Windmill Point	5	1671	990	 	90,922	Sand, tough silt and boulders. Shale rock.	
	do 12, Allan's Basin do 15, King's Basin do 41 to 43, Hochelaga	65		7.875			Hard pan and mud. Sand, silt and mud. Sand and clay.	
Spoon dredge	do 45 and 46, Maisonneuve. Section 5 and 6, Windmill Point	144	178	103,080		114,750	Sand, tough silt and boulders. Shale rock.	
100,	do 12, Allan's Basin do 15, Island Wharf do 15, King's Basin	25		3,454 360			Tearing up old wharf. do do Sand, silt and mud.	
	do 23, at Commissioner's Wharf	5		855			Sand and gravel.	
	do 41 to 43, Hochelaga do 45 and 46, Maisonneuve	}			1		Sand, gravel, silt and boulders. Sand, tough silt and	
Elevator dredge No. 8.	Lower end of guard pier	25	175		9,620	53,595	boulders.  Hard pan, silt and boulders.	
•	Current St. Mary, opposite sections 34 to 37	126	151		33,670	43,290		
	Totals	.	6711	259,267	43,290	<del></del> -		

HARBOUR Commissioners' dredging plant employed in the Harbour of Montreal in 1891.

# APPENDIX No. 18.

# QUEBEC HARBOUR COMMISSIONERS' REPORT FOR THE YEAR 1891.

(Under 38 Victoria, Chap. 55, Sec. 14.)

QUEBEC, 2nd January, 1892.

Hon. Chas. H. Tupper,
Minister of Marine and Fisheries,

SIR,—In compliance with the requirements of the 38th Victoria, chapter 55, section 14, I have to report as follows on the doings of the Quebec Harbour Commissioners for the year 1891.

### CHIEF ENGINEER'S REPORT.

The annexed report from the chief engineer, Mr. St. George Boswell, conveys all the information in relation to the harbour works, and the various additions and repairs made to them, and to the other properties of the Commissioners during the past year.

### REVENUE.

The revenue statement of 1891 shows a slight decrease in receipts as compared with the previous year. This is altogether owing to the falling off in the shipping arrivals, as the earnings from wharf properties have been fully maintained.

### LOUISE DOCKS AND WHARVES.

During the past season 42 ocean mail steamers of 106,283 tons register used the docks, landing immigrants, baggage and freight.

Eleven steamers of 17,649 tons register landed a portion of their freight, and 11 steamers of 10,541 tons register discharged their full cargoes of 18,064 tons of coal.

Six sailing vessels of 5,965 tons register landed 7,847 tons of coal, and 42 ships of a registered tonnage of 39,993 tons, have also used the docks, loading full cargoes of timber and deals, and the surface traffic has required the employment of 2,657 cars.

The ss. "Enchantress" a vessel in distress from Montreal, unloaded her deal cargo in the inner basin, and upon being repaired, re-loaded from there and proceeded to sea.

One thousand copies of a pamphlet entitled "The Port of Quebec, Its Facilities and Prospects," by Mr. E. T. D. Chambers, of the Quebec Morning Chronicle, containing a very good description of those works, have been purchased and widely circulated by the commissioners.

### PREMISES LEASED.

The only changes under this heading have been that the store No. 7, on Wellington Wharf, formerly in the occupancy of Messrs. John Ross & Company, and the adjoining one, No. 8, that had remained for some years unlet, has been leased to Messrs. E. M. Lennon & Co. for a term of three years.

The changes (referred to in Report of 1890) asked for by the Quebec and Lake St. John, and Quebec, Montmorency and Charlevoix Railway companies in the lease passed in 1888 empowering them to cross the embankment, has been finally agreed upon, and the alterations thus made by the commissioners confirmed by an Order in Council. The completed deed now awaits signature.

### REPAIRS TO PROPERTY.

The commissioners have not been in a position to undertake the repairs so necessary to be done to place the Pointe-à-Carcy Wharf in a proper condition, but trust that during the course of the ensuing year, they will be able to carry out this very desirable and pressing work.

All the other properties of the commission have been frequently inspected and kept in a thorough state of order. Detail will be found in the chief engineer's report.

### BALLAST.

Seven thousand and thirty (7,030) tons of filling material consisting of ballast taken from ships, and three hundred and forty-three (343) tons from other sources, and costing six hundred and eighty-five dollars and fifteen cents (\$685.15), or an average of nine and a quarter cents per ton, has been obtained during the year.

This ballast consisted nearly all of good stone, and has been utilized in the various properties of the commission as follows:—Pointe-à-Carcy Wharf, three thousand one hundred and ten tons; Breakwater Wharf, two thousand two hundred and sixty tons; Harbour Works, one thousand six hundred and sixty tons; Grand Trunk Wharf, one hundred and thirty-seven tons; Atkinson's Wharf, one thousand and twelve tons; and Wellington Wharf, ninety-four tons.

### ICE BRIDGE AT CAPE ROUGE.

Preparations were made in the spring to remove the ice bridge at Cape Rouge, if it proved an obstruction to the early opening of navigation; but as the ice gave way before it was deemed necessary to take any action, the material prepared for this purpose has been kindly stored by Lt. Colonel C. E. Montizambert, R.S.A., Quebec, for use on some future occasion.

### OFFICE OF PRESIDENT AND SECRETARY-TREASURER.

On the 16th of March, Mr. Edmond Giroux was elected president to replace Mr. P. V. Valin, and on the 9th of November, upon his reappointment as commissioner, was again unanimously re-elected to the same position.

Mr. James Woods, who had been acting as secretary-treasurer since February,

1890, was, on the 30th September, permanently appointed to that office.

### CHANGES IN THE PERSONNEL OF THE COMMISSION.

On the 3rd November a communication was received from the Deputy Minister of Marine, Ottawa, stating that by Order in Council of the 24th October the appointment of all the Government members of the commission had been cancelled, and the following gentlemen had been appointed as Government members of the board:—

MR. EDMOND GIROUX,
"ARTHUR J. TURCOTTE,

MR. VICTOR CHATEAUVERT,

" John Sharples,

in the room of Messrs. Thomas McGreevy, P. V. Valin and Joseph Bell Forsyth. The new commissioners took their seats for the first time at the meeting of the 9th November.

# DEATH OF CAPTAIN FRANÇOIS GOURDEAU.

The death, on the 11th May, of Captain François Gourdeau, harbour master during the past sixteen years to the commissioners, has caused them most profound regret.

Captain Gourdeau was an able, careful and zealous officer, thoroughly conversant with his duties, and his death has deprived the board of an employé in whom they could repose every confidence.

### PETERS vs. THE HARBOUR COMMISSIONERS.

Judgment was rendered by the Supreme Court, Ottawa, at its last term in this case. The particulars, so far, have not reached the commissioners.

### ICE CUTTING.

Thirty thousand (30,000) blocks of ice, all for local use, have been cut during the winter of 1890-91, a difference of four thousand (4,000) blocks less than the harvest of the previous year.

### CHAIRMAN'S VISIT TO OTTAWA.

On the 17th December the chairman, accompanied by the chief engineer, proceeded to Ottawa with a view of bringing the following matters to the notice of the Government, viz.:—

Purchase of occulting light and future maintenance of range harbour lights; settlement of graving dock and lifting barge accounts; settlement of claim for amount due for the space occupied on the breakwater wharf and embankment by immigrant buildings; repairing front of Pointe-à-Carcy Wharf and deepening of inside face; settlement of and interpretation of commissioners' debentures account.

Interviews were had on the 18th with the Honourable the Ministers of Militia and Defence, Marine and Fisheries, and Public Works, and with Mr. J. M..Courtney, Deputy Minister of Finance, and the various questions discussed and taken into consideration.

The occulting light purchased for—but found to be unsuitable for a range light—was at once taken over by the Honourable the Minister of Marine, and has been delivered to the agent of his department here.

The maintenance of the range harbour lights was also favourably considered, but awaits the report of the engineer of the department. The other matters, as already mentioned, are still under consideration.

To this report are annexed the various statements conveying the information yearly forwarded to your department in connection with the harbour, as also a complete statement of the commissioners' accounts for the year.

I have the honour to be, sir,

Your most obedient servant,

JAS. WOODS,

Secretary-Treasurer.

HARBOUR ENGINEER'S OFFICE, QUEBEC, 23rd December, 1891.

JAMES WOODS, Esq.,

Secretary-Treasurer Harbour Commission,

Quebec.

SIR,—I have the honour to submit the following, with reference to the Harbour Commissioners' property under my charge as engineer.

### LOUISE EMBANKMENT AND CROSS-WALL.

Owing to the increased demand for coal accommodation it was found necessary during the past season to extend the coal platform at the western end of the Embankment, and also to lay down an additional one on the cross-wall.

Owing to an application made on behalf of the Dominion Steamship Company, a

portion of the Ballast Wharf has also been planked for the reception of coal.

At the western end of the embankment, a portion of ground, measuring  $120 \times 50$  feet, has been leased to the Quebec and Lake St. John Railway Company, to be used by them as a coal yard.

The railway tracks on the embankment and cross-wall have been lined up and graded during the past season, and two diamond crossings placed at the intersection of the cross-wall track with those on the embankment.

A new freight shed, measuring 200 by 38 feet, has been erected on the cross-wall, and the one hundred feet space intervening between the old and new freight sheds, planked.

On the Ballast Wharf the space about three feet in depth, beneath the platform in front of the Immigration Shed on that wharf, has been filled with ships' ballast, and a fence erected in such a manner as to isolate the immigrants when landing. The roadway between the two immigration buildings has also been widened and macadamized.

The north-east angle of the Ballast Wharf has been repaired and re-sheathed. The southern end of this wharf has also been twice repaired during the past season, having

been damaged on three occasions by vessels colliding with it.

New white pine mooring posts have been placed along the entire length of the embankment quay wall, and six mooring rings will be added in the tidal basin before the opening of navigation next season.

A considerable quantity of granite ballast was accumulated during the season just past; this is now being broken up with macadam for use on the embankment and cross-

wall roadways.

A mooring buoy has been placed in the wet dock, opposite the entrance, to facilitate the exit and entrance of vessels.

An additional railway siding has been put down at the western end of the Embankment, to afford increased accommodation to the railway companies when loading coal.

The Quebec and Lake St. John, and the Quebec, Montmorency and Charlevoix Railway companies have, with the permission of the harbour commissioners, taken possession of the beach lot situated directly north of St. Andrew street, between the Drum and Dinning properties, and indicated under the cadastral number 1989, which they have now partially filled in for the purpose of laying down railway tracks to their new station on the Drum property.

The connection with the C. P. R. track on St. Andrew street and the commissioners' lines on the Embankment has also been made; but owing to the lateness of the season when this was done, the grading and lining up have not been completed.

An alteration has been made in the method of operating the cross-wall bridge apron

whereby the work is now done by one man, instead of four as formerly.

A light tower, with a Chance Bros. occulting light, was erected on the north-east corner of the breakwater; and two red electric range lights placed at the foot of Ste. Famille street on the Battery, for the purpose of indicating the fairway of the channel between the Breakwater and the Island of Orleans. The occulting light has since been removed and transferred to the Department of Marine and Fisheries, and has been replaced by a red electric light.

# POINTE-A-CARCY WHARF.

During the past season all the available ships containing stone ballast have been made to discharge into this wharf, but there still remains a great portion of the wharf unfilled. The roof of store No. 2, situated on this wharf, has been tarred.

### STORE NO. 7.

A new roof of Canada plate has been put on this building.

### STORE NO. 8.

The eastern gable wall of this building was partially taken down and rebuilt, and pointed with Portland cement. The roof has been also temporarily repaired and tarred. In addition to the above other minor repairs were effected.

The water was retained in the wet dock for the first time during the past season, on the 26th May, and remained so until 14th November, when the gates were placed in winter quarters.

On the 11th September, owing to the tide not having risen sufficiently for the purpose the gates were not opened in the morning.

I have the honour to be, sir,

Your obedient servant,

ST. GEORGE BOSWELL,

Chief Engineer.

Statement showing the movement of the coasting trade of the harbour for the season of navigation of 1891 (as reported at this office.)

argoes by	schooners		 	 	 		 	 			٠.	• •	.	
do	bateaux		 		 	 	 			 			 - 1	
do	barges	. <b></b> .	 	 	 	 	 		 	 			 	
do	steamboats		 	 	 	 			 	 			 ۸. ا	
onnage	<b>.</b>		 . <b></b>	 	 	 	 <b></b>	 	 	 				38
														1
														7

# DOMINION IMPORTS AT QUEBEC.

Report of principal entries inwards by vessels from all parts of the Dominion, at this port, for the season 1891 (as made at this office.)

Imports.	Quantity.	Imports.	Quantity.
apples brls.	48,828	Glassware brls.	1,938
pples	14,838	do crates.	1,062
do mius.	11,048	do cases.	3,401
Ilmonds and nuts bags.	3,581 8,775	Glasscases and boxes. Hidespkgs.	26,821
gricultural implements boxes.	4,236	Hidespkgs. Horses	6,858 741
discuits	45,629	Hops bales.	68
do bris.	5,778	Herrings brls.	1,790
Brandy boxes.	6,915 6,903	Hardware do	37
oots and shoes do	5,375	do cases and boxes.	20,45
Blacking do brls.	2,716	Hay bundles. Iron pkgs.	62,30 25,40
Barley bush.	6,281	Leather bales.	18,61
Bran tons.	625	Lard kegs.	21,19
do bags.	2,170	Machinery pkgs.	6,89
Brooms pkgs.	5,451 205	Maccaroni boxes.	14,88
do kegs. lbs.	119,748	Matches do do Mineral waters brls.	52
Blueberries boxes.	18,081	Marble pkgs.	46 1,04
Books cases and boxes.	5,463	Nails and spikes. kegs.	32,61
Baking powderdo	10,364	do boxes.	6,39
Bricks M.	1,027	Oakum bales.	44
Board pieces.	623,001 3,017	Oatsbush.	73,40
Bark cards.	3,938	Old iron cwts. Pork brls.	. 0.04
heese boxes.	15,613	Peasbush.	2,04 4,24
rockery brls.	1,079	Potatoes do	21,74
do crates.	1,308	Raisins boxes.	13,41
offee brls. do bags.	675	Rice hags.	14,18
	2,500   6,855	Rakes pkgs. Resin brls.	1,89
Coal tons.	2,771	Resin brls.	$\frac{9}{7}$
Corn bush.	6,492	Sugar brls,	7 15,71
Cordage bales.	4,031	Shingles M.	67
anada plates boxes	20,368	Sewing machines	2,41
Carpets bales.	1,296 6,969	Starch boxes. Soap cases and boxes.	8,60
Champagne cases.	14,376	Spices do do	28,10 21,98
do brls.	494	Steelspkgs.	11,53
Candles boxes.	345	Seeds	3,64
llocks cases.	490	Shovels and spadespkgs.	6,73
Confectionery brls.	1,008	Soda carbbrls.	25
Coal oil gulls. Drugs brls.	28,862 2,522	Scales	59
do do	12,735	Stationery cases.	2,32 14,61
Deals pieces.	770,148	Sheep	1,18
Ory fish cwts.	70	Salmon brls.	23
Eggs doz.	16,365 90	Slabsloads.	52
do brls. do boxes.	5,780	Seal oil galls. Trout brls.	29,16
Gels brls.	80	Teaboxes.	27,75
Flour do	19,124	Tobacco brls.	1,20
do bags.	54,465	docases and boxes.	5,32
Powls home	1,930	Tinboxes.	11,54
Veathers bags.	784 2,783	Turpentine. brls. do	96
Fruit brls.	2,163	Wine hhds.	2,62
in cases.	13,855	do qr. bks.	2,02 2,17
do hhds.	150	dobrls.	9,44
do brls.	2,415	do cases.	7,04
do	137	Whiskey brls.	2,14
Frain bags.	21,116	do cases,	4.97
reen fish brls.	2,766	Washboards pkgs.	4,24

JAMES WOODS, Secretary-Treasurer.

JAMES WOODS, Secretery-Treasurer.

# QUEBEC HARBOUR COMMISSION.

	Remarks.		If the amount of \$396,- 000 deducted from the	172,070 77 47 do 9 Gapo Gistaken from 49 do 19 the sum of \$446,000 in 160-51 do 41 dicated as available.	then the amount available will be \$50,000.  The debt of the Com-	missioners amounting to \$723,000 redeemed	is not included in this statement.	
эг, 1891.	Amount Available.	ee cts.	446,000 00					
showing the cost of the Quebec Harbour Works up to the 31st December, 1891	Designation of Statutes A authorizing ex- A penditure.		36 Vic., Cap. 62 43 do 17	47 do 19 50-51 do 41				
p to the	Total Amount Voted.	e cts.	3,252,000 00					
r Works u	Total Amount received from Federal Government	ee cts.	2,806,000 00					
ec Harbou	Net Cost of Works to Date.	e cts.	3,037,520 58					
of the Queb	Net Reduction.	S cts.	Int. 154,740 82 S.F. 17,329 95	172,070 77				
g the cost	Amount of Harbour Commissioners' Sinking Fund and accumulations which by SI Vic., Cap. 6, has become part of Consolibected Revenue of Canada.	e cts.						
	Reduction effected under for Vic., Cap. 6, respecting Interest and Sinking Fund paid out of Capital.	& cts.	Int. 378,670 05 S.F. 17,329 95	396,000 00				
STATEMENT	Total Expenditure, includ- ing Interest, &c.	s cts.	3,192,261 40 Int. S.F.					
	Nature of Works.	II calculation	ments					

HARBOUR COMMISSIONERS' OFFICE, QUEBEC, 2nd January, 1892.

# QUEBEC HARBOUR COMMISSION.

COMPARATIVE STATEMENT of the Revenue of the Commission for the years 1890 and 1891.

	1890.	1891.	Differenc	e in 1891.
Tonnage dues. Import do	2,113 45 33,807 68 702 79	\$ cts. 11,612 19 2,893 08 4,195 10 2,323 40 34,161 47 809 61 1,977 37 232 60 58,204 82	\$ cts. 4,725 98 36 20 1,421 58 209 95 353 79 106 82 	Decrease. do do Increase. do do Decrease.

CR.	10,321 96 482 00 859 55 879 55 115,196 00 411 75 50 65 106 60 72 60 110 60 72 60 106 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72 60 72	61,751 88
	<b>66</b>	:
REVENUE AND EXPENDITURE.	1891.  Dec. 31. By Officers' salaries.  Reporters' salaries. Legal expenditure. Report and annexures, 1890 and 1891. Property expenditure. Auditors for 1890. Harbour master's service. Removing Cape Rouge ice. Randware and pulmubing. Settlement of damages with ship. "Ferdinand". Maps of harbour. Descriptive pamphlets, Harbour of Quebec. Sundries. Sundries.	
EXPEN	1891. Dec. 31	
NOK AND	\$ cts. 11,612 19 2,893 08 4,195 10 2,333 40 3,547 06 3,547 06	61,751 88
KEVEL	ee CG8	
	Dec. 31. To Tonnage dues  Import do Export do Harbour do Property receipts Beach and deep water lots. Sundries. Sundries. Profit and loss.	
J. J.	1891. Dec. 31	199

AS. WOODS, Secretary-Treasure

10a—13

_		
CR.	\$ cts. 54,706 31 43,380 00 3,529,000 00 226,915 56 3,887,909 90	asurer. ar ending ditors.
	85 5 60	JAS. WOODS,  Secretary-Treasurer.  mmission, for the year end  A. GABOURY,  A. AHERN,  A. AHERN,
31st December, 1891.	y Beach and deep water lots. Receiver General. Taxes account. Quebec harbour debentures Profit and loss.	the Quebec Harbour Co
1st Dece	1891. Dec. 31. By	ouchers o
SHEET of	43,963 97 11,547 08 220,684 93 276,522 31 48,552 93 15,740 299 15,740 299 15,740 299 3,918 29 3,918 29 3,918 29 4,178 00 1,882 01 2,686 96 3,867,909 90	books and voy of the bal
BALANCE	\$ cta.	xamined the a correct cop
	Amount at debit grantees, beach and deep water lots Amount at debit grantees, beach and deep water lots Amount at debit sundries for rents, wharfage, &c.  Breakwater wharf Pout à Carcy wharf East India do Grand Trunk do Wellington do Aktinson's do Harbour improvements.  Jackscrews account Lifting barge.  Jackscrews account Lifting barge.  Graving dock revenue.  Tools account Bills receivable.  Suspense accounts.	We hereby certify that we have examined the books and vouchers of 31st December, 1891, and that the above is a correct copy of the balance sheet. QUEBEC, 10th January, 1892.
DR.	1891. Dec. 31. To	et Dec
	≅ ₫ 193	31

QUEBEC.

	Dr. Statem	ENT of Asset	s and Liabil	ities per	Statement of Assets and Liabilities per Balance Sheet of Date.		CR.
1891.	ASSETS.	e cts.	\$ cts.	1891.	Liabilities.	s cts.	es cts.
Dec. 3	31 Real Estato— Breakwater wharf Point & Carcy do Font & Carcy do	220,684 93 276,522 31		Dec. 31	Quebec Harbour debentures Beceiver General Corporation for taxes	3,529,000 00 43,380 00 3,908 03	60 000 00
	뇩	15,740 82 86,541 85			SURPLUS.		on 007'010'0
	දි ද	51,103 20 9,918 29	200 003 80		Composed as follows—  Beach and deep water lots.	54,706 31	
	In re Beach and Deep Water Lots— Capital at debit sundries	35,162 48 8,801 48 988 68	60 CM (60 CM)		L FUID WHILE FORS	, , , , , , , , , , , , , , , , , , ,	281,621 87
۰1	Rents, Wharfage, &c — Due by fund as per balance sheet Accrued but not yet due	11,547 08 1,708 28	44,302 00				
.94	Cash— On hand In bank	958 26 33,006 72	13,400 30				
	Dominion Government— Lifting barge Graving dock	5,644 45 5,909 54	96 46				
	Harbour improvements Jackscrews on hand. Tools Office furniture Anchors on hand Bills receivable.		3,037,520 58 3,037,520 58 1,780 00 3,471 57 90 00 1,862 01				
		<u> </u>	3,857,909 90				3,857,909 90
		-			JAS. WOODS, Secretary-Treasurer.	tary-Treasur	er.

We hereby certify that we have examined the statement of Assets and Liabilities of the Quebec Harbour Commission, on the 31st December, 1891, and that we have found the same correct. A. GABOURY, A. AHERN,

QUEBEC, 19th January, 1892.

# APPENDIX No. 19.

REPORT OF THE HARBOUR COMMISSIONERS OF TORONTO, FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

SECRETARY of the Toronto Harbour Trust in Account with the Commissioners for 1891.

DR. GENERAL BALANCE SHEET. CB.

1891.		8	cts.	1891.	•	,	\$	cts.
do 31 do 31 do 31	Wharf property	10,250 581 10		Dec. do	31 31	By Overdraft at bank Profit and loss	40,649 13,289	
		53,93	83				53,93	83

We have examined the books, accounts and vouchers, and have compared the balance sheet as above with the books, &c., and we certify the same to be correct, and to represent a true statement of the affairs of the Trust to 31st December, 1891.

COLIN W. POSTLETHWAITE,

Deputy Harbour Master.

C. B. GRASETT, W. R. HARRIS, Auditors. MORGAN BALDWIN,

Harbour Master.

A. B. LEE, J. H. G. HAGARTY, J. T. MATHEWS, THOS. ALLAN, R. H. GRAHAM,

TORONTO, 5th January, 1892.

Commissioners.

# RECEIPTS and Expenditure of the Toronto Harbour Trust for the Year 1891.

Dec. 31 C do 31 H do 31 F	Cash on hand	6,002 10,551 40	82	Jan. Dec. do	31	Overdraft at Bank of Toronto. Breakwater at Queen's Wharf.	7,378 39,598	
		40,649	00 03	do do do do do do do do do do do do do d	31 31 31 31 31 31 31 31 31	Dredging Salaries Interest. Office expenses and rent. Charges. Insurance. Lights, buoys and beacons. Law expenses Printing and stationery. Rep'g. house at Queen's Wharf Address to Lady Macdonald. New furniture. Registration. Cash on hand.	21 15 237 1	49 00 30 23 00 00 32 82 62 60

Audited and found correct.

C. B. GRASETT, W. R. HARRIS,

TORONTO, 5th January, 1892.

Auditors.

# STATEMENT of Accounts in Detail.

						=
1891.	.	FURNITURE ACCOUNT.	\$	cts.	\$	cts.
Jan. Feb. Mar.	28	Amount per ledger folio 197.  New furniture per invoice.  do do	844 159 78			•
		Amount written off on account of wear and tear	1,081 500		581	31
		PROPERTY ACCOUNT.		1		
Jan. Feb.	1 25	Amount per ledger folio 408	43,072 1	02 70	43,073	72
	ļ	INTEREST.		1		
Dec.	31	To interest on overdraft at bank	· · · · · · · · · · · · · · · · · · ·		1,304	30
		INSURANCE.				
Jan. July		To premium on lighthouses		00	128	- 00
		CANADIAN PACIFIC RAILWAY COMPANY.		1		
Dec. do	31 31	To rent on elevator property	3,000 3,000 10		e 019	. <b>E</b> A
		`			6,012	. 50
Dec. do do do do do do	31 31	K. Tulley, engineer's fees.	256 200 48 200 6	3 00 3 00 3 00 3 00 3 00 3 00 49 3 00 4 00	4,611	49
		ELEVATOR.				
Jan.	1	Amount per ledger folio 408			10,250	00
		CHARGES.	ļ	i		
Jan.	••	Commissioners' fees		0 00	300	00
		PRINTING AND STATIONERY.				
June	30	"Mail" account for 250 annual statements		7 50 7 25 1 87	34	6 <b>62</b>
		244.77				
Dec.	31 31	Morgan Baldwin, Harbour Master	1,20	0 00		
do	31	Captain Taylor do do	60	0 00	2,60	0 00

# STATEMENT of Accounts in Detail-Continued.

1891.	LIGHTS, BUOYS AND BEACONS.	\$	cts.	\$	cts
	Placing and raising buoys		75		
	Paints and oils, &c		30	•	
	Advertising for tenders		50		
	Gas for lighthouses		54 00		
	New water gauge.		48		
	Repairing old gauge		75		
		223	32		
	By cash from W. W. Department, per contract		00	100	
				123	32
	OFFICE EXPENSES.				
	Rent	<b>52</b> 0	83		
	Cost of removal		50		
	Fittings, gas and electric light.		90		
	Year's rental for two telephones		18		
	Petty cash, water rate, frames, &c		82	682	23
	BREAKWATER AT QUEEN'S WHARF.				
	Medler & Arnot, per contract	37,158	70		
	K. Tulley, engineer's fees	1,924			
	Check clerk, D. P. Ross	528	00		
				39,598	50

 $\mathbf{D}_{\mathbf{R}}$ 

# PROFIT AND LOSS.

CR.

1891.	\$ cts.	1891.	\$ cts
Breakwater at Queen's Wharf	39,598 50 4,611 49 2,600 00 1,304 30 682 23 300 00 128 00 123 32 192 82 500 00 36 62 21 60 15 00 13,289 80	Balance per ledger folio 411  Harbour dues for year  Canadian Pacific Railway—Rent  Fines, breach of by-laws	46,799 36 10,551 82 6,012 50 40 00
	63,403 68		63,403 68

Audited and found correct.

C. B. GRASETT, W. R. HARRIS,

Auditors.

TORONTO, 5th January, 1892.

### COMPARATIVE STATEMENT.

# Goods arrived per Steamer and Vessel for the Years 1890 and 1891.

Description of Goods.		1891.
General merchandise.         Tons           Coal.         do           Horses and cattle.	10,7984 160,162 454 116,850 5,641 100,000 564 3,1724 1,697 4,223 75,100 574,540 200,000	11,779\\ 162,734\\ 283\\ 98,790\\ 5,375\\ 543\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\

# COLIN W. POSTLETHWAITE,

Deputy Harbour Master.

TORONTO, 5th January, 1892.

### FORTY-FIRST ANNUAL REPORT.

To the Commissioners of the Harbour of Toronto:

Gentlemen,—I have the honour to lay before you my annual report for the year 1891.

The ice left the bay on the 16th February, but reformed on the 1st March and people were skating on it the following day. It broke up and the bay was clear of ice on the 20th March and has remained open ever since, the present winter being exceptionally mild.

The first vessel to arrive was the "Coral" with stone, Capt. Blower, who received the customary hat. The last arrival was the prop. "T. D. Stinson," Capt. H. Maitland, from Charlotte with 442 tons coal for the Canada Coal Company, on the 14th December.

The number of arrivals at the port was 2,406, an increase of two over those of last year.

	1891	1890	Increase.	Decrease.
Steamers loaded	1,038	1,210		172
" light	8	1	7	
Propellers loaded	137	80	57	
" light	114	110	4	
Schooners loaded	1,068	960	108	
" light.,	41	43		<b>2</b>

The number of vessels wintering in this harbour is 76, viz.: 17 schooners, 12 steamers, 9 steam yachts, 20 sail yachts, 10 ferries and tugs, 8 propellers and barges, 4 dredges ane 16 scows.

As will be seen by the accompanying statements the cash receipts for the year, including cash on hand, are \$16,605.49. The ordinary expenditure for the same time was \$10,277.98, showing a credit balance of \$6,327.51.

An extraordinary expenditure on account of the western breakwater, amounting to \$39,598.50, has increased overdraft at the bank from \$7,378.04 on the 1st day of January,

1891, to \$40,649.03 on the 1st January, 1892. The bank holds \$50,000 worth of Harbour Commissioners' debentures as collateral security for this amount.

The quantity of coal received by vessel is 162,734 tons, anthracite. This is an in-

crease of 2,602 tons as compared with last year.

The amount of coal received by rail, as per information obtained from the Custom House, is: bituminous 179,060 tons, anthracite 137,637 tons; total, by rail and vessel,

479,431 tons, an increase on last year's receipts of 18,1481 tons.

The work at the western channel, commenced last fall, has been finished according to the plans and specifications, though I am of the opinion that it needs one more crib at the east end, running south, to prevent the wash in at that point. The contractors,

Medler & Arnot, have performed their work satisfactorily.

The commissioners were promised assistance in this work to the amount of \$20,000 by Sir Hector Langevin, but when he left office he omitted to leave any record in his office, which was very embarrassing to the commissioners; but upon laying the matter before the Acting Minister, the Hon. Frank Smith, and soliciting his assistance, he promised the board \$10,000 toward the work this year, and the order for the same, he informed me, some ten or twelve days ago, but so far the commissioners have not received the money.

The water has been very low this year, causing a good deal of trouble in the channels and at the wharves. As many people are under the impression that this state of the water is unprecedented, it may not be uninteresting to give some account of its annual

rise and fall since the year 1854.

In the first place I may say that when Captain Richardson, the first harbour master, established his zero point at the Queen's Wharf the water was low, and I understand he did not think it would go lower. There was at that time at the end of the street leading down to the wharf nine feet of water from the surface to the bottom, and at that point he established his zero, and this has been continued ever since though there is not nine feet of water at that point now. From 1854 to 1864 the water kept above zero; in 1865 it reached zero on the 27th December and continued falling until 15th February when it reached 7 inches below; in 1866 the water rose to 20 inches above, on 17th June, fell to 12 above in October, then rose to 38 inches above zero, 17th June, 1867, fell to 5 below, on the 26th December and continued falling until 6th February, 1868, when it had reached 12 below; next year it rose to 18 inches above on 1st July, and fell in December to 1 below; on 5th February, it had fallen another inch, it then began to rise until 28th July when it was 27½ inches above, fell to 14 inches above on 8th November, then rose until it reached the highest we have on record, 47 inches above zero on the 6th May, 1870; fell to 12 above 29th December; fell to 7½ above in February, rose to 26 inches above 4th May, fell to 61 below 29th December and continued falling until it reached 16½ inches above on the 19th March. It only rose that year, 1872, to 3½ inches above 22nd June, fell on 23rd December to 12½ below, it then rose and on the 26th May was 23 inches above, fell by 22nd November to 5 above, then rose until 11th June when it was 29 above; 30th December it was 5 below, 17th February it was 15 below. Next year the highest water was on the 24th June, 12 inches above; 17th December it was 4 below, then rose and reached 41 inches above on 8th July, fell until February, 1877, to 4½ inches above, rose on the 28th April to 18½ above, fell on 18th November to 1½ below, rose on the 14th December to 25 inches above; the next year, 1879, the water fell on 30th October to 7½ below, rose on the 4th June 19 above, 31st December it was 7 below; 8th July, 1881, the water stood 15 inches above, and on the 7th December 7 below; June, 1882, 29½ above; 7th December, 2 below; 1883, 16th July, 37 inches above; 27th December 11 above; May, 1884, 40 above, 14th November 9 inches above; fell to 4 above on 10th March, rose again to 34 above on 7th August, fell to 23 above 3rd December; then rose and reached its second highest record, 46 inches above zero, on 10th May, 1886; 19th January, 1887, fell to 12½ above and did not fall below zero until November, 1889, when it was 1 below; 21st June, 1890, 37 inches above, then fell 26 inches; this year, 1891, the highest water was 29 inches above on the 2nd May, touched 13½ below on the 16th December and continued below zero for the balance of the year. The average for the year being 11% above zero.

199

In my last year's report I mentioned that the contractors, Messrs. Conlon, had repudiated their agreement at the final certificate and that the money had been paid into court. The case came up early in the year and the commissioners were sustained.

The range lights on the Queen's wharf and the Island light were lighted on the 13th March, 5 days later than last year, and were discontinued on the 16th December,

3 days later than last year.

The buoys were placed in the Western Channel on the 30th March, those round the Point on the 8th April, in the Don Channel on the 17th April. The buoys were all taken in by 25th December.

On 17th January the harbour office was removed from Bay Street to the present position, Board of Trade Building, and seems to give satisfaction to all concerned.

The following Government work at the Island has been done under the supervision of E. B. Temple, Esq., the engineer in charge. 1,253 lineal feet of the breakwater on the lake front has been further protected by large stone, making up to the present time, 5,603 feet fully completed.

1,000 feet of the breakwater on the Bay side has been further protected by small

stone.

A crib was sunk at the west end of the work to protect the beach from the sea at

that point.

The contractors for the works in the Eastern Channel have now 27 cribs placed in position and 10 other cribs in different stages of completion. 650 feet lineal of superstruction was constructed and filled with stone.

A channel was kept open during the season of navigation and was used by vessels.

The fog horn was blown on thirty-three days this year.

I have much pleasure in testifying to the zeal and ability with which my deputies, Mr. C. W. Postlethwaite and Capt. Taylor, have discharged their respective duties.

All which is respectfully submitted.

MORGAN BALDWIN,

Harbbur Master.

4th January, 1892.

### TORONTO HARBOUR WORKS.

Toronto, 9th January, 1892.

SIR,—I have the honour to report that the following quantities of dredging were done at the slips, and the Western and Don Channels. The contractors were Messrs. Manning & Macdonald, and the price was 12½ cents per cubic yard.

Rogers' slip, near Berkeley Street	4,026 cu	bic yards.
Reid's " "	800	"
Don Channel	5,300	"
Ontario Coal Co's slip, Church Street	1,000	"
Snarr's " " " "	450	"
Princess Street slip	6,600	"
Conger Co.'s slip	100	"
Total	18,276	

Besides sundry days work at the western and Don channels, making a total of \$1,608.50 for days' work. The work on the Breakwater was continued by the contractors, Messrs. Medler & Arnot, during the past season, and completed on the date specified, viz., 1st November last. The Breakwater is 1,534 feet 6 inches in length, 20 feet in width, and 21 feet in height, filled with stone, 8 feet from the bottom to the level of 15 feet, the end cribs having been filled to the planking. The channel is 354 feet in width between the Queen's Wharf and the Breakwater, the depth of water being 14 feet when the lake level is 2 feet above zero. The Hon. Frank Smith, Acting Minister of Public Works, and the Hon. Mackenzie Bowell, Acting Minister of Railways and Canals, accompanied

by the Deputy Minister and Acting Engineer of Public Works, inspected the Breakwater recently and expressed their approval of the work.

During an easterly gale in the autumn, before the work was completed, I counted no less than seven vessels moored alongside the Queen's Wharf, instead of anchoring, as usual, in the lee of the Island, thereby proving that the improvement affords a safe harbour of refuge during easterly gales. I would also remark that the lake level during the month of November was the lowest on record, the average being about nine inches below zero.

In connection with the annual expense of dredging, I would call the attention of the Trust to the following table of sewage discharge, and list of sewers extracted from the report of the City Engineer, Mr. G. Cunningham, dated 23rd November, 1891.

Location of Sewer.	Size of Sewers.	Population.	Cubic Feet per Day.
Garrison Creek Yonge Street. Fort Rouille Street Bay Street Sherbourne Street Berkeley Street Dufferin Street Bathurst Street Church Street Church Street Chery Street Chery Street Brock Street Gueen Street East Brock Street Simcoe Street Eastern Avenue Carlaw Avenue	3 ft. 6 in. x 5 ft. 6 in. x 5 ft. 6 in. 2 ft. x 3 ft	19,265 1,166 1,040	400,450 305,683 45,072 24,105 49,016 15,682 82,800 103,046 96,768 118,440 116,395 102,153 101,616 168,624 135,043 12,720 11,520
Smaller drains		181,220	2,150,401

In addition to the above, there are sundry drains discharging into the River Donwhich are not mentioned, unless included in the smaller drains in the table of sewage. The discharge of 2,150,401 cubic feet per day amounts to 13,404,415 gallons, about the average daily water supply. According to an estimate made by H. M. Cadell, Esq., of Grange, read before the Royal Scottish Society of Arts, 27th April, 1891, on the International system of water and sewage purification, 1,000,000 gallons of sewage will produce 26 tons of moist sludge, or 3 tons of dried sewage manure. Assuming that about one-third of the city daily discharge would be sewage, say 4,000,000 gallons, the total solid matter discharged into Toronto Bay and vicinity would be about 12 tons per day, or 4,380 tons annually for a population of 181,220. I do not consider this to be an excessive estimate, as the dredging from the various slips and Don Channel this year amounted to about 20,000 cubic yards, and in addition, the city dredged the Yonge, Church, and other slips at the outlets of the sewers, about 5,000 cubic yards, making in all 25,090 cubic yards, a moderate annual estimate.

Owing to the rapidly increasing population of the city, the sewage discharge is becoming a very important and expensive matter. I concur in the opinion expressed by the city engineer in his recent report respecting the reclamation of Ashbridge's Bay, that provision should be made for the construction of the proposed trunk sewer, by means of which the annual sewage discharge would be carried into the lake in an east-erly direction, and the bays freed from this unhealthy and foul pollution.

I remain, your obedient servant, KIVAS TULLY,

A. B. Lee, Esq., Chairman Toronto Harbour Commissioners. Engineer.

# APPENDIX No. 20.

REPORT OF THE HARBOUR COMMISSIONERS OF BELLEVILLE FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

Belleville, 11th January, 1892.

The Honourable

The Minister of Marine and Fisheries, Ottawa.

SIR,—The Harbour Commissioners of the city of Belleville beg to submit herewith a statement of the receipts and expenditure in connection with the harbour of Belleville for the year, ending the 31st December, 1891.

It will be observed that the receipts from harbour dues are considerably less than last year for the reasons explained by the harbour master in his annual report enclosed

herein.

The death of the late harbour master, Alexander Waters, which occurred early in the year, necessitated the appointment of a successor to that office. The harbour commissioners, after carefully looking into the qualifications of a number of applicants, gave the position to the present officer Daniel Collins, at the annual salary of five hundred dollars.

Mr. Collins has entered into bonds (himself in one thousand dollars and two other

sureties of five hundred dollars each) for the faithful performance of his duties.

In continuation of the work for the protection of the shores of Mill Island, which was begun in the autumn of 1890, and designated Mill Island Improvement, he harbour commissioners beg to say that considerable progress has been made during the past year, and that it is now approaching completion.

The work has been done in a substantial and also economical manner, and, they think, will be the means of preventing any further waste from the Island into the

harbour.

A description of this work by the superintendent, Mr. W. W. Lee, is herewith enclosed, and which the commissioners trust will meet with your approval.

I have the honour to be, sir,

Your obedient servant,

GEO. WALLBRIDGE.

Chairman Board of Harbour Commissioners, Belleville.

DOMINION OF CANADA,
PROVINCE OF ONTARIO,
County of Hastings.

I, George Wallbridge, or the city of Editorial,
County of Hastings, merchant, do solemnly declare:

1. That I am Chairman of the Harbour Commissions of Relleville.

- 2. That hereunto annexed is a statement of the receipts and expenditures of the Harbour Commissioners of Belleville for the year ending 31st December, 1891.
  - 3. That the said statement is true and correct as therein set forth.
- 4. That nothing is wilfully omitted therefrom which should be stated therein, or improperly inserted therein, to the best of my knowledge, information and belief.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the "Act respecting Extra-Judicial Oaths."

Declared before me at the city of Belleville, in the County of Hastings, this 13th day of January, in the year of our Lord 1892.

J. PARKER THOMAS, Notary Public. GEO. WALLBRIDGE.

STATEMENT of the Receipts and Expenditure of the Harbour Commissioners of Belleville, for the year ending 31st December, 1891.

Dr.

Cr.

Receipts.	<b>\$</b>	cts.	Expenditure.	\$	cts.
Harbour dues collected for the year, as per Harbour Master's statement Interest on balance in bank	2,67 8	8 29 1 47	Piers and buoys—Removing piers from river channel and replacing same, also placing of buoys  Mill Island Improvement B—  Material placed upon island from dredging\$1,662 82 Labour act. and supplies 593 98		75
			Salaries— Harbour Master (for 9 mos.) 366 68 Tally clerk (passing logs through the booms) 109 00	2,256	
			Office Expenses—         5 00           Ground rent (for office)         5 90           Stationery, printing         3 95           Postage, &c         11 45           Fuel         4 00	475	68
				24	40
Balance on hand 1st January, 1891	2,75 3,72		Balance on hand (deposited in bank).	2,925 3,563	63 90
	6,48	9 53		6,489	53

PROVINCE OF ONTARIO,
DOMINION OF CANADA,
County of Hastings.
To Wit:

In the matter of the Report of the Harbour Master of the city of Belleville for the year ending 31st December, 1891.

I, Daniel Collins, of the city of Belleville, in the County of Hastings, Harbour Master, do solemnly delare that:—

1. That I am Harbour Master at the city of Belleville.

2. That my report hereunto annexed contains a true, correct and full statement of the revenue from the harbour at the city of Belleville for the year ending on the 31st December, 1891.

3. That the said report is in all other respects true and correct to the best of my

knowledge, information and belief.

And I make this solemn declaration conscientiously believing the same to be true, and by virtue of the "Act respecting Extra-Judicial Oaths."

Declared before me at the city of Belleville, in the County of Hastings, this 13th day of January, in the year of our Lord 1892.

D. COLLINS.

J. PARKER THOMAS,

Notary Public.

The Honourable

The Minister of Marine and Fisheries.

SIR.—The undersigned, Harbour Master of the city of Belleville, begs to submit the following report for the year ending 31st December, 1891:—

Import dues on 14,062 tons coal	\$1,406	20
" $3,384\frac{1}{4}$ tons gen. mdse	338	
Calling dues on schooners and barges, to 1st July	28	00
" steamers, to 1st July	102	00
Export dues on 163,084 bush grain	203	85
" $342\frac{4}{5}$ tons mdse	34	28
Harbour dues on logs, &c., passing through boom	565	14
	\$2,678	29
Harbour dues for logs, &c., due by Messrs. Gilmour & Co.,	<b>*</b> ***	•
Trenton	<b>\$3</b> 86	60
Total dues from imports		
" exports 238 13		
" logs, &c 951 74		
\$3,064 89		

It will be observed that the dues are considerably less than usual this season. This is largely due to the very low water this season in our rivers preventing the logs, &c., reaching our harbour.

The dues from this source being only \$951.74 as compared with \$1,983.29 last on. Another cause for the decrease in the revenue from the harbour can be accounted for by the large quantities of grain, eggs, and other produce being sent by rail to Montreal for shipment to Great Britain, instead of (as in former years) being sent by vessel to ports in the United States.

As one of the results of opening, of the Murray Canal, the large steamers of the Richelieu and Ontario Navigation Co. have during the past season been calling regular-

ly at this port on their trips westward.

On account of the unusually low water, however, some difficulty has arisen with those and other large vessels in entering and leaving the harbour, which may be obviated by dredging; by so doing it will enable them to make better time and perhaps induce them to call on their trips eastward, which would be a great convenience to the citizens of Belleville.

All of which is respectfully submitted.

I have the honour to be, sir,

Your obedient servant,

D. COLLINS,

Harbour Master.

Belleville, 31st December, 1891.

Belleville, 1st January, 1892.

GEO. WALLBRIDGE, Esq.,

Chairman, the Board of Harbour Commissioners, Belleville, Ont.

DEAR SIR,—Herewith I beg to hand you a report showing work done at Mill Island during year ending 31st December, 1891.

The part completed is about 1,500 lineal feet in length. The uncompleted part is

about 500 feet in length.

In forming this embankment for the protection of Mill Island all debris was removed, and the bank proper was built on a solid gravel foundation. This applies to all the westerly side of the island and around the lower end of the island to station No. 23

on the easterly side.

From station No. 23 on the easterly side going north, we utilized the old cribbing for foundation. This was done by removing all debris and stripping all the old cribbing down to extreme low water mark (exceptionally low this season), then removing floor of cribs, and filling the whole crib solid with stone; the embankment was then built on top of cribbing, the whole forming a very solid and permanent embankment.

The whole of the embankment is still further protected by a heavy rip-rap wall, varying from 5 to 8 feet in width at bottom with an uniform width of 3 feet on top

The incomplete part on easterly side of island is finished on an average of 3 feet 6 inches above low water mark, so that when we can get material this coming season a few days will complete the embankment proper.

Between stations Nos. 13 and 12, on the easterly side of island, the old crib work extends northerly to the extreme north end of island, and thence down the westerly side

to station No. 3.

Acting under your instructions, this old crib work will be cleared of all debris and

the floor of cribs removed and then filled with stone.

A considerable quantity of the work is already done, beginning at stations 13 and

12, working towards the north end of island.

The old mill has been completely removed, and the suitable stone in same was used for rip-rap, the balance being used to make up the embankment.

All of which is respectfully submitted.

Your obedient servant, W. W. LEE, Superintendent.

## APPENDIX No. 21.

REPORT OF THE HARBOUR COMMISSIONERS OF THREE RIVERS, FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1891.

#### SECRETARY'S OFFICE,

THREE RIVERS, 15th March, 1892.

SIR,—I have the honour, by the direction of the Harbour Commissioners of Three Rivers, to forward herewith, for the information of the honourable the Minister of Marine, statements of receipts and disbursements of the Commission for the year ended 31st December, 1891; also, a comparative statement of trade and navigation of the port during the same year.

I have the honour to be, sir,

Your obedient servant,

GEORGE BALCER,

Secretary.

WM. SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

#### STATEMENT of Receipts and Disbursements.

#### RECEIPTS.

From the Collector of Customs, Three Rivers – Harbour dues on goods, inwards	640 711 664 112	33 45	2,129 34
Local traffic— Harbour dues on goods, inwards	74 196 262 1,063 805	02 64 00	2.401 83
Total receipts			
Expenditure.			
Salaries of officers	1,530 514 63 6 50 282	08 68 90 45	2.447 56
Construction and properties' account—		•	-, 1
Interest on Dean's wharf	630 147 446	22	1,223 24

467

25,548

D	R.		BAL	ANC	Е Ѕн	EET				Cr.	
	Deposit in Bank Cash on hand Harbour dues collected	\$ cts. 1,698 75 47 84	\$ 1,746 4,531		1	31 31 31 31	Expenses for administration.  Expenses for harbour works Interest on Dean's wharf  Collection refunded. Deposit in bank.  Cash on hand.	593	24 00	3,388 282 2,606	45
			6,277	76						6,277	76

STATEMENT of Number and Tonnage of Sailing Vessels and Steamers entered Inwards and Outwards at the Customs Port of Three Rivers for the year ending 1891.

Return of Vessels Inwards.		Return of Vessels Outv	ards.	
Total of vessels arrived	Tonnage. 23,737	Total of vessels cleared	No. 21	Tonnage 23,737
Number of steamers. 9 do sailing vessels. 12	11,283 12,454	Number of steamers	. 9	11,283 12,454
Nationality.		Nationality.		
British and Canadian steamers 8 do sailing vessels. 3	9,783 2,831	Scandinavian	. 9	9,623 1,500
Sailing from.		Sailing for.		
Inland ports	8,535 4,253 4,070 3,700 2,003 1,176	Great Britain. Lower Provinces. Canadian ports. Newfoundland.	3	18,398 3,002 1,500 837
	LOCAL T	PRAFFIC.		<u> </u>
		Nur	nber.	Tonnage
Bateaux, not registered Schooners. Barges Steamboats			202 14 65 64	800 6,391 6.815

Richelieu and Ontario Company's steamboats and local boats not included.

	8	\$
Divided into:— Exports		794,496
Imports		136,515
s against a total of \$982,981 in 1890 and \$1,023,692 in 1889.		
he exports are divided as follows:— To the United States—	İ	
28,041,000 feet lumber	25,233	
431 tons square timber	1,658	
12,238,000 shingles	25,233 2,829	
Telegraph poles.	2,101	
19.000 railroad ties	12,978	
Other lumber	571	
1,221 cords hemlock bark	$7,401 \ 22,725$	
6,138 do pulp wood	73,061	
7,090 tons hay	63,796	
51 horses	5,588	
11,429 sheep	31,653 2,444	
Wool64,331 bushels potatoes	30,497	
Hides and furs	4,431	
Minerals	5,861	
Other products of the farm	742 8,766	
Household effects and divers	0,700	569,065
To Great Britain—		000,000
5.578.500 feet pine deals	93,574	
13,222,500 do spruce deals	118,569 4,278	
205,000 do boards To Germany—	4,210	216,421
Furs		4,800
To Newfoundland -		
Horses, provisions and shanty riggings		<b>4,2</b> 00
Total exports		794,486
'he imports are :—		
From the United States—	2,329	
Flour and provisions 2,650 tons anthracite coal.	9,743	
Coke	2,118	
Pig iron	2,160	
Moulders' sand and clay	947	
Hardware and machinery	3,258 12,705	
Electric light implements	1 20,100	
	1.516	•
Brass. &c	1,516 540	•
Brass, &c	540 7,647	•
Brass, &c. Leather and leather goods. Hides and furs	540 7,647 1,022	•
Brass, &c  Leather and leather goods  Hides and furs  Drugs and chemicals  Paper books and prints.	540 7,647 1,022 3,368 1,449	•
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods	540 7,647 1,022 3,368 1,449 1,226	,
Brass, &c.  Leather and leather goods.  Hides and furs.  Drugs and chemicals.  Paper, books and prints.  Fancy goods.  Dry goods.	540 7,647 1,022 3,368 1,449 1,226 2,267	`
Brass, &c  Leather and leather goods.  Hides and furs.  Drugs and chemicals.  Paper, books and prints.  Fancy goods.  Dry goods.  Tobacco.	540 7,647 1,022 3,368 1,449 1,226 2,267	`
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco Settlers' effects.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930	`
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.	540 7,647 1,022 3,368 1,449 1,226 2,267	
Brass, &c.  Leather and leather goods.  Hides and furs.  Drugs and chemicals. Paper, books and prints. Fancy goods.  Dry goods.  Tobacco.  Settlers' effects.  Divers.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016	
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain—	540 7,647 1,022 8,368 1,449 1,226 2,267 99 15,930 1,016	
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military cutfits	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016	
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs.	540 7,647 1,022 8,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541	
Brass, &c Leather and leather goods Hides and furs. Drugs and chemicals. Paper, books and prints Fancy goods. Dry goods. Tobacco Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 	69,34
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers.  Even Leaves Provinces—	540 7,647 1,022 8,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541	69,344 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers From Lower Provinces— 9,583 tons coal.	540 7,647 1,022 8,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541	69,344 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers From Lower Provinces— 9,583 tons coal From France— Books	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 	69,344 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers From Lower Provinces— 9,583 tons coal From France— Books Church ornaments	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541 245	69,34 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers From Lower Provinces— 9,583 tons coal From France— Books. Church ornaments.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541 245	69,344 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits. Furs. Divers. From Lower Provinces— 9,583 tons coal From France— Books Church ornaments. Furs. Furs. Fancy goods.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 	69,344 31,12
Brass, &c. Leather and leather goods. Hides and furs. Drugs and chemicals. Paper, books and prints. Fancy goods. Dry goods. Tobacco. Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits. Furs. Divers. From Lower Provinces— 9,583 tons coal From France— Books. Church ornaments. Furs. Fancy goods. Francy goods. Francy goods. Francy goods. Francy goods. Francy goods. Francy goods. Francy goods. Francy goods. Francy goods.	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 22,581 6,856 900 541 245 	69,340 31,123
Brass, &c. Leather and leather goods Hides and furs. Drugs and chemicals Paper, books and prints Fancy goods. Dry goods. Tobacco Settlers' effects. Divers.  From Great Britain— Dry goods Leather and leather goods. Military outfits Furs. Divers From Lower Provinces— 9,583 tons coal From France— Books Church ornaments. Furs. Fancy goods	540 7,647 1,022 3,368 1,449 1,226 2,267 99 15,930 1,016 	69,340 31,125 26,112

ne Imports—Continued.	<b>\$</b>	\$
From Holland— Gin		0.059
From Austria—		2,053
Leather		
Furs	520	
Wine	75	1,808
From Germany—		1,000
Leather	498	
Machinery	242	
Fancy goods	155 229	
From Spain-		1.11
Wine		30
Total imports		136,51
RECAPITULATION.	-	
rivirta		794,486
oports		136,51
Total		931,00

The products of the forest and its manufactures exported during the season 1891 amounted in value to about \$650,000.

Out of the total quantity of lumber turned out by our sawmills, the exports amounted to 47,047,000 feet B.M., as against 46,847,000 in 1890, and 42,778,000 in

Our trade with Great Britain, as to quantity at least, showed a slight decrease during the season, and no direct shipments were made to South America or any other foreign port. The quantity shipped to the United States, however, showed a decided increase.

Unfortunately, for want of sufficient wharf accommodation to meet the requirement of the trade and provide proper piling ground for lumber for export by sea from mills in the vicinity and also from the Ottawa, we were compelled to rely on our own limited resources, and in several instances to forward considerable quantities to other ports for final shipment. The amount of such shipments is not included in our exports.

As sawn lumber was shipped in larger quantities to the United States (28,000,000 feet in 1891, as against 20,000,000 in 1890) and as pulp wood and manufactured pulp increased in volume of export about 33 per cent, there is every prospect that this increase

will be maintained and probably exceeded during the season of 1892.

In connection with our exports to the United States an incident occurred, explaining the difficulties of securing direct trade relations with certain foreign countries. A Cuban merchant purchased in the latter part of the season some 700,000 feet of lumber for Cuba and shipped it by canal boats vid New York. In answer to our remarks as to the cost of such transport, he claimed not only saving in freight from Three Rivers to New York but saving duties as well, as by existing treaties lumber from the United States is admitted free of duty into Cuba, whereas a heavy duty is charged on Canadian lumber.

The very large falling off in our export of hay to the United States—7,090 tons, of the value of \$63,796, as against 31,735 tons valued at \$235,117 in 1890—is rather disappointing. It not only reduces the value of our transaction with the United States, but accounts for the difference in the aggregate volume of our import and export trade; which, otherwise, would show for 1891 a figure never previously attained.

Our chief agricultural staple was thus obliged to seek another market which is found in the requirements for home consumption—especially Montreal: 24,000 tons; Quebec, 4,000 tons; Ontario about 11,000 tons; the lower provinces about 4,000, &c., bringing the shipment up to some 50,000 tons, of the value of about \$450,000.

The transactions in our two principal staples, lumber and hay, thus figure up to

more than a million dollars.

The imports of coal from the lower provinces remained about stationary, pending final arrangements with the Canadian Pacific Railway, as to large imports during the coming season.

The other lines of exports maintained their ordinary figures. We may mention that our industrial staples, boots and shoes, gloves, iron castings, silver plating, &c., show a large volume of trade, especially in the sister provinces of the Dominion.

Our glove manufactures, for instance, finding ready sales in all the larger business

centres, from Halifax to Vancouver and Victoria on the Pacific.

We may also add that the local trade of our city has been well maintained during the season 1891.

The Canadian Pacific Railway receiving 22,370 tons of goods and shipping 16,860 tons. The Grand Trunk Railway receiving 8,470 tons and shipping 4,600 tons. The Richelieu and Ontario line of steamers, 4,500 and 800 respectively, forming a total of 57,587 tons. Beside the bulk of freight received and shipped by some 300 barges and other river crafts, the exact amount of which can never be fully ascertained.

Respectfully submitted,

GEORGE BALCER,

Secretary-Treasurer Three Rivers Commission.

WM. SMITH, Esq.,

Deputy Minister of Marine and Fisheries, Ottawa.

# APPENDIX No. 22.

REPORT OF THE PILOTAGE AUTHORITY OF NORTH SYDNEY, C.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

NORTH SYDNEY, 1st Feb., 1892.

SIR,—I have the honour of enclosing you the Harbour Commissioners' report for 1891, which I trust you will find in order.

I have the honour to be, sir,

Your obedient servant,

GEO. W. WILSON.

WILLIAM SMITH, Esq., Deputy Minister of Marine, Ottawa.

# REPORT OF THE HARBOUR COMMISSIONERS OF NORTH SYDNEY, C.B., FOR 1891.

30th January, 1892.

Hon. Chas. H. Tupper, M.P.,
Minister of Marine and Fisheries,
Ottawa.

SIR,—In accordance with the provisions of section 4 of 42 Victoria, chapter 30, we have the honour to submit our report for the year 1891. There is a continued increase in the coal shipments, as will more fully appear by reference to the harbour master's report annexed.

The coal shipments for the harbour last year reached 551,200 tons as against 147,051 tons in 1879. The tonnage arrivals for the year were 515,215 tons, compared with 245,220 in 1879. Of the above tonnage 175,353 tons paid 1 cent per ton dues. The vessels clearing for Victoria, International and Sydney are exempted from harbour dues.

During the year a large quantity of stone was deposited on the eastern side of the deep water works on the North Bar, and a considerable space filled in at a very small cost, which filling tends to protect the harbour from the wash of the North Bar. The commissioners being now in funds purpose repairing the breach between these works and the shore during the coming season.

The receipts and disbursements for 1891 were as follows:-

Receipts.	\$ cts.	DISBURSEMENTS.	8	cts.
To Cash on hand from last year		By Harbour master's salary, G.B. Moffatt do boat-hire A. C. Bertram's account, printing. Chas. Cann's acct., handling ballast. Phil. McDonald's account, handling ballast. John McDonald's account, working on breakwater. Kenneth McQuinn's account, working on breakwater. Ed. McDonald, wheelbarrow box. 1 shovel. Stationery, 1 book Chairman's account, M. J. Phoran, salary. J. R. Lithgow's account, for interest. Bank charges, remitting. Secretary's account, G. H. Dobson, salary. Treasurer's account, W. H. Moore, commission on \$1,753.53, at 5 per cent. Balance.	222 6 200 10 1144 0 0 0 150 210 0 250	00 00 75 25 00 40 50 80 35 00 00 052
	3,022 76		3,022	
To Balance	1,798 52			

We have the honour to be, sir,

Your obedient servants,

M. J. PHORAN, M. C. MOORE, GEO. H. DOBSON. HARBOUR MASTER'S REPORT, 1891.

(Mass of Vosco)		1881.		1882.		1883.	Ä	1884.		1885.		1886.	18	1887.	17	1888.	-	1889.	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	1890.	-	1891.
1000	Z.	Tons.		No. Tons.	Z <sub>o</sub>	Tons.	Z.	No. Tons.	No.	No. Tons. No. Tons.	No.		No.	Tons.	Z S	No. Tons.	Z o	Tons.	No.	Tons.	No.	Tons.
Ocean steamers	253	250,470	174	178,566	217	212,467	27.1	240,674	240	253 250,470 174 178,566 217 212,467 271 249,674 240 226,468 289 241,849	289		392	292 280,943		335 259 493		493 379 903	198	301 330 164		996 989 460
Coasting steamers	23	55 25,703	128	86,759	178	40,732	121	35,303	17	17,475	7.2		83	19,810		26,191		19.480	3	91 774		302, <del>1</del> 03
Ships	6	11,076	ಬ	5,989	Ξ	10,480	11	13,148	2	5,523	ಹ	7,151	<u> </u>	7,528	9	8,238					3 6	
Barques	136	44,753	110	62,380	135	53,157	159	80,039	133	62,827	150	73,219	110	49,056	28		8	36,921	_		, 15	47.00
Brigantines	125	25,854	185	45,969	149	36,186	189	36,587	166	33,998	88	19,368	102	18,323	109	18,301			8		5 2	17,000
©Schooners	439	35,226	498	75,829	928	64,878	856	63,429	202	54,226	198	62,988	672	52,868	591	51,272			1118		568	
Totals	1017	410,082	1100	455, 492	1486	417,900	1607	469,189	1317	100,557	1468	0,082 1100 455, 492 1486 417,900 1607 469,189 1317 400,557 1468 420,619 1264 428,528 1279 395,505 1444 510,803 1815 549,639 1534 515,215	264	28,528	1279	395,505	1444	510,803	1815	540,630	1 253	115,21
Number of seamen	7	10,147	17	11,927	-	14,279	13	15,730	1 2	15,014	1 2	14,803	13,	13,313	-  15	15.776	_  =	18 846	-  5	1 L	-  ;	_   8

#### COAL EXPORTS.

THE following is a Statement of the Coal Shipments from the Harbour, embracing all the Mines, since 1881.

Year.	Sydney Mines.	Victoria.	Inter- national.	Old Bridgeport.	Reserve.	Totals.
1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890.	133,135 133,623 131,673 131,339 105,124 122,000 147,000 125,000 150,000 144,000	154 10,408 41,066 46,745 65,000 78,000 88,900 75,000 94,000	78,285 102,927 96,997 80,798 63,750 105,590 103,000 102,000 123,666 135,000 128,000	3,045 12,290 12,500 12,000 25,000 26,000 26,000 32,000	68,884 74,432 104,777 86,550 74,183 84,500 81,500 105,000 106,771 140,000 153,200	285,304 310,982 333,601 312,140 296,413 371,335 408,500 440,000 469,337 526,000 551,200

#### PORT OF NORTH SYDNEY.

COMPARATIVE Statement showing the dates of the Closing and Opening of Navigation, also the first Arrival from, and the last Departure to Sea, for the period of eleven years.

Year.	Closic of Naviga	•	Open of Naviga		Las Depart		Fire Arri	
1882 1883. 1884. 1885.	do January February do	27 19 16 22 28 21	March April do do do March do	2. 28 22 24	do do February do January do do	19 24 16 15 15 27 27 27 27	May April do do do do do March	1 2 1 27 25 15 28 7 30 30 15

The buoys were taken up 5th January, 1891, and put out 22nd May, 1891.

GEO. B. MOFFAT, Harbour Master.

## APPENDIX No. 23.

#### REPORT OF PORT WARDEN, MONTREAL.

MONTREAL BOARD OF TRADE, OFFICE, 10 St. John Street and 39 St. Sacrament Street, Montreal, 6th January, 1892.

Hon. CHAS. H. TUPPER, Minister of Marine and Fisheries,

SIR,-I have the honour, by direction of the council of this board and in compliance with section 31 of the Act governing the port warden office, 45 Vic., chap. 45, to transmit herewith documents as follows:-

1. The port warden's report for the year 1891.

2. Audited statement of receipts and expenditure of the port warden office for year ended 31st December, 1891.

3. Statement of investments of the port warden surplus funds.

I have the honour to be, sir, Your obedient servant,

GEO. HADRILL

Secretary.

OFFICE OF THE PORT WARDEN, Montreal, 31st December, 1891.

The President and Council of the Board of Trade, Montreal:

GENTLEMEN. -I have the honour to lay before you the annual report, with state-

ment of receipts and expenditure, for the year 1891.

Navigation opened on the 28th April with the arrival from sea of the s.s. "Charrington," and on the 28th May the ship "Jan Melchior," the first of the sailing fleet, arrived. Three hundred and fifty-three vessels of all kinds entered at this office, ten less than last year, with, however, an increased tonnage of 5,443, the total being 657,651 tons. The steamship "Cremon" came inwards by the Strait of Belle Isle on the 29th June, the first of the season's fleet by that route, and reported the usual presence of ice. The s.s. "Lake Winnipeg" cleared on the 21st November, the last sea-going vessel to leave the harbour. None of our spring fleet received any material damage by ice, and it is again satisfactory to report that all the vessels loaded here arrived safely at their destination, except one stranded on the Newfoundland coast.

In the duties of my office I have been efficiently aided by my staff, and to the best

of my knowledge the work has been done to the satisfaction of the shipping interest.

The shipment of grain has largely increased. There were 12,188,642 bushels wheat, pease, barley, rye and oats, an increase of 8,269,623 over last season, when the shipment was 3,979,019 bushels. The quantity of corn compares unfavourably, the reduction being 2,849,933 bushels, the total amount showing 2,146,577 bushels as against 5,096,510 in 1890. The decrease in lumber is very marked, partly the result of the almost total col

lapse of the South American trade. In 1890 the quantity shipped was 162,565,353 feet, this being the largest output ever made from our port. The decrease this year is 49,-

289,702 feet, reducing the shipment to 113,275,651.

The number of oxen and horses shipped was 110,169 and of sheep 32,034, a reduction of 9,152 of the former and 10,707 of the latter this season. Butter, meats and cheese are also diminished to the extent of 8,747 tons. Apples show the large increase of 134,482 barrels, and flour 53,933 barrels. Of the former there were, in 1890, 182,-263 barrels; of the latter, 533,948 barrels.

The receipts of the office from all sources have decreased \$260.65, the total being

\$8,137.44 for the present year and \$8,398.09 for 1890.

Statements are being constantly made to this office by masters of vessels and others interested in shipping, that in other ports the system of lining and its expenses are much less than here. It will be well, therefore, to have this matter looked into and statements asked for from other ports as to what means are used for lining, and also for securing grain by feeders or bags. The record of this office proves our system to be a good one, but if it is more onerous than necessary and is a bar to vessels coming to Montreal it may be advisable to relax some of the provisions of the Act, should your council deem it expedient.

The very tempestuous weather on the Atlantic during the past season has been the cause of much damage to inward goods, this, in a great measure, owing to cargoes being distributed over the much larger size of vessel now employed in the trade. It is, therefore, desirable to call the attention of owners of vessels trading here to the necessity of a more careful system and closer supervision of stowage so as to prevent "shifting," which is the main cause of the damage, and is invariably taken advantage of by "extend-

ing the protest," thereby relieving the vessel of responsibility.

The system adopted here in the cattle carrying trade refutes the objections raised by its opponents, as, with the exception of a few vessels which lost heavily during unusually severe weather on the Atlantic, mortality has been very trifling, and will compare favourably with that of any other cattle shipping port.

I am, gentlemen,

Your obedient servant,

JAS. G. SHAW,

Port Warden.

OFFICE.	
WARDEN'S	
PORT	

	ا ا	ġ ,		7,561 12 3 40 8,000 00 3,722 38		19,286 90	
C <sub>R</sub> .	ato	88		1		19,28	AW, Port Warden.
	64			3,515 91 206 47			IW,
STATEMENT of Receipts and Expenditure, for year ending 31st December, 1891.		y Paid salaries, &c.— Jas. G. Shaw, Port Warden Geo. W. Morrison, Deputy Port Warden	M. J. Anderson, book-keeper. E. J. Hunt, clerk. Wm. Palmer, boy. Board of Trade secretarial expenses. Port Warden's superannuation allowance— Jas. G. Shaw, Port Warden Geo. W. Morrison, Dpt. Port Warden Rent, fuel, taxes, light, &c Isolyd's registers, &c Books, printing and stationery. Cab-hire. Miscellaneous expenses. Office furniture Alf. W. Hadrill, auditor.	Outstanding account Treasurer, Board of Trade—For investment Balance, cash in banks.  do Port Warden's hands			JAS. G. SHAW
e, for year e	1891.	Dec 31 By					& O. E.
penditur	es cts.	7,407 39			8,137 44 175 69 3,566 38	19,286 90	떮
ts and Ex	e cts.	7,240 99 166 40	448 31 171 52 1,101 69 88 10	166 166 153 151 151 167 173 173 173 173 173 173 173 173 173 17			
STATEMENT of Receip		Dec. 31 To Balance, cash in banksdo in Port Warden's hands	Receipts derived as under—6,283,991 bushels whea <sub>1</sub> . 1,918,577 do peas. 3,283,289 do rye and barley. 692,785 do orn. 2,146,577 do corn. 1,55 fons oil cake. 2,888 tons minerals. 597,881 barrels flour and meal. 1,521 do ashles. 116,745 do apples. 110,169 oxen and horses. 32,034 sheep.	8,306 do do 2c. 15,363 do phoephate. 113,275,651 feet lumber. Port Warden's fees, inwards. do outwards. Special surveys.	Interest on deposit in Montreel City and District Savings Bank.  Cash from Treasurer, Board of Trade— Interest on investments, 1891.  City of Montreal Corporation— Bonds matured	To Balance	Audited and found correct. ALF. W. HADRILL, Auditor. Montreel, 4th January, 1892.
Dr.	1890.	Dec. 31		7		1892. Jan. 17	Audi ]

STATEMENT of the investments of the surplus funds of the Port Warden's Office at Montreal, and of interest accruing therefrom, during the year ended 31st December, 1891.

I	ate.		${\bf Investments.}$		Aı	mount.	-	Inter	est.
Jan.	12,	1877	Expended \$2,044 in purchase of City of Montreal Corporation Bonds, Nos. 00423, 00424, 00425, 00426—4, at \$500  The above bonds matured 1st Nov., 1891, and the proceeds, \$2,000, were deposited in Port Warden's current account.	\$2,000	at 6 ;	p. c. for 12	mos.	\$ 120	cts.
Feb.	16,	1880	Expended \$2,380.34 in purchase of Dominion Gov-	\$2,300	a + 4	do			00
Aug.	16,	1880	ernment Stock	<b>⊕</b> 2,300	24 U 12	ao	• • •	92	. 00
Apr.			Expended \$5,031.34 in purchase of City of Montreal	\$7,000	at 5	do	• •	350	00
Mar.	14,	1887	Expended \$10,320.75 in purchase of City of Mon-	\$5,000	at 4	do		200	00
			treal Consolidated Fund Stock, Class C-100 shares of \$100 each	\$10,000	) at 4	do		400	00
Nov.	2,	1888	Deposited in Merchants Bank of Canada, \$10,000	,				200	•
			on Deposit Receipt No. 13,881, at 4 per cent *Temporary loan to Board of Trade Building Fund, consisting of \$5,000 previously on deposit receipt in Merchants Bank, together with accrued interest thereon to 15th Oct., 1890, \$155.62; and	1890,		rom 30th rd Nov., 1		404	38
			interest \$10,000 now on deposit receipt in Merchants Bank, to 30th Oct., 1890, \$327.68.  *Additional loan to Board of Trade Building Fund, consisting of cheque withdrawn on 18th Nov.,	\$ 5,48	3 30				
			1891, from Port Warden's current account		00 0				,
			Total of surplus fund	\$47,78	3 30	Interest.	1891	1,566	38

<sup>\*</sup> These loans with the interest thereon will be repaid during 1892.

H. MONTAGUE ALLAN,

Treasurer. GEORGE HADRILL,

Secretary.

Office Montreal Board of Trade, 5th January, 1892.

## APPENDIX No 24.

# REPORT OF THE PORT WARDEN AT QUEBEC.

QUEBEC, 18th January, 1892.

SIR.—I beg respectfully to submit a copy of the annual statement of the Port Warden Office for the year 1891, which was also submitted to the Board of Trade on the 14th December, 1891, as required by section 30 of the Port Warden Act.

As you will see it shows a considerable falling off in the earnings of the office. The net earning during 1890 were \$426, while this year they were only \$283, but the report will speak for itself :---

> PORT WARDEN'S OFFICE, Quebec, 14th December, 1891.

WM. SMITH, Esq., Deputy Minister of Marine and Fisheries, Ottawa.

SIR.—As required by section 30 of the Port Warden rules, I beg respectfully to submit the following copy of annual statement of the business transacted in the office during the year ending 31st December, 1891, as follows:—

Thirty-nine steamships were surveyed for clearance outwards, after taking on board part cargo at this port, having previously loaded part cargo of grain and other goods at Montreal. Vessels not carrying grain do not come under the Port Warden rules, and therefore are not included in this statement.

Two steamships and nine sailing vessels had their hatches and cargoes surveyed by the request of the captain or agent, on their arrival from sea.

Two steamships were surveyed and valued for general average purpose.

Two steam tugs were surveyed and valued.

One sailing vessel was surveyed and found unfit to go to sea and not worth repair-She was condemned and afterwards broken up.

One steamship and four sailing vessels were surveyed for seaworthiness and were

found fit to proceed to sea.

One steamship was surveyed for damage for stranding, and afterwards for repairs in graving dock where permanent repairs were made.

Two sailing vessels and three lighters were surveyed for collision. Eight surveys were held on goods landed in a damaged state.

Four lots of goods were surveyed after being saved from a wreck, the s.s. "Circe." totally wrecked on Anticosti; and two surveys were held on wharves, damaged by steamers running into them.

The receipts and expenses of the office were as follows:-Receipts from all sources.....\$ 583 00 Expenses of office.... Balance net receipts.....\$ 283 00 Owing to the dullness of trade and the small number of accidents to vessels in the River St. Lawrence this season, the business of the office has been reduced and the receipts have fallen off from last year to the amount of \$259.

Only two steamships were seriously damaged by stranding this season.

The "Tiber" on the Bird Rocks on the 25th July; she came to Quebec, and was permanently repaired in the graving dock under the Port Warden.

The s.s. "Bangor," stranded on White Island on the 25th August, was brought to Quebec and fully repaired in Mr. G. T. Davie's dock without the Port Warden survey.

Four other steamships were surveyed for grounding or other slight damage, also

without the Port Warden survey.

One sailing vessel, the "Rapid," 325 tons, was wrecked at Mille Vaches and was condemned and sold. She was afterwards brought to Quebec and fully repaired and reclaped in Russell's dock.

One steamship and three sailing vessels were totally lost in the gulf and river St.

Lawrence this season.

The British s.s. "Circe,"  $\frac{23+3}{5+3}$  tons was totally wrecked at Cape East Anticosti, on the 18th July, while on her voyage from Glasgow to Montreal with a general cargo.

The Norwegian barque "Statsrad Langa," 658 tons, was totally wrecked on Bird Rocks on the 27th June, while proceeding from the Saguenay to Melbourne with a cargo of deals.

The Norwegian barque "Nystad," 456 tons, was wrecked at Grand Metis by driv-

ing from her moorings ashore while loading, and was condemned and sold.

The Norwegian barque "Anna," 542 tons, was wrecked on S. W. Point Anticosti while proceeding from Quebec to Great Britain with a cargo of timber and deals. She is a total wreck, and the crew returned to Quebec.

The whole respectfully submitted by your humble and obedient servant.

W. SIMONS.

Port Warden

WM. SMITH, Esq.,

Deputy Minister of Marine and Fisheries, Ottawa.

#### APPENDIX No. 25.

PORT WARDEN'S OFFICE, HALIFAX, N.S., 31st December, 1891.

SIR,—I have the honour to submit my report for the year ending 31st December, 1891, accompanied by a statement of the receipts and expenditure during that period.

Surveys have been held by me on seven steamers and twenty-eight sailing vessels which arrived in a damaged condition during the year. The Argentine barque, "John Black," of Buenos Ayres, put into this port in a leaky condition on 31st October while on a voyage from Brunswick, Ga., bound to Chatham, G.B., with a cargo of pitch pine. Upon examination it was found that the cost of repairing the vessel would exceed her value after the repairs had been effected. The vessel was subsequently sold at auction by direction of the owner. The cargo is still here awaiting instructions from the parties interested as to its disposal. All the other vessels were properly repaired, and those of them bound to other ports with their cargoes have arrived safely.

Fifteen steamers bound to Great Britain loaded grain as a portion of their cargoes during the year. The total amount of grain shipped was: 23,898 bushels of wheat, 331,810 bushels of oats, 79,750 bushels of barley, and 213,209 bushels of pease.

No irregularities in connection with the office occurred during the year.

I have the honour to be, sir.

Your most obedient servant,

DAVID HUNTER,

Port Warden.

WM. SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

RECEIPTS and Expenditure of the Port Warden, Halifax, N. S., from 1st January Dr. to 31st December, 1891. Cr.

\$ To amount of fees received		By paid assistants, office expenses, &c. Amount reverting to Port Warden.	}	38
-------------------------------	--	------------------------------------------------------------------------------	---	----

I hereby certify that the above is a true and correct statement of the receipts and expenditure of the Port Warden at Halifax, N.S., during the year 1891.

DAVID HUNTER.

Port Warden.

Halifax, N.S., 31st December, 1891.

# APPENDIX No. 26.

REPORT OF PORT WARDEN OF BURRARD INLET, B.C., FOR YEAR ENDING 31st DECEMBER, 1891.

1891.			
Jan. 17.—Surveyed hatches of s.s. "Abyssinia," and found			
	\$ 10	00	•
Feb. 10.—Surveyed hatches of s.s. "Parthia," and found			
them in good order	10	00	
do 12.—Called to survey on damaged cargo on s.s.			
"Parthia" on voyage from Yokohama to this			
port. I found that the cargo was considerably			
chafed and broken, caused by the rolling of			
the vessel during a severe storm, which also			
damaged the vessel to some extent by the			
shipping of heavy seas, breaking in the after			
house and causing the decks to leak. I found			
the cargo well stowed and dunnaged, and con-			
sider the vessel not liable, as the whole			
damage has been caused by stress of weather			
on the passege to this port	16	00	
Mar. 6.—Surveyed hatches of s.s. "Batavia," and found			
them all in good order	10	00	
do 3.—Surveyed hatches of American barque "Spartan,"			
Capt. Anderson, from Manilla, and found all	_	00	
in good order	Ð	00	
do 25.—Surveyed cargo of American barque "Spartan,"			
and found on breaking open of cargo that con-			
siderable damage had been done by salt water			
leaking from the decks; the vessel had been			
strained badly, more especially around the			
mainmast, and pump opening seams around bitts and mast-coats and abreast of after-hatch			
on starboard side; the vessel having been			
in a severe typhoon in the China seas, and			
continuous gales during the whole passage,			
thereby causing the damage. I found the			
cargo had been well stowed and dunnaged,			
and every care taken to ensure the safe			
delivery of the same; the vessel had been			
well pumped, as no signs of water below had			
touched the cargo, and I consider the vessel			
not liable for the damage, as the whole has			
been caused by stress of weather on the pas-			
sage to this port	16	00	
April 28.—Surveyed hatches of s.s. "Empress of India,"			
and found all in good order	10	00	
222			
<b></b>			

May	9.—Called to survey cargo on board s.s. "Empress of		
	India"; found the same had been well stowed		
	and dunnaged, and every care taken to deliver		
	in good order; a few of the cases were crushed and broken by the heavy rolling of		
	the ship, but consider her not liable, as the		
	cases are so fragile and easily broken by extra		
	pressure	16	00
May	20.—Surveyed the hatches of British barque "Orde-	10	00
May	vic," and found them properly covered and in		
	order	5	00
do	28.—Surveyed hatches of s.s. "Parthia," and found		
	all in good order	10	00
do	30.—Surveyed cargo of s.s. "Parthia," and found the		
	same to be well stowed and dunnaged and the		
	cargo delivered in good order and condition,		
	and every care taken in handling to wharf,		
	with the exception of a few cases of China		
	merchandise leaking and slightly broken, but		
	consider the vessel not liable, as the cases are	10	00
-	too slight to hold contents	16	00
June	15.—Surveyed hatches of British ship "Besnard," and found them in good order	5	00
۵.	23.—Surveyed hatches of s.s. "Empress of Japan,"	J	00
do	and found them in good order	10	00
July	20.—Surveyed hatches of s.s. "Empress of India,"	10	00
July	and found them in good order	10	00
do	21.—Surveyed hatches of American ship "J. B.		••
uo	Walker," from Japan, and found them in good		
	order	5	00
Aug.	11.—Surveyed hatches of s.s. "Parthia," and found		
O	them in good order	10	00
do	12.—Surveyed hatches of the ship "Morayshire,"		
	from Glasgow, and found them in good order	5	00
$\mathbf{do}$	13.—Surveyed hatches of s.s. "Grandholm," of		
•	Liverpool, England, and found them in good		00
,	order29.—Surveyed hatches of s.s. "Empress of Japan," and	Э	00
do	found them in good order	10	00
O1	2.—Surveyed damaged cargo, ex s.s. "Empress of	10	00
Sept.	India," from Yokohama, landed in warehouse,		
	and found that a portion of the cargo had		
	been badly stained from sweat, taken out of		
	No. 3 hatch, the whole of which has been un-		
	avoidable, on account of the bad weather ex-		
	perienced on the passage to this port, and I		
	consider the vessel not liable, as the cargo has		
	been well stowed and dunnaged and every		
	care taken to deliver in good order	16	00
do	22.—Surveyed hatches of s.s. "Empress of China,"	10	00
	and found them in good order and condition.	10	00
do	24.—Surveyed the hatches of American ship "Benja-		
	min Sewell," on arrival from Japan, and found them properly covered and in good order	F	00
٦,	24.—Surveyed wreck of steamer "Alpha," of Vancou-	3	UU
do	ver, B.C., and called Captain W. H. Copp to as-		
	223		
	420		

Oct.	sist in said survey. We find the vessel lying nearly submerged at half-tide and her back broken and the timbers completely burned out, the vessel having caught fire, and had to be beached to save the lives of those on board. The vessel is a total loss, and we advised the captain to sell the vessel at public auction, as she then lay, for the benefit of all concerned. The position of the vessel was about one mile from the mouth of False Creek, on the south side of English Bay	16	00
	the damaged cargo	16	00
	Port Warden.		
	CAPT. GEO. RUDLIN, H. MELLON,		
Oct.	Am. Lloyds' Surveyor 15.—Surveyed hatches of ss. "Empress of Japan"	•	
do	and found them in good order	10	00
	of Japan," damaged whilst on the voyage to this port. I found that a number of cases of tea were damaged by water caused by the straining of one of the waste water pipes, and also some cases crushed and broken, caused by the heavy rolling of the vessel encountered in a typhoon whilst on passage to this port. I found the vessel had been well stowed and dunnaged and every care taken to deliver in good order, and I consider the vessel not liable, as the whole damage has been caused by		
do	stress of weather	16	00
40	"Olga," from Yokahama, and found them in	_	00
do	good order	5	00

16 00

M. W. THAIN,

Port Warden.
CAPT. B. SEWELL,
H. MELLON,

Am. Lloyds' Surveyor.

5 00

31.—That the undersigned was called to survey the do American ship "Hecla," Capt. Cotton, from Japan, with a cargo of tea. We find that considerable of the cases of tea have been stained by sweatage on the top tiers, caused by want of ventilation as the hatches could not be opened without endangering the cargo, on account of wet and stormy weather. We also found several cases of tea wet by salt water in the lower hold, abreast of main mast, on the starboard side, caused by the straining of We found that the cargo has channel bolts. been well stowed and dunnaged, and consider the vessel not liable, as the whole damage has been caused by stress of weather on the passage to this port, and we advise that the damaged cargo be forwarded to its destination, so as to avoid any further loss to whom it may concern.....

16 00

M. W. THAIN,

Port Warden.

H. Mellon,
Am. Lloyds' Surveyor.

Nov. 7.—Surveyed the hatches of the British barque "Hawthornbank," on arrival from Java, and found the main and after hatches properly covered with tarpaulins and in order; the fore hatch was opened to get gear out.....

5 00

do 25.—That I surveyed the hatches of the British ship
"Hawthornbank," Capt. Porter, on arrival
from Java with a cargo of sugar; and found
the main and after hatches were properly
covered and in good order. The fore hatch
had been opened to jetson a portion of the
cargo, to righten the vessel, she having been

thrown on her beam ends during the passage to this port. I also found the cargo was considerably damaged by salt water from leakage from the decks and waterways, especially on the starboard side; the cement being broken and showing leakage fore and aft. The cargo had settled, causing the baskets to fall through the 'tween deck beams, and causing a great amount of chafage to the same; on breaking out the ground tier, I found the whole of the starboard belge had been washed out with salt water, showing that the vessel had been on her beam ends with at least three feet of water in her hold. I found the vessel had been well matted and dunnaged; and consider the vessel not liable, as the whole damage has been caused by stress of weather; and I would advise a further survey of vessel. to ascertain if any damage was done to vessel, before proceeding to sea again.....

16 00

M. W. THAIN, Port Warden.

H. MELLON,

Am. Lloyds' Surveyor.

Dec. 2.—Surveyed hatches of s.s. "Empress of China," and found them in good order......

10 00

do 2.—That I was called to survey damage to cargo on board s.s. "Empress of China." I find that a number of bales of silk had been damaged by water and chafage; the deck abaft number three hatch had been strained, causing them to leak slightly; the vessel having encountered a storm with heavy seas which flooded decks, and stove boats on the port side, and caused an amount of breakage and chafage to the cargo; and as the whole damage has been caused by stress of weather and was unavoidable, and as every care had been taken in the stowage and matting, I consider the vessel not liable, and advise the damaged cargo to be forwarded to its destination, to the account of whom it may concern.

16 00

Office rent from 1st January to 31st December, 1891, being 12 months at \$6 per month......

72 00

Total....

\$290 00

M. W. THAIN,

Port Warden.

Declared before me, this 4th day of January, 1892. HENRY A. MELLON,

I. P.

## APPENDIX No. 27.

REPORT OF PORT WARDEN OF VICTORIA, B.C., FOR YEAR ENDED 31st DECEMBER, 1891.

VICTORIA, B.C., 9th January, 1892.

SIR,-I have the honour herewith to enclose the annual returns for the office of the

Harbour Master and Port Warden for the port of Victoria and Esquimalt.

And should any inconvenience have occurred by these returns being late, it is not my fault. I wired in time to get the new forms, but only received one enclosed with a circular from the Deputy Minister of Marine, consequently I had to make the report on the old form.

I have the honour to remain, sir,

Your obedient servant,

M. C. CLARKE,

Harbour Master and Port Warden.

Wм. Sмітн, Esq., Deputy Minister of Marine, Ottawa.

VICTORIA, B.C., 9th January, 1892.

The annual report of the Port Warden for the ports of Victoria and Esquimalt for the year ending 31st December, 1891.

Surveys on hatches..... \$ 85 00 cargoes .....

\$295 00

W. R. CLARKE.

Port Warden.

WM. SMITH, Esq., Deputy Minister of Marine, Ottawa.

# APPENDIX No. 28.

REPORT OF THE PORT WARDEN OF PICTOU, N. S., FOR THE YEAR ENDED 31st DECEMBER, 1891.

Pictou, N.S., 31st December, 1891.

Sir,—I have the honour to herewith submit my annual report as Port Warden of this port, for the year ending this date.

Amount of fees received	
	\$82 00

WM. McLAREN, J. P.

· Respectfully submitted,

Sworn before me at Pictou, this 31st day of December, A.D. 1891. DANIEL McDONALD.

The Deputy Minister of Marine, Ottawa.

## APPENDIX No. 29.

REPORT OF THE PORT WARDEN OF SYDNEY, C.B., FOR THE YEAR ENDED 31st DECEMBER, 1891.

RECEIPTS and Expenditure of the Port Warden, Sydney, Cape Breton, from 31st December, 1890 to 1891.

	Amount.		Amount.
For survey on steamers for bunker coals, entered in my office	\$ cts. 320 00 24 00	By fees paid to assistants Office rent and stationery	\$ cts. 90 00 40 00
	344 00	Amount reverting to Port Warden	130 00 214 00 344 00

I hereby certify that the above is a true and correct statement,

JOHN LOMAY,

Port Warden.

PORT WARDEN'S OFFICE, SYDNEY, C.B., 31st December, 1891.

SIR,—I have the honour to submit a report of the transactions in connection with the office of Port Warden at Sydney, Cape Breton, ending the past year.

I have the honour to be, sir,

Your most obedient servant,

JOHN LOMAY,

Port Warden.

Hon. C. H. TUPPER,
Minister of Marine and Fisheries,
Ottawa.

## APPENDIX No. 30.

PORT WARDEN'S Report for the Port of St. Andrews, ending 31st December, 1891.

Date.	<del></del>	Amount.
February 4th . do 11	Schooner H. R. Emmerson, survey on hatches	\$ cts.  2 50 2 50 2 50 2 50 2 50 2 50 2 50

John Wren, Harbour Master, personally appeared before the undersigned at St. Andrews, County of Charlotte, and Province of New Brunswick, and made oath and sayeth that the above account is just and true to the best of his knowledge and belief.

JOHN S. MAYER, J.P.

St. Andrews, N.B., 2nd January, 1892.

# APPENDIX No. 31.

REPORT OF PORT WARDEN OF NORTH SYDNEY, C.B., FOR YEAR ENDED 31st DECEMBER, 1891.

PORT WARDEN'S OFFICE, NORTH SYDNEY, C.B., 15th January, 1892.

WM. SMITH, Esq., Deputy Minister of Marine, Ottawa.

SIR,—I have the honour to report as follows:—
During the past season I have held the following surveys:—23 sailing vessels, 9

The above vessels were principally arrivals in a damaged condition, and received

repairs at this port.

 The total fees received were
 \$386 00

 The expenses of the office were
 50 00

 Leaving total net fees received
 \$336 00

I have the honour to be, sir, Your obedient servant,

DANIEL McKAY,

Port Warden.

# APPENDIX No. 32.

REPORT OF THE PORT WARDEN OF PORT HAWKESBURY, FOR THE YEAR ENDED 31st DECEMBER, 1891.

PORT HAWKESBURY, 31st December, 1891.

SIR,—I have the honour to submit my annual report of the doings of this office, accompanied by a statement of the fees collected by me, and also the attendant expenses during the past year. Enclosed please find a list of vessels arriving at this port in a damaged condition on which surveys have been held during the year 1891 just ended.

The damaged vessels were all repaired here and arrived safely at ports of destina-

tion.

I have the honour to be, sir,

Your obedient servant,

D. W. HENESEY,

Port Warden.

Wm. Smith, Esq.,
Deputy Minister of Marine,
Ottawa.

STATEMENT of Receipts and Expenditure of the Port Warden's Office at Port Hawkesbury, for the year ending 31st December, 1891.

Year.	Receipts and Expenditure.	Fees received.	Paid Assistants.
1891.		\$ cts.	\$ cts.
May 11.	To fees for surveys on schooner "Annie Gatz"do do "Cepola"	23 00 13 00	10 00
Sept. 11 do 11	do do "Lady Franklin"	23 00 23 00	10 00 10 00
Oct. 2 do 31	Surveys on cargo of schooner "Clifton"	8 00 15 00	5 00
Dec. 31	Fees on hull of "Thomas Robertson".	23 00	10 00
	•	128 00	45 00

I do hereby certify that the above is a true statement of the receipts and expenditures of the Port Warden's Office of Port Hawkesbury, for the year ending 31st December, 1891.

W. D. HENESEY,

Port Warden.

PORT HAWKESBURY, 31st December, 1891.

		J	1101 11 (1100)				
Name of Vessel.	Rig.	Where from.	Where bound.	Port of Registry.	Descrip- tion of Cargo.	Master's Name.	Nature of damage received.
1891. Jan. 19. Annie Gatz	Schooner	Schooner., Prince Edward Halifax	Halifax	Halifax	Produce	John Weston	Halifax Produce John Weston Was in collision with the schooner "Birdie," of Lunenhure, whilst lying at another in
May 11. Cepola	op	·· op	Boston	Shelburne	Potatoes	Potatoes Anthony Giffin	Port Hawkeebury.  Was damaged by heavy drift ice in the Strait of Canso and was driven ashore and broke
Sept. 11. Lady Franklin	ep	Bras d'Or Lake, Prince Edward Prince Edward Ballast J. C. Rhude.	Prince Edward Island.	Prince Edward Island.	Ballast	J. C. Rhude	her rudder case, chafing her keel and several of her plank on bottom; repaired here on marine rallway.  Was stranded near the lime quarries in Bras d'Or Lake; had nine plank in her bottom badly chafed and about thirty-five feet of
23 do 11. Soudan3	Э	Port Wood	St. John's, Nfld.	Halifax,	Cattle	Angus McDon- ald.	Fort Wood St. John's, Nfid. Halifax, Cattle Angus McDon-Was replaced here.  ald. Angus McDon-Was replaced here.  C.B. whilst loading cattle for St. John's, Nfid.; was considerably damaged in hull
Oct. 2. Flora Bell	: op	. Mabou, C.B	:		:	Gabriel White	and rigging; repaired here and proceeded on her voyage. Was stranded at Mabou, C.B.; her damage
do 31. Clifton	: op	Prince Edward Island.	Edward West Indies St. John, N.B Oats A. D. Munro.	St. John, N.B	Oats	:	slight; was repaired here.  Damaged by grounding on Cascumpec Bar, P.E.I.; was repaired on marine railway
Dec. 31. Thos. Robertson	op	Cow Bay	Prince Edward Prince Edward Coal. Island.	Prince Edward Island.	:	Mark C. Bonnell	Mark C. Bonnell Ground on Kelley's Reef. Bras d'or Lake, C.B., with her cargo of coal; had thirty-five feet of main keel brokes.
	_		,				paired here and proceeded on her voyage.

## APPENDIX No. 33.

REPORT OF THE PORT WARDEN FOR THE PORT OF CHARLOTTETOWN, P.E.I., FOR THE YEAR ENDED 31st DECEMBER, 1891.

PORT WARDEN'S OFFICE,

CHARLOTTETOWN, P.E.I., 31st December, 1891.

SIR,—I have the honour to submit my report of the business of my office during the past year.

Navigation remained open this year later than usual, which enabled vessels to load

with safety and proceed to sea.

I have much pleasure in stating that the shipment of grain from the Island this season to Europe has been more active than the last four years, and the farmers have disposed of their produce at reasonable prices.

I am pleased to say there has been no loss of any grain-laden vessels from the

Island bound to foreign ports this year.

I have the honour to be, sir,

Your obedient servant,

H. P. WELSH,

Port Warden.

WM. SMITH, Esq.,
Deputy Minister of Marine,
Ottawa.

RECEIPTS and Expenditure of the Port Warden's Office, Charlottetown, P.E.I., for the year ending 31st December, 1891.

Date.	Receipts.	Amount.	Date.	Expenditure.	Amount.
1891. Dec. 31	To Fees derived from grain- laden vessels Damaged goods Survey on hatches Other surveys	5 00	1891. Dec. 31	By Expenses of office	\$ cts.  18 16 85 00 188 34

I hereby certify that the above is a correct statement.

H. P. WELSH, Port Warden.

# APPENDIX No. 34.

Table showing the names of Ports proclaimed under certain Dominion Acts, the provisions of which are found in Chapter 86, Revised Statutes of Canada, for the appointment of Harbour Masters; the dates of proclamation; the names of the Harbour Masters appointed; the dates of the appointment of Harbour Masters; the amount which each of their salaries is not to exceed; the amount of fees collected by each of them during the calendar year ended 31st December, 1891, and the overplus, if any, paid into the credit of the Receiver-General.

#### PROVINCE OF ONTARIO.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appoint- ment.	Amount from the fees of office salary not to exceed.	Amount collected in 1891.	Amount paid over to Receiver-General.
Midland	7 July, '91 28 April, '76 22 July, '82 24 March,'83 2 Feb., '77 12 May, '84 4 May, '78 23 Sept., '75	Andrew Lockerbie J. J. O'Connor. Thomas N. Dancey E. Polkinghorn. John Galna Francis Densome. J. J. O'Connor. W. R. Fellowes. W. H. Johnston. Robt. McAdam.	7 July, '91 22 April, '76 22 July, '82 19 March, '83 3 June, '81 6 July, '91 17 Dec., '88 — Oct., '82	400 00 300 00 200 00 200 00 200 00 200 00 100 00 100 00	\$ cts. 92 00 217 50 80 00 137 00 103 00 28 50 56 50 99 70 50 00	\$ cts.

#### PROVINCE OF QUEBEC.

Amherst	14	Sept	'78	John Cassidy.	2 :	Sept.,	78	200	00	12	00	· . • • • •
Bersimis			'91	E. D. Chase 3	1 .	July,	'91	200		30	00	
Carleton				Joseph H. Landry			'81	200				
Chicoutimi				Ainsworth Sturton				200	00	78	50	
Gaspé		Sept.,	'74	Francis J. Eden	3.	April,	<b>'89</b>	<b>500</b>	00	86	50	
House Harbour			'87	Peter Bourgue	9.	Aug.,	'87	200	00	19	50	
Lachine				Vacant								
Matane	19	Oct	'77	G. C. Pelletier1	1.	Aug.,		200		38	50	
Mátia	7	Feb	78	P. F. Leggatt.	7	Feb.,	78	200	00	30	00	
Nour Carliala	25	Wah	'QQ	Dighy Smollett	5	Heh	<b>'89</b>	200	00	2	00	• • • •
New Richmond	115	April.	'82	Henry Lebianc	3.	April.	7821	.200	00	25	00	•• • .
Oak Ray	27	March.	. '80	Jas. D. Sowerby	2.	March.	,'80	200	00			
Pagnehiac	112	Mav.	'77	Hugh Christie2	2.	Mav.	771	150	00	23	00	
Port Daniel	125	March.	. 89	J. Enright   1	1 8	Sept.	'90	200	00	2	50	
Rimouski	5	March.	.'77	Jos. St. Laurent	0.	May,	78	200	00	9	50	
Rivière Quelle	22	July, !	'82	Achilles Fraser	2 .	July,	'82	100	00			
QL MI.	. ຄ	Tam	'QC	Fug Hammand 9	1 1	Thee	'85	200	00	86	50	
9. 7.	W	ithin	the	Alfred Pinsonneault2 Pierre Bellefeuille2	۰.	Masak	200	<b>E00</b>	^	004	*^	
St. John's	H	[arbour	of	Diama Pallafanilla	ο.	March.	,00	000	(V)			104 50
Sorel.	M	iontrea	1.	Fierre Denereume   2	v.	April,	10	300	w	308	DU .	8 50

TABLE showing the names of Ports proclaimed under the Dominion Acts, &c.—Continued.

PROVINCE OF NEW BRUNSWICK.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appoint- ment.	Amount from the fees of office salary not to exceed.	Amount collected in 1891.	Amount paid over to Receiver-General.
				\$ cts.	\$ cts.	8 cts
Bathurst	30 May, '73	James Andrew	23 March, '81	200 00	53 00	
Black's Harbour and	• •			200 00	00 00	
Beaver Harbour	22 Sept., '83	E. W. Cross.	17 Sept., '83	100 00	11 50	l
Buctouche	30 May, '73	Melem Chase	30 July, '90	100 00	10 50	
	30 May, '73	William Mott	9 July, '73	200 00	19 50	
	30 May, '73	John Benjamin Beatty	7 July, '73	100 00	36 00	
Caraquet	30 May, '73	Louis Poirier	17 April, '83	150 00	10 50	<b></b>
Chatham	30 May, '73	Wm. Johnston	25 June, '79	300 00	309 00	90
Cocagne	30 May, '73	John Brooks	7 July, '73	100 00	2 74	
Oalhousie	30 May, '73	Wm. Smith	19 March, '88	200 00	126 50	
Dorchester	30 May, '73	E. Palmer	11 April, '87	200 00	12 50	1
Fredericton	30 May, '73	Vacant				١
Frand Manan, North	18 Sept '76	James A. Pettis	21 May, '88	100 00		
Grand Manan, South	22 Aug., '89	Abel Wilcox	22 Aug., '89	100 00	7 00	١
Freat Shemogue	17 May, '75	Fred. Chapman	21 May, '88	100 00	1 00	l
Harvey	30 May. 73	H. E. Graves	8 July, '84	100 00	41 50	١
Hillsborough	30 May, '73	W. H. Carlisle	20 May, '90	150 00	87 50	
Hopewell Cape	25 Aug., '91		25 Aug., '91	200 00		
Ledge of St. Stephens	30 May, 73	Charles Young	22 April, '76	100 00	[	1
Letete, &c		Jos. Chambers	17 Sept., '83	100 00	4 00	
Little Shippegan and	• ′					
Miscou Gully	1 May. '86	Donald Harper	19 April, '86	100 00	6 00	1
Little Shemogue	5 Sept., '88	Fred. Chapman	5 Sept., '88	100 00	1 00	
Moneton	30 May, 73					
Musquash	26 March. 74	George Rose	16 May. '87	100 00	32 00	
Newcastle		John Niven.	7 July, '73	300 00	166 00	1
North Joggins	30 May. '73	Vacant.			200 00	
Port Elgin & Baie Verte		Jacob Silliker	6 Feb., '78	200 00	74 00	
Pokemouche	7 July, '83		23 June, '83	100 00		
	30 May, '73			200 00	84 00	
		Vacant			02.00	1
Sackville	30 May. '73		28 June. '88	200 00	12 00	1
St. Andrews	30 May. '75	John Wren		100 00	57 00	
	30 May, '73	Alexander Dick	29 Aug., '84		18 50	l.::::
St. Martin's and Quaco.	14 May, '74	Joseph Carson.			8 50	1
Shediac	30 May, 73	Alexander McQueen	19 May. '76		76 50	1
Shippegan	30 May. 75	John DeGrace	10 Aug., '80		8 50	1
Tracadie		Vital Arceno			2 50	
Waterside	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Wni. Riley Copp	3 Sept., '89		8 50	1
West Isles	4 Feb., '79	Thos. K. Parker	4 Feb., '79	200 00	1 5 20	1

#### PROVINCE OF NOVA SCOTIA.

Advocate	15 May,	'80 Samuel Morris	. 10 May, '8	100 00	9 00
Annapolis	12 March	n, '75 William Cummings	16 May, '7	9 200 00	)
Apple River	14 Aug.,	'86 Robt. Fields	. 9 Sept. '9	200 0	20 50
Arichat	22 April.	79 Francis Marmeau	. 6 May. '8	1 200 0	40 50
Baddeck	23 Sept	'75 Vacant		100 00	6 50
		'82 Thos. L. Banks			
Bayfield	11 July.	'79 John McDonald	11 July. 7	200 0	)
Bay St. Lawrence	21 April.	'87 G. Zwicker	21 April. '8	7 200 0	)
Bear River	25 Sept	'74 Robert Austin	. 4 April. '8	100 0	74 50
Beaver Harbour	24 July.	'80 Henry Hawboldt	. 22 Sept. '8	100 0	4 00
Big Harbour	9 June.	'83 Donald McKenzie	28 May. '8	3 100 0	)
Bourgeoise River	1 May.	'86 E. C. Bouchie	. 19 April. '8	100 0	9 50
		'74 Joseph Robins Wyman			
•	,			1	

236

Table showing the names of Ports proclaimed under the Dominion Acts, &c.—Continued.

PROVINCE OF NOVA SCOTIA—Continued.

Name of Port.	Date of Proclamation.	f Name of ama- Harbour Master.				Amount from the fees of office salary not to exceed.	Amount collected in 1891.	Amount paid over to Receiver-General.
				\$ cts.	8 cts.	\$ cts.		
Bras d'Or, including New Campbelltown Cape Canso Cape Negro or North	6 May, '74 6 June, '76	A. Livingston	25 Aug., '91 6 June, '76	200 00 100 00	2 00 117 00	17 00		
East Harbour Chester Cheticamp Clarke's Harbour	18 May, '81 8 Sept., '83 20 April, '76	A. D. Perry Arch. Evans Fulgence Ancoin J. B. Brennan Thomas Tracey	18 May, '81 4 Aug., '83 15 April, '76 1 June. '81	200 00 100 00 100 00 200 00 100 00	21 50 15 00 4 50 14 50 13 00			
Clementsport. County Line to Grand Narrows. Cow Bay. Crow Harbour	9 June. '83	Vacant. Hector McDonald. John Ehler. Arthur Pertus James A. Hughes.			135 00			
D'Escousse. Digby East Bay Fourchier Gaberouse	25 Aug., '83 22 May. '89	Arthur Pertus James A. Hughes. Donald McInnes. Neil McLean John Wm. Hardy.	5 April, '86 22 May, '89	100 00 300 00 100 00 100 00 100 00	38 50 28 50  0 50 2 00			
Glasgow and Cape Bre- ton Pier		Angus McQuarrie	1	300 00	230 50			
Hantsport	quired by Act 27 June, '84 22 March,'81 9 Oct., '84	Edward O'Brien Edward Davison. William Thompson. P. C. Brewer	18 March, '80 27 June, '84 24 March, '81 9 June, '86	1,800 00 225 00 200 00 100 00	1,677 00 202 50 13 00			
Sydney	30 Oct., '80 30 Oct., '89 20 Sept., '90 25 Oct., '76	Michael Neville	30 Oct., '80 30 Oct., '89 20 Sept., '90	300 00 100 00 100 00 150 00	320 00 24 50 2 50 3 50	20 00		
* LaHave or Getson's Cove L'Ardoise, Upper and	12 March, 75	George Henry Zwicker	[	300 00	22 00			
Lower Lingan Liscombe Little Bras d'Or Lake, between McKay's	12 July, '81 18 May, '81	George Burke	12 July, '81	100 00 200 00 200 00	1 00			
Point and Grand Nar- rowsLittle Bras d'Or Lake,	25 April, 34	Peter McLean	25 April, '84	100 00				
from McKay's Point to Washadebuck Rivers. Little Glace Bay Little Narrows and	25 April, '84 3 Aug., '74	Alex. J. NcNeill E. Douglas Rigby	8 May, 84	100 00 200 00	188 00			
Cranberry Point Liverpool Lockeport Louishurg	9 June, '83 19 Jan., '77 18 May, '81 17 March, '79	Norman Matheson Wm. A. Kenny E. A. Capstick. Louis Dickson	19 Jan., 77 18 May. '81		2 00 114 00 44 50 45 00			
Mahana Bay	116 May. '87	Louis Dickson William Heary Begg Finlay Rankin W. A. Pickles Ronald McEachen	116 May. '87	100 00 200 00	101 50 25 50			
McNair's Cove	31 July, '86	Ronald McEachen	21 July, '86	100 00	14 00			

<sup>\*</sup> Note.—The Harbour Master at LaHave imposed a fine for violation of the Harbour Regulations and deposited the amount \$12, to the credit of the Receiver-General.

A. 1892

TABLE showing the names of Ports proclaimed under the Dominion Acts, &c.-Con.

## PROVINCE OF NOVA SCOTIA—Concluded.

Name of Port.	Date of Proclamation.	Name of Harbour Master.	Date of Appoint- nient.	Amount from the fees of office salary not to exceed.	Amount collected in 1891.	Amount paid over to Receiver-General.
Margaret's Bay Margaree Merigomish Meteghan River McNeil's Harbour Musquodoboit New Haven Northport Northwest Cove, Coleman's Cove and Aspo-	26 March, 78 16 July, 75 12 June, 86 26 March, 78 10 Feb., 83 9 June, 83 19 May, 82 9 June, 83 27 June, 82	Urbain Doucette A. Hayman. David Williams. H. A. McLeod John Burns.	9 July, '75 2 Aug., '89 26 March,'78 31 Jan., '83 28 May, '83 19 May, '82 17 Aug., '89	\$ cts. 100 00 100 00 100 00 100 00 100 00 100 00 100 00 100 00 100 00	\$ cts. 27 50 6 00 36 00 3 00 44 00	\$ cts.
Port Hawkesbury. Port Hood Port Ia Tour. Port Lorne. Port Mulgrave. Port Medway Pubnico. Pugwash. Ritcey's Cove. River John. St. Ann's, including Fu-	22 Oct., '73 7 July, '83 6 May, '74 1 May, '77 13 March, '80 16 July, '75 14 April, '81 27 March, '86 8 March, '76 25 June, '72 27 Sept., '82 22 Oct., '84 26 March, '78	Joseph Nelson Parks Vacant. Charles B. Weaver George Hatfield Daniel Henesey John Murphy, jun William Nickerson Samuel Beardsley Duncan Gillis John W. Hutt D. Q. Amireau A. A. Stevens Joseph Ritcey H. Campbell	27 April, '88  1 May, '77  8 April, '91  9 July, '75  9 July, '75  14 April, '81  13 March, '86  23 March, '83  19 April, '84  27 Sept., '82  22 Oct., '73  29 Sept., '84  11 June, '91	200 00 100 00 100 00 200 00 200 00 200 00 200 00 200 00 200 00 100 00 100 00 100 00	5 50 78 00 2 50 3 00 1 00 28 50 15 00 46 50 51 00 50 50	
ches Cove St. Mary's River St. Peter's. Sambro. Sheet Harbour Ship Harbour. Smith's Mountain Tatamagouche. Tidnish. Torbay and Whitehead. Tusket. Victoria Pier, Sydney. Wallace West Arichat. West Port. Whycocomagh.	20 April, '81 18 May, '81 24 Jan., '81 27 Dec., '79 14 May, '74 27 Aug., '77 2 June, '83 27 Feb., '85 5 July, '82 18 May, '81 18 March, '87 22 Oct., '73 20 Aug., '90 8 May, '87 29 Oct., '75 29 Oct., '75	Ben Smith, sen	18 May, '81 17 Sept., '83 23 Dec., '79 6 Dec., '83 22 Jan., '80 2 June, '84 28 May, '73 18 March, '87 30 June, '84 18 May, '81 7 March, '87 25 July, '85 20 Aug., '90 8 May, '84 8 March, '87 8 Oct., '75	200 00 200 00 200 00 200 00 150 00 200 00 100 00 100 00 200 00 100 00 200 00 100 00 200 00 100 00 200 00 100 00 200 00 200 00	9 00 4 00 4 00 52 00 1193 00 2 50 28 00 38 00 6 00 126 50 9 50 21 50 3 50 3 50 3 50 3 50 3 50	

#### PROVINCE OF PRINCE EDWARD ISLAND.

Alberton and Cascumpec 15 July, Bay Fortune. 10 April, Brudenell 25 July,	'85 John A. Gordon, jun	25 July, '85	200 00	<i></i>	
Cape Traverse 23 May,	'84  Vacant.		J		

Table showing the names of Ports proclaimed under the Dominion Acts, &c.—Con.

PROVINCE OF PRINCE EDWARD ISLAND—Concluded.

Name of Port.	Date of Proclama- tion.	Name of Harbour Master.			Amount collected in 1891.	Amount paid over to Receiver General.
				\$ cts.	\$ cts.	\$ cts.
Cardigan River, includ- ing Cardigan Bridge. Cardigan River, from head of river to north	2 0 4.25,	Hercules McDonald	2 July, 78	200 00		· · • · · ·
bank Mitchell River	2 July. 7	Allan Campbell				
	15 May. '8	James D. McMillan				
	15 July. '7	David Small			210 75	
	15 July, '7	Wesley Myers	17 June, '74	200 00	4 00	
	15 July, '7	George Bollum				
Georgetown	15 July, "7	Samuel Hemphill	1 Dec., '87		91 00	
Grand River, down to and including Poplar	10 April, 7	Ronald S. McDonald	10 April, '75	200 00		
Point and Chapel Wharf	10 April, '7	Vacant				
		Alex. Thomson		200 00	0 50	
Miminegash		Michael McElroy			0.00	
Montague Bridge		Daniel C. Campbell			10 00	
		Wm. Millar			1 20 00	
		Hugh McKay			7 00	• • • •
	15 July, '7	George Mackenzie	17 June, 74		3 00	
Pinette	15 July. '7	Vacant	1			
Port Hill	15 July. 7	James Ellis		200 00		
Pownal	10 July. '7	A. A. Moore	10 July, '79	100 00	0 50	l
Rollo Bay	10 April. "7	Vacant				
Rustico	17 May. '7	Geo. W. McKay	12 April, '81	200 00	7 00	
St. Peter's Bay	10 April. '7	John McGrath	28 June, '87			
Souris, East and West	10 April. '7	John McCormick	25 April, '79		1	l
Summerside	15 July. 7	James Grady		200 00	43 00	<b></b>
Tignish		Vacant	01 T			
Tracadie	17 May, "7	Donald Campbell	31 Jan., '81	200 00	1 00	
Tryon	12 April, 7	Vacant.	0.0-4			
Vernon River Bridge		John Finlay		200 00	5 00	
West River	17 May, "7	vacant				
	17 May, "	TINCE OF BRITISH COLU		200 00		

New Westminster	23 Jan	'80	E. Quennell Jas. N. Draper Vacant	18	Aug.,	'86	400 00	63 50	
Vancouver, in cluding Burrard Inlet Victoria and Esquimalt.	22 Feb., 20 March	'88 75',	M. W. Thane. W. R. Clarke	22 33	Feb., March	'81 '81	400 00 600 00	431 00 422 00	31 00

WM. SMITH,

Deputy Minister of Marine.

Ottawa, 1st January, 1892.

## APPENDIX No. 35.

STATEMENT showing results of certain returns respecting Shipping and Discharging of Seamen, received by the Department of Marine in accordance with the provisions of chapter 74, Consolidated Statutes of Canada, from Shipping Masters throughout the Dominion, for the half-years ended 30th June and 31st December, 1891.

Norm.—Names printed in italics are Shipping Masters appointed under the Act, the others the Collectors of Customs who act as Shipping Masters.

QUEBEC.

Name of Port.	Name	Name	For Ha	For Half-year ended 30th June, 1891.	ed 30th	For Ha	For Half-year ended 31st December, 1891.	ed 31st 91.	Total	Total Seamen	Total
	County.	Shipping Master.	Seamen Shipped.	Seamen Dis- charged.	Amount.	Seamen Shipped.	Seamen Dis- charged.	Amount.	Shipped.	Dis-	Amount.
					e cts.			e cts.			e cts.
7 Gaspé.	Bonaventure	John Topping	ZZ	rici:		Kil.	Nil.		Nil.	Nil.	
Magualett Islands Montreal New Carlisle	Montreal Bonaventure	Henry McKay. P. C. Beauchesne	A12 10		305 00 6 20	1,498	1,226	1,116 80	1,910 15	1,556 1,556 11	1,421 80
Percé. Gaspé Quebec. Quebec.	Gaspé Quebec	W. Flynn. J. U. Gregory.	Nii.	N.I.	152 30	Nii. 433	Nil.	267 80	N:i.	Nil.	420 10
Rimouski	Rimouski	J. A. Martin E. D. Philips	i z	ZZ		ri ri	ZZ		N. I	ZZ ZZ	
Three Rivers.	Kichelieu. Three Rivers	Joseph Mathieu P. H. Vanasse	Nil.	Nii.	4 40		7	88		42	4 0 06 08
			NEW	BRUNSWICK	WICK.						
Alma Bathurst	: :	D. Cleveland	Nil.	Nil.	6 70	10 Nil.	Nil.	7 10	21 Nii.	Nii.	13 80
Cocagne Cocagne	Northumberland Kent.	J. J. Brown. A. K. Dysart.	37. Nil.	Nii.		S. I.	Z.S.	27 40	75 Nil.	34 Nil.	
Daihousie Kesugouche Dorchester Westmorelar Fredericton York Grand Manan Charlotte	<b>.</b>	w. Montgomery. Walter Dobson. A. F. Street. E. A. Calder.	NN 18	Nii.	09 :	z <sup>8</sup> zizi	i i i i i	27 60	Nii. Nii. Nii.	N. S. S. S. S. S. S. S. S. S. S. S. S. S.	28 : : 28 : :

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STATEMENT showing returns respecting Shipping and Discharging Seamen, &c.—Concluded.

	For half-year ended 31st December, 1891. Total Seamen Total	Dis- charged.	S Cts.	1,720 1,341 1,262 30 3,534 2,604 2,548 20 11 130 69 50 103 154 97 70 103 154 97 70	6 380 11 9 8	10 16 00 34 10 20 7 10 10 10 22 7 13	4 4 20 6 4 4	Nil. Nil Nil. Nil.	74 20 248 115 156	03 02 90 198 120 150 150 150 150 150 150 150 150 150 15	29 22 70 71 43 48	321 269 80 625 4 25 20 59	Nil. Nil. Nil.	Nil. Nil.	6 00 II	5 8 00 54 15 31	906	200 173 50 342 284 256	09 03 70 117 07 78 78 78 78 78 30 78 30 30 30 30 30 30 30 30 30 30 30 30 30	60	132 94 10 200	6 3 80 27 8 15	Nil. Nil. Nil. Nil.	Nil. Nil. 180 3 1 180 Nil. Nil. Nil.
NOVA SCOTIA—Concussor.	For half-year ended 30th June, 1891.	Seamen Seamen Amount. Sk Shipped. charged.	es cts.	1,814 1,263 1,285 90 24 28 20	7 3 4 40	4.00	) <u>:</u>	Nil. Nil.		3	14 25	278 418 264 40 11 14 9 70	Nil.	Nil.		10 23	61 22 37 10	28	× 63	; ;		2 12	14 14 Nil	Nil. Nil.
INC.	ne	Shipping Master. Sea		rence	E. Corbet.	J. D. Giffin	M. D. McKenzie.	Matthew Koche	James Hemlow W. A. Kenney	George Stalker.	W. H. McAlpine	William Young	R. McDougall	M. A. Dunn	D. W. Landers	E. U. Doucet	G. B. Swaine	A. S. Townshend	M. Campbell		J. J. Campbell.	James Kerr	John Stapleton	J. W. Taylor.
	Name	of County.		Halifax	Antigonish	Guysboro'	Shelburne	Cape Breton	Guysboro' Queen's	Shelburne	Colchester Cape Breton	Lunenburg	Cape Breton	Hants Inverness	Annapolis	Pictou. Dieby	Shelburne	Cumberland	Pictou.		Cape Breton	Cumberland	Inverness	Shelburne
		Name of Port.		HalifaxHantsport	Harbour au Bouche	Isaac Harbour		Little Bras d'Or.	Z Liscomb	: : : : : : : : : : : : : : : : : : : :	Londonderry		Main à Dieu	Maitland	ville				:	pus	Little Glace Bay	: :	Port Hawkesbury	

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## APPENDIX No. 36.

## REPORT OF MAJOR GENERAL D. R. CAMERON ON MESSENGER PIGEONS OF THE DEPARTMENT, AT HALIFAX.

KINGSTON, ONT., 2nd September, 1891,

W. Smith, Esq., Deputy Minister of Marine, Ottawa.

SIR,—In compliance with the desire of the Hon. Minister of Marine and Fisheries, intimated in your telegram of the 2nd July, I proceeded to Halifax, N.S., on the 27th, to inspect and report on the Department messenger pigeon loft there

I arrived at Halifax at midnight on the 28th July and left again on the night of

the 7th August.

I have now the honour to report as follows:—

The stock of pigeons with which the loft was established consisted of young birds hatched last year, 17 imported from England and 6 presented at a later date by the Count de Bury, of St. John, New Brunswick. These were received at the loft last year, three others from England having died either in transit or immediately after arrival from England via Quebec.

On taking stock, I found 41 birds in the loft—including 38 in full plumage and 3 nestling squabs. At the time there were probably a few absentees out of the loft in

the neighbourhood.

Of those birds I found only 11 had been marked with the special leg bands supplied for the loft, viz.:—H1, blue chequer; H5, blue; H6, black; H7, blue chequer; H10, blue chequer; H12, blue chequer; H13, blue; H14, blue; H16, blue chequer; H21, blue chequer, and H26, silver dun.

The intermediate numbers, 2, 3, 4, 8, 9, 11, 15, 17, 18, 19, 20, 22, 23, 24 and 25 were not found on birds, and of the remaining leg bands, 27 to 50, supplied to the loft,

No. 27 was deficient.

Assuming that the bands from 1 to 27 inclusive had been used, 16 birds were missing at stock-taking from amongst the 27 banded birds only. This is a very excessive loss—even allowing liberally for deaths, accidents and birds out of the loft. As I partially checked the numbers present on two subsequent occasions, and found none which I had not counted before, I think it unlikely that more than two or three birds, if any, were excluded from the loft and its cage while I first counted them.

Exclusive of the three nestlings, two at least of which were of an age to have had bands placed on their legs, there were 27 birds of full plumage without bands, although

there were 23 unused bands—from 28 to 50—available.

The use of the stock book had been entirely neglected, no entry appearing in it after those of the birds imported from England, of which I had made entries before transmitting the book to Halifax.

It is therefore impossible to ascertain what number of casualties have happened since the loft was established, nor to distinguish imported birds, and those received from Count de Bury, from birds bred in the loft, nor to tell the pedigree of any of them.

No record has been kept of the training to which birds have been subjected, so that no system can have been followed in this important particular. With the excep-

tion of Mr. Neal, the storekeeper, knowing that Nos. H1, H5 and H7 had been flown from Ship Harbour, there was no information as to the age, sex and distances and dates of training flights with respect to any of the birds; thus it happened that when I desired to send some birds out seaward I was reduced to taking them at hap-hazard, without regard to age or previous training.

While some of the unsatisfactory results may be due to absence of proper attention, I think it is mainly due to the circumstance that Mr. Downs—who is officially responsible, and alone receives remuneration in connection with the loft—with all his desire to make progress and his great experience and interest in all that concerns natural history.

is not physically fitted, at his age, to do what is needed.

Storekeeper Neal is constantly present in the neighbourhood of the loft in discharge of his regular duties; he is active, attentive and assiduous, and has ample opportunity

for looking after the birds and training them.

For these reasons I submit that it is desirable that Mr. Downs should be relieved of the charge of the loft and sole control transferred to Storekeeper Neal, to whose pay some addition—say \$1 a week—should be made.

Before leaving the subject of the stock book and training record I would note the

objects they serve:

In the stock book are ready headed columns for loft number, the birds' individual distinguishing marks, their sex, colour, date of hatching, pedigree, source whence obtained, manner of disposal, by death, sale, gift, &c., cost, price, if sold, and remarks.

This book thus furnishes the means of checking the contents of the loft and of distinguishing individual birds to enable selections to be made of such as are best fitted for

work in connection with the training records.

The training records are most simply formed by a number of vertical parallel columns, the first column being headed "loft number," the second "band number," the third "colour" and the rest left unheaded, to be filled in as required.

Under the headings of the first, second and third columns are successively entered

the data given in the corresponding columns of the stock book.

In the fourth and subsequent columns, when a bird is sent out for training, a figure 1 is placed opposite its loft number and the column is headed with a note of the date, place and distance to which the bird has been sent.

All birds sent on the same date to the same distance and place for training flight

are entered in the same column under the same heading.

I annex an illustrative form of a training sheet.

In training birds they are sent to successively greater distances from their loft for liberation. It is most desirable that special attention should be paid to this with regard to very young birds whose training is just being commenced.

The successive distances should be approximately in miles:

1 3 10 20 Followed by increases of from 25 to 50 miles up to 200. 35 50 75 100

Without the record sheet and stock book, it is apparent no such system in training can be followed, for not only would there then be no means of knowing what flights any individual bird had taken previously, but it would be almost impossible for a loft-

keeper to distinguish, with a few exceptions, individual birds.

Moreover, it is desirable to discard birds which prove themselves inefficient, both on account of their individual worthlessness and the risk of their propagating their bad qualities by breeding in the loft. But discarding cannot be intelligently acted on without the stock book and training record sheet data.

In its earlier lesson—up to, say, 50 miles—a young bird may occasionally miss returning to its loft for many days. If on reference to the stock book it be found that birds of the same pedigree have turned out badly, the bird should be got rid of. On the other hand if the stock book reference shows nothing adverse, then the training of the bird may well be continued, for the delay in its return may have been due to accidental hindrances of wind, weather, injury, &c., and its ultimate return strong evidence of its being possessed of highly valuable dogged perseverance. Birds have been known to return when deprived of the use of one wing over long distances.

Such a pigeon might afterwards be invaluable for breeding purposes.

The loft is an exceptionally good one. In a few respects, however, it needs improvement.

At present, entrance to the loft is obtained through a floor trap door. This arrange-

ment is very objectionable.

Avoidance of alarming the pigeons is always to be observed, but, just at the very time when this is most essential, when the loft-keeper is entering to make notes or to get some particular birds for training, the mysterious lifting of a part of the loft floor and the intrusion of a man's head and body set the whole of the birds in a flutter.

The defect may be simply and easily remedied by making a doorway through the partition wall, and moving the ladder a few feet from the present floor trap door so as to give approach to the new partition door. In this new door there should be a window, wire net covered on the inside, both to enable the loft keeper to see into the loft, and to allow of the birds observing that they are being visited before the door is opened.

The roosting places were not suitably arranged.

Messenger pigeons, if not all pigeons, claim individual property in roosting places; but those I found in the loft, contrary to the explanations and drawings I had supplied, were made as continuous rails supported by uprights from floor to ceiling. This arrangement not only leads to constant and bitter fighting amongst the birds, but makes it extremely difficult to get hold of the birds when they are being checked or sent out for training, and exposes them to injury when flying in the loft.

These uprights and rails should be entirely removed, and perches 5 inches long by 1½ inches broad secured to the walls and other available points, avoiding doorways, &c.,

substituted.

There should be at least two-thirds as many perches as there are pigeons in the loft.

The supply of suitable earthenware nest pans was insufficient. The nest boxes should be in readiness at all times.

Straw has been used for the birds' nests. No straw should be admitted into the loft. A liberal supply of sawdust should be substituted.

Straw is unnatural nesting material for pigeons—harbours vermin and is otherwise most uncleanly, for it mats and decomposes when affected by the bird's droppings—adheres to their eggs and to the nestlings, causing many casualties amongst them.

Sawdust, although not a natural nesting material, is acceptable to pigeons—har-

bours no insects, is cleanly and wholesome.

Both the floors of the nest boxes and the floors of the whole loft should be also well and liberally covered with sawdust. A light superficial raking of the sawdust once a week serves to clear off the birds' droppings and to maintain a pure atmosphere in the loft.

The omission of this precaution results, as I found, in the droppings becoming firmly adherent to the loft floor, and offensive.

The loft should be whitewashed once a year, in autumn.

The airing cage in connexion with the prisoners' compartment of the loft needs raising and being made accessible from the interior of the loft, for cleaning, It is also necessary to arrange for the interior of the cage being visible throughout from the interior of the loft. This may be done by the insertion of a pane of glass in the wall of the loft.

44 inches

Bob-wire.

The "bob wires," or means of shutting or opening the pigeon's entrance to and exit of the loft, are inefficient; in fact a dropping door and a sliding door have been substituted, improperly, for "bob wires."

The object served by "bob wires" is at discretion either to shut the pigeons without the loft, while admitting those that may be outside to enter; to exclude any from

coming in or passing out, or to leave the passage free in both directions.

The passage-way should be from 6 to 9 inches high, and from 4½ to 5 inches broad, the breadth of the opening being divided into three equal spaces by the two ends of a twice rectangularly bent stiff wire, hanging vertically from 1½ inches. staples at the upper edge of the passage-way.

The staples and wire are so adjusted that the wire may swing freely

inwards or outwards, but not move laterally.

If a cleat be now permanently placed across the bottom of the passageway outside it will serve to prevent the wires swinging outwards, but will admit of their swinging freely inwards. Thus arranged, birds, by pressing from the outside, may enter the loft, but cannot pass outwards.

To close the passage against ingress or egress a removable cleat—otherwise corresponding to the outside permanently fixed cleat—is placed, when desired, against the inside of the wires.

To clear the passage-way of obstruction by the wires, so that birds may pass inwards or outwards at pleasure, the staples supporting the wire are driven into a piece of wood which is so arranged as to be capable of being slid upwards or downwards. attached to the upper part of this piece of wood, passed over a small pulley fixed above and thence led through a hole in the floor to the chamber beneath the loft. On pulling this cord downwards the pendant bob-wires will be raised clear of the cleats, or even clear of the whole passage-way as desired, and the birds be thus afforded freedom to pass inwards or outwards.

Occasionally it is well to raise the wire clear altogether of the passage-way, but at other times it should be lowered so as to swing only just clear of the cleats. This arrangement is with a view to accustoming the birds to make use of the entrance when the wire is down, because, on the receipt of messages conveyed by pigeons, the birds have to pass into their loft while the bob-wire is arranged to admit of their entrance, but to prevent their exit. If the birds are not accustomed to push the wires inwards on entering the loft their entrance and capture may be much delayed when they arrive with messages.

It was observed that a net, something in the nature of a butterfly net, or a landing

net, was in the loft for use in catching pigeons.

Such a contrivance should never be used, at least in a messenger pigeon loft where there is constant recurring occasion for catching birds. The use of the net terrifies. not merely the bird hunted, but all others in the loft, and this at a time when there is every reason to avoid alarming them in handling.

If the loft be thoroughly darkened, and then only so much light admitted by shutter or lamp arrangement as may be just sufficient to enable the loft keeper to see. the birds will remain quietly on their roosts while being taken in the keeper's hands; and if the keeper avoids hurry, sudden movements and discomfort to the birds in hold-

ing them, these will soon learn to submit quietly to capture and handling.

The shutter fitting of the loft is defective. When closed the shutters do not exclude the light, and although not essential it would be desirable to have them so arranged as to be capable of being operated from the chumber below the loft, similarly to the bob-wire fitting, with a view to the loft being darkened and the birds allowed to roost quietly for a short time before the keeper entered for stock-taking, or catching birds to send out for training.

Provision should be made for regularly supplying the pigeons with peas—small field

peas—or with vetches, as food.

I found that whole Indian corn was being provided, a difficulty having been experienced in procuring peas or vetches.

Whole Indian corn is too large for very young birds to swallow or digest, and when parents have no other food to give to their young, these are sometimes choked, or waste away and die in a few days after hatching.

For the breeding birds a small portion of hard wheat may be supplied with the peas; and under any circumstances, if resort must be had to Indian corn, the corn

should be broken up.

For a time, say two months, I recommend that a little hempseed be mixed with their food.

At the elevator, in the immediate neighbourhood of the pigeon loft, the birds have found more attractive grain than in their own loft, and have acquired to some degree the habit of resorting there with flocks of common house pigeons from the town. I understand that at the elevator both wheat and peas have been procurable by the birds.

Hempseed, not to be used as a regular diet for which it is unsuitable, is passionately liked by pigeons. By mixing some with the peas, vetch and wheat to be furnished in the loft, the department birds may be weaned back from the habit some have acquired of frequenting the elevator and consorting with common house pigeons there.

The quantity of hempseed used should be gradually reduced, so as to be discontinued

after two months' use without attracting the birds' attention.

At St. John, New Brunswick, I ascertained that Messrs. Jardine & Co., Prince William St., can always supply peas and vetches. Possibly, however, they may be ob-

tained more cheaply at other places where Government transport is available.

I found the birds' food scattered on the floor of the loft. This is an objectionable method of feeding birds. It exposes the food to be soiled by the birds' droppings, is unwholesome, uncleanly and wasteful. The food should be in receptacles which admit of the birds' feeding without walking amongst the grain or soiling it. Similarly the drinking water supply should be protected against pollution; also a mixture of salt, sharp sand and old mortar in a separate receptacle.

I have already referred to the inefficiency of the past training of the birds. No system had been followed and no bird had been flown from seaward, whereas it might reasonably have been expected that by the end of last June at the latest, some birds at least might have been trained as far seaward as Sable Island—the objective of the

loft.

I found the agents of the Cunard and Allan lines of steamers, Furniss line and coast lines—Messrs. Francklyn, Pickford & Black, and Corbett—very ready to offer any

assistance in their power towards training the birds.

In addition to these specially valuable facilities, the Dartmouth ferry boat and the "Royal Engineer" harbour works steamer—the latter making three trips daily to outer parts of the harbour—afford opportunities for the training of young birds such as could not be excelled anywhere for convenience and efficiency; but neither the ferry boat, the engineer boat, the coast line steamer nor the ocean steamers had been made use of, although gratuitously available for training flights daily or tri-weekly.

During my stay at Halifax I twice availed myself of ocean-going steamers to send birds—16 in all—seaward towards Sable Island, and I met with not the least difficulty or hindrance in despatching the birds. A line of tram cars runs from close to the pigeon

loft to near each of the wharves, whence the birds may be sent out.

Through Mr. Francklyn of the Allan Line I received a report of the behaviour of six birds taken out by Captain Hughes of the "Nova Scotian" on the 3rd August, to be released at 2.45 p.m. The vessel sailed from Halifax at noon. Captain Hughes wrote from Newfoundland.

It has already been mentioned that except in the case of three birds which Mr. Neal stated had been flown overland from Ship Harbour, nothing was known of the training of any others, but none had previously been sent seaward or released from on board ship.

Under these circumstances, and with the imperfect arrangement for trapping birds on their return to the loft, the results are not quite definite; nevertheless they are, in a

measure, quite satisfactory as affording evidence of what may be and might have been accomplished by efficient training.

Of the six birds released at 2.45 p.m., at a distance of 23.61 statute miles, only two

left the ship directly.

Of these, one was noted at its loft at 3.20 p.m., having accomplished the flight at the rate of rather more than  $40\frac{1}{2}$  miles an hour.

A second bird was noted at the loft at 4 p.m. Assuming that this was the other

bird, it had flown the same distance at the rate of  $18\frac{8}{10}$  statute miles an hour.

Three other birds left the ship at 3.50 and 4 p.m., and one was noted at its loft a few minutes before 6 p.m. It was at a distance of 34.55 miles from George's Island when it started homeward. It, therefore, accomplished its flight at the rate of 17.27 miles an hour.

It is most probable that the first bird to return was one which had been trained from Ship Harbour. Its colour confirmed this view. The second and third birds may also have been out to Ship Harbour, but, as they could not be trapped, this is very uncertain.

The novelty of being released far out at sea from a steamer for a first time may well account for the birds being very irregular in starting and in arriving at home.

They left the vessel:

			P.M.
(a.) 2 at 23.61	statute miles out	at	2.45
(b.) 2 at $34.55$	do	• • • • • • • • • • • • • • • • • • • •	
(c.) 1 at 36.28	$\mathbf{do}$	••••••	4.00
(b.) 2 at 34.55 (c.) 1 at 36.28 (d.) 1 at 52.96	do		6.00
( )		=	

The bird which arrived at home at 4 p.m. could not have been one of (b); it, there-

fore, must have been one of (a).

The bird which came in a few minutes before 6 p.m. must have been one of the three (b) and (c) which left the vessel within ten minutes of one another, and within a distance of  $1\frac{3}{4}$  miles of one another.

The distances are given as measured from the vessel direct to George's Island, not

to the loft.

Watch for the birds was interrupted between 5 and 6 p.m. and not continued after-

wards, as their irregularity in leaving the vessel had not been anticipated.

In view of the lateness in the season, I would recommend training seaward should not be extended beyond the mouth of the harbour—say ten miles from the loft—until May next year, and that the training meantime should be limited to young birds between three months and eight months of age and such as are not breeding amongst the older ones.

In the course of ten weeks from the commencement of training next year all the birds worked should be in readiness for use in flying from Sable Island to their loft at Halifax whenever it may be desirable to use them. This estimate is based upon very gradual training stages and intervals of rest of liberal duration with allowance for inclement weather and other interruptions applicable to all birds of six months of age or more, thus:—

Intervals between

	:		ntervals betw days.
1st training, 1	mile		Ó
2nd do Î	do		1
3rd do 3	do		1
10	do		$\dots$ 2
20	do		$\dots$ 2
35	do		3
50	do		5
75	do		5
100	do	<b></b> .	5
125	do		7

	Intervals between days.
150 miles	7
175 do	7
200 do	, 7
	52
Allowance for interruption	18
Total	70

The officers of the Imperial service at Halifax engaged in preparing a scheme for the defence of Halifax and its neighbourhood—Colonel Goldie, assistant Adjutant General and Major Waldron, R.A., on the staff of the general officer commanding, as well as the Royal Engineer officer at the head of the signalling department—Captain Dopping-Hepenstal—took much interest in the subject of messenger pigeons, hoping that they may be made available for communication between look-out stations at lighthouses on islands and the mainland—a matter of difficulty at present and of much importance in war time. It is most probable that these officers would be found ready to heartily co-operate in carrying out experiments with pigeons, and I think it not unlikely that on representations being made to the general officer commanding, he would be willing to detail a non-commissioned officer to either take charge of or to assist in working the pigeon loft on the condition that efforts should be made to utilize the birds for the defence scheme as well as for Sable Island use.

In the north-easterly direction along the coast the training of birds for Sable Island would, to a large extent, cover the requirements of the defence scheme in connection

with look-out stations at lighthouses, &c.

In conclusion I beg to remark, that although the results hoped for by me are as yet far short of having been attained by the Halifax department loft, their feasibility is beyond doubt, from the experience of European nations. In all the leading continental countries the greatest attention is being paid to the development of complete systems of inland and coastal systems of pigeon communication by both the military and naval authorities. It is said that the French Government alone can control the services of a quarter of a million of birds trained systematically for military and naval purposes.

I have the honour to be, sir,

Your most obedient servant.

D. R. CAMERON,

Major-General.

## APPENDIX No. 37.

anadian	Amount.	•	200	1,000 Cargo, 100	6,000 Cargo, 500	<b>2</b> 2	1,200 Cargo, 500	<b>8</b>	7,000
els in C 391.	.480.I laitra Tro latoT		Partial.	ob	Total	Partial	တု	Partial	: op
Vess r, 18	Lives Lost.		<u>:</u>	:	<u> </u>	:		<u>:</u>	<u>:</u>
Sea-going st Decembe	Cause of Casualty.		:						
and Foreign ths ended 31	Nature of Casualty.		Salem, Grounded on theebbing tide	74	her on Hart's Island. Cables parted and went ashore; condemned and and demned and demned and	-4	age. Stranding; no buoy on ledge.	Sprung a leak unexpectedly.	W. Continuous gales; vessel stranded, &c.
Jasualties reported as having occurred to British, Canadian and Foreign Sea-going Vessels in Canadian Canadian Sea-going Vessels in other waters, for twelve months ended 31st December, 1891.	Place where Casualty happened.			Hart's Island, north entrance to Canso Harbour.	90 Victoria to Clayoguot. Pedder Bay, Metcho-Cables parted and went as hore; condens as shore; condens and demned and	194 Lunen burg to New 22 miles south-west of Vork.	to Boston, Barrington Passage		6
having occurred to essels in other wat	Port sailed from.		84 St. John to Salem, Mass. North River, Mass.	Gloucester, fishing	Victoria to Clayoguot.	Lunenburg to New York.	79 Liverpool to Boston, Mass.	TQuebec Harbour Louise Basin.	1125 Montevideo to Valpar 37° 10' S.; 65° also.  Pacific Ocean.
l as	Register Tonnage.		28		8	194	7.0	26	1125
s reported n Sea-goir	Rig.		ohn, N.B. Schooner, wood, sail.	op ·	.: ор	. <del> </del>	ob	Steamer, wood.	ohn, N.B. Barque, wood, sail.
	Port of Registry.		St. John, N.B.	Gloucester, Mass.	St. John, N.B.	op	Liverpool, N.S.	Quebec	St. J
ks a , and	Age.		6	∞	=	19	63	ដ	17
STATEMENT of Wrecks and C waters, and to	Name of Vessel.		9 Almeds	1 Annie C. Hall.	2 Arill	Jan. 20 Adria	9 Arbutus	22 Anglesia	Jan. 17 Antoniette 17
STATEM	Date of Casualty.	1891.	Jan.	ි පි 251	Feb. 2	Jan. 20	April 9	do 22	Jan. 17

&c.—Continued.
Vessels,
Sea-going
2
Casualties
and
f Wrecks
oŧ
STATEMENT

Amount.	Cargo	4,000	4,250 Carg. 2,500	120	200	625	300	:
Total or Partial Loss.	Partial	Total	Total	Partial.	: op	op	·· op	-: op
Lives Lost.	:	:	:	:	:	:	:	:
Cause of Casualty.			:		:			:
Nature of Casualty.	Heavygale, lost spare and rig- ging and spring a leak: towed	into Bermuda. Driven ashore in a gale of wind.	Stranding; thick fog.	Vessel struck by a squall; lost anchor and	chains, and broke main boom. Vessel caught on a wharf and ello	Miscalculated distance and struck on Blonde Rock;	put into Yarmouth for repairs.  Master of "H. B. Ogden" ran	into her. Chains parted, and vessel drove ashore.
Place where Casualty happened.	300 miles off Cape Hat- teras.	into Bermuda. Haslem Harbour, B.C., Driven ashore to Queen Charlotte in a gale of Sound.		Apple River	Parrsboro' Harbour	Blonde Rock, near Seal Island.	Vineyard Sound	Santa Cruz
Port sailed from.  Port bound to.	123 San Domingo to New 300 miles off Cape Hat. Heavygale, lost teras.  York.  York.	Mictoria, B.C., sealing. Haslem Harbour, B.C., Driven ashore to Queen Charlotte in a gale of Sound.	93 Lockeport, fishing Green Island, St. Peter's Bay, C.B.	69 Joggins to Partsboro'. Apple River	37 Parrsboro' to Advocate Parrsboro' Harbour	96 Provincetown, Mass., Blonde Rock, near Seal fishing.	99 St. John to Vineyard Vineyard Sound. Haven.	:
Register Tonnage.	123	25	8	69	33	96	8	173
Rig.	Schooner, wood, sail.	· op	cop	:	··· op	: •	: op	Barque, wood, sail.
Port of Registry.	Annapolis	op	Shelburne, N.S	Parrsboro, N.S.	· op	16 Provincetown, Mass.	St. John, N.B.	20 Lunenburg, Barque, N.S. wood, sail.
Age.	2	14	6	র	71	16	ಣ	8
Name of Vessel.	7 A. T.	Adele	Ardella	8 Alice S	11 Atlanta	17 Odak Damon.	Aug. 18 Advance	Oct. 13 Allego I
Date of Casualty.	1891. April 7	Mar. 12 Adele	CMay 16 Ardella.	June 8	do 11	do 17	Aug. 18	Oct. 13

อก	V ICTOL I	a.				COO.	OLLO.		apo.	(21	· .	UA.,			<i>1</i> 1. 1	1034
:	520	:		:	:	:	3,000	Cargo 4,000	4,500 Cargo 2,000	:	150		1,500	200	4,000	:
Triffing.	Partial.	<u>·</u>	:	:	:	:	Total		: e	:	Partial	Total	т ор	op	op	<del></del> පි
=	-	:	:	:	:	:				:	÷	All lost.	:	:	:	<del></del>
			:	:					:				:			
Vessel dragged her anchor and heached	During a fog, schon'r struck on a rock in the Str'ts of Belle-	Typhoon	Fire and strand-	ing.	:	Vessel struck on bar in Ad-	vocate Hr. at ebb tide. Dense fog and		32	off tide. Str'ding; snow squall.	Str'ding; dragged ashore in a	Kale. Not known	Dragged anch's & went ashore	In gale. Rough sea; probably age of vessel had something to	CO WIGH IC.	Heavy storm
	to N. Straits Belle Isle, New-I foundland.	3° 0' N.; Long. f° 22' E.	Van- English Bay	to Rio de Lat. 29° 50' N., Long.	Lat. 34° 40′ S., Long.	to Ad- Advocate Bar.	20 miles west of S.W.	point of Anticosti.	Lunen-Owen's Keef, Lunen- burg Bay.	Petru's Ledge		St. Gulf St. Lawrence	Pleasant Bay	to Char-Point Prim, P.E.I	Cape Near Bob's Cove, Tre- passing Bay.	
65 West Arichat Harbour.	50 Newfoundland to N. Sydney.	1846 New York to Shanghai Lat.	Side wheel 65.87 Westminster to Van-	œ	oro.	99 Boston, Mass., to Advocate, N.S.	. 542 Quebec to Yarmouth 20 miles west of S.W	,	98 St. Pierre to Lunen- burg.	79 Gloucester, fishing Petru's Ledge.	68 Rockland to Port Gre-Bliss Harbour, Maine	39 Halifax to Bay St. George, Nffd.	-54 Cheticamp to Pleasant Pleasant Bay Bay, C.B.	77 Pictou, N.S., to Charlottetown, P.E.I.	97 St. Pierre to Cape Broyle, Nffd.	93 Halifax, N.S., to Car-Cow Bay bonnear, Nffd.
	:		el 65°.			£'rd	10	·	ř:	-:-	:	:	<u> </u>	<del></del>	•	<del></del>
S. Schooner, wood, sail.	op	Ship, wo'd sail.	Side whe	wood, str. Barque,	wood, sau. do	Schooner, wood, sail.	Barqu	wood, str.	Schooner, wood, sail.	op	op	စု	op	op	qo	qo
	St. John's, Nfld		Vancouver	Yarmouth	-: op	:			2 Lunenburg	Gloucester, Mass., U.S.	7 Parrsboro'	33 Halifax	ор	Guysboro'	7 Yarmouth	St. John's, Nfid.
22	: :	9	10	nos o	16	24							15	:	2	14
13 Alma 21 Halifax, N	13 Albatross	13 Annie E. Wright.	2 Alpha.		20 Addie H. Cann 16	17 Amherst 24 Parrsboro'.	26 Anna.		9 B. C. Smith	April 15 Blanche	7 Bessie G	Aug. 18 Bloomer	Oct. 13 Bismark	13 British PearlGuysboro'	13 Byron	Nov. 6 Barbarone 14 St. John's,
do 1	do 1	do 1	Dec.	စု	Oct. 2	Dec. 1	ę		.i W 253	April	op	Aug.	0ct.	do 1	do 1	Nov.

A. 1892

									• •
Amount.	200	:	6,000 Cargo 1,400	28,000	1,800 cargo, 2,000		:	650	009
seo I laitra T To lato I	Partial.	:	. Total	т ор	Total	Triffing.	: op	Partial	: op
Lives Lost.		:	:	<u>:</u>			<u>:</u>	<u>:</u>	:
Cause of Casualty.									
Nature of Casualty.	She was taken in harbour, misstayed and struck on a	_	Grounded when being to wed	Stranding	Mains'l and jib torn away; im- possible to keep		Stranding	Got jammed in ice and drove on L'ng Beach.	Collision with 3-m. schr. "El- liott L. Dow."
Place where Casualty happened.	32 Lapoil, Nfid., to Chan-S. W. end of Peguac She was taken in harbour, mel, Nfid.  misstayed and struck on a	Bet. Archibald Co's. Wharf and Break-	361 Toledo, N.S., to Gode-300 yards outside the Grounded when rich, Ont. being to we describe.	Ship, wood 1142 Rio de Janiero to Bar-About Lat. 24° 50′ N., Stranding sail.	Point Michaux	1713 San Francisco to Nana-North channel, Nana- imo Harbour.	88 Tynemouth Creek to Tynemouth Creek, N.B Stranding New York.	94 Souris, P.E.I., to Bos-Long Beach, 3 miles N. Got jammed in ton. ice and drove on L'ng Beach.	107 St. John to Newford Off Lloyd's Neck, 13 Collision with miles below City Isld., 3-m. schr. "El- Long Island Sound.   liott L. Dow."
Port sailed from. Port bound to.	Lapoil, Nfid., to Chan- nel, Nfid.	Yarmouth, N.S., to St. Bet. Archibald John's, Nfld. Wharf and F	Toledo, N.S., to Goderich, Ont.	Rio de Janiero to Bar- badoes, Aoru Island,	Halifax to Canso Point Michaux	San Francisco to Nana- imo.	Tynemouth Creek to New York.	Souris, P.E.I., to Boston.	St. John to Newford
Register Tonnage.		:	361	1142	93	1713	88	Ŧ6	107
. Rig.	. Schooner, wood, sail.	ob	ob	Ship,wood	Schooner, wood, sail.	Schr., iron, steam.	N.B. Schooner, wood, sail.	-: op	: op
Port of Registry.	26 Lunenburg	Yarmouth	Kingston, Ont.	Yarmouth	Pictou, N.S	9 San Francisco. Schr.,iron, steam.	St. John, N.B.	16 Shelburne	St. John
Age.	92	i	52	15	81	6	- oc	16	<u> </u>
Name of Vessel.	2 Brisk	17 Bessie	23 Bavaria	Bertie Biglow.	Jan. 11 Cygnet	22 City of Puebla	April 27 C. T. Gregory.	28 Cepola	Mar. 29 Clifford C
Date of Caeualty.	1891. Dec. 2	do 17	do 88		Jan. 11	do 22	April 27	% op	Mar. 29

	<del></del>	•		2	:		===	300	8	:	:	•	00	•	
8		100	1,600	1,000	:	40	:	ক	1,500				<del>4</del>	9,000	1,500
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	:			:	i		:		:	:			:		:
a way	and prok- rried	drifted ks and off at	F.E.	states vessel e pur-	with Rock	Vessel dragged her anchor in Port Royaland	in a	Island. Partridge Island, River Vessel sprung a	Farrsboro. 132 Booth Bay to St. Pierre Misaine, N. Atlantic Terrific gale	229 Westport, Briar Island, Lat. 54° 41′ N., Long. Heavy gale; to Sydney, C.B.	Bar between the inner and outer		aught urrent car- re. A	: : :	and
maintopmast,	Rudder and sternpostbrok- en and carried	~ (c) —	high water. San on in	5 5 5	posely. Collision with barque "Rock	Vessel dragged her anchor in Port Rovaland	stranded. Wrecked	le. sel spi <sub>l</sub> .	rificega	vy g paban	betwe		Ves I got caught in the current and was carried ashore. A gale afterw'rds	sprang up. Abandoned	ricane
maint	Rud ster	~ ~	high Ran	<b>4</b>	0		str ie Wr	er Vesse	Terri	Hea shi	Barb		of in and ries	•	h Hurri hazv.
:	:	43 Harrington River, U.S. Sister Rock, two islands to Parreboro', N.S. Basin of Minas.	202	Jacnel Har-	to Plymouth, Lat. 40° 30' N., Long. 58° 38' W.	12 Fishing in Chadabucto Beach, Port Royal, Co. Bay.	184 Bahia to Sydney, C.B. Tin Cove, off Scatterie Wrecked	1, Rive	lantic.	Long	:	Chatham, East part of Byron Inlet, Magdalen Island.	At entrance of House Veslgot caught Harbour, west side of in the current Magdalen Islands. ried ashore. A ried ashore. A gale atterw'rds	Sydney, Lat. 54° 47' N., Long. 19° 21' W.	218 Alberton to Port au On the reef off North Hurricane and
	intic.	c, two	ıd, N.	Jacne	,	nt Ro	off S	Island	N. At	1, N.		of By	nce of t, west	ν Ν.	ef off
neic O	h Atla	r Rock sin of	e Islan	off our.	. 38.	sach, Port Richmond	Cove	Island. rtridge	Farreboro isaine, N.	. 54° 4	Richibucto.	t part t, Mag	t entrance of Ho Harbour, west side Magdalen Islands.	54° 4	In the re
Aug	Nort	Siste	Sabl	Reef book	I, Lat.	A. Bes	Tin	T. F.	e Mis	1, Lat	Sign	ı, Eas	A H	, Lat. 19	- 5°
ston.	2909 New York to Marseilles North Atlantic.	N.S.	490 Boston, Mass., to New Sable Island, N.S.	933 Jacnel, Hayti, to St. Reef off Nicholas More, Hayti. bour.	mouth	labuct	y, C.E		. Pier	Island B.	 	athan	: :	ydney	ort a
ğ 3	to Ma	nRive boroʻ,	ass., t	ayti, More,	Ply	Chac	Sydne	<u>.</u> :	y to St	Brian ley, C.	o Frai	to Ch	Islan	\$	장: 면
o Kico	York	ingtor Parrs	on, M	asgow el, H sholas		ishing in Bay.	is to S	rsboro	th Bay	estport, Briar Is to Sydney, C.B.	way to		rdalen	tport B.	lberton to Spain Trin
Z7 Forto Kico to Boston Atlantic Ocean	9 New	Harr to	0 Bost	SJacin Nicia	1252 Quebec G. B.	2 Fish	74 Bah	55 Parrsboro'	32 Boo	29 We	405 Norway to France.	732 Belfast N.B.	42 Magdalen Islands.	229 Westport C.B.	Alb g
												<del>"</del>			
Barque, wood, sail.	es, Str., iron.	Schooner, wood, sail.	. Barque,	Schooner, wood, sail.	Newcastle, Barque, G.B. wood, sail.	Schooner, wood, sail.	Barque	wood, sail. Schooner,	wood, sail. do	Barque, wood, sail.	op	op	I'ds Barque, wood, sail.	5 Yarmouth, NS Brigant'e, wood, sail.	6 St. John, N.B. Schooner,
:	lles, S	:	20	ster,	t1e,	αż		:	sett,	:	:	N.B.		h,NS	N.B.
6 Lunenburg.	Marseill France.	15 Parrsboro'	29 Boston, U.S	8 Dorchester, N.B.	₩ C 8.8	Arichat, N	18 Beddeford	rsbor	8638	5 Yarmouth	Norway	St. John, N.B.	20 Magdalen	rnout	John,
<u> </u>	Ka	Pari	Bos	O N		3 Ari	Bec	Par	<u>``</u>	Z X	% No No	12 St.	Ma M	Z Ya	
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April 22 Clyde	Aug. 18 Cachar	18 Carrie Maud	do 18 Conquest	5 Clara J. Wilbur	13 Canora	13 Charlotte	13 Camelia	13 C. E. Thornton 20 Parrsboro'	6 Carleton Bell	6 Clair	6 Coden	6 Carniola	6 Cora May	Sept. 24 Clare	Clifton
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STATEMENT of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

	Amount.	<b>69</b>	200	250	<b>8</b>	:	<b>38</b>	1,800	
	Recal or Partial Loss.		Partial .	Total	Partial .	Small	Partial .	Partial.	
1	Lives Lost.	:	:	:	:		i		
red.	Cause of Casualty.								
&c.—Continu	Nature of Casualty.	She was beating out of harbour, Ledge. Was taken off by	tug boats. Very stormy voyage. The ship lost, split sails and carried away	booms,	Was nearer land than sup-	posed. Struck on a rock not marked on	Rud'r-post bro- ken by floating	timber. Dragged ashore in a heavy gule Pilot did not knowthechan-	
Sea-going Vessels,	Place where Casualty happened.	Peter's Ledge ,Sydney Harbour.		Grand Battery Shoal	County, N.B. land than sup-	Queen Charlotte Sound	St. Lawrence River	West Chop, N.S Fraser River, close to	About Lat. 41° 45' N., Long. 62° 15' W.
STATEMENT of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.	Port sailed from. Port bound to.	154 Sydney, C.B., to Hali- Peter's Ledge ,Sydney She was beating out of harbour, ran on Peter's Ledge. Was Laken off by	473 Windsor, N.S., to New York.	Lyuisbourg to Halifax,	97 Hillsboro', N. B., to Campobello, Charlotte Rockland, Me. County, N. B.	561 Victoria to Coal Harb'r Queen Charlotte Sound Struck on arock not marked on	35 Quebec St. Lawrence River	174 Cienfuegos to Boston West Chop, N.S Dragged ashore 960 London, Eng., to New Fraser River, close to Pilot, did not wharf.	1654 New York to Antwerp About Lat. 41° 45′ N., Long. 62° 15′ W.
/recl	Register Tonnage.	151	473	19	26	199	88	174	1654
MENT Of W	Rig.	Schooner, wood, sail.	de	op	op	Schooner, iron, steam	Schooner, wood, st'm	Schooner, wood, sail. Barque, iron. sail.	Schooner, steel, st'm.
STATI	Port of Registry.	Halifax	Windsor, N.S.	Halifax, N.S	St. John, N.B.	Victoria	Quebec	Windsor	Belfast
	.98A	15	∞ .	6	17	ಷ	8	-	9 mos
	Name of Vessel.	2 Cumminger	2 Clifton	17 Champion	23 Champion	4 Danube	26 Dauntless	Aug. 18 Donacona do 18 Duke of Argyle	Oct. 13 Dan Murray .
	Date of Casualty.	1891. Dec. 2	ප 2 <b>5</b> 6	do 17	do 23	May 4	do 26	Aug. 18 do 18	Oct. 13

								,
	Unknown.	100	8,000	100 Cargo, 200	160	2,000		C'go, 3,000
Total	<u>.</u>	Partial .	Total	Partial.	- : မွ	: op	Slight	Partial . C'
:	:			<u>:</u>	<u> </u>	<u>:</u>		
		:	:	:			:	out of
								Buoy out place.
Vessel moored at wharf, but broke away from moorings	Run into by steam'r "City of Pueblo," & danaged star- board side.	Struck by a whirlwind, breaking main boom & stranding ship.	Stranded and otherwise da- maged during voyage; con-	Ice caused vessel to leak, and had to beach.	Mistook buoys, & struck ledge & got off again	Heavy weath'r, & vessel leaking badly, lost sails and running gear; got into Vineyard Haven.	Got inside the ice, touched ground, got off and into N. Sydney.	Stranding
Arichat Harbour	Nanaimo Harbour, near Channel.	Salem, Between Parrsboro' and Struck by a whirlwind, breaking main boom & stranding ship.	to Buenos During voyage	Port Mul-1 m. N. of Rabbit Isl'd, Carribou Cove, C.B.	Penobscot Bay, Maine	George Shoals, New England.	Bridgeport Head, C.B.	Pierre, Yankee Cove Ledge, Stranding Whitehaven.
36 Halifax to Arichat Arichat Harbour	1746 Nanaimo to San Fran-Nanaimo Harbour, near Run in to by cisco.  Channel. Channel. Of Pueblo, & of Pueblo, & damaged star-board side.	94 Parrsboro' to Salem, Mass.	631 Havana to Buenos Ayres.	40 Halifax to Port Mul-grave.	94 Boston to Digby Penobscot Bay, Maine, Mistook buoys, & struck ledge & got off again	97 Barbadoes to Yarmouth George Shoals, New Heavy weath'r, England.  England.  ing badly; lost salls and run-ning gear; got into Vinepard Haven.	Ship, wood 1533 Java to Montreal Bridgeport Head, C.B. sail.	143 Boston to St. Pierre, Miquelon.
<b>9</b> 8	1746	\$					1533	
B wood, sail.	Schooner, steel, steen.	Schooner, wood, sail	Barque, wood, sail	Schooner, wood, sail	: op 	: op	Ship, wood sail.	Schooner, wood, sail
36 Jersey, G. B	London, Eng Sc hooner, steel, steel, stean.	Weynouth, Schooner, N.S. wood, sail	St. John	Port Hawkes-Schooner, bury.	13 Parrsboro'	Yarmouth	14 Maitland	St. John
8	<b>H</b>	21	ន	2	13	оо		13
Oct. 13 Dolphin	22 Eton	7 Eureka	5 E m m a G. Scammell.	GApr. 12 Euma Proctor 10	Mar. 25 Eureka	30 Emma S	May 11 Esther Roy	14 E. Walsh
Oct. 1	Jan. 2	Feb.	Dec. 1891.	id V 257	Mar.	op Op	May	do 1

STATEMENT of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

<b>1</b> 4	88	1,000	200	:	:
Amount.	\$ 24,000 C'go, 16,000			:	:
4		C,80,	<u> </u>		<u> </u>
seo.I laitaq to latoT	Total	Partial.	Partial		
Lives Lost.	<u> </u>	<u>:</u>		<u>:</u>	<u>:</u>
Cause of Casualty.					
Nature of Casualty.	Prolonged storm; vessel became water-logged; aban-doned by cww, off by Ger. str	was not aware of shoal. Stranded	Bar, sprung a leak and was abandoned. Was loading cordw'od at St. George, & was driven ashore and damaged	in gale, Sept. 7 This schr. ran too close to schr. "Nota Bene," caught her head gear,	and swung into the other vess?! Caught on the bar while try- ing to make Advocate Hbr.
Place where Casualty happened.	Hol-Lat. 43° 10′ N. ; Long. Prolonged 41° 40′ W. became waterlogged; abandoned by Goned by Grew, who were tak'n off by Ger. str. "Sophia."	Port- Chedabucto Bay, N.S. Stranded	light, Atlantic. Port George, N.S	to Apple River, Cumberland Bay.	:
Port sailed from. Port bound to.	934 Pascagonala to Holland.	391 Bonaventure to Port Chedabucto Bay, 14584 Thomas, P. Naw, W.S. W. of Fire L.	York.  194 At Port George, load-Port George, N.S. ing a cargo.	65 Dorchester, N.B., to Parrsboro, N.S.	418t. John to Advocate Advocate Harbour. Harbour.
. вужитоТ тыққе.	6.	eo +-	46	39	41
Rig.	Barque, wood, sail	r, N.S. Barque, wood, sail Brief, with		ор	· op
Port of Registry.		Hallifax Windsor, N.S.	, <sub>2</sub>	St. John	Windsor
.egA		8 =		41	83
Name of Vessel.	Exile	18 Ellia Moore	13 Eureka.	13 Endeavor	13 E. B. Ketchum
Date of Casualty.	1891. June 11 Exile	S Aug. 18 Ellio do 18 Ella M		do 13	do 13

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€	250	100	6,000	700	313	1,200	6,000	888	608	4,000 cargo 2,000	1,500	1,000	2,200 350	
								cargo	cargo	Carres	cargo	cargo	cargo	
Fartial	: op	Partial.	Total	ф	Partial.	Total	op	Partial	• Partial.	Total	Partial.	Total	 ф	
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our. chors and ran	Two schooners drifted upon her in the gale	Gulf of Heavy gale	Enter-Thick and hazy B.C. weather.	Cum-Gale of wind	op	op	ob	Weak, caused by strain ow-	ing to carrying too much.  Mistake of master, hauled up too soon and	struck. In thick fog; tide and wind			Misjudged dis- tance from a	14
-0	to International Pier, T	Gulf of	_ئ	Cape Chegnecto, Cumberland, N.S.	New Haven Break- water, Port of New	Port George Pier	to Off Hatterns	Cape Ann	Fox Island, Miramichi Bay, N.B.	Spectacle Isle, N.S	Handkerchief Shoals, near Chatham, Mass.	to Nash's Island, Me., U. S.A.		
41 Little Bras d'Or to N. International Sydney. Sydney.	Sydney, C.B., N.S.	Cheticamp to Port Off Cregnish, (Hawkesbury.	25 Victoria to Nanaimo Monatt Reef, prise Channe	64 Parrsboro' to Hillsboro' Cape Chegnecto, berland, N.S.	176 New Bandon, N.B., to New Haven Break- New Haven, Conn. water, Port of New	94 Port George, N.S., to Port George Pier.	Kockiand, Me.	New York. 96 St. John to Boston Cape Ann.	Pictou to Chatham, N. Fox Island, B. Bay, N.B.	138 Port Mulgrave to Dig-Spectacle Isle, N.S by.	272 St. John to New York Handkerchief Shoals, near Chatham, Mass.	38 St. George, N. B., to Rockland, Me.	92 Sheet Harbour to Hali-Off Jeddore.	252 Port Townsend to San Juan Tuca Straits.  Bonaventure.
	51		8											
: op	op	Schooner, wood, sail.	Schooner, wood,	steam. Schooner, wood, sail.	. ob	: <b>9</b>	Brig'ntine,	wood, sail. Schooner, wood, sail.		: op	·· op	: op	: op	· op
Arichat	Lunenburg	Arichat, N.S.	Victoria, B.C.	St. John, N.B.	9 Dorchester, N. B.	13 Parrsboro, N.S	do	St. John	Port Hawkes- bury.	Annapolis	Portland, N.B.	St. John	Halifax, N.S	9 San Francisco.
<u>`</u>	6	83	24	i			∞	2	۲-	6	19	4	10	
13 Eliza B 10 Arichat	13 Emperor	6 Euxine	6 Emma	6 Endeavour	2 Ethel Emerson	2 Eureka	23 Energy	22 Flash	8 Flora Bell	Aug. 18 Fesland	18 Florida	18 Freddie B	Sept. 8 Fernot	Oct. 13 Fanny Dubard
do 1	문 10a-	 Now -17 <del>1</del>	မှာ	op	Dec	op	စု	259	ęp )	Aug.	op	qo	Sept.	Oct.

STATEMENT of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.		
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	7	CTATEMENT

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Amount.	<b>66</b>	784	300	1,000	100	130	150	1,000	008
seo.I laitra Tro lato.T		Partial.	op•	op	Partial.	op	ор :	· ор	ob
Lives Lost.			:	:	:	:	:	:	:
Cause of Casualty.							:		
Nature of Casualty.	Set on shore hy	drift ice.  Met with bad weather and was damaged.	Cape A strong wind carried a way masts.	Vessel met bad weather, lost	A heavy sea boarded vessel	Wind & squall.	Vessel listed & filled; leaking on account of	being laid up all winter. Collision with schooner A.M. Gates; carried away head gear	and otherwise damaged.  Dragged an- chors & beach- ed vessel to save her,
Place where Casualty happened.		N.; Long.	Minus Gut, off Cape Split.	Windsor to New York. 30 miles east N.E. of Vesselmet bad Highland, Cape Cod. weather, lost	Gloucester, on a fishing 15 miles W. of Brown's A heavy voyage.  Bank. Bank boarded w	25 miles off Burges	110 St. John to New York. St. John Harbour, at Vessel listed & wharf.	Long Island Sound	Gabarus Bay, C.B
Port sailed from.  Port bound to.	RS (Saharis, C. B. to Hali, Cara Canso	fax. 570 Savannah, Ga., to Montevideo.	391 Walton, N.S	Windsor to New York.	Gloucester, on a fishing voyage.	79 Burin, Nfld., fishing 25 miles off Burges.	St. John to New York.	297 New York to St. Pierre, Long Island Sound. Miquelon.	94 Halifax to Glace Bay Gabarus Bay, C.B
Register Tonnage.	55	570	391	201	82	23	110		26
Rig.	Schooner	wood, sail. Barqu'tine wood, sail.	S chooner,	Barqu'tine wood, sail.	Schoon er, wood, sail.	op	ob	Brigan- tine, wood,	Schoon er, wood, sail.
Port of Registry.	13 Halifav	r, N.S.	·· op	op	Gloucester, Schooner, wood, sail.	St. John's, Nfld	St. John, N.B.	Halifax	10 Guysboro'
. 98A	<u>e</u>		19	15	:	2	4	<b>∞</b>	01
Name of Vessels.	19 19 19 19 19	13 Flash Light	13 Frank G. Dow	13 Falmouth	6 Governor But- ler.	G. G	Mar. 27 Genesta	April 4 Glenorchy	30 Georgenia
Date of Casualty.	1891.	do 13	පු දි 260	do 13	Mar. 6	April 24 G. G	Mar. 27	April 4	96 Op

10,000	4,500	19,000 Cargo 3,000		4,000 Cargo 216	3,200	Cargo 800	1,000	30,000	4,000 Cargo 2,269	8
Total	-: op	: क	ob	. ob	Partial	op	Total	op .	Total	Partial.
<u>:</u>	:	:		:	<u>:</u>	<u>:</u>	<u>:</u>	<u>:</u>	10	<u>:</u>
:							:			:
Abandoned at sea and set fire to; crew taken off by German	steamer. Stranding	of Grand Stranding;		squail. In a gale; ves- sel foundered by deel being	pryed up when spars went overboard.	In a gale vessels broke away	und ran down on this vessel. Vessel caught in the current	ashore; a gale a f t er w a rds sprung up. Vessel seen stranding off shore thenight	arcersnessaled and has not since been heard of.	Collision with
Barque, 1000 Leith to Quebe.c Lat. 48° 07', Long. 26°. Abandoned wood, sail.  to; crew ta	477 Barbados to Antigua Warrington Shoal, An Stranding	491 Mahone Bay, N.S., to N. E. reef of Grand- Genfuegos. Turk Island, B.W.I.	to Off Morrilloes decabo, Rojo, Porto Rico.	Mispeck	Off Jeddore, N.S	International Pier	to Peases Island, N.S		Last seen 40 miles E. of Mount Desert, on 8th Dec., 1890, not since been heard of; a ves- sel seen, bottom up, 395 miles E. of Sandi	Hook, supposed to be the Holmes. Thorne's St. John Harbour
Leith to Quebe.c	Barbados to Antigua	Mahone Bay, N.S., to Cienfuegos.	149 Ponce, Porto Rico, to St. John, N.B.	98 Spencer's Island to St. Mouth of John.	90 Yarmouth	36 Charlottet.wn, P.E.I., International Pier. to Sydney.	63 Caledonia, N.S., to Yarmouth.	St. John, N.B. Ship,wood 1531 Bolivia to New York	121 St. John to Boston	34 St. John to Thorne's Cove, N.S.
1000	477	491	149	-	8	% %	<u>.</u>	1531		¥
Barque, wood, sail.	-: op	N. Barquen- tine, wood,	Brigan- tine, wood,	Schoon er, wood, sail.	op	: op 	do	Ship, wood	S chooner, wood, sail.	ор 
	Pictou, N.S		Halifax	Parrsboro'	Yarmouth	Arichat	15 Shelburne, N. S.		St. John	Halifax
32	16	9m.	t~	<b>F</b>	ಹ	33		. 15	∞	路
May 22 G. M. Cairns  32  Newcast	Mar. 28 G. H. Gordon. 16	13 Gilbert Parker 9m. Liverpool,	Aug. 18 Grace Butler	Gertie	Nov. 13 Georgiana	G. H. B	10 Gordon Belt	General Dom-	Holmes	May 11 Hope
May 2	Mar. 2	do 1	Aug. 1		Nov. 1	26	Dec.	:		May 1

Arcount.	<b>00</b>	1,500 Cargo 2,500	<u>2</u>	9	:	<del></del>		180	200	200	009
Au		Jarg							Cargo		
eso.I laista T to lato.I		Partial.	-: op	. ob	Triffing.		Total	Partial.	Total	. ob	Partial
Lives lost.		:	:	:	:			:	:	:	:
Cause of Casualty.											
Nature of Casualty.		Stranding	Leak at lower bow port.			A piece of oak- um started out	board seam. Heavy gale on the land; could not carry sail, and had to slip chains to save	life. When towing, collided with schr. "Watch-		ф	Martha's Heavy weather; Mass. parted chain, and vessel
Place where Casualty happened.		Ocean City, Maryland.	North Sydney Harbour	Vessel was in port and broke her lines at the	Latitude 46	Between Spencer's Island and St. John.	to North Cranberry Head, at the Heavy gale on mouth of Sydney Harner carry sail bour.	West Bay, Port of Parrsboro' N.S.	Pouler Bay, Gulf of St. Lawrence.	Poulet Bay, Cape	rd, 1
Port sailed from.		142] Antigua to Delaware Ocean City, Maryland Stranding Breakwater.	730 Bremerhaven to Quebec North Sydney Harbour Leak at lower bow port.		95 North Sydney, fishing Latitude 46.	70 Five Islands to Boston, Between Spencer's Is-A piece of oak- Mass. um started out.	Lunenburg to North Sydney.	642 Lying in Parrsboro' West Bay, Port Parrsboro' N.S.	55 Pouler Bay, Cape Pouler Bay, Gulf of St. Breton, Gulf of St. Lawrence.	55 Sydney, C.B., to Chat- Poulet	ham, N.B.  Prevon.  John, N.B.  Vineyard, Mass.
Register Tonnage.	İ	143	85	28	38	2	:	642	33	18	ಕ
Rig		Schooner, wood, sail.	Barque, wood, sail.	wkes-Schooner, wood,sail.	op	: op	op	N.S. Barque, wood,sail.	, N.B. Schooner, wood, sail.	: &	: op
Port of Registry.		Windsor	Trinidad	Port Hs bury.	Yarmouth, N.	20 Parrsboro, N. S.	5 Lunenburg	Windsor,	Chathan	: ep	St. John, N.B.
Age.		-	প্ত	13	œ	8	5 108	27	15	15	61
Name of Vessel.		3 Harold Borden	Aug. 18 Hypatia	13 Head Reaches	Hazelglen	Henry Nicker- son.	6 Hilan Maud	6 Hoare	Haley Ann	.:. op	17 H. A. Holder.
Date of Casualty.	1891.	May 3	Aug. 18	Oct. 13			Nov. 6	g op	:	Dec. 17	

1,600	6,000	000,	OWD.	220	5	17	<b>1</b> 8	8,8 900,000	· 28	88		4,000		
	Ū	4,000 Cargo 1,000	Unknown.					cargo		cargo			:	
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± 20 ± 0	: g ox	: g ଫ ଲ	: -	 .:	E & .	: : : : : : : : : : : : : : : : : : :	Broke rail, split Gale	ng; was	: B he :	: 5071		: A d	her Saco hton	222
Very thick weather; string current; im- possible to	the gale. Appears to have been gross	Broke main boom, &c., and could not keep	ship from go- ing ashore.	nistoc of	sunken vessel for buoys; ves- sel stranded.	the Am. schr. "Clara Jane."	ail, sp	Stranding;	wrong & light was changed. Caught in the ice and becan	leaking. Stranding; light winds	and ice. Met with a gale and sprung	rudder. Stranding; winddiedaway	2.50	riverandrolled against the vessel.
a, ii j	judge to the gale. Ippears to been g	Sroke mai boom, &c., al could not ke	ship from ing ashore.	dense 10g. Aaster misto masts of	nken r buo	Clara	Sroke rai	trand compass	as chaught	leaking. trand light w	and ice. Let with and sp	rudder.	drove ashore. chr. " ma" cau	riveran again vessel.
Sydney Very weat curre		miles N. E. of Petit Broke Light, Digby County, boom, N.S.	G.E.F.	Grandique Master mistook mas ts of a	sunken vessel for buoys; ves- sel stranded.	3#*	<u>.</u>			d, Se le	<u>a ≩ a</u> ∶	Aus-St	02	
Sydne	dge offGrandManan Charlotte Co., N.B.	F Pet	Gulf	ndiq	i i	₹ 2	ra.s.	Haven, Maine,	er Se	lan			wha	
	rand) Co.,	E. ol	land,		Dobras Granba	). .i.	<b>Ia</b> tte	ven,	niles ond.	y Is	 8e	Reef,	coal	
Mines, C.B.	offG rlotte	ht, Di	p's Is	each at ferry.		Liverpool.	h of I	h S.	bout 25 mile arie Island	berr.	voya		longside œ Parrsboro'.	
Lunenburg to Sydney, Black C.B.	to Penarth Ledge offGrandManan, Charlotte Co., N.B.	Zinile Zisz	ship from going ashore. Warcouver to Victoria. Gossip's Island, Gulf of Grounded in a	70 Souris, P. E. I., to North Beach at Sydney. C.B. ferry.	<u> </u>		Port de Paix to New North of Hatteras	86 Boston to St. Andrews, North N.B.	About 25 miles off Scat- arie Island.	170 Louisburg to Yarmouth Cranberry Island, C.B.	1117 Falmouth to New York On a voyage	Mel-Victoria tralia.	at Alongside coal wharf, Parrsboro'.	
ney,	arth]	169 New York to St. John. 2	oria.	orth			New	rews,		outh	York	Mel-	d at	
Syd	Pen	St. J	Vict	to F.		411142 411142	χ Ş	And	fishin	Yarn	New	\$	cleared N.B.	
ing to	~	rk to	ver to	2.E.I		3	Pai	S.	ster,	irg to	th to	York 1e.	70, c	
nenbi 7. B.	John Roads.	w Yo	noous	uris, l Švdne			ort de Vork	N.B.	99 Gloucester, fishing	ouisbı	almou	ew Yc bourne.	86 Parrsboro', St. John,	
<u>।</u>	<u>x</u> <u>x</u>	30 Ne		02 05	Pool T. Lois to U. life.	3	<u>~</u>	82 28	- <del>8</del>	-120-	LI7E	- H		
<u>:</u>	Barque, 1,234 St. John wood, sail.				4		:.	#: <del>-</del>		:		Ship,wood 1411 New York sail.	<u>بۇ</u> رىغ	
do .	'que od,sai	Schooner, wood,sail.	Schooner,	Schooner, Wood.sail.		r. Od. 88	Brig'nt'ne,	Schooner, wood, sail.	မွ	စု	rqu od,sa	ip,wo	hoone od, sa	
_	Ba Wo	. Sc. ▼	. Sc.	20° ≥	. 6	Italian vessel. Darque, wood,sail.	K. Bri	S. ×		:	Annapolis, Barque, N.S. wood, sail.	8. R	5 Parrs boro', Schooner, N.S. wood, sail.	
<b>9</b>	St. John, N.B.	•				GREAN A CREATE	Ĩo, 1	n, N.B.	98		poli	n, N.B.	bore	
nembı	John	qo	ctoria	lifax.			rrsbo	St. John,	louc Mass.	Windsor	n n R n S.	St. John,	N.S.	
<u></u>	8 Zt.		24 Victoria	24 Halifax		3	Parrsboro', N.	<u>ω</u>	5 Gloucester, Mass.	<u>×</u>		7 2	- <u>F</u>	
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15 Hilds Maud   Lunenburg	23 Highland	sasc B	slande	8 Ida May		Tre Guisepie.	sabell	ames	ohn G	2J. L. Crossley. 17	James Stafford 12	8 Joseph Scammell.	13 Jessie D	
15/H		26 Is	do 21 Islander		<u>F</u>	:	. 3 <u>.</u>	111	April 11 John G. Whit-	- 2	7		13.1	·
မှ	စ္	Jan. 26 Isaac Burpee.	qo	Aug.		:	S Jan. , 3 Isabella Bal-	Feb. 11 James Rourke.	April	ф	op	May	Oct.	
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STATEMENT of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

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Amount.	क् : : :				cargo
Total or Partial Loss.		Total	Partial	Total	Partial
Lives Lost.			:	: :	:
Cause of Casualty.			:		:
Nature of Casualty.	Bk. "ScotsBoy" was moored to thesamebuoys, w it h springs to the "J. F. Whitney"; vessel "Fleet-	wood broke adrift, leaving weight to "J. F. Whitney." Sudden hurri- can e sprung up, sea break-	ing over vessel. Vessel carried away jib-bom and head gear in a squall.	itude, Ship encounter- longi- ed a succession of gales, fol- lowed by a hur- reefs, Run into by	American schr. while beating into harbour. At an chor, wind shifted ashore.
Place where Casualty happened.	Fleet Grounded whilst moor'd Bk. "ScotsBoy" at buoys in Wyre was moored to the samebuoys, with springs to the "J. F. Whitney";	170 Gabarus, C.B., to Hali- By gas wharf, Halifax.	N.S., to Off Cape Blomidon	titude, longi- reefs,	·
Port sailed from.  Port bound to.	700 Brunswick to Fleetwood.	Gabarus, C.B., to Halifax.	124 Wentworth, N.S., to Red Beard.	gow, Scotland. 25° 30' north la gow, Scotland. 25° 20' west tude. 27° 20' west tude. 28' 20' West tude. 28' 20' West tude.	73 Cow Bay to Canso
Register Tonnage.	700		124	637	73
Rig.	Barque, wood,sail.	Se hooner, wood, sail.	·· op.	States. Brig, wood sail.	wood, sail. S chooner, wood, sail.
Port of Registry.	Parrsboro', Barque, N.S. wood,sail.	Windsor	Parrsboro', N.S.	United Liver	N.S. F. Constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the consta
Age		17	-	22	
Name of Vessel.	1891. Oct. 13 J. F. Whitney	13 J. L. Crossley.	13 J. W. Durant.	6 John E. Chase	18 Laura
Date of Casualty.	1891. Oct. 13.	. ep 264	do 13	Nov. 6	

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tra neavy	rolling in. Abandoned and set fire to vessel; leaking badly and	masts gone. Struck ice; got into Canso;	got on nre. Jollision v stean t	ime on board caught fire and	burned vessel.  Dragged ashore  Collision with	off Collision; want ht, of lights in	barges. Succession of gales, lost some	spars and sails. Vessel misstayed in foggy and squally	weather. Has not been heard of since	leaving Japa Vessel was anchor, drag	went ashore. By loss of sails & rigging ship	to windward. Vessel filled with water.	Vessel dragged anchor, came across the bow of schooner.
Rock, west Stranded of Vancouver heavy swel	~4		to Rock- Coming down St. John Collision with street Ralls.	to Near wharf, Weymouth Lime on board bridge.	odger's Cove, Bar-Dragged a clay's Sound. miles S.W. of Egg Collision	off		ance Har-	:	:		:	:
r, w	ude, ngitu	froght.	St. J	eymo	re, ]	Sound, op Lig	. g	entr ork	:	:	igon	S. N.	our
Rocl Vs	latit st lo c.	south	lown Falls.	ırf, W	Sound S. W.	d Sc Chop	Oces Oces	land, w Y	: #	: gi	Mer.	'sport	Harb
	Island. o north latitude, 69° 30° west longitude, Atlantic.	miles south from Cranberry light.	ming down River Falls.	ear wha bridge.	Dodger's Cove, clay's Sound. 6 miles S.W. o	Island. ineyard Sound, off East Chop Light,	Mass., 1 tlantic (	rt Is o Ne our.	know	ecous.	iddle Beach	King	chat
to Victoria, Sunday			Com .	N G	Doc D	18land. 99 St., John, N. B., to Prov- Vineyard idence, U. S.	to Atlantic Ocean	St. John, N.B., to New Hart Island, entrance York, U.S. to New York Har- bour.	to Unknown	ar-Descousse.	Port Middle Merigomish Beach.	67 Kingsport to Wolfville, Off Kingsport, N.S	97 Mahone Bay to Arichat Arichat Harbour
toria,	\$ _ <b>:</b>	63 Lunenburg to Douglas- 5 town, Que.	Rock		<b>. . .</b>	Prov	ce, t	to Ne		essel had lately arrived from fishing		Ifville	richa
Vic	%.W.]	o Do	\$	Cove h.	aling ydne	Äį Ž	ran	.B.,	Jap k.	late in fi	to ury.	o Wo	/to A
5 5	ts, I	urg t Que	own Me.	lliveau's Weymouth.	s, se k to S	4.8 X.D	, au, F aey.	hn, N k, U.	akodati, J New York.	had from	own rkesb	ort t	e Bay
9 Kynquot B.C.	st. Kitts, B.W.I., t Yarmouth.	unenburg to town, Que.	62 Indiantown port, Me.	36 Belliveau's Weymout	68 Victoria, sealing 99 Halifax to Sydney	t.Joh iden	Sydney.	t. Jo Yor	Hako New	Vessel had lately rived from fishi	76 Ch. Town to Hawkesbury.	Çingsı	<b>Sah</b> on
9 X	143 St. Kitts, Yarmout	<u>용</u>	62 In	- <del>2</del> -	<u>У Н</u>		241 E	<u> </u>	- <del>1</del> 98+,	8	92	- 22 K	97 N
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op, w	Barque, wood,sail.	Schooner, wood, sail.	ဝှ	op	do Schooner,	sod,sa do	Ship, w	Schoon er, wood, sail.	Ship, v	Schoon er, wood, sail.	op	do	ф
B.C. Sloop, w'd,	Ba wo			<del></del>		:	<u> </u>	- ∞ ≱ - :	<u> </u>	<u>- xŏ</u> ≱ - :	<u>.</u>	:	:
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9 Victoria,	- Xa	16 Свяре́	13 St.	40 Digby	Victoria, 21 Arichat.	<u>∞</u>	16 Yarmouth	<u>ත</u>	<u>×</u>	8 	<u>C</u>	14 P	<del>j</del>
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ureti	ouisa	1 Laurence	7 Llewellyn	e o n Snow	29 Lily13 Lochiel	yra.	ydia	P	18 Lansdowne	13 Laura Victoria	13 Lady Franklin 10 Charlottetown	inda	otty
18 L	15 Louisa Carpel. 14 Yarmoutl	<u> </u>	7	16 L	29 L	3 -	3.	Aug. 18 S.P	181		13.I	Linda	Lotty Hardy.
Feb. 18 Lauretta	op	May	o <del>p</del>	April 16 Leonard B. Snow.	Mar. 29 Lily May 13 Lochiel.	April 3 Lyra	Of June 3 Lydia	Aug.	စု	Oct.	qo	:	i
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STATEMENT
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Lives Lost.	•	•	::	:		<u>:</u>	<u>:</u>	_ :	Mas		
Cause of Casualty.			:			:					
Nature of Casualty.	The gale so great, vessel draged ashore	at midnight. Sprung a leak.	Bay of Fundy in-draught.	•	Collision;strong current.	Dragged ashore with both an-	chors down. Dismasted	Weather thick and night dark	Dragged an- chor; stranded Heavy gale.	Stranded. During gale a stmr. drifted into the M. M. and damaged	her.
Place where Casualty happened.	77 St. Peter's to Bras d'Or Off Lime Hill Marble The Grea	Quoddy Bay	90 Provincetown to Bay Moody Island Bay of Fundy of Islands, Nfld.		Grand Narrows bridge Collision;strong stone abutment.	to Pisarince, N.B	89 Thomas Cove to Boston South Seal Islands bore Dismasted east about 7 miles.	46 North Sydney to Lun-Bold Rock Shoal, Canso Weather thick enburg.  Harbour.	12 Victoria, sealing Barclay Sound, Van-Dragged an- couver Island, B.C. chor; stranded 1111 Rio Janeiro to St. John, Grand Manan, Bay of Heavy gale.	Fundy. Boston Harbour	_
Port sailed from. Port bound to.	St. Peter's to Bras d'Or	94 St. John to Boston Quoddy Bay	Provincetown to Bay of Islands, Nfld.	212 Port Hope to Sarnia	52 Canso to Halifax	120 St. Andrew's, N.B. to Parrsboro', N.S	Thomas Cove to Boston	North Sydney to Lunenburg.	12 Victoria, sealing 11 Rio Janeiro to St. John,	N.B. Boston to St. John	
Register Tonnage.	77	8	8	212	25	120	88	<del>,</del>	12	92	_
Rig.	Schooner, wood, swil.	ob	op	op	·· op	. op	cop	burg Schooner, wood, sail.		wood, sail. Schooner, wood, sail.	_
Port of Registry.	Charlottet'wn, P.E.I.	Parrsboro'	Provincetown, Mass.	16 Port Hope	Liverpool	Parrsboro	Annapolis,	Lunen	New West- minster. Norwegian	St. John, N.B.	
Age.	91	10	18	16	88	new	12	ន	16 2	ಣ	_
Name of Vessel.	6 Lady Franklin 10 Charlottet' wn, Schooner, P.E.I. wood, sail	2 Laura Brown	Lottie Bell	2 Lewis Ross	17 Laura	17 Leonard B new Parrsboro.	17 L. B. Hatch	4 Merino	8 Martha	3 Maggie Miller.	
Date of Casualty.	1891. Nov. 6	Dec. 2	ခ မွ 26	ę	do 17	do 17	do 17	Jan. 4	Feb. 8 April 3	do 9	

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Total	- <u>P</u>	<del>-</del>	-:		:	•	<u> </u>	:			<u>:</u>	<del></del> -	<u> </u>	:	:
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Crushed in the	Long. Sprung a leak in gale.	Collision in coming to an-	or wind.  Had no pilot, and misjudged distance from	shore. Collision in	Ran into by ship "Sadia."		_	<b>-</b>	got off at flood	<u> </u>	<u>.</u>	In a gale lines parted, and she	another. Supposed the vessel thrown or		Ran ashore
Bird Rocks	30° N.; W.	ort Hawkesbury Harbour.	Herring Cove, Escumi-Had no nac, Miramichi Bay. and misj	South Shoal light, N.	15 miles off St. Ann's Bank, Cape Breton.	to 15 miles S. E. of St. Paul's Island.	I., Crichton's Island, West Arichat.	North side 'of Lenno' Passage, C.B.		Harbour of Cow Bay	Victoria Pier, Sydney	II.	40 miles S.S.W fron Cape Canso.	Bay View, off Pictou Harbour.	West coast Mfld
47 Burges, sealing	806 Brunswick, Georgia, to Lat. Gustenmonde, Ger- 79°	many. Rustico to Sydney, C.B. Port Hawkesbury Har- bour.	76 Pictou to Chatham	449 Philadelphia to St. John South Shoal light, N. Collision in	North Sydney fishing grounds.	139 Chicoutimi, Que, to Newfoundland.	67 Charlottetown, P.E. I., to West Arichat.	138 Halifax to Wallace, N.S North side 'of Lennox Passage, C.B.		167 Arichat	91 Halifax to N. Sydney	50 Channel to N. Sydney.	98 Canso, N.S., to Lunen-40 miles S. S. W from burg.	65 Fictou, N.S., to Char-Bay View, lottetown, P.E.I. Harbour.	
47	908	88	92	44	8	139	29	138		167	16	 	<b>8</b> 8 	38	92
op	Barque, wood, sail.	Schooner, wood, sail.	op	Barq'ntine	Schooner, wood, sail.	op	op	တ္ 		ф	ф	op .	op	op	ф
St. Johns, Nfid.	Windsor	Charlottetown P.E.I.	Sackville, N.B.	St. John, N.B. Barq'ntine	1 Liverpool	5 Quebec	24 Halifax	13 Arichat		ор	Barrington	St. Johns, Nfld.	Lunenburg	Charlottetown P.E.I.	St. Johns, Nfld.
24	क्ष	∞	<b>x</b> 0	1-		χĊ	22			63	<b>∞</b>	9	<u> </u>		<u>:</u>
3 Marion Smith. 24 St. Johns,	25 Montreal	June 13 Maggie A. Jewell.	12 Marie Del- phine.	Aug. 18 Merritt	18 Mary E. Leslie	18 Mignonette	13 M. C. McLean	13 Mary Rogers		13 Mary E. Mc-	13 Myrtle	13 May Queen	13 Morris Wilson Lunenburg	13 Margaret Jane	Minnie Tobin St.Johns,
ф	Mar. 2	une 1	do L	Aug. 1	do 1	do' 1	Oct. 1	do l		op	စု	op	op	မှ	

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Wrecks and Casualties to	
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STATEMENT of	

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	Lives Lost.	:	:		<u>:</u>	<u>:</u>		<u>.</u>	
	Cause of Casualty.		:						
(crocon i	Nature of Casualty.	Struck on a rock	in fog.	Jib and fore—sail torn.	Stranded; ran on ledge.	Howe Drifted out of harbour at night; filled and sunk.	Stranded; rock not buoyed. Schr. "Endeavor"swung into vessel and damaged her at bow.	Vessel struck by a gale and sails torn.	Dense fog
Same of contains	Place where Casualty happened.	80.St. Johns. Nfd to Bum Off. Bird Island. west Struck on a rock	coast Nfd.  Beach, Mose River	•	46 Peraux, N.B., to Bos-Green's Landing, Me., Stranded; ton, Mass. U.S.		111 Boston, fishing Cerberus Rock, Cheda-Stranded; rock bucko Bay not buoyed. 50 Joggins, N.S., to Wolf-Apple River Schr. "Endeaville, N.S. to Wolf-Apple River Schr. "Endeaville, N.S. to Wolf-Apple River Schr. "Endeaville, N.S. to Wolf-Apple River schr. "Endeaville, N.S. to Wolf-Apple River schr. "Endeaville, N.S."	249 Windsor to New York. Mouth of New York Vessel struck by a gale and Sound.	34 Amherst to Cow Bay West side of break-water, Cow Bay. 117 New York to St. John, Starboard Island, out-Dense fog Maine.
of Wiccass and Casuations	Port sailed from.	3t. Johns, Nfid., to Bum	Island. 57 Loading	112 Joggins, N.S., to Salem, Mass.	Peraux, N.B., to Boston, Mass.	5 New Westminster Fort Graves, Sound.	11 Boston, fishing Cerberus Roo bucto Bay 50 Joggins, N.S., to Wolf- Apple River ville, N.S.	Windsor to New York.	Amherst to Cow Bay West side of water, Cow B 17 New York to St. John, Starboard Islan side of Libby Maine.
I FEW I	Register Tonnage.	8	22	112	46	20	50	249	34
DIVIDUENT OF	Rig.	Schoon er.	wood, sail.	op	. op	: op	: : op op	· · op	: : op op
	Port of Registry.	St. Johns N#d	15 St. John, N.B. do	8 Parrsboro'	ор	Victoria	United States.	ор	Amherst St. John, N.B.
	Age,				69	15	2 14	1	9 6
	Name of Vessel.	1891. Oct 13 Mary E. Power	Minnie N	T. W. McKay.	1 N. H. Upham.	Nellie Taylor 15 Victoria	April 20 Nellie Dixon	13 Nettie Shaw	13 Neptune 2 Nellie Bruce
	Date of Casualty.	1891.	Dec. 2	:	892 8Mar. 1	Feb.	April 26 Oct. 18	do 13	do 13 Dec. 2

do         28 Neptume         SF Halifar.         do         68 Fort Mulgrave to Syd. Figure as Grand Mannal Steamer collide         Grand with collision         do         4,000           Jan. 13 Octer.         6 St. John, N.B.         do         199 St. Kith, B.W.I. to Beach Gills of 10.7 t. Harvy was an echonome.         Ther may in the may: wand the map of 10.0 the map of 10.0 the may of 10.0 the may of 10.0 the may of 10.0 the may of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map of 10.0 the map o															
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	Cause of Casualty.		:			:				
	Nature of Casualty.		Struck by wind; lost mast and	~	Sprang a leak and beached vessel, when			snow; were unable to land until vessel struck. Fog: steamer altered her course and col-	lided.	Vessel broke from her anchor; shipped large quantities of water.
Sea-going vessels,	Place where Gasualty happened.		Lat. 34° 30′ N.; Long. 72° 30′ W.; Atlantic.	to Little Glace Bay Harbour.	Grandique Ferry Beach, Lennox Passage.	Machias, Maine, U.S	to Pla-Lighthouse, Nfld	Pollock Reef Light-ship bearing E.S.F.	to Noddy Island	GrandLat, 45° 13' N.; Long. 51° 10' W.
Statement of Wfecks and Casualties to Sea-going Vessels, &c.—Continued.	Port sailed from. Port bound to.		194 Bahia to New York Lat. 34° 30' N.; Long. Struck by wind; 72° 30' W.; Atlantic. Lat. mast and	99 Little Glace Bay to Halifax.	80 Sydney to Chatham GrandiqueFerryBeach, Lennox Passage.	248 Saco, Me., to St. John, Machias, Maine, U.S N.B.	62 Charlottetown to Pla- centia, Nfd.	unable to were unable to were unable to were unable to were unable to were unable to were struck.  115 Hillsboro to New York Pollock Reef Light-ship Fog; steamer bearing E.S. E. altered her course and col-	Yarmouth, N. S., to Clark's Harbour.	115 Halifax to Grand Banks.
186.e.	nnoT restaigesH		<u>8</u>	8	86	248	62	115	29	115
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STATE	Port of Registry.			Liverpool	Miramichi	Portland	Halifax	St. John	22 Princetown, N. S.	Shelburne
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	Name of Vessel.		April 23 W. & H. Weth- 18 Parrsboro' srspoon.	May 6 Wenoah	June 17 Wild Briar 20	Aug. 18 William Mason	Oct. 13 William Boak.	13 Wascano	13 Willie A. Jewel.	fc-
ra-	lauseO lo etaU	1891.	April 23	May 6	270 nung 270	Aug. 18	Oct. 13	do 13	do 13	do 13

8	:	2,000	150	<b>4</b>	88		3,000		900	2,000 150	200	2,000
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<del>දි</del> 	Triffing.	Total	Partial.	ਦੇ ———	· · ·	<u> </u>				<del>-</del>	<del>т</del> ——	<del>-</del>
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her .	: : : : : : : : : : : : : : : : : : :	ted.	g at chr. N.	ow. fore- k by	and	dam-	ship leak, nast,	sails	ith a rried ging,	hurri- t sails, mizen	ing; bar.	an- roke
lost or s	was was rin I Hal	r. drifted	Fessel lying at wharf; schr. Lettie N. Hardy came	ost her fore-sail; struck by	y sea	Thick fog	Turricane; ship sprung a leak, and foremast,	toreyard, lost; 6 strained. stranded.	Collided with a schr.; carried away rigging,	8	mast. tranding; struck on bar.	gged rs; b lass.
Vessel lost her and anchor and	Economy, N.S. Vessel was at anchor in Descousee Harb.; dragged her	anchor. Schnr.	whore. Vessel lying at wharf; schr. "Lettie N. Hardy" came	across her bow. Lost her fore- sail; struck by	Port Heavy sea gale.	1142 London to Port Town-About 6 miles to the Thick fog send.  220 Miragome to Boston	Hurricane; ship sprung a leak, and foremast,	02	653 New York to Santos Off New London, Conn. Collided with a schr.; carried away ricging,	<b>U</b> 2	mast. Stranding; struck on bar.	Dragged an- chors; broke windlass.
•	<u> </u>	:	:	8	ort	o the	ank.	. off	Zonn.	248 Cape Hayti to Cien-400 miles north of Berfugos.		:
da, N	ard's asse I	:	ou <b>r</b>	inas.	of I	les to Be Be	ge's I	Ledge,	don, (	th of	sine,	3ay
[slan	Berr	 Ve	Harb	grapol of M	est when	6 mi f Cal	Geor		Lon	ous.	ar, M	ake l
Five	Beach on Bernard's Island, Descousse Harbour.	st Co	chat	Kin Sesin	South-east of Hood wharf.	bout 6 miles to the east of Cape Beale.	East of George's Bank.	Brocher's Victoria	f New	0 mile mud <b>a.</b>	ass B	edesa
<u>\$</u>		Me	i-Ari		702	- At		<u> </u>	<u>5</u> :	-n -40	-d F	<u>- '</u>
90 Port Pique to Parrs-Off Five Islands, N.S. boro'.	: :	35 Souris, P.E.L., fishing. Meat Cove	to Ari-Arichat Harbour.	24 Canning, N.S., to Parrs-Off Kingsport, I boro'.	118 Port Hood to Bayfield, N.S.	London to Port Tow send. 220 Miragome to Boston.		:	antos	o Cie	123 St. John to Vineyard Brass Bar, Maine, U.S. Haven.	celon
\$	vrenc	.I., fi	N.S., t	Š.	to B	Port to B	į	isco.	. 55 53	yti t	23	o Bar
Pique	t Lav	P.E		ng,N	Hood }	on to d. gome	E O	Franc	York	Ha,	. John Haven.	ort t
ort	32 Gulf St Lawrence	ouris	74 Pictou,	Sannin boro'	Port N.S.	Londor send. Mirago	845 Leghorn	2113 San Francisco	New	Cape I fugos.	St. J Ha	New
96	 	- <del>2</del> 8	74 E	42	118	1142	845	2113	653	248	123	1386
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qo	ф	qo	op .	မှ	op	h Barque, wood, sail.	phia Barque, wood, sail.	S c hooner, iron, steam		N.B. Schooner, wood, sail.	op	Ship, wood 1386 Newport to Barcelona. Chesapeake Bay.
ż	:	:	nwo	:	:	E.B.	hia	:	S.	N.B.	:	:
horo',	B.t.	8.X	ottet	,poro		Yarmouth. Kingston, fi	adelp	:	Windsor,	St. John,	ф	Parrsboro'
2 Parrshoro', S.	Arichat.	Halifax	Charlottetown	Parrsboro	Halifax	Yarr King	Philadel	<u>:</u> _				
63	- E	-	:E	15	2	: :	<b>8</b> 0	<u> </u>				۲-
18			:	6 Star in the East	:	6 Sarah	Sun Beam	17 San Pedro	ز	15 St. John	8 Thrasher	
% S2 €	ting S	ger.	,	in the	lan	h	Веал	Ped	Croix	John	asher	eanse
6 White Swan.	13 Shooting Star.	13 Stranger	13 Swan	Star	6 Soudsn	6 Sarah 3 Solario.	Sun .	7 San	15 St. Croix.	St.	Thr	Tre
								do 17	do 18			Mar. 22 Treasurer
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STATEMENT of Wrecks and Casualties to Sea going Vessels, &c.—Continued.

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	Amount.	\$ 2,000 cargo 1,000	800 cargo 1,900		24,000 cargo 1,051	25	908	1,000		;
	Total or Partial Loss.	Total	Partial	Total	ون : و	Partial.		Partial	Total	
١	Lives Lost.	:	:	:	:	:	:	:	:	
	Cause of Casualty.			:				:		: .
	Nature of Gasualty.	Run into by str. "Wandrahan"	total loss. Sprung a leak in a storm, pumps broke down, vessel foun.	dered. Storm; no opportunity to do	save vessel.  Was running for harbour, and run on	ledge during thick squall.	Parted chains, and marter ran her ashore to	save her from going on the rocks. Greatgale; lost main sail, fore-	Gale of wind	Water-logged
	Place where Casualty occurred.	Off Briar Island	to Off Betty Island	West side Archibald's Scom; no op- loading whar portunity to do any thing to	Harding's Ledge, S.W. Harbour, N.S.	1112 Joggins, N.S., to Salem, 25 miles S. E. of Port- Mass.	72 New Haven, Conn., to Bell's Gate, Cape Cod, Parted chains, Port Greville, N.S. N.S. and marker ran her ashore to	Arichat, C.B., to Char-Off Pictou Island, Gulf Great gale; lost lottetown, P.E.I.  St. Lawrence.  anil. &c.  saye her from gave her from gong on the gong on the gong on the grant gale; lost lost anil.	White Point	to S.W. point, Amherst, Water-logged Magdalen Islands.
	Port sailed from. — Port bound to.	118 Boston to Annapolis Off Briar Island	49 Liverpool, N. S., to Halifax.	5 Fishing banks	557 Windsor, N.S., to New Harding's Ledge, S.W York.	Joggins, N.S., to Salem, Mass.	New Haven, Conn., to Port Greville, N.S.	Arichat, C.B., to Charlottetown, P.E.I.	Fishing	353 Campbell, N.B., to Queenstown.
ı	Register Tonnage.	118	49	70	557	1112	72	74	83	33
	Rig.	Schooner, wood, sail.	· op	: op	·· op	: op	ob	Schooner, wood, sail	ob	op
	Port of Registry.	Annapolis .	Halifax	Sydney	Parrsboro'	ор	ор	Lunenburg	Sydney, C.B	19 Amer. Record
	Age.	6	37	70	<del>-</del>	∞	9	17	15	19
	Name of Vessel.	7 Star	13 Thistle	13 Thos. Parnell.	23 Trojan.	17 T. W. McKsy	17 Trader	6 R. W. Smith	2 River Queen	Rocheko
	Date of Casualty.	1891. June 7	Oct. 13	ရ ၁၃ <b>272</b>	Dec. 23	do 17	do 17	Nov. 6	Dec. 2	

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250 250	5,000	150	æ	1,000	39,900	360	:	495	:	908	:	1,750	1,200
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<u>:</u>	:	:	<u>. :</u>	:	· · · · · · · ·	: ± ਰ	<u> </u>	<del>:</del>		0 = 1	:		
French River to Tober-Fish Dock, Tobermoray Caught fire	Stranding; error lights in	the snowstorm Miss, chains	parted & poin anchors lost. Fire; accident.	St. John to Kockland, The light on Libby Is Stranding: Maine. thick fog and smoke.	Stranding; took Bryon Is- land for west	point Amherst Island. Lost spars and sails.	leak.		Mistak'g Bryon Isl'd for Mag.	dalen Islands. Vessel went to shore while in	Beabing in Halifax Harbour. Vessel sprung a leak.	Mount Parted hawser,	shore. Deceived by sound of fog. whistle in a thick fog, and went ashore.
ıght f	rand or lie	s snov	parted & boranchors lost.	trand thick fo smoke.	rand okBr nd fo	point A Island. Jost spa	Sprang a leak.		stak'g I'd for	len L ssel w ore w	Cuarge Beabi Halifax bour. 'essel sp	ted ha	shore.  O e c e i v e d l  sound of fo  whistle in thick fog; an
y Can	•		Fire	th th	02	<u>इ.स.च</u>	:	<u>:</u>	m Mis		Hali Dour Vesse leak.	t Partec	
rmora	S.S.	, Z.S.	Que.	oby I	est bar of Bryon Island, Magdalen Isl'ds	15 miles off Pope's Harbour.	tic		Reef S. W. point, Bryon Island.	Near Meagher's beach light.	: ;;	Moun	Onod.
Tobe	bour,	Начеп	harf,	on Lil sine.	of Bragedale	f Pop	Atlan	and .	point	gher's	\tlant		West Me.
Dock,	Har	Vineyard Haven,	Customs wharf, Que.	light o	bar o	miles of bour.	orth	in is	S.W.	Mea ht.	orth 4	Isla ert, N	st of Light,
Fish	Littl	Vine	Cust	The	Mel-West bar of Bryon land, Magdalen Is	15 m	U.S., to In North Atlantic	Shut	Reef	Near	In	Long De	Boston, Abreast of West Quod- dy Light, Me.
l'ober-	: 50	:	i	cland,	Mel	; ;	3.	Eggi	Mel-	ifax	avia.	John	ston,
er to ]	fishin	:	:	Kock	\$	Arich		ret to	\$	Hal	o Bat	o St.	ප සූ
h Riva	ster,		:	n to ne.	ıtimi ne.	x to 7	arian, Ga. Newcastle.	Marge e.	ıtimi me.	ara to	ork t	ork to	ž.
French I	Gloucester, fishing Little Harbour, N.S	Boston	Quebec.	št. Jol Maii	Chicoutimi bourne.	Halifax to Arichat	Darian, Ga., Newcastle.	Glen Margaret to Eggs Shut in island Cove.	Chicoutimi bourne.	Demerara to Halifax.	New York to Batavia. In North Atlantic.	New York to St. John Long Island, Desert, N.S.	Hillsboro' Mass.
88	88	88	6	8	629	74	<b>2</b> 8	16	629	176		143 N	8
wo'd, m.	ner,	wo'd,	wood	ner, sail	ıe, I, sail	ner, I, sail	Sarque, wood, sail	oner, I, sail	karque, wood, sail	nti'e, 1, ssil	₩o'd,	:	sail
9 St. Catharines Tug, wo'd, steam.	Schooner, wood, sail	Brig, wo'd,	Tug, wood steam.	N.B. Schooner, wood, sail	Nor- Barque, wood, sail	Charlottetown Schooner, P.E.I. wood, sail	Barque, wood, sa	Schooner, wood, sail	Barque, wood, a	Briganti'e, wood, sail	Ship,wo'd, 1757	<del>o</del>	Schooner, wood, sail
arinee		n, taica,		N.B.	Nor-	etown	:	:	i	7 Port Medway.	<u>:</u>	,;	
Cath	Glouceste	Kingeton, Jamaic	Quebec		ndal, sy.	rrlott	lifax.	မွ	Arendal	τ Mec	Maitland	Parrsboro'	St. John.
- St.	5 Gb	Kir	9 One	<u>*</u>	Are W	_ <mark>경</mark>	# e		s.	-7 Por	5 Ms	8 Par	
		<b>&amp;</b>		<b>8</b>	<del>п</del> е	<b>8</b>	=	- Cg	d lst		<del></del>	<del></del>	69
ds's King.	. Lee	:		 <del>.</del> .	88 95 88 95	:	gueen	Fan	8 r 8 8	:	.:	:	
Dec. 17/Richards's	7 Sarah E. Lee .	Mar. 13 Solario.	30 St. George	1 Sea Bird	25 Stratsraad 3 m. Arendal. Lange. way.	25 Swan	, wou	Sailor's Fancy 10	Stratsraad 1st Lange. vog.	Biroco	Sølkirk	Sower	wallor
121		<u>8</u>	8	7	<u>8</u>	- <del>2</del>	18	:	:	:		<u> </u>	<u> </u>
Dec.	Feb.	Mar.	May	June	ဝှာ	ф	Aug. 18 Snow Queen 19 Halifax.	:	•		:	:	Aug. 21 Swallow
	100	10					273						

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ontinued.
ls, &c.—Contin
Vessels,
o Sea-going Vessels,
d Casualties to
Wrecks and (
STATEMENT OF

	Amount.	1,100	2,000	400	1,000	2,500 450	140	200	5,000
	An	cargo							
seo.I L	Total or Partia	Total	Partial .	Total	Partial .	Total	Partial .	<del>: :</del>	Total
	Lives Lost.	:	:	:	:	:	:		:
	Casualty.				: : : :				
	Nature of Casualty.	In tacking pins came out of block attached to wheel-chain and vessel mis-		Set to leeward.  Torn to pieces by ice during	winter and drifd out with ice in spring.  Lost and split	Ship would not snswer helm,	sprung a leak, and lime set fire to vessel. Strong wind and heavy sea.	Fog collision Broke from her	moorings and ran ashore.  Heavy sea and gale, thick weather; driven on shore.
	Place where Casualty happened.	16 Glen Margaret to Shut In Island, St. Mar- In tacking pins came out of garet's Bay.  Peggy's Cove.  Block attached to wheel-chain and vessel mis.	Vineyard				Cape George	<ul> <li>149 New York to Moncton. 30 miles N. E. from Pol. Fog collision.</li> <li>100 Reef Light, Nantucket Shoal.</li> <li>109 St. Pierre to North Port of North Sydney. Broke from her</li> </ul>	Sydney.  63 Off shore fishing, Shel-Black Point, Shelburne Heavy sea and burne.  County, N.S. ther; driven on shore.
	Port sailed from. Port bound to.	Glen Margaret to Peggy's Cove.	107 Maricaibo to Boston Graveyard, Sound, U.S.	63 Laid up at Parrsboro' .	578 Guantanamo to Dela-	ware breakwater. 92 St. John N.B., to Bos-St. John Harbour. ton, Mass.	41 Newfoundland, fishing. Cape George	149 New York to Moncton. 109 St. Pierre to North	Sydney. Off shore fishing, Shel- burne.
·92%	Register Tonn	16	107	8	578	36	41	109	8
	Rig.	. Schooner, wood, sail.	op	<b>ှ</b>	Barque,	wood, sail. Schooner, wood, sail.	op	စု စု	op
	Port of Registry.	10 Halifax	6 m. Parrsboro'	op	Windsor	15 Halifax	St. Johns, Nfid.	Moneton, N.B. St. Malo	Gloucester
	yge.	9	ä.	33	تم	15	<b>6-</b>	: 8	, <b>=</b>
	Name of Vessel.	1891. Oct. 13 Sailor's Fancy.	:	+ March 1 Pocahontas	29 Persia	23 Pioneer	23 Plover	rante	
ra.	lausa'D to etad	1891. Oct. 13	Jan. 1	4 March 1	62 op	May 23	op 88	Nov. 13 Parlee	

500	 : :	300	8,000	1,800	10,000	14,000	500	:	100	1,000	<b>4</b>	1,500	:	:
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-		<u>:</u>	:	:	:	:							:	
Lost sails		sprung a leak	Met a severe gale, lost spars	and masts. Dragged anchor and stranded	In gale. Masts carried	dered. Collision with barque "Can-	-	_	_	anchor.	Bque. "Havre" collided with the vessel and carried away	<b>F</b>	dismasted.	Collision in fog with "Fanny Dubard."
At sea	t. John Harbour	miles west of White S Head Light, sea.	3' N.; Long.	Cove, St. Nfld.	New Lat. 77° 49° N.: Long. 30° 19° W.	About 50 miles E.S.E. cf Flint Island.	St. Beach west of River Bourgoise.	North side Petit de Grat Inlet.	At Gaul Min'g Association, North Sydney.	Off Dover, N.B.	In Parrsboro' Harbour, N.S.	Lat. 29° 30′, Long. 67° 0′	Ha-Lat. 43° 30' N., Long. 124° 45' W.	Juan de Fuca Straits Collision in fog with "Fanny Dubard."
276 Philadelphia	209 Parrsboro', N.S., to St. St. John Harbour Andrew's, N.S	28 Halifax to Port Hood 5 miles west of White Sprung a leak Head Light, sea. and filled with-	1462 Liverpool to St. John . Lat. 43° 63° 16′.	87 St. Pierre Miquelon to Skinner's St. Jacques.	348 Cientuegas to New York.	Belfast, G.B., to Mira-About 50 miles E.S.F. cif Flint Island.	West Arichat to St. Peter's.	25 Sheet Harbour to Ari- North chat. Grat	94 St. Johns, Nfld	61 Joggins Mtn	46 Lying in port, Parrs-In Parrsboro' Harbour, boro' to West Bay N.S.	432 Pt. William to Havana Lat. 29° 30', Long. 67° 0'	1296 San Fraacisco to Ha-	1664 Yokohama
	209	88	1462 I	87.8	348			8	26	19	46	432	1296	1564
Barque, wood, sail.	Schooner, wood, sail.	op	Barque, wood, sail.	Schooner, wood, sail.	op	Barque, wood, sail.	Schooner, wood, sail.	op	op	ှ မွာ	op	Barqu'ne, wood, sail.	Schooner, iron, stm.	Schooner, wood, sail.
Parrsboro'	ор	Liverpool, N.S	Windsor	Lunenburg	Charlottetown P.E.I.	Frederickstad.	Halifax	op	St. Johns, Nfld	Parraboro'	op	Windsor, N.S. Barqu'ne, wood, sail.	Newcastle	Shanghai
	17		22	-	<del></del>	ន	8	\$	<u>.</u> -	2	∞	•	<b>o</b> o	18
2 Platiner	12 Pacoma	Oct. 18 Quickstep	Mary 13 Quebec.	12 Robt. F. Mason	26 Roland.	13 Rock City	13 Renfrew	13 Reaper	13 Rose Mary	6 Wioma.	6 Watchman	2 Winnifred	17 Wellington	13 Zambesi
Jan. 2	ध १ १	31 0-18 a-18	Merican 13	Jan. 12	Mar. 26	Oct. 13		ස දි 75	do 15	Nov.	op	Dec.	do 15	Nov. 13

to the Statement of Wreaks and Casualties to Sea-coing Vessels. &c. —Continued.

1	Amount.	<b>49</b>	5,000	110	8	801	400	100	900		250	1,500 800 800	250
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١	Lives Lost.		•	:	:	:	:	:	:		:	:	<u> </u>
-Concerteucu.	Cause of Caequalty.			:		:		:					
, v essens, wc.	Nature of Casualty.		Sprung a leak	op	Foundered	Dragged anchor and went ashore in a gale	Dragged anchor and collided with "Bessie	Dragged anchor and driven	Schr." Bertie C. H."brokeloose	ran down the A.G., carrying	Big Stranding; mis- St. stayed.	Island, Stranding	Miscellaneous; gale of wind broke vessel up at wharf.
SUPPLEMENT to the Statement of Wiecks and Casualues to Sea-going Vessels, ac.—Continued	Place where Casualty happened.		Mouth of Bay of Fundy	Boston Machas, Seal Island.	miles S.E. Port Ma-	:	op	Poulamond Harbour, Lennox Passage.	Port Hawkesbury		to Bar at mouth of Big Stranding; mis-Salmon River, St. stayed.	N. end Dolino Island, Stoul ground, White	Souris, moored at rail-
of w recks and car	Port sailed from.		620 St. John to Belfast   Mouth of Bay of Fundy  Sprung a leak	do Boston	26 Green Harbour to Lun- 4 miles S.E. Port Ma- Foundered.	enourg. 60 Laid up for winter at Port Hawkesbury. Port Hawkesbury.	op	74 Canso to Discousse	36 Grand River, P. E. I., Port Hawkesbury.		93 St. John, N. B., to	68 Georgetown, P.E.I., to N. end Dolino Portland, Me. foul ground,	P.E.I. Wulgrave to Souris, Souris, moored at rail- Miscellaneous; gale of way wharf.  P.E.I. broke vessel up broke vessel up at wharf.
men	Register Tonnage.		029	172	8	8	49	7.4	8		93	88	\$
the State	Big.		Barque, wood,sail.	Schooner,	wood,sail.	ор	·· op	op	ob		ob	do	ор
PPLEMENT to	Port of Registry.		St. John	New York	Shelburne	Halifax	Port Hawkes- bury.	Sydney	Halifax		St. John, N.B.	United States.	Guysboro'
2	Age.		19	37	ដ	뚕	83	12	2		<b>9</b> 0	22	88
	Name of Vessel.		May 19 Algeria		Nov. 16 A. J. Lloyd	1 Admiration	1 Arizon	1 A.S.Townsend 12	8 Annie Gaetz		May 23 Annie Harper.	1 A.H.Lennox	4 Atalia
	Date of Casualty.	1890.	May 19	Oct. 28	Nov. 16	276		do 1	do 8		May 23	Dec. 1	do 4

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Stranding;	dragg'd anchor	Stranding; gale	Gale	John Thick snow	storm, stranded Miscellaneous:	hurricane, ship-	became water-			against wharf. Heavy gale, ves-	sel dragged	Bay Heavy gale,	drift'd on rocks Lost anchor and	chains, stran'd.		_	-		Stranding; mistake in dis-	tinguishing be- tween 2 lights.	Duramum K.	Long. Sprung a leak	Collision with	Schr. "Mari Eu-	dragged down	carrying away
a barouse Harbour,	C.B.	Lingan, C.B	ff Scatterie Island	and Cove, St. John	Harbour			at. 31º 13' N., Long.	03° 04° W.	Flushing Island, Ports-	mouth, Newhaven.	sute,	of Fundy. Rustico Harbour	abrador coast.		Near Point Rich, St. Lawrence River.	ground,	Thomas Shoals, St. Lawrence River.	Catacomb Ledge	was bosses Tallond	Maine, U.S.	at. 39° 31′ N., Long.	ort Hawkesbury	ор		
96 Halifax to Gabarouse Gabarouse Harbour, Stranding;		seter, fishing voy-	770 Whycocomagn to Liver Off Scattarie Island Gale.	54 Parrsboro' to St. John. Sand Cove,	270 St. John to Demerara L		-	137 Lunenb'rg to Barbadoes Lat.	13 Anchored at wharf in .			\$	to Rustico,	P.E.I. 59 Gaspé to Halifax Labrador coast		110 Quebec to French shore Near Point Rich, Lawrence River.	114 Quebec Harbour G		124 St. John to New York.	163 Diche to Boston	THE DISCOURT ON EASING	Lunenburg to Mayag-I	66 Grand River, P. E. I., to Port Hawkesbury	138 Laid up at Pt. Hawkes-	bury.	
96	1	6	270	72	270			137	13	112		30	92	26			114			163	3 5	132	99	138		
op	•	· op	Barque,	S chooner,	wood, sail. Brig'nt'ne.	wood, sail.		- op	Tug, wood,	steam. Schooner,	wood, sail.	op	: op	: op	,	: 용 	: ep	•	: ફ		: } .	: වේ 	: જુ		wood, sail.	
Lunenburg		Gloucester,	11 Pictou, N.S	18 Parrsboro'	24 Machias. Me.			13 Windsor	16 Sydney.	St. John		12 Annapolis	7 Charlottetown	11 Halifax.		7 Quebec	op		St. John	91 Annarolia	···· smodermy	7 Lunenburg	32 St. Johns, Nfid	New Carlisle,	چ من 	
4		4	п	18	42			23	16	18							- 18		<del></del>		-			-		
1 A. G. Heisler.   4  Lunenburg		1 Alice	1 Amur	27 Alice	1 Angelia	)		2 Aliœ	9 Annie	9 A. C. Watson. 18 St. John		Nov. 13 A. Elliott	4 Acadian.	LJuly - Annie McGee.		June 10 Albani	Oct. 11 Alexina		13 Ayr	A 119 3 A delia		Oct. 18 Blizzard	1 Blondel	8 Bessie Louise 11 New Carlisle,		
op		9	op	do 2	op			qo	Nov.	Dec.		Nov.	Dec.	<sup>źn</sup> . 277	•	Tune	Oct.		op	Δ 11.0	• 60 ·	Cet:	Dec.	ф		

SUPPLEMENT to the Statement of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

	vunt.		3,990	2,000	1,500	9,8	888	1,200	08	300	60,000	6,000 2,000	200	110
	Amount	••			Caron	cargo	cargo	04.0	9		9	cargo		cargo
*S1	soI laitraT 10 latoT		Total	op	: op	: op	Partial.	: : မှာ	Partial	: မို	: op	Total	Partial.	: op
	Lives Lost.		:	:	:	:	:		i	:	:	:	:	:
	Cause of Casualty.		:										:	
	Nature of Casualty.	,	Stranding; defective tube	Stranding; heavy weather	and mgn sea. do	Stranding;	ran ashore. Lost deck load and other dam-	Stranding	Lost topsail; gale suddenly	changed. Pic-Stranding, gale	steamer Stranding; counter currents	Stranding, had to beach ship	Sudden gale of	Stranded; gale parted chain, and driven
	Place where Casualty happened.	:	29 Victoria to Chemains. About 10 miles from Stranding; Victoria. defective tube	New Hogg Island, P.E.I	Gabarouse Harbour	220 Sandoning to Boston. Ocrakoke Island, North Stranding; Carolina.	:	Red IslJnd Reef Off Quaco, Bay of	Syd-Lat 50° 52' N.; Long. Lost topsail; 38° 43' W. gale suddenly	Off Indian Point, Pictou Harbour.	Beach ahead steamer Jean De Fuca.	Buenos Conway Inlet, north Stranding, had side P.E.I. to beach ship	St. Bayfield, N.S., moored Sudden gale of	to Burnt Island, Jauvrin Stranded; gale Island. and driven ashore.
	Port sailed from. Port bound to.		Victoria to Chemains.	79 Summerside to New London, P.E.I.	79 Halifax to Sydney Gabarouse Harbour	Sandoning to Boston	92 St. John to Boston Isle of Shoals, Mass	Iron stmr. 1,866 Middleboro', Que Red IslJnd Reef Schooner, 109 Parrsboro' to Yarmouth Off. Quaco, Bay	176 Londonderry to Sydney, C.B.	38 Pictou Harbour to Lo-Off Indian Point, gan's Tannery, Pic- tou Harbour.	1274 San Francisco to De-Beach ahead parture Bay. Jean De Fuc	600 Quebec to Buenos Ayres.	196 Port Mulgrave to St.	
	Register Tonnage.		81	79	73	230	66	1,856	176	88	1274	009		
	Rig.		Sloop, w'd, steam.	Schooner, wood, sail.	ob	: op	ob	Iron stmr. Schooner,	wood, sail. Barque, wood, sail.	Schooner, wood, sail.	Barque, iron,steam	Ayres. Barque, wood, sail.	Schooner,	wood, sall. Schooner, wood, sail.
	Port of Registry.		Victoria, B.C. Sloop, w'd, steam.	Lunenpurg	Halifax	Sydney	St. John	12 Dundee	St. John, N.B.	Pictou, N.S	Corinto	Buenos Ayres.	Shelburne	24 Arichat
	Age.		ಣ	2	4	<b>∞</b>	H	12	Si	<del></del> -	:	:	-	22
	Name of Vessel.		Dec. 16 Badger	1 Beatrice	1 Bella May	17 Blanche	12 Byrtle	Sept. 13 Barcelona Dec. 27 Belvidere	8 Crown Jewel.	1 Chief Commander.	29 Costa Prica	12 Cleopatra	6 Conga	1 Catherine
	Date of Casualty.	1890.	Dec. 16	do 1	do 1	qo	87 9 78	Sept. 13 Dec. 27	Oct. 8	Dec. 1	Nov. 29	Oct. 12	qo e	Dec. 1

750	1,000	:	4,600 8° 3,000	% 904 900	2,000	10,000 cargo 1,920	5,500		:		3,470	4,000 cargo 500	5,000		1,400	cargo 1,000 400	5,000 cargo 10,000	000 004 004
		<u>.</u>	cargo	cargo	<del></del> -	. 8	<del></del>	:	· ·	_:	<del></del> :		<del></del> -		<u> </u>	8		Carren
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:	<u>:</u>	:		<u>:</u>	:		:		<u>:</u>	<u>:</u>	<del>-</del> -	• 	<u>:</u>			<u>:</u>	:	:
				:		:			: : : : : :		•		50			:		
Mistake, touch- ed ground and	hung for 3 hrs. Strand'g, broke away tug and	drifted asnore. Stranding; heavy weather	and high sea. Stranding; thick, squally	weather. Stranding; gale and unusual	sea. Met with a succession of	20 V 43	sauing. Heavy gale part ed anchors and	went ashore. Ran into tug,	'McNaughton' Stranding, pilot		barque Saga	Vessel capsized and sunk with	all hands. Stranding, gales			Port Hood Stranding; very	high sea. Stranding; error in compass	Bar. Stranding; gale and hich aca.
		Charlottetown to Ber-Point Prim Reef	ast end of Booty Rock, Bahama.	20 Glace Bay to Gabarous Gabarousse Harbour.		716 North Sydney to New Atlantic Ocean	to Digby, West Calk Light Vine-	Denis	Reef of Cacouna	Below Quebec	Lat. 46° o'; Long. 30°o'	Wil- Off Harborville, N.S	Ta- 4 miles west Carmanah	t. Thomas. St.	ce River.	ide, Port Hood	New Jones' Inlet Bar, Long Stranding; er. Island.	23 Halifax to Port Hood. West side Port Hood Stranding; gale Island.
to Foint Aconi	Grace B	Point P	Ĕ	Gabaro	:	Atlanti	West C	Off St.	Reef of	Below	Lat. 46	Off Hs.	4 miles	Port. Great Near St.	Lawr Bic Ha	West side,	Jones' Ir Island	West s
NHd., to	to Liver-Grace Bay	o Ber-	Pro-	abarous	C.B. to New	to New	Digby,	dney	ontreal.	ır	:	rt Wil-		Great	onear	Ialifax.		Hood.
o, Ni dney.	Bay to N.S.	town (	rt-à-Prince to vidence, R.I.	ıy to G	C.B.	ydney 1		I to Sy	ol to M	Harbou		to Port	ancisco	oma. Thomas to	n. to Carb	np to E	Thomas to ork.	to Port
114 Carboneao, North Sydney.	88 Grace E	harlotte muda.	231 Port.à-Prince to vidence, R.I.	ilace Ba	781 Sydney, (York.	North S. York.	314 New York N.S.	1451 Montreal to Sydney.	1818 Liverpool to Montreal	90 Quebec Harbour	700 Quebec	109 Boston liams.	247 San Francisco to			43 Cheticamp to Halifax.	<u> </u>	Halifax
114	88	421	183	8	781	912	314	1451	1818	8	200	109	247	1197 St.	-	•	146 St.	
brightne wood, sail.	S chooner, wood, sail,	own Barque, wood, sail.	Brig'ntine wood, sail,	Schooner, wood, sail.	op	Barque, wood, sail.	Brig'ntine wood, sail.	Iron, str	· op	Wood,	steam, tug Barque,	wood, sail. Schooner, wood, sail,	ob	Barque.	wood, sail. Schooner,	wood, sail.	Brig'ntine wood, sail.	Schooner,
r. Johns, Nhd.	Luneaburg	14 Charlottetown P.E.I.	Shelburne	Halifax	Boston	St. John	· · op	Montreal	19 Liverpool, G.B	19 Quebec	16 Louisberg	Boston	San Francisco.	Halifax	NA	; \$6	11 Halifax	op
41	- <del>1</del> -	41 O	21	11 E	12 H		13	9		61		:	∞	14	~		=	20
do 22 Ciedau Belle.   14 St. Johns, Nat. Brigntine wood, sail.	Oct. 23. C. M. Mader	12 Claribel	Nov. 21 Canadian	Dec. 1 Cetewayo	12 Conecut	Jan. 24 Crown Jewel. 22	26 Carrick	Ne May 15 Cacouna	do 14 Canopas	Sept. 14 Champion	May 23 Chatham	1 Daniel Marey Boston	do 20 Dare	Aug. 24 D. H. Morris. 14 Halifax	Nov. 17 Dominion	1 E. D. Myra	28 Eugenie	Dec. 1 Evangeline
3	83	. 12	۷. 21				. 28	y 15	) 14 ) 14	pt. 14	3.y 23.	Dec. 1	<b>8</b>	1g. 24	v. 17	ć.		c. 1
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Supplement to the Statement of Wrecks and Casualties to Sea-going Vessels, &c. -Continued.

unit.		2,290	200	900	1,400	88	<del></del>	1,000	10,000	400	4,000	5,000	900
Amount.	**			Carron	cargo	0.0160		cargo			cargo		cargo
Total or Partial Loss.		. Total	Partial	Total		. Total	Partial	. ·	Total	Partial	Total	Partial	Total
Lives Lost.		-	:		<u>:</u>	:	<u>:</u>	<u>:</u>	<u>:</u>	:	<b>!~</b>		:
Cause of Casualty.						:		:		:	:		
Nature of Casualty.		Stranding; storm.	Stranding; thick mist and could not see	buoys. Stranding	Stranding;gale;	Stranding;gale,	Victoria Stranding; no	buoy or mark. Missta yed going out and		Gulf Heavy gales	and cross sea. Never heard from after sail-		gale. Snow stormand gale; parted chain; drove ashore and smashed up.
Place where Casualty happened.		91 Rockland, Me., to Bel-Machias Harbour, Me. Stranding; liveau's Cove.	354 Florida to St. John, N. Vineyard Sound, Mass. Stranding; thick mist and B.	Straits Belleisle	:	:	Pin Rock, Victoria	Harbour.  Parr's Port, Digby Gut Misstayed going out and	Off Shelburne, N.S	edge	Stream. Atlantic	786 Little Glace Bay to St. Partridge Isl'nd Wharf, John.	Prospect Basin
Port sailed from.	•	Rockland, Me., to Belliveau's Cove.	Florida to St. John, N. B.	41 Fishing voyage	297 St. John to New York. Bliss Harbour, N.B.	38 Souris to Halifax Canso Harbour	25 Victoria to Nanaimo Pin Rock,	126 Boston to Port Lorne	1247 Liverpool to Pensacola Off Shelburne, N.S.	270 Bear River, N.S., to	Bridgeport, N.S. Stream. 148 St. John to Barbadoes, Atlantic. W.I.	Little Glace Bay to St. John.	Halifax to Blandford Prospect Basin
Register Tonnage.		<b>.</b>	8	41	297	8	8	128	1247	270	148	282	27
Big.		Schooner, wood, sail.	N.B Brig'ntine wood, sail.	tetown Schooner,	wood, sail.	ob	Steam	S c hooner, wood, sail.	Ship,	wood, sail. Brig'ntine	wood, sail. do	Barque, wood, sail.	Schooner, wood, sail.
Port of Registry.		Parrsboro'	St. John, N.F	25 Charlottetown	P.E.I. Portland, Me.		Victoria	Annapolis	St. John	Digby	op	St. John	Lunenburg
Age.		<b>∞</b>	۲-	8	14	೫	ध	4	88	9	=	18	4
Name of Vessel.		Dec. 4 E.B. Newcomb	30 Echo	E. Har-	riet. 5 Etna	1 Euxine	26 Emma	24 Elizabeth	20 Eurydice	do 2 Estella.	Edmund	4 Etta Stewart	26 Emerald
Date of Casualty.	1890.	Dec. 4	Oct. 30		088 Dec. 5		96 96	do 24	<b>%</b>	do · 2		Dec. 4	do %

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2,500	200	3,500	100	1.000		, § §			38	200				88	100.	858 820 820 820 820 820 820 820 820 820 82	6,000	1.000	10,000 cargo 12,000
					cargo	cargo	)	cargo	cargo		cargo		<u>:</u>	cargo		cargo			cargo
Partial.	Total	Partial	ob	op	<b>E</b>	1002	Total	:   	: }	Partial			:	Total	Partial	: 9	Total	Partial.	
<u>:</u>	<u>:</u>	<u>:</u>	<u>:</u>			:			:	<u>:</u>			<u>:</u>	<u> </u>	<u>:</u>		- :		8
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Lat.; 73° Cut away some g. spars; gales &	shifting cargo. Stranding; gale and thick wea-	ther. Teavy weather	Stranding; ves	sel misstayed Stranding : re	moval of light; loss of buoy.	vessel set on	fire by water getting on lime Stranding: un-	known cur'nts.	set on fire by	lime. During voyage	deck swept; sails, &c., car-	to throw away  1.500 bushels	corn. Collided with barque "Mag-	nificent." Collision, and sunk.	Stranding dragged on	shore in gale of wind. Stranding; gale of wind; driv-	en ashore. Stranding; loss of main sail	caused by run on shore. Partially de-	North All lost.
N. Lat.; 73°  C.	:	to Dun-Long. 38° 30'; Lat. 58° Heavy weather	Island Ledge,	near Jones' Port, Me. Sandy Beach, Gaspé	W from Cone			7			,		Farbour	to Entrance of Big Bras Collision, a'Or.	:	•			North
36° 25' N. I. 30' W. Long.	Murray F	Long. 38°	Ports Gose Is	Sandy Be	20 m G	Sable.	Char-Richibucto Bar.	Officenth					Quebec I	Entrance d'Or.	Port Hawkesbury	Coddje's	Inside of	Quebec Harbour	Tignish, Point,
172 Demarara to Halifax   35° 25'	26 Pictos to Georgetown. Murray Harbour	lphia.	99 Moneton to Ports	79 Gaspé to Lisbon	as d'Or Labe to Ros.	ton. Sable.	3	lottetown. Marble Mountain to	1,	145 New York to Halifax			396 Queliec to Great Britain Quebec Harbour	17 Little Glace Bay to Whycocomagh.	58 Laid up in Port	29 Canso to New Harbour Coddje's Harbour	186 Boston to Two Rivers. Inside of Seguin, Me.	26 Quebec Harbour	677 Murray Bay to Glasgow Tignish, near Point, P.E. I.
172/D	26 P	846 PI	86 W	79 G	47 E	<u> </u>	18 R	Σ.		145 N			<del>0</del>	17 I	182	<u> </u>	186 B	<u>~</u>	677 M
Brig'ntine wood, sail.	Schooner, wood, sail.	Barque,	S chooner,	wood, sau.		:	. ob	- op		op			Barque, wood, sail.	C.B., Schooner,	op	ob	: op	Wood,	Barque, Wood, sail
18 Halifax	P. E. Island	:	St. John	14 Guernsey	Pieton, N.S.		Sydney C.B	Picton, N.3		9 Guysboro'			Tonsberg	Sydney,	33 Port Hawkes-bury.	Halifax.	St. John	Quebec	:
18	91	18	<b>∞</b>	14	5 m.		ĸ	:					. 14	13		22	۲-	18	£.
8 Edith	6 Emerald	2 Emma Payz'nt 18 Windsor.	13 Frank W	2 Fearles	2 Florence C 5 m. Picton. N		3 Fiying Mist	9 Florence C		Fred. E. Cox		•	Sept. 19 Falcon	Nov. 13 George Wil- 13 liams.	1 Granada	1 George.	4 Gondola	June 15 Flora	Sept. 29 Falka 13 Christiania
မှ	Oet.	Dec. 2	Nov. 13	Dec. 2	do 2		do 3	op Op		op	281		Sept. 19	Nov. 1	Dec	qo	do	June 18	Sept. %

SUPPLEMENT to the Statement of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

Amount.	•	150		4,		100	100	829	4,500	1,000	750		5.00	160,000 do 650,000
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Lives Lost.		:	:	:	:	:	:	:	:			:	:	
Cause of Casualty.			:											
Nature of Casualty.		Heavy gales; leak and lost	Stranding; gale	Foundered	Starboard forward rigging	gave away. Dragged on shore in gale	Collission with	Missed light: struck reef &	sunk. Collided with iceberg.	Caught in vio- lent storm.	Collision with	Stranding; gale	Ran into by str.	Stranded on rock not mark- ed on chart.
Place where Casualty happened.		148 New York to St. John. 3 m. N. W. Cape Spen-Heavy leak	Porphyry Point	:	237 Bristol, Eng., to Syd-Lat. 42° 31' N.; Long. Starboard for-ney, C.B. ward rigging	Port Hawkesbury	Canso Harbour	Little Bras d'Or Reef.	955 Quebec Lon. 48° 46'; Lat. 30°. Collided iceberg.	1599 Philadelphia to Hiago, Lat. 27° 55' N.; Log. Caught in vio-Japan.	Island. Rattan Bay.	Arichat Harbour	:	2401 Montreal to Liverpool. 4 m. S. W. Point Anti-Stranded on costi.
Port sailed from. Port bound to.		New York to St. John.	124 Two Rivers to Boston Porphyry Point.	98 Parrsboro' to St. John, Mispec, N.B.	Bristol, Eng., to Syd- ney, C.B.	64 Port Hawkesbury	25 Charlottetown to Hali. Canso Harbour.	29 Cow Boy to N. Sydney Little Bras d'Or Reef.	QuebecQ	Philadelphia to Hiago, Japan.	170 South Amboy, U.S., to Rattan Bay.	109 Crapaud, P. E. I., to Arichat Harbour	350 West Indies to Quebec. Quebec Harbour	Montreal to Liverpool.
Register Tonnage.		148	124	89	297	25	25	83		1599	170	109	350	2401
Rig.		Schooner, wood, sail.	op	op	ob	ob	. op	ор	Barque, wood, sail.	Ship, wood, sail.	op	ob	Barque,	
Port of Registry.		St. John	Amherst	Parrsboro'	1 St. John	Port Hawkes- bury.	Arichat	St. John's, Nd.	18 Christiania	St. John	ор	Halifax	10 Charlottetown Barque	2 London, Eng
. 98А		<b>∞</b>	N.	6 m.	-	22	15	i	18	∞	10	23		
Name of Vessel.		Dec. 13 Gladys	27 G. Stanley N'w Amherst	27 Gertie 6 m. Parrsboro'	Aug. 18 Harry W. Lew-	1 Helen M.Cros- 25 Port Hawkes-by.	1 Hector.	27 Hyacinthe	6 Hanna	Sept. 19 Honolulu	Oct. 25 Isaac Burpee.	Dec. 1 Isabella	Aug. 6 Isabel	July 23 Idaho
Date of Casualty.	1890.	Dec. 13	do 27	do 27	81 ·gny 28	7 Dec 2	do 1	do 27	Aug. 6	Sept. 19	Oct. 25	Dec. 1	Aug. 6	July 23

88	200		2,500 100 100		250	909	250	100	200	747	200	888	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	300
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Partial.	т ор	do Total	Total Partial	: ક	: පි 	: မွာ	: op 	: ક	Total	: op	Partial.	: : 용용	: op	Total
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:			Gale	op	:		:	Misstayed, and driven		Heavy weather	Gale	Storm	Windandsnow	Misstayed; went ashore on rocks.
Stranding; heavy sea and	Stranding; gale	Broke from an- chor in gale & ran down on steam'r "Cape Breton."	Settled in mud; upset and became a total wreck.	Stranding	op	Collision with barque "Val-borg" during	Mainmast car-	₩.	Stranding	ор	ор	op op	op	op
Fownes' Beach, Bay of Fundy.	Sum- am. W. of Tony River,	Sydney Harbour	Moneton	Crow Harbour	Middle Ground, West Passage, Marie Jos-	epn. Quebec Harbour	Charlotte-5 miles west of Cariboo Mainnast car-	to Prince McPherson's ferry, str.	Rocky ledge, ½ m. W. from White Head	Port Haw-150 yds. S. W. from White Head Light-	Port Hawkesbury	Lower Descousse Beach South side Canso Har-	to Mouth St. John Har-	to Entrance to Parrsboro' River.
85 Quaco, N. B., to Rock-Fownes' Beach, Bay of Stranding land, Me. Fundy.	47 Cape Canso to Sum-and merside, P.E.I.	Sydney, C.B.	badoes. Lying at wharf, Moncton. ton. Arichat to Halifax	52 Georgetown to Lunen-Crow Harbour	burg. 58 Mount Stewart to Hali-Middle Ground, fax. Passage, Mari	1168 Quebec Harbour	33 Pictou to Charlotte-	Lunenburg Edward Is	41 Whitehead, fishing	31 Jeddore to Port Haw- kesbury.	64 Laid up at Port Haw- Port Hawkesbury	39 Halifax to Descousse 56 Deceousse to Halifax	68 St. John, N.B., to	Maine, oro'.
	47	40	88 8 <del>4</del>	52	<b>%</b>			78	· 				<b>8</b> 8	····
S chooner, wood, sail.	: op	: : op	Schooner, wood, sail. do	·· op	ob	Barque, wood, sail.	Schooner,	do do	: တု	•• op	• •	: : မမ	: op	: જુ
7 St. John.	Halifax	Lunenburg	3 Moneton 8 Port Medway.	14 Lunenburg	6. Yarmouth	Holmstrand	Charlottetown	2 Lunenburg	 ор	Halifax	Port Hawkes- bury.	Arichat	St. John	Halifax
	<b>∞</b>	7 m.		14		8	9	61	<u> </u>	13	8	2,2	14	<b>8</b>
Nov. 17 James Rourke.	James Davis	1 Jessie 7 Lunenbur 1 J. W. Durant, 4 m. Parrsboro	J. P. Ames	Jewel	7 Jacques	June 18 Johanne	8 L. H. Davies 10 Charlottetown Schooner,	Nov. 14 Lawrence	8 Letitia May	Nov. 6 Lady Key 13	1 Lelia Linwood 20 Port Hawkes-	4 Laura Victoria 1 Lida & Lizzie.	3 L. Edna 14	Oct. 12 Lord Mayo 18 Halifax.
Nov. 17	Dec. 1	do 1	 Dec. 1	do 1	Nov. 7	}I aunf 283	Aug. 8	Nov. 1	Oct.	Nov.	Dec	දිදි	op	Oct. 1:

	un t.	•	:	:	:	1,500	100	1,400	1,600 1,600 1,600	4,000	5,000	\$ S	2,000	:	<u> </u>
	Amount.		:	:	:			1,400	(4,000 cargo, 1,600	6	5,000 cargo, 4,000	cargo,	cargo,	:	
	seed Isitze T to lato T		Triffing.	:	:	Partial	ob	Total	op	: မှ	: op	Partial.	; op 		Partial
7.	Lives Lost.		:	<u>.</u>	<u>:</u>	<u>:</u>	<u>:</u>	<u>:</u>	<b>x</b>	:	۲-	_ <u>:</u>	<u>:</u>	<u>:</u>	<u>:</u>
&c.—Continued.	Cause of Casualty.		Gale					Hurricane	:	:				:	:
Vessels,	Nature of Casualty.			Parted chains and ran ashore to save cargo	and vessel. Ran into "Is-	Damaged by	Struck by squall and carried	away foremast Stranding	Wreck found		Speized. Not heard from	Apple Fog-alarm not in operation.	Mistook red light for gas		Stranding
Casualties to Sea-going	Place where Casualty happened.		Machia's Seal Island, bearing N. N. E. 28	to McNab's Island, Hali- Parted fax Harbour.	Quebec Harbour	op .	Near Scattarie Island, C.B.	Meagher's Beach	St. Shag Rock, St. Mary's Wreck Bay, N4d.	Lat. 30° 20' N., Long. 70° W.	Atlantic	Point, N.S.	to Lark Island Reef	Wrecked on Grand Manan several years	since. Black Pt., Little Har- bour, Pictou Cove.
Wzecks and	Port sailed from. Port bound to.		450 Windsor to New York, Machia's Seal	Tiverton, P.E.I., to Halifax.	2207 Liverpool to Quebec Quebec Harbour	2 Quebec Harbour	65 Cow Bay to Halifax Near Scattarie C.B.	63 Anigonish from Hali- Meagher's Beach.	246 New York to St. John's N4d	nenburg.	87 Boston, Mass., to Lun-Atlantic.	42 Rockland to St. John, Sudsey, N.B. River,	68 Quebec Harbour to L Harbour Breton, Nfl d.		since. 53 Tatamagouche to Little Black Pt., Little Har Stranding Glace Bay.
ent (	.egister Tonnage.		450	27	2207	87	<b>B</b>	8	246	8	87	42	88	12	33
r to the Statement of	Rig.		Mass. Schooner, wood, sail.	ob	Iron, str	Wood, str.	Schooner, wood, sail.	op	Brig'ti'ne,	Schooner, wood, sail.	ob	ੇ: ਉ	op	ор	·· op
SUPPLEMENT to t	Port of Registry.		17 Boston, Mass.	12 Digby	15 Montreal Iron, str	29 Ottawa	10 Halifax	St. John's, Nfid	6 Charlottetown Brig'ti'ne,	4 Lunenburg	op	Windsor	14 Lunenburg	St. Andrew's	Pictou
Sup	yRe.		17			83	10	జ్			81	8	14	æ	2
	Name of Vessel.		28 Lulu	Little Annie	6 Lake Nepigon.	23 Lizzie	L & S	1 Lady Franklin 30 St. John	Lantana	3 Laura A. Smith	Leonora B.	19 Laurel	4 Loraine	Loreto	6 Margaret Ann 10 Pictou
	Date of Casualty.	1890.	Dec. 28	do 1		9 84 84	Oct.	Dec. 1		do 3	- op	May 19	Nov.	:	Nov.

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		Gale.		1 00			L. 2		- g	p			6	: :	:		•		A	
Heavygalewith snow.		lost sails. Stranding	Slipped heran-	ashore. Driven as	by gale. Bad weather	-	Lying at anchor	Struck a rock	and was beach- ed. Gale, driven	$\overline{}$	Heavy storm	Squall.	Stranding; ga	op g	Lost sails, &c.		Collided with "Falcon."	Struck a reef .	Bay During heavy galeranashore.	Vessel dismast- ed and sunk.
to Point Lepreaux		P.E.I. Magdalen Port Hawkeebury	Pilot Harbour, S. of C.	to East Pt. Barnard's Is-	land, Descousse. Off Cape Hatteras	Eastern Rock, Scattarie Island.	de Petit de Grat Inlet	Little Bras d'Or	St. Charles Island, N.	Entrance of Bouquet	Gabarouse	Booth Bay, Boston	Off Louisbury Breaker	Mock Island.  I mile N. of Cape Race Tichthone	its.	Entering Maianham Harbour.	Quebec Harbour	Les Eboulements	14 miles W. from Bay Anticosti.	Margaretsville Pier
38/St. John, N.B., to/1 Westport, N.S. 1283 Quebec to Greenock	ar-	39 Halifax to Magdalen	45 Canso to Harbour a Bonche.	C.B.,	Descousse.	43 Main à Dieu to Scattarie Eastern Rock, Scattarie Island.	96 Arichat to Petit de	46 Halifax to Aspy Bay. Little Bras d'Or.	111 St. Pierre to Quebec	17 No port	120 Sydney to Halifax	100 Moneton to Boston	62 Placentia to Glace Bay. Off Louisbury Breakers Stranding; gale	95 Cow Bay to Cape Race 1 mile N. of Cape Race	136 Charlottetown to Linn,	423 Cardiff to Brazil	1283 Quebec	155 Quebec to Saguenay	84 St. Pierre to Quebec	44 St. John to Margareta-Margaretsville Pier ville.
	4 -			-:	<del>-</del> :	<del></del> -	<del>-:</del>	<del></del>	<del></del> :	<del>-</del> :	-:	<del>-</del> :	<del></del>	:	:	ine sil.		er,	j :	-:-
do Barau	wood, se	Is. Schooner,	wood, se do	qo	qo	op	စု	ф	တု	စု	မှ	မှ	ခု	op -	မှ	Brig'ntine wood, sail.	Barque, wood, sail.	Schooner,	go.	op
7 Digby	27 Norway do		700	43 Arichat	Windsor, N.S.	20 Guysboro'	Arichat	Magdalen Is-	Quebec	Shelburne	7 Liverpool	7 St. John	5 St. Johns, Nfld.	9 Charlottetown	4 Liverpool	5 Charlottetown	Z Liverpool	4 Quebec	ор	Digby
23		2	14	<b>a</b>	3 H		8	17	81	*									-	8
3 Mabel 7 Digby	12 Marie	1 Marie Enph- 12 Magdalen	rosyne. 5 Marie A	4 Mary Ann	5 Mineola 3 m. Windsor	Nov. 20 Mable	Dec. 15 Maria Matilda 81 Arichat.	10 Marie Anne . 14 Magdale	Nov. 29 Marie Erzélie.	Cobec. 1 M. E. Lloyd 24 Shelburne	Maggie Mil-	Dec Mauld Pye	do 17 Meteor	July 23 Minnie E	Dec. 4 Morier	Sept. 17 Minnie	1892. Sept. 19 Magnificent	1890. Sept. 22 Marie Elmire.	Oct. 13 Marie Del-	Dec. 1 Mizpah 25 Digby
Dec.		Dec.	qo	ę ę	မှ	Nov. 2	Dec. 1	do 1	Nov. 2	285		Dec.	op	July	Dec.	Sept.	1892.	Sept. 2	Oct. 1	Dec.

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	Live'Lost.		:		:	:	:	:	က	:	:	:	:	:	က	:	:
	Canse of Casualties.	-		:				:					:	:		:	:
,	Nature of Casualty.			Fire	Dismasted by gale.	Stranded; bro-	ken to piece. Stranded; light having been destroyed by	Cape Driven ashore in a gale, all	Sprang a leak, rudder damag-	Collision	:	_	unk'n vessel. Collision	Stranding gale.	Explosion	Stranding; gale	op
9	Place where Casualty happened.		Off St. Denis.	Louise Basin	Pentecost	Cod Roy, Nfld	676 Quebec to Newcastle Garganelle, near Point Stranded; light Biche. Biche. destroyed by	reef of main.	During voyage	Lake St. Peter	Roving Bull Harbour	31 Halifax to Arichat Edge Island, coast N.S.	Souris, Port Hawkesbury	ор	502 Westport to Cape Sable. 6 miles W. S. W. from Explosion	rease s island Light St. Andrew Channel	Rabbie Island, Cheda- bucto Bay.
	Port sailed from. Port bound to.		50 Quebec Harbour	36 Winter quarter	114 North Shore to Quebec. Pentecost.	256 Christiania to Quebec. Cod Roy, Nfld	Quebec to Newcastle	44 Pictou to Miramichi North	1648 Manila to New York During voyage	1939 Middlehorough to Lake St. Peter	Westport, N.S., to St. Roving Bull Harbour.	Halifax to Arichat	32 Halifax to Souris,	32 White Head to Souris,	Westport to Cape Sable.	68 North Sydney to Ha-St. Andrew Channel 1:fa.,	Вау
	Registered Tonnage.		28	8	114	256	676	4	1648	1939	88	31	32	32	202	88	87
2000	Rig.		Tug, wood,	steam.	Schooner, wood, sail.	Barque,	wood, sail.	Schooner, wood, sail.		Iron, str	Schooner,	wood, saii.	: op	: op	Schooner,	Schooner,	do ::
	Port of Registry.		Montreal	op	Quebec	Frederikotad . Barque,	Maryport	41 Halifax.	St. John, N.B. Ship, wo'd, sail.	London	Digby	31 Arichat	1 Halifax	ор	19 Ottawa	1 Sydney	2 Lunenburg
	Age.		4	22		22	13	41	17	ಣ	<b>∞</b>	31		12	19	-	81
	Name of Vessel.		May 15 McNaughton	Nov. 1 Margaret	17 Marie Vigi- 11 lante.	May 21 Martha	Scept. 8 Mary Graham. 13 Maryport	7 Mary Jane	6 Minister of Marine.	14 Michigan	17 Mabel	15 Mary Stevens.	1 Nettie M. G	8 Nettie M. G	9 Newfield	1 Native Lass	Z Nellie B
	Date of Caenalty.	1890.	May 15	Nov. 1	do 17	May 21	% rdes 286	Oct. 7	Nov. 6	Oct. 14	Dec. 17	do 15	do 1	do 8	6 op	do 1	do 27

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Snow storm, struck and	sunk. Vessel capsized	on voyage. Lost some sails,	&c. gale. Struck iceberg.		Never heard of	after sailing. Collision with	Winter. Unknown shoal	stranded. Upset from	carrying too	load. Dragg'd anchor in gale and	Salas Salas	Sprung a leak;	Gale	Stranded; gale		parted chains		Collision	Fault of pilot.	Foundered	Split sails and was driven s-	shore by storm Lost sails, &:
Cape August		om Boston	Harbour. Lat. 48° 13' N.; Long.	49° 15' W. Gulf of St. Lawrence		Grand River Harbour.	3 m. N. E. by E., 2 m.	E., Louise Basin.	,	Port Hawkesbury	About 30 m. E. by N. from Little Hope Is-	land Light. Off Cocagne Bar	Sydney Harbour	to Carrigan Pier, Guys-	Gabarousse Harbour		S.E. end of Grand Cay-	man, Carridoean Sea Lake St. Peters	Beauport Flats	Head of Bay of Fundy Foundered	Near Cape Jock	Atlantic Ocean
44 Arichat to Halifax	150 Cienfugos to Jamaica	96 Portland to Boston	1935 Antwerp to Montreal.	1587 Greenock to Quebec	695 Pictou to Liverpool,	6. B. Port Hawkesbury	Quebec	and Montreal.  Buctouche to Picton		Cocagne to Pictou	Boston to Charlotte-town.	Buctouche to Pictou	Halifax to N. Sydney Sydney Harbour	£	Halifax to Glace Bay		Colon to Halifax	Antwerp to Quebec	Liverpool to Quebec	St. John to Boston	Shediac to Pt. Hawkes-Near Cape Jock bury.	Sanbeas coast, N.Y
4	150	8	1935	1587	692	29	2273		133	72	52	32	1086	8	88		124	1623	2407	27	88	136
op	ob	do	Steel, str.	Ship, wo'd,	op	op		iron. Schooner,	wood, sail	op	: op	: op	Brig'ntine 1086	Schooner,	do do		: op	Iron, str 1623	ob	Schooner,	do	ි :
27 Halifax	1 Annapolis	St. John	:	16 Christiania	Germany	9 Halifax	7 Liverpool, G.B Schooner,	37 Halifax		24 Yarmouth	20 Charlottetown	35 Halifax	Sunderland	9 Lunenburg	7 Halifax		6 Liverpool	12 Glasgow	8 Liverpool	9 St. John	14 Arichat	9 Windsor
_	-	ಬ	2 m.	16	- <u>-</u> -	6	~	જ					9									
24 Nimble	Sept. '4 Nellie Pickup.	13 Nellie Watters	2 Norse King 2 m. London	Norwood	Nimrod	Nov. 6 Olive J	28 Oregon	25 Omega		1 Ottawa	2 Onward	1 Omega	27 Oakdone	1 Ocean Bride	1 Osceola.		Nov. 21 On Time	14 Ocean King	28 Oregon	4 Prescott	29 Pioneer	Nov. 10 Pearl
do 2	Sept.	Dec. 1	May		:	Nov.	Oct. 2	Aug. 2		Dec.	ф	ф	do 2	ф	op	,	Nov.	Oct. 1	do 2	Dec.	Oct.	Nov. 1

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SUPPLEMENT to the Statement of Wrecks and Casualties to Sea-going Vessels, &c.—Continued.

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Amount.	രണ്ടോ				cargo	cargo	cargo	cargo cargo	cargo	cargo
reso.I laitra Tro latoI	Partial Total	: ор	Partial	Total	rartial	Total Partial	Total Partial		G do	
Lives Lost.		:	:	:	:	: :	_ <u> </u>		n	
Cause of Causely:									:	
Nature of Casualty.	Gale Sprung a leak and abandon-	ed. Hurricane; stranded.	Sudden change of wind;	Carried away sail and drove on shore in a	gale. Heavy sea; ves- sel sprung a	ce, Pt. Misstayed and ur. ran on rocks. Liver-Gale; stranded	Stranded	Raninto by str.	Vesselnot heard of after leaving Alber- ton, P.E.I.	in gale and went ashore.
Place where Gasualty happened.	Gloucester, fishing South end Blanche Is Gale Santa Fe to Falmouth	Cape James, Anticosti.	198 Montreal to St. John, Richelieu Lighthouse Sudden change NAd.	Halifax to Glace Bay Simond's Point, Gaba-Carried sail and on sho	Vineyard 10 m. south of Island of Heavysea; ves- Shoals.	Liverpool to Port Her. E. side of entrance, Pt. Missayed and bert.  Herbert Harbour. ran on rocks.  Boston, fishing Forbes, Point, Liver Gale; stranded	Cod Roy, Nfd	Summerside, P.E.I. Gray 9 m. S.E. of Cape Raninto by str. George, Pictou Co Alert."	18 Alberton to Chatham, Between North Cape, V essel not N.B. N.B. P.E.I., and Port Escheard of after cuminac, N.B. ton, P.E.I.	Lennox Passage.
Port sailed from. Port bound to.	Gloucester, fishing	Newfoundland to Anti- Cape James, Anticosti.	Montreal to St. John, Nad.	Halifax to Glace Bay	Jogrins to Vineyard Haven.	Liverpool to Port Herbert.  Boston, fishing	Quebec to Liverpool, Cod Roy, Nfd Eng. Obelones to Off Lot 7 P E I	Summerside, P.E.I. Cripaud to Boston	Alberton to Chatham, Between North Cape, N.B. P.F.I., and Port Escuminac, N.B. cuminac, N.B.	IIIIIII W Teaching
Register Tonnage.	23.6	72	138	31	124	13	398	-	æ F	:
Rig.	Schooner, wood, sail. Brig'ntine wood, sail	Schooner, wood, sail	Nfid Brig'ntine wood, sail	Schooner, wood, sail	 	: : ор ор	Barqu'tine wood, sail	wood, sail	: - 9	: B
Port of Registry.	Gloucester, Mass. 13 Hamilton,	16 Quebec	16 St. John, Nfld	Halifax	St. John	Liverpool, N.S Boston	Sandejeford	P.E.I. Port Hawkes-bury.	Charlottetown	Io Arichat
-98A	13	16	16	11	10	- :	28 '		5 5	
Name of Vessel.	1890. Dec. 11 Plymouth do 12 Poeress	5 Palma.	June 18 Plymouth	8 Rival	13 Reaper	Sept. 26 Rattler Dec. 28 Roulette	25 Resolve	Nov. 13 Scylla	17 Spy	Dec. 15. G. Irwin
Uste of Casualty.	1890. Dec. 11	Oct. 5	81 aune 18	8 Nov. 8	Dec. 13	Sept. 26 Dec. 28	Aug. 25	Nov. 13	Oct. 17	1.960.

2,000	58	908	8	8 <b>8</b>	\$	1,400	5,000 1,560	2,500	1,800	928	3	190	99	3,000	90	950
	700 cargo 2,000			cargo		cargo	cargo 1					-				1,500 cargo, 1,050
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Dragged an- chere, and col- lided with	Shipped anchors and was driven	Lost anchose in a gale.	Draggedanchor and went a-	shore in storm Caught on bar, rolled over and	Stranding; gale	Parted chains;	gale. Condemned at Colon; heavy gale; leak and	lost sail. Heavy storm	Heavy storm	Stranded.	Collision with schr. "Mary	A. Stevens." Collision with tug "Champ-	her in tow. Stranding; error of judg-	ment. Vesselstranded in fog 3 captain	drowned. Dismasted in gale.	Stranding; not injured. Struck on sand- bar.
to Liverpool, Shediac Breakwater	Braddoes Bay, Labra-	artridge Island,	bour. Lower Bescousse Beach	Eatonville River, N.S.	Gaberouse Harbour	Doewst's Cave Ledge	Gulf of Darin	Camp Island, Maine	Dever's Cove Ledge	Murray Harbour Bar .	S. by E. from Wedge Island, 6 miles.	Below Quebec	Petit Manan Bar	St. Pierre Miquelon	Seven Islands Harbour	Point Aconi, C.B Off Cape Maringum, Bay of Fundy.
675 Shediac to Liverpool, S.B.	T Labrador to Boston	74 Rockland, Me., to St. John, N.B.	41 North Sydney to Des-Lower Descouse Beach Dragged anchor couses.	St. John to Parrsboro'. Eatonville River, N.S.	79 Halifax to Gabarouse. Gabarouse Harbour	68 Sydney to Halifax	154 St. Blaise to New York Gulf of Darin	117 Fall, Mass., to St. John, Camp Island, Maine	68 St. Peter's to Halifax	30 Georgetown to Halifax. Murray Harbour Bar	147 Sydney to Halifax	to Quebec	82 St. John to Boston		19 Anchored at Seven Is-Seven Islands Harbour lands Harbour.	o Jog-
675	E	72	4	47	2	8	75	117	8	8	147	499	82	197	61	8 4
Barqu'tine wood, sail	Nfid Schooner, wood, sail	<del>:</del> 용	<del>ි</del> :	ဗု	: \$	op	Brig'ntine wood, sail	Schooner,	tres op	: ક	ફ	Barque, wood, sail.	Schooner, wood, sail.	Brigant'ne wood, sail.	Schooner, wood sail.	Brigant'ne wood, sail. Schooner, wood, sail.
	St. John, Nfld	St. John, N.B.	Luneaburg	Parraboro'	8 Lunenburg	Halifax	Liverpool	St. John, N.B. Schooner,	14 Halifax	: မှ	op	Liverpool, G.B Barque, wood, sail.	St. John	France	Quebec	St. John's, Nfld St. John, N.B.
:	2	675	ន	<u>o</u> ,		18	2	27			•	ĸ	٠.	12	t~	E 8
6 Sinkine Norway	S Snow Bird	1 Susia Pearl	1 Sea Slipper 22 Luneubu	Nov. 20 Second.	29 Sexon	2 Sunbeam	27 Saidie	19 Sarah	1 Sunbeam	10 Silver Dart	158arah A. Townsend.	Sept. 14 Saga	Dec. 15 Speedwell	April 128t. Joseph	8 Souvenir	Dec. — Silver Sea 13 St. John's, Nfid Brigant'ne wood, sail. Oct. 27 True 26 St. John, N.B. Schooner, wood, sail.
250	2 10a-	-19	do 1	Nov. 2	Oct.	Dec.	9 8	ન ક 28		Oct. 1	Dec. 1	Sept. 1	Dec. 1	April 1	Nov.	Dec.

ន្តនន្ត 1,900 3,500 88 8 1,000 Amount. CBY BO cargo, cargo, Partial. Partial Total Total [otal Total notal or Partial Los ခု ခု မှ ද ခု Lives Lost. SUPPLEMENT to the Statement of Wrecks and Casualties to Sea-going Vessels, &c.—Continued Cause of Casualty. Harbour.

Harbour.

221 New York to St. John, Mouth St. John Har-Stranded ..... in gale. Fow-line broke light. Mistake of pilot head. Pilot mistook Wrecked on Grand Manan. Driven ashore Dragged anchor In collision with 41 Musquash to Rockland, Little Musquash Har-Stranded..... Went to pieces struck pier Collided with and vesse 359 Baie Verte to Exeter.. Great Shemogue Har-Driven on bar became a tota and stranded Nature of Casualty an iceberg. in a gale. wreck. Lower Descouse Beach, St. Peter's Bay. 124St. John to New York New York Place where Casualty happened. Chrichton's Island ... Ballast Ground..... 5141 Liverpool to Quebec .. Straits of Belle Isle 1116 Great Britain to Que-Barrel's Ledge.... Red Island Reef to Cayman Brae. 1188 Quebec to Liverpool... Louise Basin. S. 111 Sydney to Arichat .... Kingston, Jamaica, Cayman Island. Port sailed from. Port bound to. \$ 1025 Quebec Harbour 57 Hawkesbury John's, Nfid. 416 Quebec to Register Tonnage. Barque, wood, sail. Barque, wood, sail. wood, sail. Schooner, Schooner, wood, sail. Turk's Island . Brigant'ne Schr., iron, Sarpeburgh ... Barque, Schooner, wood, sail. Liverpool, G.B Iron, str... St. Andrews...Schooner, Rig. wood, s ခု Liverpool, N.S. St. John ... Maryport. Annapolis Sandyford Stavanger E 5 Montreal Halifax Sweden 2 œ 83 ಷ .98 Å 6 2 器 9 13 9 8 Village Bell .. | ... 8 1 Trial 18|Topey ..... 27 Terpsichore... 20 Thornholme .. 10 Udsire..... 1 Veritas 18 Valborg .... Name of Vessel. 27 Vancouver 1|Vergesco 21 Trygoe.. April 21 Traffick Date of Casualty. Nov. Aug. June July May Ď G Ö D 60 ခု 290

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59 Laid up at Pt. Hawkes-Port Hawkesbury Capaized and bury.	77 Cow Bay to St. Pierre Miquelon Roadstead, Driven schore	bi	;	41 Halifax to Descouse St. Peter's Harbour Stranding:		P f t		-
A. ¥iʻs	3	ale.		din	draga incho	25 5. g		
speiz ollide	wreck.	Miquelon, St. Pierre, in a gale, 52 Pictou to Cow Bay East side Ghost Beach, Stranding;	92 Halifax to Glace Bay South side Glace Bay, do	trar	gale; dragged 38 Souris to Guysboro' Near Port Hastings Stranding;	gale; dragged anchors. Grand shaft	broken. trandec sunk.	
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do l'Wallace 18 Pugwash, N.S. do	ф	අ	qo	op .	ં ફે	Steel, str., 2027 London to Quebec Below Bic .	Steamtag, 26 Quebec to Lower St. Bellechasse lighthouse. Stranded and wood.	
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¥	1	13 W	<u>8</u>	27 W. E. Weir 19 Arichat.	<u>₩</u>	8	24 William 30 Quebec	-
မှ	Nov. 1 W. J. Christie 6 Sydney, C.B.	Dec. 13 Warrior	Nov. 29 W. E. Young. 8 Lunenburg	Dec.	do 20 Willie B 14 Liverpool, N.S	June 8 Warwick 8 Bristol	စု	

STATEMENT of Wrecks and Casualties reported as having occurred in Canadian Inland Waters.

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Amount.	225	3,000 2,000 cargo 200	1,500 cargo 2,500 4,600	
sso.I laitra Tro lato'f	Partial	: -;	Triffing.	
Lives Last.	:			• • •
Cause of Casualty.				
Nature of Casualty.	Piston rod broke during heavy gale. Gale of wind	and bad steering.  Sprung a leak and sunk. Fearing collision with stur. Northern.	shore and dam- sged. Strart. Corsican backed into the J. H. Error in com- pages. Lost-ruddet and became, un-	natingenois: To w-post to fasse was torn out. Out. down on Burlington Beach and sustained sustained we by br y slight damage.
Place where Casualty happened.	1167 Quebec to Montreal Opposite Champlain Piston rod broke during tool Detroit to Claveland Dendas Dock Detroit Gale of wind	River.  4 miles S. by W. of Spurung a leak Pigeon Lt. Kiln Crossing, Detroit Fearing colli- River. North er n, North er n,	2613 Toricitto to Toronto Yonge St. Wharf, To-Stur. Corsican ronto.  454 Kingston to Toronto . Rose Bank, Lake On-Error in comtantario.  Fisher Bay to Selkirk. Mouth of Red River . Became un-	Off Elk Island, Lake Winnipeg.
Port sailed from. Port bound to.	Quebec to Montreal	7 Oswego to Kingston	2613 Toricate to Toronto Island. 454 Kingston to Toricate Fisher Bay to Selkirk.	ор 
Register Tonnage.	1167	2000	2613 464	668
Rig.	Steamer, wood.	iron. Tug, wood, steam. Iron,	Wood, steam, schooner. do Barge, wood.	do Schooner, wood, sail.
Port of Registry.	Montreal	Kingston	Toronto St. Chtharines Winnipeg	do
Age.	ឆ	: % :	8 8 2	<b>6</b> 5
Name of Vessel.	1 Canada	7 Eleanor 25 Milwaukee	June 22 John Hanlan. Fuly 2 Gosan	Grand Rapids. 5. G. Wöffs.
Date of Casualty.	ø.	op op	June 22	

<u> </u>								
	Amount.		••		1	4,00°		5 2 2 2 3 3 3 3
ľ	₹	- [	•	•	:			cargo
	otal or Partial Loss.	T				Fartial	: 40 F	
	teo Lost	ı	:		:	:	:	
	Cause of Casualty.					:		
	Nature of Casualty.		No particulars.	Sprung a leak.		Heavy weather	Fire: don't	know origin.
	Place where Cacualty happened.		St. Mary's River.	:	Johnson's Dock. Wal.	laceburg. 20 to 25 miles west of	Goderich. Tyrconnel Dock	
	Port sailed from. Port bound to.		2268 Owen Sound to Fort St. Mary's River No particulars.	Cleveland, U. S., to	98 Sarnia	Musicoka Mills to Buf-	173 Chatham to Detroit Tyroonnel Dock Fire: don't	
	Register Tonnage.	Ì	2368	:	88	1001	173	
	R. P.		end Schooner, Steel,	:		¥.	do do	:
	Port of Registry.		Montread	American vee-	2 Collingwood Wood,	•	Ф	
_		<u>,                                     </u>	8	;	.63	8	18	
_	Name of Vessel,		Athabasca	Sept. 5 J. E. Gilmor.	Interocean	Lewis Hotch- 20 Toronto	Twilight	
	Date of Caeualty.	1891.		ept. 5	:	:	:	-

	Amount.	**	cargo 1,200	908	100 cargo 300	1,000 cargo 2,000		2,500	6,000 8,000 cargo 1,300	1,700	2,000 cargo 900	2,000
T TURE	rotal or Partial Loss		T0007	: op	Partial	Total	Triffing.	Total	: : မှမ	: පු	် မွာ	ි : ඉ
<b>1</b>	Lives Lost.		:	ĸ	:	20	:	<u>:</u>	<u> </u>			:
essels in Can	Cause of Casualty.		:									
nd Foreign Ve	Nature of Casualty.	5	Severe weather, stranded.	Collision with	Mistake in distance; caused by current;	'v– - ·	Collision with schr. "T w o	Took fire and sunk.	Took fire Broke 100se from tug; lost	щ.	Heavy weather; stranded.	Collision with propeller "Al- derson."
n Inland Vessels a. 90.	Place where Casualty happened.	•	Magnetic Keef	to a mile N. E. of Sunken Collision with RockLight, Alex'nd'r J. U.S. str. "St.	Day, N. E. point of a lime stone shoal, Georgian Eay.	About 15 miles from Oswego, N.Y.	Near Young's Dock	Ottawa River, foot of Took fire and canal locks.	Ottawa River at Hull. Took fire Pigeon Island, Lake Broke 100 se Ontario.	Port Stanley Harbour.	Algona Magnetic Reef	Between Briar Island and Gun Point.
SUPPLEMENT to the Statement of Wrecks and Casualties to Canadian Inland Vessels and Foreign Vessels in Canadian Inland Waters in 1890.	Port sailed from.  Port bound to.		300 Cleveland to Algoma Magnetic Reef Mills.	10 Alexandria Bay to Grenadier Island.	Day,  Day,  Day,  Day,  E. point of a lime Mistake in distribute.  Stone shoal, Georgian tance; caused Bay.  Bay. ourrent;	100 Trenton to Oswego	38 Ports in Bay of Quinté Near Young's Dock.	19 Ottawa	34 Laid up at Hull, P.Q. Ottawa River at Hull Took fire 328 Charlottefown, N. Y., Pigeon Island, Lake Broke 100s to Ogdensburg.	7 At anchor at Port Stan- Port Stanley Harbour.	d to	Wiarton to Lion's Head Between Briar Island Collision and Gun Point, propeller derson."
Ö g	Register Tonnage.		8	91	20	9	88	10	* 88	2	232	7
Wrecks ar	igi		Wood,	එ	: &	S chooner, wood, sail.	Wood,	Wood, steam, tug.	do Schooner, wood, sail.	Tug, wood,	Barque, wood, sail.	Tug, wood, steam.
tatement of	Port of Registry.		Toronto	Kingston	Collingwood	Picton, Ont Schooner, wood, sail.	Kingston	15 Ottawa	Montreal 20 Cape Vincent, N.Y.	Prescott	St. Cath	Owen Sound Tug, wood, steam.
e So	Age.		13	•	пем	ន	9		28	2	83	-
PLEMENT to th	Name of Yessel.		5 Bruno	July 17 Catherine	6 City of Mid-new Collingwood.	9 Ocean Wave	23 Reindeer	July 29 Resolute	Sept. 21 Ivy Nov. 25 Polly M. Rogers.	2 James Buckley	5 Louisa.	Aug. 16 Annie Watt
SUP	Date of Casualty.	1890.	Nov. 5	July 17	294	g ob	Oct. 23	July 29	Sept. 21 Nov. 25	do	qo Q	Aug. 16

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do   2,000	1,500		. 5,000 cargo 400	:	88		3,000	6,000
Cango			cargo		Gergo			
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Ì	:		:		•		:	
Carried away sails and driven on shore at Os-	wego. Sprung a leak and sank		Steam barge let her go to save	herself. Abandoned; a	wreck in Picton Har., Ont. Struck on a rock while in tow	of str. "Chief.	Foundered	Stranding; gale
swego Beach	miles N. E. of Dun- ning, Lake Erie.	•	and Beach, Michigan, U.S.	•	wreck in Picton Har, Out. to St. Bishop's Point, Lake of Struck on arock the Woods.	4	Off Capt. John's Is-Foundered . land, Bay of Quinté.	ar Pancake Island, 15 miles from Parry Sound.
224 Oswego to Toronto   Oswego Beach	234 Windsor, Out., to 70 miles N. E. of Dun-Sprung a leak buffalo. and sank:	4	320 Midland to Buffalo Sand Beach, Michigan, Steam barge let U.S.	•	3 Rat Portage to St. Bi Francis.		111 Gananoque Of	do 181 Fish River to Parry Near Pancake Island, Stranding; gale Sound.  Sound.  Sound.
<u>2</u>	<u> </u>		NG.	ः स	S. Rad		1 G	- F.
				121				18
Schooner wood, sail	: &		ob	. op	Wood,	•	Schooner, wood, sail.	1
Port Hope	Picton, Ont		Hamilton	Kingston	4 Winnipeg		Kingston	St. Catharines
88	91		R		4		92	83
Nov. 2 CarolineMarsh 38   Port Hope Schooner,   wood, sail.	Huron		May 30 Victor		Oct. 16 Windigo		Sept. 29 A. G. Ryan 10 Kingston Schooner, wood, sail.	1890. <b>56</b> Nov. 10 Jane McLeod. 22 St. Catharines
Nov. 2		1889.	May 30	:	Oct. 16	1886.	Sept. 29	1890. 100 Nov. 10

## APPENDIX No. 39.

KINGSTON OBSERVATORY, 29th February, 1892.

Sir,—I respectfully submit for the information of the Minister of Marine and Fisheries, the following report of the Kingston Observatory for 1891:—

The instruments have been kept in good order and adjustment, and observations

have as far as possible been daily made throughout the year.

Since last report a hot-water coil from the adjoining building has been introduced into the observers' room. The cost of this improvement has been considerable; but, besides contributing greatly to their comfort, and that of visitors throughout the winter by the constant and equitable temperature which it affords, it has added to the accommodation of the department by rendering available the space formerly occupied by the stove and the necessary storage of fuel. Some small repairs have also been made in connection with the arrangements for opening and closing the shutters in the Equatorial and Transit rooms.

A new web of wires, with micrometer, for the transit, together with a ring micrometer for the equatorial, in addition to the position circle micrometer by Alvan Clarke, have just been ordered from Fauth & Co., the makers of the sidereal clock, which still

maintains its excellent performance.

I am happy to say, that, since the improvements made some years ago, the foundations, and piers, on which the transit rests, have been found so perfectly stable that when the instrument is once adjusted, and is used with ordinary care, the level from day to day shows little or no appreciable change.

I have the honour to be, sir,

Your most obedient servant,

JAS. WILLIAMSON,

Director of Observatory