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Additional comments /  
Commentaires supplémentaires:

Various pagings.

Sessional paper No. 9, Annual report of the Department of Railways ... 30<sup>th</sup>  
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In Sessional paper No. 9, Appendix No. 12, page 143 is incorrectly numbered  
page 134.

In Sessional paper No. 9A, Canal statistics for season of navigation 1892  
starts at page [iii].

In Sessional paper No. 9B, Reports. Railways statistics of Canada ..., page  
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THIRD SESSION OF THE SEVENTH PARLIAMENT

OF THE

DOMINION OF CANADA

SESSION 1893



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VOLUME XXVI.

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OF THE  
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### CONTENTS OF VOLUME 1.

1. Report of the Auditor General on Appropriation Accounts for the year ended 30th June, 1892. Presented 27th January, 1893, by Hon. G. E. Foster.  
*Printed for both distribution and sessional papers.*

### CONTENTS OF VOLUME 2.

2. Public Accounts of Canada for the fiscal year ended 30th June, 1892. Presented 27th January, 1893, by Hon. G. E. Foster. 2a. Estimates for the year ending 30th June, 1894; presented 30th January, 1893. 2b. Supplementary Estimates for the financial year ending 30th June, 1893; presented 17th February, 1893. 2-1b\*. Further Supplementary Estimates for the year ending 30th June, 1893; presented 16th March, 1893. 2c. Supplementary Estimates for the year ending 30th June, 1894; presented 27th March, 1893.....*Printed for both distribution and sessional papers.*
- 2d. Trade with Great Britain—Horses.....*Printed for both distribution and sessional papers.*
- 2e. Commercial Relations, Canada, No. 1. Reports upon Trade and Trade Openings in Great Britain and other countries, to 31st December, 1892.....*Printed for both distribution and sessional papers.*
3. List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1892. Presented 24th March, 1893, by Hon. G. E. Foster.....*Printed for both distribution and sessional papers.*

### CONTENTS OF VOLUME 3.

- 3a. 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, 1892, in chartered banks of Canada.....*Printed for both distribution and sessional papers.*
4. Report of the Superintendent of Insurance for the year ending 31st December, 1892.  
*Printed for both distribution and sessional papers.*
- 4a. Preliminary abstract of the business of the Canadian Life Insurance Companies for the year ending 31st December, 1892. Presented 20th February, 1893, 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, 1892.  
*Printed for both distribution and sessional papers.*

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### CONTENTS OF VOLUME 4.

5. Tables of the Trade and Navigation of Canada for the fiscal year ended 30th June, 1892. Presented 27th January, 1893, by Mr. Wood (Brockville). *Printed for both distribution and sessional papers.*
6. Inland Revenues of Canada. Part I., Excise, &c., for the fiscal year ended 30th June, 1892. Presented 26th January, 1893, by Mr. Wood, (Brockville). *Printed for both distribution and sessional papers.*
- 6a. Inland Revenues of Canada. Part II., Inspection of Weights, Measures and Gas, for the fiscal year ended 30th June, 1892. *Printed for both distribution and sessional papers.*
- 6b. Inland Revenues of Canada. Part III., Adulteration of Food, for the fiscal year ended 30th June, 1892. Presented 27th January, 1893, by Mr. Wood (Brockville).  
*Printed for both distribution and sessional papers.*

### CONTENTS OF VOLUME 5.

7. Report of the Minister of Agriculture for Canada, for the calendar year 1892. Presented 23rd February, 1893, by Hon. G. E. Foster. *Printed for both distribution and sessional papers.*
- 7a. Report on Canadian Archives, 1892. *Printed for both distribution and sessional papers.*
- 7b. Report of the Director and Officers of the Experimental Farms, for the year 1892. Presented 20th March, 1893, by Hon. G. E. Foster. *Printed for both distribution and sessional papers.*
- 7c. Criminal Statistics for the year 1892. *Printed for both distribution and sessional papers.*

### CONTENTS OF VOLUME 6.

8. Annual Report of the Minister of Public Works, for the fiscal year ended 30th June, 1892. Presented 20th February, 1893, by Hon. J. A. Ouimet. *Printed for both distribution and sessional papers.*
9. Annual Report of the Minister of Railways and Canals, for the past fiscal year, from the 1st July, 1891, to the 30th June, 1892. Presented 10th February, 1893, by Hon. J. G. Haggart.  
*Printed for both distribution and sessional papers.*
- 9a. Canal Statistics for Season of Navigation, 1892. Presented 10th February, 1893, by Hon. J. G. Haggart.  
*Printed for both distribution and sessional papers.*
- 9b. Railway Statistics, and Capital, Traffic and Working Expenditure of the Railways of Canada, for 1892. Presented 29th March, 1893, by Hon. J. G. Haggart.  
*Printed for both distribution and sessional papers.*

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10. Annual Report of the Department of Marine and Fisheries for the fiscal year ended 30th June, 1892. Presented 27th January, 1893, by Hon. J. Costigan.  
*Printed for both distribution and sessional papers.*
- 10a. Fisheries Statements and Inspectors' Reports for the year 1892.  
*Printed for both distribution and sessional papers.*
- 10b. Report on the Oyster Fisheries of Canada, 1892. Presented 30th January, 1893, by Hon. J. Costigan.  
*Printed for both distribution and sessional papers.*
- 10c. Report of British Columbia Fishery Commission, 1892.  
*Printed for both distribution and sessional papers.*
- 10d. Report on the Lobster Industry of Canada, 1892. *Printed for both distribution and sessional papers.*

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11. Report of the Chairman of the Board of Steam-boat Inspection, etc., for calendar year ended 31st December, 1892. *Printed for both distribution and sessional papers.*
12. Report of the Postmaster-General of Canada for the fiscal year ended 30th June, 1892. Presented 3rd February, 1893, by Sir A. P. Caron. *Printed for both distribution and sessional papers.*
13. Annual Report of the Department of the Interior, for the year 1892. Presented 22nd March, 1893, by Hon. T. M. Daly. *Printed for both distribution and sessional papers.*
- 13a. Summary Report of the Geological Survey Department for the year ended 1892.  
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- 14.** Annual Report of the Department of Indian Affairs for the year ended 31st December, 1892. Presented 7th March, 1893, by Hon. T. M. Daly. . . . . *Printed for both distribution and sessional papers.*
- 15.** Report of the Commissioner of the North-west Mounted Police Force, 1892. Presented 3rd March, 1893, by Hon. W. B. Ives. . . . . *Printed for both distribution and sessional papers.*
- 16.** Report of the Secretary of State of Canada for the year ended 31st December, 1892. Presented 6th March, 1893, by Hon. J. Costigan. . . . . *Printed for both distribution and sessional papers.*
- 16a.** Civil Service List of Canada, 1892. Presented 9th February, 1893, by Hon. J. Costigan. . . . . *Printed for both distribution and sessional papers.*
- 16b.** Report of the Board of Civil Service Examiners, for the year ended 31st December, 1892. Presented 29th March, 1893, by Hon. J. C. Patterson. . . . . *Printed for both distribution and sessional papers.*
- 16d.** Annual Report of the Department of Public Printing and Stationery of Canada, for the year ended 30th June, 1892, with a partial report for services during six months ending 31st December, 1892. Presented 28th February, 1893, by Hon. J. Costigan. . . . . *Printed for both distribution and sessional papers.*
- 17.** Report of the Joint Librarians of Parliament, on the state of the Library of Parliament. Presented 26th January, 1893, by Hon. Mr. Speaker. . . . . *Printed for sessional papers only.*

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- 18.** Report of the Minister of Justice as to Penitentiaries in Canada, for the year ended 30th June, 1892. Presented 27th January, 1893, by Sir John Thompson. . . . . *Printed for both distribution and sessional papers.*
- 19.** Annual Report of the Department of Militia and Defence of Canada, for the half-year ended 30th June, 1892. Presented 31st January, 1893, by Hon. J. C. Patterson. . . . . *Printed for both distribution and sessional papers.*
- 19a.** Establishment Lists of the Active Militia for the financial year 1893-94. Presented 25th March, 1893, by Hon. J. C. Patterson. . . . . *Printed for both distribution and sessional papers.*
- 20.** Return to an order of the House of Commons, dated 23rd March, 1892, for a return showing the number and names of men and vessel-owners applying for bounties for the years 1889, 1890 and 1891, and not receiving the same, giving the reasons why such applications were not granted; also whether any were refused and afterwards granted, the names, amounts and reasons given why such were afterwards granted; also all papers and correspondence since 1888 in reference to the bounty system and in regard to applications granted and ungranted. Presented 27th January, 1893.—*Mr. Bowers.* . . . . . *Not printed.*
- 20a.** Return to an order of the House of Commons, dated 27th May, 1891, for a return giving a comparative statement for the years 1882 to 1891, inclusive, (by province) of: (a) Total number of bounty claims received by department. (b) Total number paid. (c) Number of vessels, tonnage, and number of men entitled to bounty in each year. (d) Number of boats among which bounty was distributed, and number of men engaged in boat-fishing receiving bounty. (e) Total number of men receiving bounty. (f) Total annual payments of fishing bounty. Presented 30th January, 1893.—*Mr. Flint.* . . . . . *Not printed.*
- 20b.** Statement in reference to fishing bounty payments for 1891-92, required by chapter 96 of the Revised Statutes of Canada. Presented 6th February, 1893, by Hon. J. Costigan. . . . . *Not printed.*
- 20c.** Return to an order of the House of Commons, dated 30th May, 1892, for a copy of all correspondence, papers and reports relating to the investigation into the conduct of William Prosser, fishery overseer for the district fronting the county of Essex, on lake Erie, and his dismissal from office. Presented 8th February, 1893.—*Mr. Allan.* . . . . . *Not printed.*
- 20d.** Copy of the proceedings of the conference recently held at Halifax between delegates from the governments of Canada and Newfoundland upon the fishery question and other questions between the two governments. Presented 8th February, 1893, by Sir John Thompson. . . . . *Printed for sessional papers only.*



## VOLUME 10—Continued.

- 20e.** Further papers respecting the enforcement by the Newfoundland authorities against Canadian vessels of the Newfoundland act respecting the sale of bait to foreign fishing vessels. Presented 9th February, 1893, by Hon. J. Costigan,..... *Printed for sessional papers only.*
- 20f.** Further papers respecting the several questions at issue between the dominion of Canada and the colony of Newfoundland. Presented 13th March, 1893, by Hon. G. E. Foster.  
*Printed for sessional papers only.*
- 20g.** Return to an address of the House of Commons to his excellency the Governor-General, dated 27th July, 1891, for copies of all documents, petitions and letters in relation to the fishing rights of F. F. Rouleau, Esq., advocate, of Rimouski, which said rights he and his predecessors have always exercised on his property at Rimouski. Presented 13th March, 1893.—*Mr. Choquette.*  
*Not printed.*
- 20h.** Return to an order of the House of Commons, dated 1st March, 1893, for copies of all correspondence between the government and the Quebec board of trade, respecting the appointment of a fishery officer in the place of Mr. W. H. Whitely, for the Bonne Espérance division, from Checatia to Blancs Sablons. Presented 29th March, 1893.—*Mr. Joncas.*..... *Not printed.*
- 20i.** Return to an order of the House of Commons, dated 13th March, 1893, for a return showing a copy of a certificate of qualification held by each of the commanders of the fishery protection service last season, as follows: Commander O. G. V. Spain, "Acadia;" W. H. Kent, "Agnes Macdonald;" E. Dun, "Bayfield;" Geo. M. May, "Constance;" J. H. Pratt, "Dream;" Wm. Wakeham, "La Canadienne;" A. Finlayson, "Stanley;" C. T. Knowlton, "Vigilant." Presented 29th March, 1893.—*Mr. McMullen.*..... *Not printed.*
- 20j.** Return to an address of the House of Commons to his excellency the Governor-General, dated 20th March, 1893, for copies of all documents, reports and correspondence between the government and the Quebec Board of Trade, or any other person, in relation to the treatment endured by Canadian fishermen from Newfoundland fishermen along the Canadian Labrador coast. Presented 30th March, 1893.—*Mr. Joncas.*..... *Not printed.*
- 20k.** Return to an order of the House of Commons, dated 20th March, 1893, for: 1. Copies of instructions issued to the fishery overseers of Berthier, Maskinongé, St. Maurice, Champlain, Nicolet, Yamaska and Richelieu, since 1st January, 1892, and of all correspondence on the subject between the Government and the said fishery overseers; or between the government and any other persons from 1st January, 1892, up to this date, in relation to such instructions and the enforcement thereof. 2. A statement of fishing licenses issued in the counties aforesaid during the years 1891 and 1892, separately. 3. A statement of the quantity and value of the various kinds of fish taken in the said counties—separately—during the years 1891 and 1892. Presented 30th March, 1893.—*Mr. Bruneau.*..... *Not printed.*
- 20l.** Return to an order of the House of Commons, dated 20th February, 1893, for a return of all persons receiving fishery bounties in the counties of Victoria and Guysboro', N.S., for the year 1892, with amount paid each. Presented 30th March, 1893.—*Mr. Fraser.*..... *Not printed.*
- 21.** 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 McIntyre, and the appointment of his successor. Presented 27th January, 1893.—*Mr. Landerkin.*..... *Not printed.*
- 21a.** Return to an order of the House of Commons, dated 20th February, 1893, for copies of all letters, correspondence, petitions and other documents received and exchanged by the government, respecting the dismissal of Edouard Lesage, postmaster of St. Léon, in the county of Maskinongé, and to any appointment or appointments made to the position since the discharge of the said official. Presented 16th March, 1893.—*Mr. Legris.*..... *Not printed.*
- 21b.** Return to an address of the Senate, to his excellency the Governor-General, dated the 7th March, 1893, for copies of the order in council, information, evidence and papers upon which the dismissal of John J. Cosgrove, an officer of the inland revenue department, proceeded and was determined. Presented 23rd March, 1893.—*Hon. Mr. O'Donohue.*..... *Not printed.*
- 22.** Statement of Governor-General's Warrants issued since last session of parliament, in accordance with the Consolidated Revenue and Audit Act, section 32, subsection b. Presented 30th January, 1893, by Hon. G. E. Foster..... *Printed for distribution only.*

VOLUME 10—*Concluded.*

- 23.** Statement of expenditure on account of miscellaneous unforeseen expenses. Presented 30th January, 1893, by Hon. G. E. Foster..... *Not printed.*
- 24.** Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th January, 1892, and from the 11th to the 20th January, 1893. Presented 30th January, 1893, by Hon. G. E. Foster..... *Not printed.*
- 24a.** Statement of the receipts and payments of Canada, 1891-92 and 1892-93, to 31st January. Presented 6th February, 1893, by Hon. G. E. Foster..... *Not printed.*
- 24b.** Statement of the receipts and payments of Canada, 1891-92 and 1892-93, to 10th February. Presented 17th February, 1893, by Hon. G. E. Foster. .... *Not printed.*
- 24c.** Statement of the receipts and payments of Canada, 1891-92 and 1892-93, to 10th March. Presented 15th March, 1893, by Hon. G. E. Foster..... *Not printed.*
- 24d.** Statement of the receipts and payments of Canada, 1891-92 and 1892-93, to 20th March. Presented 21st March, 1893, by Hon. G. E. Foster..... *Not printed.*
- 25.** Rules of the Exchequer Court of Canada in respect to any proceeding that may be had or taken in the Exchequer Court of Canada to impeach any patent issued under "The Patent Act." Presented 27th January, 1893, by Hon. J. Costigan..... *Printed for sessional papers only.*
- 26.** Return to an address of the Senate to his excellency the Governor-General, dated 9th July, 1892, for a copy of the latest time-table adopted to govern the running of passenger trains on the Intercolonial Railway. Presented 30th January, 1893.—*Hon. Mr. Power*..... *Not printed.*
- 26a.** Return to an order of the House of Commons, dated 6th February, 1893, for a statement of the working expenses of the Intercolonial Railway for the year 1890-91 and also for the year 1891-92, and from the 1st July, 1892, to the 31st December, inclusive, under the following headings, viz. :— Locomotive power, car expenses, maintenance of way and works, station expenses, general charges, car mileage. Presented 27th February, 1893.—*Sir Hector Langevin.*  
*Printed for distribution only.*
- 26b.** Return to an order of the House of Commons, dated 6th February, 1893, for a statement showing the revenue of the Intercolonial Railway for the years 1890-91 and 1891-92, and from the 1st July, 1892, to the 31st December, inclusive, under the following headings, viz. :—Passengers, freight, mails and sundries; giving also the number of passengers and the number of tons of freight carried in each of the above-named years. Presented 27th February, 1893.—*Sir Hector Langevin.*  
*Printed for distribution only.*
- 26c.** Return to an order of the House of Commons, dated 13th March, 1893, for copies of all correspondence, reports and other documents relative to the reduction in rank of C. A. Atkinson from conductor to brakeman, on or about October, 1887. Presented 30th March, 1893.—*Mr. Wood (Westmoreland)*..... *Not printed.*
- 26d.** Return to an order of the House of Commons, dated 28th March, 1892, for copies of all letters, telegrams and correspondence relating to the use by the Canadian Pacific Railway of running privileges over the Intercolonial Railway between Halifax and St. John; and copies of all agreements between the Canadian Pacific Railway and the Intercolonial Railway, or any department or officer of the government of Canada, relating to the running privileges given to the Canadian Pacific Railway over the Intercolonial Railway and to the payments to be made therefor; and also of all agreements for the payments by the Intercolonial Railway to the Canadian Pacific Railway for the cars and engines of the latter run over the Intercolonial Railway. Presented 1st April, 1893.—*Mr. Davies*..... *Not printed.*
- 27.** Copy of the Report of the Commissioners appointed by Royal Commission to take evidence as to the truth or falsity of certain charges made against Sir Adolphe P. Caron, member of the House of Commons and of the Queen's Privy Council for Canada, with copies of the evidence and exhibits thereto pertaining. Presented 6th February, 1893, by Sir John Thompson.  
*Printed for both distribution and sessional papers.*

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- 28.** 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, 1892. Presented 7th February, 1893, by Hon. G. E. Foster.  
*Printed for sessional papers only.*
- 28a.** Return to an address of the House of Commons to his excellency the Governor-General, dated 1st March, 1893, for copies of all correspondence, papers or orders in council relating to the superannuation or retirement of Mr. T. Trudeau, late deputy of the minister of railways and canals. Presented 21st March, 1893.—*Mr. Edgar*..... *Not printed.*
- 29.** Return of orders in council of 1892 relating to the department of the interior, in accordance with clause 91 of the Dominion Lands Act, chapter 54, Revised Statutes of Canada. Presented 9th February, 1893, by Hon. T. M. Daly..... *Printed for sessional papers only.*
- 30.** Return under resolution of the 20th February, 1882, in so far as the same is furnished by the department of the interior, respecting the Canadian Pacific Railway Company. Presented 9th February, 1893, by Hon. T. M. Daly..... *Printed for sessional papers only.*
- 30a.** List of all lands sold by the Canadian Pacific Railway Company from the 1st October, 1891, to the 1st October last. Presented 9th February, 1893, by Hon. T. M. Daly.  
*Printed for sessional papers only.*
- 31.** List of public officers to whom commissions have issued under chapter 19 of the Revised Statutes of Canada, during the past year, 1892. Presented 9th February, 1893, by Hon. J. Costigan.  
*Printed in No. 16.*
- 32.** Return to an address of the House of Commons to his excellency the Governor-General, dated 17th March, 1892, for copy of all correspondence between the imperial government and the Canadian government concerning the defences of Esquimalt. Presented 10th February, 1893.—*Mr. Laurier.*  
*Printed for sessional papers only.*
- 33.** Return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for copy of all petitions, memorials, appeals, and of any other documents addressed to his excellency in council, since the 15th March, 1892, relating to the Manitoba School Acts of 1890 and to section 22 of the "Manitoba Act" and section 93 of the "British North America Act." Also copy of all reports to and of all orders in council in reference to the same. Also copies of all correspondence in connection therewith. Presented 10th February, 1893.—*Mr. LaRivière.*  
*Printed for both distribution and sessional papers.*
- 33a.** Return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for a copy of the judgment of the judicial committee of her majesty's privy council in the appealed case of *Barrett vs. the City of Winnipeg*, commonly known as the "Manitoba School Case." Also copy of factums, reports and other documents in connection therewith. Presented 14th February, 1893.—*Mr. LaRivière*..... *Printed for both distribution and sessional papers.*
- 33b.** Further return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for a copy of the judgment of the judicial committee of her majesty's privy council in the appealed case of *Barrett vs. the City of Winnipeg*, commonly known as the "Manitoba School Case." Also copy of factums, reports and other documents in connection therewith. Presented 20th February, 1893.—*Mr. LaRivière.*  
*Printed for both distribution and sessional papers.*
- 33c.** Supplementary return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, on the subject of the Manitoba School Acts of 1890, with a certified copy of a report of a committee of the honourable the privy council, approved by his excellency the Governor-General in council on 22nd February, 1893, relative to the settlement of important questions of law concerning certain statutes of the province of Manitoba relating to education. Presented 1st March, 1893.—*Mr. LaRivière*..... *Printed for both distribution and sessional papers.*
- 33d.** Partial return to an address of the Senate to his excellency the Governor-General, dated 3rd February, 1893, for: 1. A copy of the deliberations, resolutions and ordinances of the former council of Assiniboia, relating to educational matters within its jurisdiction as it existed on the banks of

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the Red River before the creation of the province of Manitoba. 2. A statement of the amounts paid by the said council of Assiniboia for the maintenance of schools, showing the persons to whom such payments were made, the schools for which such amounts were paid, and the religious denomination to which such schools belonged. 3. A statement of the amounts paid by the Hudson's Bay Company or by its agents, to the schools then existing in the territories forming to-day the province of Manitoba. 4. A copy of all memoranda and instructions serving as basis for the negotiations as a result of which Manitoba became one of the provinces of the confederation; together with a copy of the minutes of the deliberations of the persons charged, on both parts, to settle the conditions of the creation of the province of Manitoba and of its entrance into the confederation; and also a copy of all memoranda, returns and orders in council, establishing such conditions of entrance, or serving as a basis for the preparation of "The Manitoba Act." 5. A copy of the despatches and instructions from the imperial government to the government of Canada on the subject of the entrance of the province of Manitoba into the confederation, comprising therein the recommendations of the imperial government concerning the rights and privileges of the population of the territories, and the guarantees of protection to be accorded to the acquired rights, to the property, to the customs and to the institutions of that population by the government of Canada, in the settlement of the difficulties which marked that period of the history of the Canadian west. 6. A copy of the acts passed by the legislature of Manitoba relating to education in that province, and especially of the first act passed on this subject after the entrance of the said province of Manitoba into the confederation, and of the laws existing upon the same subject in the said province immediately before the passing of the acts of 1890, relating to the public schools and relating to the department of education. 7. A copy of all regulations with respect to schools passed by the government of Manitoba or by the advisory board in virtue of the laws passed in 1890, by the legislature of Manitoba, relating to public schools and the department of education. 8. A copy of all correspondence, petitions, memoranda, resolutions, briefs, factums, judgments (as well of first instance as in all stages of appeal), relating to the school laws of the said province of Manitoba, since the 1st June, 1890, or to the claims of catholics on this subject; and also a copy of all reports to the privy council and of all orders in council relating to the same subject since the same date. Presented 30th March, 1893.—*Hon. Mr. Bernier.*

*Printed for both distribution and sessional papers.*

- 74.** Return to an order of the House of Commons, dated 13th April, 1892, for copies of the instructions issued to Prof. Saunders when he was directed to inquire into the question of the growing of sugar-beet and the manufacture of beet-root sugar in Canada, or since that date up to the time when his report was laid before this House. Presented 10th February, 1893—*Mr. Beausoleil.*  
*Not printed.*
- 75.** Return to an Address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for all correspondence, documents, reports and orders in council about a special commission to inquire into the most feasible means of completing the telegraphic system of the empire. Presented 10th February, 1893—*Sir H. Langevin.*.....*Printed for sessional papers only.*
- 76.** Detailed statement of all bonds and securities registered in the department of the secretary of state of Canada, since last return, 1892, submitted to the parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented 13th February, 1893, by Hon. J. Costigan.  
*Not printed*
- 77.** Statement showing quantity and bounty paid on pig iron produced in Canada since date of last return to House of Commons, 16th March, 1892. Presented 16th February, 1893, by Mr. Wallace.  
*Printed for sessional papers only.*
- 77a.** Return to an order of the House of Commons, dated 20th February, 1893, for return showing the quantity of pig iron produced in Canada in the years 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879 and 1880, and bounty paid, if any, during those years; also amount of pig iron imported from Great Britain and the United States respectively, and the total amount imported during those years. Presented 28th February, 1893.—*Mr. Macdonald (Huron).*  
*Printed for sessional papers only.*
- 77b.** Return to an order of the House of Commons, dated 6th February, 1893, for a return showing the quantity of pig iron produced in Canada in the years 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1890, 1891, 1892; and the bounty paid for the production in each of those years. Presented 13th March, 1893.—*Mr. McMullen.*.....*Printed for sessional papers only.*

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38. Return to an order of the House of Commons, dated 20th February, 1893, for the evidence taken before Mr. James G. Moylan, inspector of penitentiaries, in connection with the investigation or investigations held by that official at Kingston penitentiary during the past year which resulted in the dismissal or resignation of certain officials of that institution. Presented 22nd February, 1893.—*Mr. Somerville*.....*Not printed.*
39. Return to an order of the House of Commons, dated 20th February, 1893, for a copy of the questions put and the subjects submitted to the parties who presented themselves for preliminary or qualifying examination, or both, at the last examination for the civil service. Presented 23rd February, 1893.—*Sir Hector Langevin*.....*Not printed.*
40. Return to an order of the House of Commons, dated 20th February, 1893, for a return showing the number of *Experimental Farm Reports* published for the year 1891; the number published in English and French respectively; the number allotted to each member of the House of Commons and Senate, and the number still on hand. Presented 24th February, 1893.—*Mr. Grieve*.....*Not printed.*
41. Return to an address of the House of Commons to his excellency the Governor-General, dated 20th February, 1893, for a copy of any report to council made by Hon. J. A. Chapleau when minister of customs, on the reorganization of the customs department or recommending changes regarding that department. Presented 24th February, 1893.—*Mr. Landerkin*.....*Not printed.*
42. Return to an order of the House of Commons, dated 6th February, 1893, for a list of the names of all tenderers for section eight of the Soulanges canal, also of the residence of each such tenderers, and of the amount of each tender. Presented 27th February, 1893.—*Sir Hector Langevin*. *Not printed.*
43. Return to an address of the House of Commons to his excellency the Governor-General, dated 2nd February, 1893, for copies of all correspondence, memorials, departmental orders and orders in council, not already laid before the House, respecting the north-western, northern and eastern boundaries of the province of Quebec, together with all reports of surveys or explorations ordered thereon or in connection therewith, by the government of Canada, since last session of parliament, including the instructions for said surveys or explorations. Presented 27th February, 1893.—*Sir Hector Langevin*.....*Printed for sessional papers only.*
44. Return to an address of the House of Commons to his excellency the Governor General, dated 6th February, 1893, for a copy of any order in council or other document which gave power to the "Stanstead, Shefford and Chambly Railway Co." or their successors "The Vermont Central Railway Company" to build a bridge across the Richelieu river at St. John's, P.Q. Presented 28th February, 1893.—*Mr. Béchard*.....*Not printed.*
45. Return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for copies of all petitions, correspondence and documents whatsoever respecting the granting of a subsidy to the Quebec Oriental Railway. Presented 28th February, 1893.—*Mr. Vaillancourt*.....*Not printed.*
46. Return to an order of the House of Commons, dated 1st March, 1893, for copies of instructions to officers employed in the taking of the third census of Canada, 1891, and copies of forms used. Presented 1st March, 1893, by Hon. G. E. Foster.....*Not printed.*
- 46a. Return to an address of the Senate to his excellency the Governor-General, dated 6th February, 1893, for information, accompanied with full explanatory remarks, from the officer in charge of the direction and superintendence of the last Canadian Census of 1891, on the following points: 1. Was the enumeration of the French element of the population, in the taking of the Census of 1891, intended and carried on to convey the same information as was furnished by the previous Census of 1851 and 1861 of the former province of Canada, and the Canadian Census of 1871 and 1881? 2. What was the meaning intended and the interpretation given, in the taking of the Census of 1891, to the words *French-Canadian* and *Canadian-French* as heading of one of the columns of Census Schedule No. 1? 3. What is the precise meaning and what is to be understood by the various words made use of in the Census Bulletin No. 11, signed George Johnson, statistician, namely, the words *Nationalities*, *Nationalités*, French-speaking, English-speaking, *Canadiens-Anglais*, as part of the new nomenclature adopted? 4. Were there people of French nationality, real Frenchmen, excluded from the registration of the French element of the population on account of being born outside of Canada, and were there French people included among the English-

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- speaking on account of being able to speak the English language? Is there any connection between such cases and the nomenclature of Bulletin No. 11, and if not, why is it that the simple word French, formerly used as meaning the French element, was abandoned, to be variously replaced by the words French-speaking, French-Canadians, and so forth? 5. What were, in addition to the printed instructions, the practical explanations and directions given to the officers, commissioners and enumerators, as regards the registration of the French element of the population, or persons of French origin or nationality? 6. Was the actual enumeration of the French, in 1891, uniformly carried on throughout, in the various Census districts, subdistricts and divisions? 7. Are there reasons to apprehend, from direct investigation, personal knowledge, or statistical criticism, that the figures given as representing the number of French people, are notably deficient in some or many returns of the enumeration of 1891? 8. Were the returns delivered by the enumerators examined by the commissioners, the officers, and at the central office under the supervision, the responsibility of the superintendent, in view to test their accuracy and to correct apparent errors? 9. Was it noticed by some of the officers or the superintendent, that very serious discrepancies existed in the return of the French between the Census of 1891 and the statistical series of previous censuses, and was thereby trouble taken to investigate the serious question raised by the very striking want of concordance? 10. Is there any rational explanation of the returns of 1891 by which the French appear to have met abnormal losses in their number, especially in Nova Scotia, Ontario and the Territories? 11. Are there local or accidental causes capable of explaining the vast differences in the multiplication of the French which would have taken place, if the figures of the Census of 1891 were correct, between Prince Edward Island, New Brunswick and Nova Scotia, for instance? 12. Was there, at any time, steps taken to ascertain the cause and extent of such extraordinary returns; if not, what was the cause of that omission; if so, what were the proceedings adopted, and what the results? 13. Has the superintendent of the Census of 1891 taken notice of the very determined objection to accept the extraordinary figures of 1891, as representing the actual number of the French in Canada, and has any serious investigation of this important question been undertaken by him; if so, what are the conclusions arrived at, including the statistical criticism involved? 14. And that the said information include all instructions given to the enumerators in the several years, 1881 and 1891, be brought down with the return. Presented 30th March, 1893.—*Hon. Mr. Tassé*. . . . . *Not printed.*
47. Return to an address of the House of Commons to his excellency the Governor-General, dated 20th February, 1893, for a copy of the report of the Honourable Mr. Justice Wetmore, appointed by royal commission to inquire into certain charges against Lawrence Herchmer, commissioner of the North-west Mounted Police. Presented 3rd March, 1893.—*Mr. Davin*. . . . . *Not printed.*
48. Return to an address of the House of Commons to his excellency the Governor-General, dated 20th February, 1893, for a return of all correspondence, telegrams, reports and other papers relating to the suspension of Mr. Edward Hackett, Inspector of Fisheries, Prince Edward Island, in the year 1892; together with copies of the charges made against Mr. Hackett, the authority given to the commissioner in Prince Edward Island to take evidence on such charges, together with the evidence taken, and the report of the minister of marine thereon, together with any letters, correspondence, orders or reports relating to the reinstatement of Mr. Hackett. Presented 6th March, 1893.—*Mr. Davies*. . . . . *Not printed.*
49. Return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for a statement showing total amount of money paid by years since confederation on each of the following accounts: (a) Salary of Governor-General. (b) Travelling expenses of Governor-General. (c) Expenditure on Rideau Hall on capital account and maintenance; expenditure on Rideau Hall grounds on capital account and maintenance. (d) Expenditure on furnishings of all kinds for Rideau Hall. (e) Allowance to Governor-General for coal and light. (f) Expenditure on any other account in connection with the office of Governor-General. (g) Expenditure on any other account in connection with Rideau Hall and grounds. (h) Total expenditure of every kind since confederation in connection with the office of Governor-General. (i) Total expenditure of every kind in connection with Rideau Hall and grounds. Presented 6th March, 1893.—*Mr. Mulock*. . . . . *Printed for sessional papers only.*
50. Return to an address of the House of Commons to his excellency the Governor-General, dated 6th February, 1893, for a return of all letters, correspondence, reports and all other matter on record, passed between the department of agriculture and the high commissioner of Canada in London,

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the imperial board of trade or any other officials of an authoritative body in reference to the scheduling of Canadian cattle in the ports of Great Britain and Ireland, on and after 20th October, last. Presented 6th March, 1893.—*Mr. Sproule*.....*Printed for sessional papers only.*

- 51.** Agreement entered into between Her Majesty the Queen of the United Kingdom of Great Britain and Ireland and the President of the French Republic, regulating the commercial relations between Canada and France in respect of customs tariffs. Presented 6th March, 1893, by Hon. G. E. Foster. .... *Printed for both distribution and sessional papers.*
- 51a.** Return to an address of the House of Commons to his excellency the Governor-General, for copies of correspondence and other papers in relation to an agreement entered into between Her Majesty the Queen of the United Kingdom of Great Britain and Ireland and the President of the French Republic, regulating the commercial relations between Canada and France in respect of customs tariffs. Presented 15th March, 1893, by Hon. G. E. Foster. .... *Printed for both distribution and sessional papers.*
- 51b.** Supplementary return to an address of the House of Commons to his excellency the Governor-General, dated 15th March, 1893, for copies of correspondence and other papers in relation to an agreement entered into between Her Majesty the Queen of the United Kingdom of Great Britain and Ireland and the President of the French Republic, regulating the commercial relations between Canada and France in respect of customs tariffs. Presented 20th March, 1893, by Hon. G. E. Foster..... *Printed for both distribution and sessional papers.*
- 51c.** Further supplementary return to an address of the House of Commons to his excellency the Governor-General, dated 15th March, 1893, for copies of correspondence and other papers in relation to an agreement entered into between Her Majesty the Queen of the United Kingdom of Great Britain and Ireland and the President of the French Republic, regulating the commercial relations between Canada and France in respect of customs tariffs. Presented 25th March, 1893, by Hon. G. E. Foster.....*Printed for both distribution and sessional papers.*
- 52.** Papers relating to the conference held at Washington in February, 1892, between the delegates of the Canadian government and the secretary of state of the United States upon the several subjects therein mentioned. Presented 7th March, 1893, by Hon. G. E. Foster. .... *Printed for sessional papers only.*
- 53.** Return to an address of the House of Commons to his excellency the Governor-General, dated 1st March, 1893, for copies of all letters, telegrams and correspondence between the government or any member thereof, and the late English financial agents of Canada in London and the Bank of Montreal in reference to the recent change of agency at London. Presented 7th March, 1893.—*Sir Richard Cartwright*..... *Not printed.*
- 54.** Copy of an order in council of the 17th January, 1893, authorizing the issue of licenses to United States fishing vessels during the year 1893, for the purchase of bait, ice, lines and all other supplies, the transhipment of catch and shipping of crews. Presented 7th March, 1893, by Hon. J. Costigan..... *Not printed.*
- 55.** Statement of the affairs of the British Canadian Loan and Investment Company, on 31st December, 1892. Also a list of shareholders on the 31st December, 1892. Presented 30th March, 1893, by Hon. Mr. Speaker ..... *Not printed.*
- 56.** Return to an address of the Senate to his excellency the Governor-General, dated 21st February, 1893, for copies of all letters, communications and telegrams between the minister of agriculture or any official under him, or any other minister or official of the Dominion government and the Canadian Pacific Railway Company, the British Columbia government, the mayors of the cities of Victoria and Vancouver, the Dominion health officers of the ports of Victoria and Vancouver, relating to the introduction of small-pox into Victoria and Vancouver, in May and June, 1892, by the mail steamers from Japan and China. Presented 9th March, 1893.—*Hon. Mr. McInnes (Victoria)*. .... *Not printed.*
- 57.** Return of applications for registration under the provisions of chapter 131, Revised Statutes of Canada, "An Act respecting Trades Unions." Presented 15th March, 1893, by Hon. J. Costigan..... *Not printed.*

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58. Return to an order of the House of Commons, dated 15th March, 1893, for a statement showing in detail the expenditure incurred since last session of parliament, in carrying on the borings in the Straits of Northumberland to obtain data as to the probable cost of a tunnel, also for all contracts, correspondence, telegrams or papers in anywise relating to such borings or such expenditure. Presented 15th March, 1893.—*Mr. Perry*.....*Not printed.*
59. Return to an order of the House of Commons, dated 20th February, 1893, for copies of all petitions, letters and documents whatsoever, in relation to the change in the location of the post office of Notre Dame du Rossaire. Presented 20th March, 1893.—*Mr. Choquette*.....*Not printed.*
- 59a. Return to an order of the House of Commons, dated 6th February, 1893, for a return of all petitions, documents and letters in relation to a request made for increased mail service at the Harkaway post office, during the past six years. Presented 29th March, 1893.—*Mr. Landerkin*.....*Not printed.*
- 59b. Return to an order of the House of Commons, dated 1st March, 1893, for copies of all correspondence and petitions asking for a change in the post office of St. Sébastien, in the county of Beauce; and of the report of the post office inspector in relation thereto. Presented 29th March, 1893.—*Mr. Godbout*.....*Not printed.*
60. Return to an order of the House of Commons, dated 1st March, 1893, for copies of all accounts, letters, receipts and other documents in relation to the claim of Charles I. Labrie, of Lévis, for professional service in connection with expropriation, during the construction of the St. Charles Branch. Presented 20th March, 1893.—*Mr. Frémont*.....*Not printed.*
61. Return to an order of the House of Commons, dated 1st March, 1893, for copies of petitions from county councils and other municipal corporations asking that railways under Dominion control be compelled to build culverts on natural watercourses crossing their lines, and correspondence relating thereto. Presented 21st March, 1893.—*Mr. Casey*.....*Not printed.*
62. Return to an address of the House of Commons to his excellency the Governor-General, dated 1st March, 1893, for copies of all communications, memorials, etc., addressed to his excellency in council, to the Dominion government or any member thereof, since 1888, urging the granting of a federal subsidy to the Central Ontario Railway Company, to enable that company to extend its line from Coehill northward. Presented 21st March, 1893.—*Mr. Corby*.....*Not printed.*
63. Return to an address of the House of Commons to his excellency the Governor-General, dated 1st March, 1893, for all correspondence, petitions and papers that are in the possession of the government relating to the disallowance of chapter 1 of the Acts of Nova Scotia, dated 1892: "An act to amend and consolidate the Acts relating to Mines and Minerals," including any petition of David McKeen, Esq., M.P.; and others, in respect of the said act. Presented 21st March, 1893.—*Mr. Weldqn*.....*Printed for sessional papers only.*
64. Return to an order of the House of Commons, dated 6th February, 1893, for a return, in the form used in the statements usually published in the *Gazette*, of the exports and imports from the first day of July, 1892, to the first day of January, 1893, distinguishing the products of Canada and those of other countries; and comparative statements from the first day of July, 1891, to the first day of January, 1892. Presented 21st March, 1893.—*Sir R. Cartwright*.....*Not printed.*
65. Return to an order of the House of Commons, dated 20th February, 1893, for all papers, documents, correspondence, etc., addressed to the government in relation to the best means to be adopted to prevent the spreading of cholera. Presented 23rd March, 1893.—*Mr. Landerkin*.....*Not printed.*
66. Return to an order of the House of Commons, dated 15th March, 1893, for copies of all correspondence between the minister of justice and the Hon. J. G. Bossé, judge of the court of Queen's Bench, in relation to the trial and condemnation of R. H. McGreevy and O. E. Murphy, charged with a conspiracy to defraud; of all recommendations and of all reports made by the said Hon. J. G. Bossé in relation to the conviction of the said Murphy and McGreevy and to a commutation of the sentence of R. H. McGreevy; of the order for the commutation of the sentence of R. H. McGreevy, and of any petitions, letters, etc., in relation thereto. Presented 24th March, 1893.—*Mr. Tarte*.....*Not printed.*



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- 67.** Return to an address of the Senate to his excellency the Governor-General, dated 23rd February, 1893, for: 1. A copy of the commission issued appointing and constituting certain persons a royal commission to obtain reliable data respecting the operation and effects of legislative prohibition of the traffic in intoxicating liquors. 2. Also a copy of any and all instructions given for the guidance of the said royal commission by or under the authority of the government. 3. Also copies of any and all documents and statistics furnished to the said royal commission, by any of the departments of the civil service, or any officer of the government, embodying information or suggestions in relation to the subjects which the said royal commission was appointed to examine and report upon. Presented 15th March, 1893.—*Hon. Mr. Vidal*. . . . . *Not printed.*
- 68.** Return to an address of the Senate to his excellency the Governor-General, dated 7th February, 1893, for copies of all letters, communications and telegrams between the minister of agriculture, or any official under him, or any other minister or official of the Dominion government, and the government of British Columbia or any official thereof, the British Columbia board of trade, and the local Dominion engineer, relating to the erection of a proper quarantine station at Albert Head or William Head, British Columbia. Presented 15th March, 1893.—*Hon. Mr. McInnes (Victoria)*.  
*Not printed.*
- 69.** Return to an address of the Senate to his excellency the Governor-General, dated 7th March, 1893, for a copy of the royal instructions from her most gracious majesty the Queen to his excellency, on his appointment to his present office. Presented 20th March, 1893.—*Hon. Mr. Wark*.  
*Printed for sessional papers only.*
- 70.** Return to an order of the House of Commons, dated 6th February, 1893, for copies of all correspondence between Mr. Robertson, dairy commissioner for Canada, and the department of agriculture, in relation to a certain resolution adopted by a committee of the board of trade of Bristol, England, against accepting as Canadian cheese, cheese designated by the said committee under the name of "French Cheese" and manufactured in the province of Quebec. Copies of all speeches, letters and reports made by the said dairy commissioner, Mr. Robertson, on the value of cheese manufactured in the provinces of Quebec and Ontario. Presented 25th March, 1893.—*Mr. Rinfret*.  
*Not printed.*
- 71.** Return to an address of the House of Commons to his excellency the Governor-General, dated 20th February, 1893, for copy of the claims made by Messrs. F. B. McNamee & Co., contractors, in connection with the recommendations made by a select committee of the House of Commons, June, 1887, with all reports, orders in council and other papers relating thereto. Presented 28th March, 1893.—*Sir Hector Langevin*. . . . . *Not printed.*
- 72.** Return to an order of the House of Commons, dated 20th February, 1893, for copies of all correspondence and reports accumulated between the years 1876 and 1893 in the hands of the government relating to the Lurcher Shoal, near the entrance to the Bay of Fundy, and proposed means for the protection of navigation in that vicinity. Presented 29th March, 1893.—*Mr. Bowers*.  
*Not printed.*
- 73.** Return to an order of the House of Commons, dated 13th March, 1893, for copies of all correspondence relating to the claim of Mr. Lauchlin McDougall, of Victoria County, Nova Scotia, for superannuation allowance, together with the amounts paid him as lighthouse-keeper in St. Paul's and Ingonish, giving the separate amounts for each year. Presented 29th March, 1893.—*Mr. Fraser*. . . . . *Not printed.*
- 74.** Return to an address of the House of Commons to his excellency the Governor-General, dated 13th March, 1893, for copies of all tenders, letters, telegrams and correspondence between the government and their agents and any other persons, in regard to the contract let for the repairing of the Dominion steamer "Quadra." Presented 30th March, 1893.—*Mr. Prior*. . . . . *Not printed.*
- 75.** General statements and returns of baptisms, marriages and burials in the districts of Chicoutimi, Gaspé, Joliette, Iberville, Montmagny, Ottawa and Saguenay, for the year 1892. Presented 30th March, 1893, by Hon. Mr. Speaker. . . . . *Not printed.*
- 76.** Return to an address of the Senate to his excellency the Governor-General, dated 14th March, 1893, for a statement and account showing the amount said to have been improperly retained by William Ellis, superintendent of the Welland canal, and subsequently refunded by him, and not included in a return laid before the Senate, in answer to an address of the Senate of the 18th June, 1891. Presented 28th March, 1893.—*Hon. Mr. McCallum*. . . . . *Not printed.*

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- 77.** Return to an address of the Senate to his excellency the Governor-General, dated 28th February, 1893, for a list giving the names of all persons employed permanently or temporarily at the custom-house at Montreal, on the first day of January, 1868; also a similar list of those so employed on the first of January, ultimo, with, in both cases, their ages, nationality, religion, salary, occupation and date of appointment. Presented 30th March, 1893.—*Hon. Mr. Bellerose*..... *Not printed.*

Department of Public Works.

CANADA

REPORT

OF THE

MINISTER OF PUBLIC WORKS

*ON THE WORKS UNDER HIS CONTROL,*

FOR THE FISCAL YEAR ENDED 30th JUNE, 1892.

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER THIRTY-SIX  
SECTION 37, OF THE REVISED STATUTES OF CANADA.

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

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

1893

[No. 8—1893.] *Price 20 cents.*



Department of Public Works.

*To His Excellency the Right Honourable Sir Frederick Arthur Stanley, Baron Stanley of Preston, in the County of Lancaster, in the Peerage of Great Britain, Knight Grand Cross of the Most Honourable Order of the Bath, Governor-General of Canada, and Vice Admiral of the same, &c.*

MAY IT PLEASE YOUR EXCELLENCY :

In compliance with Chapter 36, Section 37, of the Revised Statutes of Canada, I have the honour to lay before Your Excellency, the Report of the transactions of the Department of Public Works, for the fiscal year ended 30th June, 1892.

Respectfully submitted,

J. ALD. OUIMET,  
*Minister of Public Works.*

OTTAWA, 9th February, 1893.



### ERRATA.

The Roman Numerals of the Alphabetical Index should read one page in advance of those printed, viz. :—For page xxi read page xxii and so on.





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Pictou Island	Wharves	xxi	13, 57
Pictou, Ont.	Post office, &c.		6
do	Dredging	xxii	80
Piers	Below Quebec		15
Pincher Creek	Barracks		7
Pointe St. Pierre	Removal of reef		15
Pointe à Valois	Wharf		15
Pointe Esquimaux	Telegraph Service		20
Police Barracks	Generally		7, 35
Portage du Fort	Slide stations, &c.		130, 133
Port Arthur	Immigration building		6
do	Post office, &c.	xxii	6, 10, 32
do	Harbour		16
do	Navigation opens, &c.	xix	214
Port Colborne	Post office		6, 10, 233
Port Credit	Dredging	xxii	18, 80
Port Dover	Navigation opens, &c.	xix	214
Port Elgin	Breakwater	xxii	16, 80
Port George	Harbour		13
Port Hood	Harbour, breakwater, &c.	xx	13, 17, 58
Port Hope	Pier, &c.	xxii	16, 18, 80
do	Post office, &c.		6, 10, 232
do	Navigation opens, &c.	xix	214
Portland	Post office, &c.	xix	8, 25, 231
Port La Tour	Canal, &c.	xii, xvi	14, 67
Port Lorne	Breakwater	xx	13, 58
Port Maitland	Harbour	xx, xxi	13, 58
Port Selkirk	Pier	xxiii	14, 45
Portsmouth, N.B.	Post office		3
Port Stanley	Navigation opens, &c.	xix	14
do	Pier	xxii	16, 81
Pot au Beurre	Dredging	xxiii	15, 68
Pownal	Pier, dredging	xxiii	17, 45
Prescott	Public buildings		6, 10, 233
"Priestman"	Dredge		94
Prince Albert	Court house, &c.	xx	7, 11, 35, 233
do	Crown land and timber office		7
do	Immigrant building		7
do	Mounted Police Barracks		7
"Prince Edward"	Dredge		90, 99, 110
Prince Edward Island	Public buildings	xxiii	3, 8, 24, 230
Printing Bureau	Report on		31
Property	Purchased and sold		207
do	Leased		208
Public Buildings	Generally		7
Public Property, British Columbia	Value, &c.		227
Quaco	Breakwater	xix	14, 65
do West	Dam	xviii	14, 65
Quebec	Citadel buildings	xxiii	4, 9, 27, 231
do	Clerk of Works office		4
do	Culler's office	xxiii	4, 9, 27
do	Custom house		4, 9, 231
do	Dredging		18
do	Drill hall		4
do	Examining warehouse	xxiii	4, 9, 27, 231
do	Immigrant building		4
do	Inland Revenue office		4
do	Navigation, opening and closing of	xix	214
do	Observatory		4, 9
do	Post Office	xxiii	4, 9, 27, 231
do	Parliament grounds, old		4
do	Queen's wharf	xxiv	15, 71
do	Telegraphs	xxv	20, 176
do	Weights and measures office		4

Name of Place, &c.	Nature of Work, &c., referred to.	Page in Report.	Pages in Appendices.
"Queen" .....	Dredge .....		93, 103, 112
Rainy River .....	Improvements .....		16
Red Deer .....	Industrial school .....	xx	7, 34
do .....	Lands office .....		11
Red River .....	Dredging .....	xix	18, 83
Regina .....	Barracks, &c .....	xx	7, 35
do .....	Council chamber .....	xx	7, 35
do .....	Court house .....	xx	12, 35, 233
do .....	Gaol and asylum .....		7, 233
do .....	Governor's residence, new .....	xx	7, 12, 35
do .....	Immigrant building, &c. .....	xx	7, 35
do .....	Telegraph service .....		167
Revenue and expenditure .....	Harbour .....	xix, xx	14, 17, 65
Richibucto .....	Ottawa .....	xxii	6, 30, 232
Rideau Hall .....	Wharf, &c .....	xxiv	15, 72
Rimouski .....	Wharf .....	xxiv	15, 72
River Blanche .....	Improvements .....		15
do des Prairies .....	Lock, &c .....	xviii	15, 72
do du Lièvre .....	Post office .....	xxii	4, 26
do du Loup .....	Deepening channel .....	xx	17, 65
do Kennebecasis .....	Clearing channel .....	xxiv	15, 72
do L'Assomption .....	do .....	xxiv	15, 72
do Mattawin .....	Removing obstructions .....	xxiv	15, 72
do Maccinac Shoal .....	Dredging .....		18
do Nicolet .....	Channel .....		16, 18
do Ottawa .....	Ship channel .....		15, 95, 106, 113
do St. Lawrence .....	Improvements .....		15
do St. Louis .....	Dredging, &c .....	xxiv	15, 72
do St. Maurice .....	Chute aux Iroquois dam .....	xviii	19, 73
do Vermilion .....	Dam .....	xviii	15, 18, 73
do Yamaska .....		xxiv	19, 72, 74, 83,
Roads and bridges .....			130
Rocher Capitaine .....	Station, Ottawa River slides .....		130, 133
Rondeau .....	Piers .....	xxii	16, 81
Round Hill .....	Works .....	xviii	13, 59
Rustico, North .....	Navigation opens, &c .....	xix	214
Rustico, South .....	Breakwater .....	xxiii	14, 45
Saguenay District .....	Slides and booms, Report, &c. .....	xxv	18, 143
Saltcoats .....	Dominion Lands office .....		12
Saulnierville .....	Pier .....		13
"Samson" .....	Dredge .....		95, 109
Sappers' Bridge .....	Ottawa .....		19, 130, 133
Sarnia .....	Navigation opens, &c .....		215
Saguenay District .....	Slides and booms .....	xxv	18, 145
Sault Ste. Marie .....	Navigation opens, &c .....		215
do .....	Crib work .....		16
Shediac (Pointe du Chêne) .....	Navigation opens, &c .....		215
Sherbrooke .....	Post office .....		4, 9, 231
Shippegan .....	Harbour .....	xix	14, 66
Ship channel .....	River St. Lawrence .....		15, 95, 106, 113
Skeena River .....	Improvements to channel .....	xvii	17, 86
Slides and Booms .....	Collection of dues .....	xxiv	18, 149
do .....	Collector's report, &c. .....	xxiv	149
do .....	Newcastle district, report .....	xxv	10, 137
do .....	Ottawa do do .....	xxv	19, 129
do .....	Saguenay do do .....	xxv	18, 145
do .....	Staff employed do .....	xxv	150
do .....	St. Maurice district do .....	xxv	18, 141
Snow .....	Removal of .....		5
Somas River .....	Improvements .....	xvii	17, 86
Sorel .....	Navigation opens, &c .....		215
do .....	Ice piers .....	xxiv	15, 73
do .....	Post office .....		4, 9, 231
Souris .....	Marine hospital .....	xviii	3
Southampton .....	Pier .....	xxi	16, 82
South Gut .....	Wharf .....	xxi	13, 59
South Sydney .....	Post office, &c. .....		3
do .....	Rebuilding wharf, quarantine station .....		3
St. Albert .....	Barracks .....	xx	7, 35



# Department of Public Works.

Name of Place, &c.	Name of Work, &c., referred to.	Page in Report.	Pages in Appendices.
Ste. Anne de la Pérade.	Dredging, &c.	xxiv	15, 74
Ste. Anne des Monts.	Cribwork, &c.	xxiv	15, 74
Ste. Anne du Saguenay.	Wharf	xxiv	15, 74
St. Catharines	Post office.	xxii	6, 10, 32, 233
St. Henri.	do		4
St. Hyacinthe.	do	xxiii	4, 27
St. Jérôme.	Public building.	xxiii	4, 9, 27, 231
St. John's, Que.	Navigation opens, &c.	xix	214
do	Post office.		4, 9, 231
St. John River, N.B.	Navigation improvements.	xx	14, 66
St. John, N.B.	Civil service examining office.	xiv	3, 28
do	Custom house	xix	3, 4, 8, 25, 231
do	Inland revenue office.		4
do	Marine hospital.	xiv	4, 8, 26, 231
do	Navigation opens, &c.	xix	214
do	Post office.	xiv	4, 8, 26, 231
do	Savings bank.	xiv	4, 8, 26
do	Harbour works.	xix	14, 63
do	(Negro Point) Wharf		15
St. Laurent	Dredge		83, 96, 110
"St. Lawrence"	Ship channel.	xxiv	14, 74, 95, 106
do	Dredge		93, 102, 111
"St. Louis"	Post office.		4, 231
St. Martin's.	Slides and booms	xxv	18, 20, 141
St. Maurice District.	Works.		142
do	Wharf.	xxiv	15, 75
St. Michel.	Indian industrial school.		6
St. Paul.	Breakwater	xxiii	14, 46
St. Peter's Bay	Navigation opens	xix	215
do	Canal dredging.		170
do	Post office.		4, 8, 231
St. Stephen, N.B.	do		4, 231
Ste. Thérèse	do &c.		6, 10, 233
St. Thomas.	do	xix	4, 8, 26, 231
Sussex, N.B.	Penitentiary	xxiii	4, 9, 27
St. Vincent de Paul.	Wharf	xxiv	15, 75
St. Zotique	Slides and booms.	xxv	160
Staff employed	Barracks		7
Stand-Off	Annual expenditure.		3, 230
Statement	Breakwater.	xx	13, 59
Stony Island.	Post office.		6, 10, 233
Strathroy	Public building.		6, 10, 233
Stratford	Pier—Dredging	xxiii	17, 46
Sturgeon	Marine hospital.		3
Summerside.	Post office.	xvi	8, 230
do	Dredging	xxiii	17, 47
do	Building		5
Supreme Court, Ottawa.	List of	xxi	87
Surveys and Examinations.	Post office	xxv	4, 8, 26, 231
Sussex.	do &c.	xxi	3, 8
Sydney (South).	Quarantine station.	xxi	3, 24
do	Wharf	xxiv	14, 75
Tadouac	Navigation opens, &c.		215
do	Report on Government, &c.	xxv	19, 165
Telegraph Lines	Revenue and expenditure		167
do	Total St. Lawrence lines expenditure	xxiv	20
do	Public buildings		37
Telephone Service.	Dredging	xxiii	18, 81
Thames River.	do &c.	xxii	16, 18, 82
Thornbury	Custom house, &c.	xxiii	4, 9, 28
Three Rivers	Wharf, &c.		15
do	Navigation opens, &c.		215
do	Breakwater	xxiii	14, 47
Tignish.	Channel improvements	xx	14, 67
Tobique River.	Civil Service examination office		6, 233
Toronto.	Custom house, &c.	xxii	6, 10, 32, 233
do	Drill hall.	xxii	6, 32
do	Examining warehouse	xxii	6, 10, 33, 233
do	Harbour	xxii	16, 82
do	Inland Revenue office.	xxii	6, 10, 33, 233

Name of Place, &c.	Nature of Works, &c., referred to.	Page in Report.	Pages in Appendices.
Toronto	Military school		6
do	Navigation opens, &c		215
Touchwood	Barracks, &c.		7
Tracadie	Harbour	xix	14, 67
Trenton	Channel	xxii	18, 83
do	Post office	xxii	6, 10, 33, 233
Trois Pistoles	Wharf	xxiv	15, 75
Trout Cove	Breakwater	xx	13, 59
Truro	Public buildings		3, 8, 230
Tynemouth Creek	Breakwater	xix	14, 67
Valleyfield	Post office	xxiii	4, 9, 28, 331
Vancouver	Post office	xvii	7, 12, 35
Vermilion River	Slide and dam	xviii	19, 73
Victoria, B.C.	Public buildings	xvii	7, 12, 36
do B.C.	Barracks, &c.	xvii	7, 12, 37
do B.C.	Harbour improvements	xvii	17, 18, 84, 87
do B.C.	Macaulay Point battery		7
do B.C.	Public property		227
do B.C.	Telegraph lines		20, 181
do P. E. I.	Pier	xxiii	14, 47
Walkerton	Post office	xxii	6, 10, 33, 233
Walton	Breakwater		13
Water	Dominion buildings		5
Wellington street	Ottawa		19
West Arichat	Breakwater	xx	13, 60
West Chezzetcook	Wharf		13
West Farnham	Post office, &c.		4
West Pubnico	Works		13
Whitehead Island and Grand Narrows	Telegraph lines	xxv	19, 165
White Mud River	Dredging	xix	18, 83
Wiarion	Navigation opens, &c		215
Windsor, N.S.	Post office building		3, 8, 230
do Ont.	Navigation opens, &c.		215
do Ont.	Public building	xxii	6, 10, 33, 233
Winnipeg	Public buildings	xix	6, 11, 33, 233
do	Post office, &c	xix	6, 11, 34, 233
do	Navigation opens, &c.		215
"Winnipeg"	Dredge		94
Woodstock, N.B.	Post office	xix	4, 8, 25, 231
Wood Mountain	Barracks		7
Works on navigable rivers		xvi	
Writing-on-Stone	Barracks		7
Yamachiche	Pier		15
Yamaska River	Dam	xviii	15, 73
do	Dredging	xxiv	15, 18, 68, 73
Yarmouth Harbour	Works		13
do	Post office		3, 8, 230
York Factory	Navigation opens, &c.		215

# Department of Public Works.

DEPARTMENT OF PUBLIC WORKS,

OTTAWA, 6th February 1893.

To the Honourable

JOSEPH ALDRIC OUMET.

Minister of Public Works.

SIR,—I have the honour to submit the report of this department, for the fiscal year ended 30th June, 1892.

The report contains references to the more important works performed under the direction and superintendence of the department, during the fiscal year.

In the appendices annexed, detailed accounts of the expenditure will be found, with reports by officers of the department, on the extent and nature of the services performed, in constructing, extending, repairing and maintaining the public buildings, harbours, government telegraph lines, slides and booms, &c., throughout the Dominion.

The works under the control of the department are:—

BUILDINGS (PUBLIC), their construction and maintenance.

DREDGING AND DREDGE VESSELS.

HARBOURS AND PIERS, their construction and maintenance.

ROADS AND BRIDGES.

SLIDES AND BOOMS, and the collection of revenue therefrom.

TELEGRAPHS.

WORKS ON NAVIGABLE RIVERS.

For convenience of reference, the following summary of the transactions and operations of the department, is alphabetically arranged:—

## ACTS OF PARLIAMENT.

LAW AMENDMENTS.—A list of the acts passed during the last session of Parliament, having reference to the Department of Public Works, is given in Appendix No. 18, page 219.

## ART GALLERY—NATIONAL.

The additions to the gallery during the fiscal year consist of two oil paintings, viz. :—

“Twilight,” by Miss M. A. Bell.

“Marine,” by Franklin Brownell,

and a life size bust of L. R. O'Brien, R.C.A., by Hamilton McCarthy, R.C.A.

The number of visitors who registered their names during each fiscal year, since the gallery was inaugurated, have been as follows:—

1882-83	8,261
1883-84	9,928
1884-85	11,893
1885-86	8,792
1886-87	11,943
1887-88	16,593
1888-89	14,241
1889-90	18,048
1890-91	21,289
1891-92	20,026

The Curator's report is added hereunto, in Appendix No. 11, page 185.

## BRITISH COLUMBIA.

**BUILDINGS.**—The following public buildings have been extended, improved, repaired or fitted up during the fiscal year, viz. :—

Agassiz experimental farm,	Victoria custom-house,
Kamloops industrial school,	do "C" battery barracks,
Nanaimo post office, etc.	do immigrants' home,
New Westminster public building	do public building.

Owing to the failure of the first contractor to carry on the works, the contract for the erection of the Vancouver post office was re-let. A site for the new drill hall in Victoria was secured, and a contract entered into, for the erection of the building.

(See Appendix No. 1, page 7, and No. 2 pages 35-37.)

**HARBOURS AND RIVERS.**—For facilitating, and for the security and improvements of navigation, operations for the removal of obstructions by dredging and otherwise, have been carried on at the following harbours and rivers, viz. :—

Columbia river,	Nanaimo harbour,
Courtney do	Nicomeckel river,
Cowichan do	Skeena do
Fraser do	Somas do

**VICTORIA HARBOUR AND ESQUIMALT GRAVING DOCK.**—(See Appendix No. 1, page 16-17 Appendix No. 3, pages 84 to 87.)

**PUBLIC PROPERTY.**—In Appendix No. 20, page 227, attached to this report, is a statement by Mr. F. C. Gamble, resident engineer, British Columbia, showing the extent and value of property owned by the Dominion, in the city of New Westminster.

## CONTRACTS.

APPENDIX No. 15, page 203, contains a statement of the contracts entered into, the property purchased and sold, and property leased by or to the department, during the fiscal year.

## CORRESPONDENCE.

APPENDIX No. 16, page 211, shows a statement of the official correspondence of the department, together with that of its principal officials, from 1867 to the 30th June, 1892.

## DOMINION BUILDINGS.

APPENDIX No. 1, pages 3 to 13, is a statement, by provinces, showing the amounts expended for heat, light and water, for the use of the several public buildings throughout Canada, for the fiscal year.—(See also Appendix No. 21, page 230.)

## DREDGES.

**DREDGING OPERATIONS.**—The report on the operations of the various dredges in the different provinces, is appended in Appendix No. 3, pages 88 to 126, and the expenditure will be found in Appendix No. 1, pages 17-18.

## Department of Public Works.

### ENGINEERS, ENGINEMEN, FIREMEN AND CARETAKERS, ETC.

**EMPLOYEES.**—A list of the engineers, &c., employed in the public buildings throughout Canada, with a statement showing date of birth, position, date of appointment and salaries, is added in Appendix No. 13, page 192.

### EXPENDITURE.

**APPENDIX No. 1.**—This appendix is a succinct statement by the accountant of the department, of the expenditure on the various services provided for, during the fiscal year.

**APPENDIX No. 21,** pages 229 to 234 is also a statement prepared by the accountant, giving in detail, the items of expenditure in connection with the repairs, etc., of all the public buildings under the control of the department, during the last fiscal year.

### GRAVING DOCKS.

**APPENDIX No. 19.**—This appendix, at page 223, is a statement showing the dimensions of the several graving docks in operation in Canada.

**ESQUIMALT GRAVING DOCK.**—A report on the operations of this dock will be found in Appendix No. 3, page 85.

**KINGSTON GRAVING DOCK.**—This work has been completed, and is now in thorough working order. Twenty-one vessels, of various descriptions, availed themselves of the use of the dock, since its completion in November, 1891, up to the 30th June, 1892.

(See Appendix No. 3, page 78.)

**LÉVIS GRAVING DOCK.**—This dock was under the control of the Quebec Harbour Commissioners until October, 1890, when the department assumed the management thereof. During the year, some necessary improvements were supplied, and the dock maintained in good order. Government dredge No. 11, worked for 15 days, improving the entrance to the dock.

(See Appendix No. 3, page 70.)

**OFFICIALS.**—A list, showing the age, date of appointment, salary, etc., of all the graving dock employees, is annexed to this report, at page 197 of Appendix No. 14.

### LOCKS AND DAMS.

**IMPROVEMENTS.**—Extension, necessary repairs or construction work, was carried on in connection with the following locks, shear or other dams, during the fiscal year, viz. :—

Grand Falls Shear Dam, N.B.	Round Hill Dam, N.S.
Miller's Landing Dam, B.C.	Vermillion River Dam, P.Q.
Oromocto Shoals, Shear Dam, N.B.	Yamaska River, Lock and Dam.
River du Lièvre, Lock and Dam, P.Q.	West Quaco Dam, N.B.

(See Appendix No. 1, pages 13 to 16. Appendix No. 3, pages 59 to 73.)

## MANITOBA.

**BUILDINGS.**—Fixtures, fitting, etc., were supplied for the use of the following buildings, etc., viz.:—

Brandon Post office,	Winnipeg Immigration Building.
Winnipeg do	

(See Appendix No. 1, page 6. Appendix No. 2, page 33.)

**DREDGING.**—Operations for the improvement of navigation by dredging, were carried on, at the bar at the mouth of the west branch of the Red River, 18 miles from Selkirk; and at the mouth of the White Mud River, 9 miles west of Westbourne, in Marquette county.

(See Appendix No. 3, page 83.)

## MAJOR'S HILL PARK.

The appearance of this favourite resort, during the summer season, has been pleasing and attractive. The grounds and walks have been maintained by the contractor to the satisfaction of the department.

(See Appendix No. 2, page 31.)

## NAVIGATION—OPENING AND CLOSING OF.

**DATES.**—At page 214, Appendix No. 17, is given an alphabetically arranged list of the principal ports of Canada, showing the date of the formation of ice, and the closing of navigation thereby at each place, in 1891, also the date when the navigation opened in 1892, &c.

The department again, this year, thankfully acknowledges the courtesy and kindness of the customs officials at the several ports, who supplied the information.

## NEW BRUNSWICK.

**BREAKWATERS AND PIERS.**—At each of the following places, breakwaters or piers were either commenced, repaired or extended during the fiscal year, viz.:—

Black River,	Partridge Island,
Cape Tormentine,	Quaco,
Caraquette,	Quaco West,
Clifton,	Richibucto,
Gray's Island,	Shippegan,
Kingston,	Tracadie,
Negro Point,	Tynemouth Creek.
Neguac,	

(See Appendix No. 1, page 14. Appendix No. 3, pages 60 to 67.)

**BUILDINGS.**—Repairing and improving the following public buildings engaged the attention of the department last fiscal year, viz.:—

Bathurst,	Portland post office,
Chatham,	St. John custom house,
Carleton,	do marine hospital,
Dalhousie,	do post office,
Fredericton,	do savings bank,
Newcastle,	Sussex public building,
Portland meteorological office,	Woodstock public building.

## Department of Public Works.

(See Appendix No. 1, page 3. Appendix No. 2, pages 24 to 26. Appendix No. 21, page 230.)

**HARBOURS.**—Improvements by dredging, &c., were executed at the following places, viz. :—

Caraquette,	St. John River,
Hampton-Kennebecasis,	Tobique River.
Richibucto,	

(See Appendix No. 1, page 14. Appendix No. 3, pages 60 to 67.)

**WHARVES.**—During the fiscal year, wharves have been either completed, extended or repaired, at the following places viz :

Campbellton,	Edgett's Landing.
Cocagne,	Kingston.
Dalhousie.	

(See Appendix No. 3, pages 60-67.)

### NORTH-WEST TERRITORIES.

**BRIDGES.**—During the fiscal year the Battle River bridge, at Battleford, was painted and repaired; the approaches to the Belly River bridge were completed; the Bow River bridge was also repaired, and the bridge that spans Old Man's River, near Macleod, completed.

(See Appendix No. 3, page 83.)

**BUILDINGS.**—The following named buildings and other edifices for public purposes, were constructed, improved or fitted up during the year, viz :—

Calgary barracks,	Regina Council chamber,
do court house	do court house,
Edmonton immigrant building	do government offices,
Maple Creek barracks,	do new government house,
Red Deer industrial school,	do immigration building.

(See Appendix No. 1, page 6. Appendix No. 2, pages 34-35.)

**GENERAL.**—Various and numerous repairs and renewals have been made by Police labour, at the Mounted Police posts and connected outposts, at Prince Albert, Battleford, Fort Saskatchewan, St. Albert, Calgary, Fort Macleod, Lethbridge, Maple Creek and Regina.

(See Appendix No. 2, page 35.)

### NOVA SCOTIA.

**BREAKWATERS.**—The following named breakwaters, were commenced, repaired, reconstructed or extended during the last fiscal year, viz. :—

Arisaig,	Margaretville,
Beaver River,	Port Hood,
Church Point,	Port Lorne,
Cow Bay,	Port Maitland,
French River,	Stoney Island,
Jordan Bay,	Trout Cove,
L'Ardoise,	West Arichat.
Louis Head,	

(See Appendix No. 1, page 13. Appendix No. 3, pages 48 to 60.)

**BUILDINGS.**—The following public buildings have been repaired, improved, or extended during the last fiscal year, viz. :—

Annapolis,	Nappan,
Baddeck,	Pictou,
Dartmouth,	Sydney.
Halifax,	

(See Appendix No. 1, pages 3 and 8. Appendix No. 2 pages 23-24, and Appendix No. 21, page 230.)

**HARBOURS.**—During the last fiscal year improvements were made to the under-mentioned harbours by dredging, protection work or other means, viz. :—

Cheticamp,	Margaretville,
Clyburn Brook,	Margaree,
Descousse,	Pictou,
Mabou,	Port Maitland.

(See Appendix No. 1, page 13. Appendix No. 3, pages 48 to 60.)

**PIERS.**—Slight repairs to the old Digby pier were effected. Owing to the death of the contractor and other causes, actual work of construction on the new pier had not been commenced, although a large quantity of material had been provided, at the end of the fiscal year.

(See Appendix No. 3, page 53.)

**WHARVES.**—Public wharves, or landing places, have been constructed, repaired or extended at each of the undermentioned places, during the year, viz. :—

Abercrombie,	Cribbin's Point,—
Aspy Bay,	East Bay,
Barrington,	Georgeville,
Big Pond,	Grand Narrows,
Bird Islands,	Irish Cove,
Broad Cove,	Lismore,
Cape Sable Island,	Pictou Island,
Cheticamp,	South Gut.

(See Appendix No. 1, page 13. Appendix No. 3, pages 48 to 60.)

#### OFFICIALS.

APPENDIX No. 12, page 189, is a statement, giving the names, with the dates of appointments, etc., of the chief officers of the Department of Public Works, from 1841 to 1893.

#### ONTARIO.

**BREAKWATER.**—The breakwater which forms the harbour of Southampton, was connected with the shore by a landing pier. The work was completed on the 21st June.

(See Appendix 3, page 82.)



## Department of Public Works.

**BUILDINGS.**—Public buildings have been commenced, completed, extended, repaired, or fitted up and improved during the fiscal year at the following places, viz. :—

Almonte,	Peterborough,
Barrie,	Petrolea,
Berlin,	Port Arthur,
Brockville,	St. Catharines,
Carleton Place,	Toronto,
Cobourg,	Trenton,
Hamilton,	Walkerton,
Orillia,	Windsor.
Ottawa,	

(See Appendix No. 1, page 4. Appendix No. 2, pages 28 to 33. Appendix No. 21, page 231.)

**CHANNELS, &c.**—Dredging or other operations to improve the channel and facilitate navigation were performed in connection with the following rivers, channels, &c., during the last fiscal year, viz. :—

Clapperton Channel,	Ottawa River,
Cobourg,	Parry Sound Narrows,
Collin's Bay,	Pickering or Frenchman's Bay,
Kaministiquia River,	Thames River.
Little Current,	Thornbury,
Meaford,	Trenton.
Nation River,	

(See Appendix No. 1, page 16. Appendix No. 3, pages 75 to 83.)

**HARBOURS.**—The improvement of the following harbours engaged the active attention of the department during the fiscal year. A description of the work done at each, will be found in Appendix 3, pages 75 to 83 :—

Amherstburgh,	Meaford,
Belleville,	Oakville,
Collingwood,	Owen Sound,
Gananoque,	Picton,
Hamilton,	Port Credit,
Kincardine,	Toronto.
Kingston.	

**PIERS.**—In Appendix 3, pages 75 to 83, will be found a description of the work done to the following piers, viz. :—

Beaverton,	Port Hope,
Burlington channel,	Port Stanley,
Goderich,	Rondeau,
Kingsville,	Southampton,
Port Elgin,	Thornbury.

### / PARLIAMENT HILL GROUNDS.

**CONTRACT.**—The contract for the keeping and dressing of the Parliament grounds, has been satisfactorily carried out.

(See Appendix No. 2, page 31.)

## PRINCE EDWARD ISLAND.

**BREAKWATERS.**—The breakwaters at the following places were repaired, extended or reconstructed during the fiscal year, viz. :—

Bay Fortune,	Campbell's Cove,
Brae Harbour,	Malpeque.

(See Appendix No. 1, page 14. Appendix No. 3, page 41.)

**BUILDINGS.**—Minor repairs to the Dominion building, Charlottetown, and Souris Marine hospital were effected.

(See Appendix No. 1, page 3. Appendix No. 2, page 24. Appendix No. 21, page 230.)

**HARBOURS.**—Harbour improvements were executed at the following places, viz. :—

Miminegash,	Summerside,
Rustico,	Tignish.

(See Appendix No. 1, page 14. Appendix No. 3, page 41.)

**PIERS.**—The following piers were repaired, rebuilt or extended during the fiscal year, viz. :—

Bay View,	North Cardigan,
Belfast,	Port Selkirk,
Clifton,	Pownal,
Georgetown,	Rustico (South),
Higgin's Shore,	St. Peter's Bay,
Miminegash,	Sturgeon,
Mink River,	Victoria.

(See Appendix No. 1, page 14. Appendix No. 3, pages 41 to 47.)

## PUBLIC BUILDINGS, OTTAWA.

**MAINTENANCE.**—The heating, lighting, bell and water services in connection with the Parliament and other public buildings in the capital were maintained with efficiency and due regard to improvement and economy.

(Particulars are given in Appendix No. 1, page 5. Appendix No. 2, pages 29 to 31. Appendix No. 21, page 232.)

## QUEBEC.

**BUILDINGS.**—Improvements, repairs, additions or extensions were made to the following public buildings and institutions during the fiscal year, viz. :—

Fraserville,	Quebec citadel,
Grosse Isle quarantine station,	do examining warehouse,
Lachine,	do post office,
Montreal custom house,	St. Hyacinthe,
do examining warehouse,	St. Jérôme.
do inland revenue office,	St. Vincent de Paul penitentiary,
do post office,	Three Rivers,
Quebec culler's office,	Valleyfield.

(See Appendix No. 1, page 4. Appendix No. 2, pages 26 to 28. Appendix No. 21, page 231.)

## Department of Public Works.

**CHANNELS, ETC.** :—Baie Lavallière, near the mouth of the River Yamaska, was drained by means of a channel dredged from River Yamaska towards Pot au Beurre River; a channel was also dredged through the Lake of Two Mountains, to a depth of 10 feet; and boulders that obstructed the channel of the River Mattawin, in the parish of St. Michel des Saints, were removed; at Chute Monte-à-peine on Rivière L'Assomption the protection work was extended and points of rock and boulders removed from the channel; two gangs of men wrought during a portion of the season, removing the Maccinac Shoal, and blasting rock at the Manigance rapid on the River St. Maurice, and the channel of the Yamaska River above the lock was improved by dredging. Operations for the improvement of the ship channel between Montreal and Quebec, were continued during the year; at Ste. Anne de la Pérade the channel at the outlet of the River Ste. Anne, was improved by dredging.

**HARBOURS.**—The dredge St. Louis commenced operations at Longueuil, but the material being too hard for her machinery, the work was abandoned. At Laprairie the retaining wall was extended. (*See Appendix No. 3, page 70.*)

(*See Appendix No. 3, page 71.*)

**PIERS.**—During the past fiscal year, piers, have been commenced, completed, repaired or extended at the following places, viz :—

Belœil,	Matane,
Cacouna,	Nicolet River,
Isle Verte,	Rimouski,
Lake Megantic,	Sorel,
Lanoraie,	Ste. Anne des Monts.
Longueuil,	

(*See Appendix No. 1, page 14. Appendix No. 3, pages 68 to 75.*)

**WHARVES.**—The requirements of public wharves have been attended to by the department at the following places, during the fiscal year, viz :—

Anse St. Jean,	Murray Bay,
Berthier, <i>en bas</i> ,	Queen's Wharf, Quebec,
Carleton,	Rivière Blanche,
Chicoutimi,	Ste. Anne du Saguenay,
Coteau Landing,	St. Michel,
Grande Rivière,	St. Zotique,
Grosse Isle,	Tadoussac,
Knowlton's Landing,	Trois Pistoles.
Lévis Ferry,	

(*See Appendix No. 1, page 14. Appendix No. 3, pages 68 to 75.*)

### ROADS AND BRIDGES.

**CONSTRUCTION, &c.**—A detailed account of the expenditure on roads and bridges will be found in Appendix No. 1, page 19, and a description of the work done in Appendix No. 3, pages 72, 74 and 83 and Appendix No. 4, page 130.

### SLIDES AND BOOMS.

**COLLECTOR'S REPORT.**—The report of the collector of slide and boom dues, for the fiscal year, will be found at page 149 of Appendix No. 8.

To this report eight statements are attached, viz :—

1st. Showing the dues accrued on the Government slides and works, on the River Ottawa and its tributaries, during the fiscal year ended 30th June, 1892.

2nd. Statement of the number of pieces of saw-logs, &c., that passed through the Government slides and works, on the River Ottawa and its tributaries, during the fiscal year ended 30th June, 1892.

3rd. Statement of slide and boom dues, accrued from Ottawa River works since 1st July, 1889, outstanding on 30th June, 1892.

4th. Statement of slidage and boomage from the Ottawa slides and works, outstanding at Ottawa, previous to 1st July, 1889.

5th. Statement of outstanding slide dues, Ottawa District, bonds for which were sent to Quebec for collection, remaining unpaid 30th June, 1892.

6th. Statement of slide and boom dues from the St. Maurice slides and works outstanding on 30th June, 1891, and remaining uncollected the 30th September, 1891.

7th. SAGUENAY DISTRICT.—Statement of slide dues accrued at the Saguenay, outstanding on 30th June, 1892.

8th. Statement of slide and boom dues accrued on the Fenelon River works outstanding on 30th June, 1892.

NEWCASTLE DISTRICT.—A detailed description of the repairs executed, and a statement showing the quantities of timber that passed through the slide is inserted at page 137, Appendix No. 5.

OTTAWA DISTRICT.—A detailed report on the work done, under the direction of the department, and a statement showing the number of pieces of timber that passed through the Government slides and works on the Ottawa River, and its tributaries, etc., will be seen on reference to Appendix No. 4, page 129.

SAGUENAY DISTRICT.—The report of the superintendent of slides in this district is attached at page 145, Appendix No. 7.

ST. MAURICE DISTRICT.—The report of the superintendent, and details of the expenditure in connection with the maintenance of the St. Maurice district works are given in Appendix No. 6, page 141.

STAFF EMPLOYED.—In Appendix No. 9, page 160, is given a list, showing the names, date of birth, where employed, date of appointment and salary, of each one of the staff, employed on all the slides and booms in Canada.

#### SURVEYS AND EXAMINATIONS, &c.

Preliminary surveys, examinations and reports, were made at 134 different localities by officers of the department during the fiscal year, a list of which will be found in Appendix No. 3, pages 87-88.

#### TELEGRAPHS.

Important improvements to, and extension of, the Government telegraph system were carried on throughout the Dominion, the particulars of which are attached in the acting superintendent's report, Appendix No. 10, page 165.

I have the honour to be, sir,

Your obedient servant,

A. GOBEIL,

*Deputy Minister.*

Department of Public Works.

APPENDIX No. 1.

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# STATEMENT OF EXPENDITURE

BY THE

DEPARTMENT OF PUBLIC WORKS

DURING THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.

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O. DIONNE, ACCOUNTANT.



# Department of Public Works.

(Reference No. 135628.)

## APPENDIX No. I.

STATEMENT showing the amount expended by the Department of Public Works,  
Dominion of Canada, during the fiscal year ended 30th June, 1892.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>PUBLIC BUILDINGS.</b>				
GENERALLY .....		37 13	14,748 91	14,786 04
<i>Nova Scotia.</i>				
Amherst post office, &c .....		12 45		12 45
Annapolis do .....	11 00	71 12		82 12
Antigonish do .....		37 33		37 33
Baddeck do .....		190 49		190 49
Dartmouth do .....	4,521 18			4,521 18
Halifax Dominion building .....		1,764 99		1,764 99
do examining warehouse .....		1,257 95		1,257 95
do immigrant building .....	2,482 34			2,482 34
do penitentiary .....		0 24		0 24
Lunenburg post office .....				1 16
Nappan experimental farm .....	1,644 01			1,644 01
New Glasgow post office, &c .....		8 20		8 20
North Sydney do .....	107 20	75 00		182 20
Pictou quarantine hospital .....	498 70			498 70
Sydney (South) post office, &c .....	1,014 58			1,014 58
do quarantine station—Rebuilding wharf, &c .....	300 00			300 00
Truro post office, &c .....		40 55		40 55
Windsor post office, &c .....		40 00		40 00
Yarmouth do .....		31 96		31 96
<i>Prince Edward Island.</i>				
Charlottetown Dominion building .....	1,111 03	1,383 95		2,494 98
Montague post office, &c .....	286 01	5 97		291 98
Souris marine hospital .....	56 55			56 55
Summerside post office, &c .....	555 38	21 84		577 22
<i>New Brunswick.</i>				
Bathurst post office .....		42 00		42 00
Carleton do (St. John) .....		28 35		28 35
Chatham do .....	5,271 65	14 05		5,285 70
Dalhousie do .....	129 00	59 50		188 50
Fredericton do .....	4 73	333 50		338 23
Moncton do .....		272 30		272 30
Newcastle do .....		396 80		396 80
Partridge Island quarantine station .....		280 00		280 00
Portsmouth post office .....		130 90		130 90
St. John civil service examination office .....		1 50		1 50
do custom-house (destroyed by fire 19th March, 1892) .....	457 00	1,100 00		1,557 00
Carried forward .....	18,451 52	7,638 07	14,748 91	40,838 50

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total
<b>PUBLIC BUILDINGS—Continued.</b>				
<i>New Brunswick—Concluded.</i>				
Brought forward . . . . .	18,451 52	7,638 07	14,748 91	40,838 50
St. John custom-house—New (clearing debris) . . . . .	2,965 72			2,965 72
do do —Temporary quarters . . . . .	3,441 54			3,441 54
do Fort Howe—See page 20.				
do inland revenue office . . . . .		0 90		0 90
do marine hospital . . . . .		100 57		100 57
do post office . . . . .		517 41		517 41
do savings bank building . . . . .		41 33		41 33
St. Martin's post office . . . . .		18 05		18 05
St. Stephen's do . . . . .		41 33		41 33
Sussex do . . . . .		84 25		84 25
Woodstock do . . . . .		12 94		12 94
		64 30		64 30
<i>Quebec.</i>				
Aylmer post office, &c. . . . .		5 50		5 50
Carillon inland revenue building—Improvements . . . . .	170 00			170 00
Chicoutimi marine hospital . . . . .		299 42		299 42
Coaticook post office, &c. . . . .		9 35		9 35
Grosse Ile quarantaine station . . . . .	4,045 05			4,045 05
Hull post office, &c. . . . .		12 85		12 85
Joliette do . . . . .		15 57		15 57
Lachine do . . . . .	6,311 25			6,311 25
Laprairie do . . . . .	5,435 38			5,435 38
Montreal custom-house, renewals, &c. . . . .	2,399 97	699 46		3,099 43
do examining warehouse . . . . .		556 52		556 52
do immigrant building . . . . .		6 00		6 00
do inland revenue office . . . . .		26 76		26 76
do post office, improvements . . . . .	4,996 94	4,511 10		9,508 04
do do electric lighting extension . . . . .	1,058 95			1,058 95
Quebec citadel buildings . . . . .		1,106 55		1,106 55
do clerk of works office . . . . .		711 00		711 00
do culler's office . . . . .		1,473 06		1,473 06
do custom-house . . . . .		153 36		153 36
do drill hall . . . . .	250 00			250 00
do examining warehouse . . . . .		88 09		88 09
do immigrant building . . . . .		177 90		177 90
do inland revenue office . . . . .		15 50		15 50
do observatory . . . . .		151 00		151 00
do old Parliament grounds . . . . .		175 00		175 00
do post office—New wing and improvements . . . . .	1,055 92	1,730 70		2,786 62
do weights and measures office . . . . .		15 00		15 00
Rivière du Loup (Fraserville) post office, &c. . . . .	6,558 70			6,558 70
Sherbrooke post office, &c. . . . .		549 70		549 70
Sorel do . . . . .	7 20	70 50		77 70
St. Henri do . . . . .		9 90		9 90
St. Hyacinthe do . . . . .	8,227 06			8,227 06
St. Jérôme do . . . . .	33 30	93 50		126 80
St. John's do . . . . .		89 74		89 74
St. Vincent de Paul penitentiary . . . . .	32,064 66			32,064 66
Ste Thérèse inland revenue office . . . . .		27 20		27 20
Three Rivers custom-house . . . . .		714 56		714 56
do post office . . . . .		463 44		463 44
Valleyfield do &c. . . . .		534 10		534 10
West Farnham do &c. . . . .	1,519 15			1,519 15
<i>Ontario.</i>				
Almonte post office, &c. . . . .		2 00		2 00
Amherstburg do . . . . .		2 55		2 55
Carried forward . . . . .	99,002 21	22,964 80	14,748 91	136,715 92



# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
<b>PUBLIC BUILDINGS—Continued.</b>				
<i>Ontario—Continued.</i>				
Brought forward.....	99,002 21	22,964 80	14,748 91	136,715 92
Barrie post office, &c.....	128 47	174 88		303 35
Belleville do .....		175 20		175 20
Berlin do .....	379 09	46 78		425 87
Brampton do .....	11 40	17 14		28 54
Brantford drill shed.....	46 15			46 15
do post office, &c.....		234 65		234 65
Brockville post office, &c.....		53 00		53 00
Carleton Place post office, &c.....	12,322 65			12,322 65
Cayuga do .....		157 19		157 19
Chatham do .....		94 77		94 77
Cobourg do .....	1,114 76	19 62		1,134 38
Cornwall do .....		11 86		11 86
Dundas do .....		504 20		504 20
Galt do .....		81 23		81 23
Gananoque custom-house.....		312 00		312 00
Goderich post office, &c.....	65 00	4 00		69 00
Guelph do .....		75 42		75 42
Hamilton custom-house.....		147 58		147 58
do drill hall.....		12 45		12 45
do post office.....		1,541 46		1,541 46
Kingston civil service examination office		9 45		9 45
do custom-house.....		715 12		715 12
do military college, new dormitory.....	15 78			15 78
do post office.....		107 63		107 63
Lindsay do &c.....		26 46		26 46
London custom-house.....		136 57		136 57
do drill hall.....	7 50			7 50
do infantry school.....	2,791 62			2,791 62
do post office—Alterations.....	1,708 00	92 60		1,800 60
Napanee do &c.....	1,025 70	87 74		1,113 44
Niagara Falls post office, &c.....		28 40		28 40
Orangeville do .....		116 41		116 41
Orillia do .....	4,330 78			4,330 78
Ottawa experimental farm.....	7,119 00			7,119 00
do do lighting.....			263 03	263 03
do geological museum.....		704 91		704 91
do do lighting.....			704 00	704 00
do Major's Hill park.....			3,820 50	3,820 50
do national art gallery.....			816 25	816 25
do post office.....	54 30	6,577 17		6,631 47
do do lighting.....			3,121 34	3,121 34
do printing bureau.....	9,768 13	463 11		10,231 24
do do Babcock fire extinguishers.....	671 00			671 00
do do heating.....			444 06	444 06
do do lighting.....			1,113 40	1,113 40
do public buildings.....	359 55	116,567 18		116,926 73
do do Langevin block.....	3,510 37			3,510 37
do do gas and electric lighting.....			20,534 66	20,534 66
do do grounds.....			5,653 33	5,653 33
do do heating.....			57,947 39	57,947 39
do do removal of snow.....			1,041 25	1,041 25
do do telephonic service.....			3,447 80	3,447 80
do do water.....			14,942 22	14,942 22
do supreme court,—Addition to building.....	14,718 75			14,718 75
do do —Lighting.....			43 40	43 40
Pembroke post office, &c.....	2,043 25			2,043 25
Peterborough new custom-house.....	10,451 29			10,451 29
do do post office, &c.....		3 65		3 65
Carried forward.....	171,644 75	152,264 63	128,641 54	452,550 92

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>				
<i>Ontario—Concluded.</i>				
Brought forward.....	171,644 75	152,264 63	128,641 54	452,550 92
Petrolea post office, &c.....	2,699 99			2,699 99
Port Arthur immigration building.....		59 77		59 77
do post office, &c.....	4,404 79			4,404 79
Port Colborne do.....		62 95		62 95
Port Hope post office, &c.....		66 04		66 04
Prescott do.....		53 30		53 30
Rideau Hall.....		11,394 53		11,394 53
do fuel and light.....			8,000 00	8,000 00
do lighting New Edinburg street.....			400 00	400 00
do removal of snow.....			450 00	450 00
Stratford post office, &c.....		3 75		3 75
Strathroy do.....	637 90	9 15		647 05
St. Catharines post office, &c.....		112 23		112 23
St. Thomas do.....		9 00		9 00
Toronto civil service examination office.....		122 60		122 60
do custom-house.....		857 36		857 36
do drill hall.....	39,926 20			39,926 20
do examining warehouse.....		547 63		547 63
do inland revenue office.....		142 54		142 54
do military school.....	3,295 42			3,295 42
do post office.....		1,848 08		1,848 08
Trenton do.....	203 00	58 00		261 00
Walkerton do.....	7,251 27	4 30		7,255 57
Windsor do.....		614 89		614 89
<i>Manitoba.</i>				
Brandon experimental farm.....	3,446 11			3,446 11
do industrial school.....	284 91			284 91
do post office, &c.....	14,072 11			14,072 11
Public buildings generally.....			1,390 30	1,390 30
St. Paul Indian industrial school.....		15 00		15 00
Winnipeg clerk of works office.....		1,232 75		1,232 75
do custom-house.....		155 26		155 26
do examining warehouse.....		239 37		239 37
do Fort Osborne.....	3,929 27			3,929 27
do immigrant buildings.....	1,998 70	104 10		2,102 80
do Indian office.....		11 72		11 72
do land office.....		123 17		123 17
do post office.....		337 62		337 62
do savings bank.....		17 00		17 00
<i>North-west Territories.</i>				
Battleford mounted police barracks.....		2,043 68		2,043 68
Bull's Head do do.....		3 00		3 00
Calgary do do.....		2,397 31		2,397 31
do court-house and jail.....	452 14			452 14
do mines office.....		50 00		50 00
do post office, &c.—Land for site.....	2,500 00			2,500 00
Coutts mounted police barracks.....		31 00		31 00
East end do do.....		13 20		13 20
Edmonton crown lands and timber agent's office.....	55 57			55 57
do immigrant building.....	884 11			884 11
Edmonton mounted police barracks.....		54 33		54 33
do registry office.....	13 75			13 75
Fort Macleod custom-house.....		81 33		81 33
do mounted police barracks.....		901 72		901 72
Fort Saskatchewan do do.....		402 19		402 19
Indian Head experimental farm.....	3,980 48			3,980 48
Kootenay mounted police barracks.....		301 33		301 33
Carried forward.....	261,680 47	176,745 83	138,881 84	577,308 14

# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>				
<i>North-west Territories—Concluded.</i>				
Brought forward.....	261,680 47	175,745 83	138,881 84	577,308 14
Kutawa mounted police barracks.....		47 60		47 60
Lethbridge do do.....		740 26		740 26
Maple Creek do do.....		1,709 54		1,709 54
Medicine Hat immigrant building.....	550 00			550 00
Milk River Ridge mounted police barracks.....		5 70		5 70
Moose Jaw court-house, lock-up, &c.....	138 11			138 11
Moosomin court-house.....		22 98		22 98
do do do.....	75 63			75 63
Mounted police buildings generally.....		3,129 56		3,129 56
Onion Lake mounted police barracks.....		17 50		17 50
Pincher Creek do do.....		59 81		59 81
Prince Albert court-house, lock-up.....	37 65	81 50		119 15
do Crown land and timber office.....	233 35			233 35
do immigrant building.....	1,020 57			1,020 57
do mounted police barracks.....		543 39		543 39
Public buildings generally.....			3,796 10	3,796 10
Qu'Appelle immigrant building.....		22 00		22 00
do mounted police barracks.....		42 95		42 95
Red Deer industrial school.....	3,134 67			3,134 67
Regina clerk of works' office.....		532 42		532 42
do court-house.....		73 10		73 10
do do and registry office.....	307 78			307 78
do immigration building.....		701 35		701 35
do jail and lunatic asylum.....		487 41		487 41
do jail—Steam heating, water supply, &c.....	2,696 41			2,696 41
do Lieutenant-Governor's residence (new).....	6,100 26			6,100 26
do mounted police barracks.....		1,460 11		1,460 11
do North-west council chamber.....	10,496 07			10,496 07
do post office.....		30 35		30 35
do Wascana dam (water supply).....	37 44			37 44
St. Albert mounted police barracks.....		100 00		100 00
Stand-off do do.....		8 00		8 00
Touchwood do do.....		74 95		74 95
Whitewood do do.....		372 00		372 00
Wood Mountain do do.....		475 03		475 03
Writing-on-Stone do do.....		32 78		32 78
<i>British Columbia.</i>				
Agassiz experimental farm.....	13,105 95			13,105 95
Kamloops Indian industrial school.....		130 00		130 00
Nanaimo post office.....		277 96		277 96
New Westminster custom-house.....		152 00		152 00
do Dominion building (old).....		9 75		9 75
do inland revenue office.....		127 00		127 00
do land office.....		11 25		11 25
do penitentiary.....		12 50		12 50
do post office.....		1,848 90		1,848 90
Vancouver post office &c.....	35,259 08	19 20		35,278 28
Victoria coal shed.....	182 34			182 34
do custom-house.....		274 34		274 34
do drill hall.....	2,865 50			2,865 50
do immigrant building.....		15 00		15 00
do McCaulay point battery.....	403 35			403 35
do post office.....		541 98		541 98
do savings bank (new vault).....	39 00			39 00
<i>England.</i>				
London High Commissioner's house.....		30 66		30 66
	338,363 63	190,966 66	142,677 94	672,008 23

APPENDIX No. 1—Continued.

Name of Work.	Construction and Improvements.		Repairs.	Staff and Maintenance.	Total.	
<b>PUBLIC BUILDINGS—Continued.</b>						
	\$	cts.	\$	cts.	\$	
Brought forward.....	338,363	63	190,966	66	142,677	
					94	
					672,008	
					23	
EXPENDITURE ON ACCOUNT SERVICES MENTIONED.	Salaries of Engineers, &c.	Supplies for Engineers, &c.	Heating.	Lighting.	Water.	Total.
	\$	cts.	\$	cts.	\$	cts.
<i>Nova Scotia.</i>						
Amherst post office.....	400	00	257	25		891
Annapolis do.....	400	00	210	47	40	687
Antigonish do.....	400	00	117	50		521
Arichat do.....	15	00	78	75		93
Baddeck do.....	200	00	107	00		327
Halifax appraiser's office.....			146	19		146
do Dominion building.....	2,017	96	890	61	557	6,091
do examining ware-house.....	500	00	13	20	105	740
do immigrant shed.....			21	88		336
New Glasgow post office.....	400	00	138	18	100	1,053
North Sydney do.....	400	00	154	25		841
Pictou marine hospital.....			80	64		80
do post office.....	400	00	150	68		550
Sydney South post office.....	400	00	100	00		584
Truro do.....	400	00	143	00	20	840
Windsor do.....	400	00	164	67	50	705
Yarmouth do.....	400	00	147	75	84	935
<i>Prince Edward Island.</i>						
Charlottetown Dominion building.....	1,979	92	94	24		597
Montague post office.....	120	00	13	15	1,194	77
Summerside do.....	400	00	22	70	225	00
			334	89		4,090
				26		98
				40		223
				80		54
						798
						39
<i>New Brunswick.</i>						
Bathurst post office.....	400	00	6	09		430
Carleton, St. John, post office.....	100	00	56	28	12	15
Chatham post office.....	130	03	120	19		78
Dalhousie do.....	400	00	220	00	36	00
Fredericton do.....	400	00	272	00	385	65
Moncton do.....	400	00	241	00	167	50
Newcastle do.....	400	00	324	12		285
Portland do.....			29	94		29
St. John custom-house.....	1,796	69	1,432	42	95	25
do marine hospital.....			557	34	494	22
do penitentiary.....	450	00	47	60	212	76
do post office.....	1,169	87	579	92	6	25
do savings bank.....			1,909	95	410	36
St. Stephen's post office.....	400	00	1	82	58	26
Sussex do.....	400	00	166	50	19	96
Woodstock do.....	399	96	199	55	69	00
			231	47	160	00
					34	00
						831
						48
<i>Quebec.</i>						
Aylmer post office.....	100	00	150	99		39
Coaticook do.....	400	00	220	50	115	91
Hull do.....	116	62	259	50	40	00
					108	00
						820
						75
Car ed forward.....	16,696	05	423	60	9,721	83
					10,860	03
					2,656	22
					40,357	73
						672,008
						23



APPENDIX No. 1—Continued.

Name of Work.	Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
<b>PUBLIC BUILDINGS—Continued.</b>						
Brought forward.....	338,363 63	190,966 66	142,677 94	672,008 23		
	Salaries of Engineers, etc.	Supplies for Engineers, &c.	Heating.	Lighting.	Water.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>EXPENDITURE ON ACCOUNT SERVICES MENTIONED—Continued.</b>						
<i>Ontario—Concluded.</i>						
Brought forward....	33,457 11	1,561 24	22,866 53	23,502 86	7,563 65	88,951 39
Gananoque post office....	83 30		67 84	235 00		386 14
Goderich do.....	400 00	38 52	199 50	27 47		665 49
Guelph do.....	400 00	9 30	272 95	235 20	46 80	964 25
Hamilton custom-house....	600 00		30 00	87 80		717 80
do drill hall.....	360 00					360 00
do post office.....	906 00	32 23	954 18	1,660 90	1,000 00	4,553 31
Kingston custom-house....	91 60	38 80	276 00	125 00	70 80	602 20
do examining warehouse.....					12 00	12 00
do inland revenue office.....				43 40	113 26	156 66
do military college.....	1,440 00					1,440 00
do post office.....	98 25	3 50	62 00	438 40	56 26	658 41
Lindsay do.....	400 00	2 00	132 85	104 94		639 79
London custom-house....	1,000 00	23 06	580 99	294 15	183 75	2,081 95
do post office.....	600 00	10 67	576 26	631 70	85 00	1,903 63
Napanee do.....	400 00	13 25	221 75	132 20	69 44	836 64
Niagara Falls post office....	400 00	23 75	232 80	52 21	29 00	737 76
Orangeville do.....	400 00	3 00	162 22	125 80		691 02
Ottawa experimental farm....			649 80			649 80
Pembroke post office.....	400 00	5 40	150 90	240 00		796 30
Peterborough do.....	400 00	4 33	146 40	301 65	75 00	927 38
Port Arthur do.....			35 00			35 00
Port Colborne do.....	240 00	70 53		96 25		406 78
Port Hope do.....	400 00	13 20	227 00	188 20		828 40
Prescott do.....	405 00	36 80	104 40	132 32		678 52
Stratford do.....	650 00	14 90	359 35	339 80	63 00	1,427 05
Strathroy do.....	400 00	8 00	137 53	19 43		564 96
St. Catharines do.....	400 00	32 10	272 83	231 25	57 00	993 18
St. Thomas do.....	400 00	41 65	388 50	413 55	35 67	1,279 37
Toronto assistant receiver general's office.....				74 82		74 82
do custom-house....	1,383 00	64 71	351 75	100 59	179 10	2,079 15
do Dominion build'gs....					828 11	828 11
do examining warehouse.....	2,350 79	3 04	774 58	23 41	112 00	3,263 82
do inland revenue office.....	648 34	8 85	216 62	235 59	162 52	1,271 92
do post office.....	3,038 49	22 08	711 29	3,849 23	657 04	8,278 13
Trenton do.....	400 00	3 75	179 50	208 00		791 25
Walkerton do.....	366 67	20 55	191 38			578 60
Windsor do.....	1,000 00	2 75	438 15	637 29	97 50	2,175 69
<i>Manitoba.</i>						
Brandon Dominion lands office.....				56 00		56 00
Carried forward.....	53,918 55	2,111 96	31,970 85	34,844 41	11,496 90	134,342 67

# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.		Construction and Improvements.	Repairs.	Staff and Maintenance.	Total.	
<b>PUBLIC BUILDINGS—Continued.</b>						
Brought forward.....		\$ cts. 338,363 63	\$ cts. 190,966 66	\$ cts. 142,677 94	\$ cts. 672,008 23	
<b>EXPENDITURE ON ACCOUNT SERVICES MENTIONED—Continued.</b>	Salaries of Engineers, &c.	Supplies for Engineers, &c.	Heating.	Lighting.	Water.	Totals.
<i>Manitoba.—Concluded.</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward....	53,918 55	2,111 96	31,970 85	34,844 41	11,496 90	134,342 67
Brandon experimental farm do post office....	400 00	55 65	110 80 1,355 51	71 28	52 80	110 80 1,935 24
Deloraine Dominion lands office .....			62 50			62 50
Minnedosa Dominion lands office .....			125 80			125 80
Winnipeg custom-house... do Dominion lands office .....			673 55 272 15	236 52 14 04	91 20	1,001 27 286 19
do examin'g ware-house .....			475 75	8 64		484 39
do immigrant shed .....			759 50	247 15	125 00	1,131 65
do Indian office....			180 50			180 50
do post office.....	2,973 25	61 12	2,554 77	1,359 99	550 00	7,499 13
<i>North-west Territories.</i>						
Battleford, Dominion lands office .....			52 50			52 50
Birtle, Dominion lands office .....			85 75			85 75
Calgary barracks... do court-house... do custom-house... do Dominion lands office .....			492 75 40 00 168 00	1,500 00 427 50	1,250 00 287 50	2,750 00 1,207 75 40 00 168 00
do immigrant shed... do mines office .....			80 00 8 00			80 00 8 00
Coteau Dominion lands office .....			19 00			19 00
Edmonton Crown lands, &c .....			28 00 45 50			28 00 45 50
do registry office..			45 50			45 50
Fort Macleod custom-house .....			200 50			200 50
Indian Head experimental farm .....			238 90			238 90
Lethbridge Dominion lands office .....			42 50			42 50
Medicine Hat intelligence office .....			17 00			17 00
Moosomin court-house... Prince Albert court-house do Crown lands &c .....	400 00 400 00	47 55 48 35	403 96 48 88	30 90 48 88		882 41 497 23
do registry office .....			89 75			89 75
do registry office .....			24 00			24 00
Red Deer Dominion lands office .....			3 00			3 00
Carried forward.....	58,091 80	2,324 63	40,580 79	38,789 31	13,853 40	153,639 93

APPENDIX No. 1—Continued.

Name of Work.	Construction and Improvements.		Repairs.	Staff and Maintenance.	Total.									
	\$	cts.	\$	cts.	\$	cts.								
<b>PUBLIC BUILDINGS—Concluded.</b>														
Brought forward.....	338,363	63	190,966	66	142,677	94	672,008	23						
<b>EXPENDITURE ON ACCOUNT SERVICES MENTIONED—Concluded.</b>	<b>Salaries of Engineers, &amp;c.</b>	<b>Supplies for Engineers, &amp;c.</b>	<b>Heating.</b>	<b>Lighting.</b>	<b>Water.</b>	<b>Totals.</b>								
<i>N. W. T.—Concluded.</i>	\$	cts.	\$	cts.	\$	cts.	\$	cts.						
Brought forward.....	58,091	80	2,324	63	40,580	79	38,789	31	13,853	40	153,639	93		
Regina court-house.....			22	90	684	30	10	26			717	46		
do jail and lunatic asylum.....	1,560	00	10	00							1,570	00		
do Lieut.-Governor's residence.....	400	00									400	00		
do post office.....			246	00							246	00		
do registry office.....			197	61							197	61		
Saltcoats Dominion lands office.....			11	50							11	50		
<i>British Columbia.</i>														
Kamloops Dominion lands office.....			19	75							19	75		
Nanaimo post office.....	600	00	260	00	318	55	36	00			1,214	55		
New Westminster post office.....	600	00	182	37	266	55					1,048	92		
Vancouver post office.....	77	50									77	50		
Victoria appraiser's office.....									12	00	12	00		
do custom-house.....			33	37	41	00	29	74			104	11		
do post office.....			450	22	970	35	31	79			1,452	36		
do savings bank.....			1	40							1	40		
do weights and measures office.....								12	00		12	00		
<i>Miscellaneous.</i>														
Dominion buildings generally.....			4,216	28			1,484	79			5,701	07		
Totals.....	61,329	30	2,357	53	46,883	59	40,396	02	15,459	72	166,426	16	166,426	16
Carried forward.....	338,363	63	190,966	66	309,304	10	838,434	39						



# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Forward .....	338,363 63	190,966 66	309,104 10	838,434 39
<b>HARBOURS AND BREAKWATERS.</b>				
<i>Nova Scotia.</i>				
Abercrombie wharf .....	864 22			864 22
Arisaig pier .....	3,001 22			3,001 22
Aspy Bay .....	199 95			199 95
Beaver River .....	450 00			450 00
Big Pond .....	40 00			40 00
Broad Cove Marsh pier .....		1,076 04		1,076 04
Brulé pier .....		5 00		5 00
Canada Creek pier .....		250 00		250 00
Cape Sable Island breakwater, south side .....	306 54			306 54
Cheticamp—Dredging .....	4,895 75			4,895 75
Chipman's Brook .....		200 00		200 00
Church Point wharf .....	1,434 38			1,434 38
Clyburne Brook .....		200 00		200 00
Cow Bay breakwater .....	3,499 90			3,499 90
Cribbin's Point wharf .....	6,081 50			6,081 50
Devil's Island breakwater .....	77 99			77 99
Digby—New pier at the Raquette .....	9,804 78			9,804 78
do old pier .....		29 76		29 76
East Bay wharf .....		811 10		811 10
Eatonville or "The Three Sisters"—Beach protection works .....	569 74			569 74
Economy breakwater .....	1,161 38			1,161 38
Fox Island do .....		50 00		50 00
French River pier .....	2,860 00			2,860 00
Georgeville wharf .....	4,874 43			4,874 43
Grand Narrows wharf .....	749 75			749 75
Great Village .....	1,585 00			1,585 00
Halifax graving dock—Subsidy .....	10,000 00			10,000 00
Hall's Harbour .....	500 00			500 00
Harbours generally .....			4,771 74	4,771 74
Ingonish south pier .....		158 50		158 50
Irish Cove .....	1,200 00			1,200 00
Joggins breakwater .....		987 71		987 71
Jordon Bay do .....		750 00		750 00
L'Ardoise do .....	5,979 02			5,979 02
Lismore—Extension of pier .....	1,300 00			1,300 00
Mabou harbour .....	8,398 84			8,398 84
Margaree pier .....		586 08		586 08
Margaretville pier .....		2,194 83		2,194 83
Meagher's Beach .....	599 06			599 06
Merigomish .....		24 80		24 80
Morden wharf .....		300 00		300 00
McNair's Cove .....		5 00		5 00
Ogilvie wharf .....		500 00		500 00
Pictou Island wharves .....	2,096 29			2,096 29
Port George .....		2,947 00		2,947 00
Port Hood pier .....	27 45			27 45
Port Lorne .....		800 00		800 00
Port Maitland or "Green Cove" .....		993 22		993 22
Round Hill .....	298 45			298 45
Saulnierville pier .....	3,724 96			3,724 96
Stony Island .....	17 60			17 60
South Gut pier .....	3,260 00			3,260 00
Trout Cove .....		499 66		499 66
Walton .....		100 31		100 31
West Arichat—Breakwater .....	5,323 84			5,323 84
West Chezzetcook .....	2,526 32			2,526 32
West Pubnico .....		518 34		518 34
Yarmouth .....		250 00		250 00
		50 00		50 00
Carried forward .....	425,773 54	206,552 46	313,875 64	945,201 64

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward .....	425,773 54	205,552 46	313,875 84	945,201 84
<b>HARBOURS AND BREAKWATERS—Continued.</b>				
<i>Prince Edward Island.</i>				
Bay Fortune harbour.....	46 17			46 17
Bayview wharf.....	499 63			499 63
Belfast pier.....		699 28		699 28
Brae harbour breakwater.....	891 10			891 10
Harbours generally.....			4,994 92	4,994 92
Higgin's Shore wharf.....		511 56		511 56
Campbell's Cove pier.....		1,208 45		1,208 45
Clifton pier—New London.....		49 99		49 99
Hurd's Point pier.....		23 00		23 00
Malpeque breakwater.....		350 00		350 00
Miminegash do.....	39 51			39 51
Mink River do.....		1,100 00		1,100 00
New London, <i>see</i> Clifton.....				
Nine Mile Creek—Extension of pier.....	33 14			33 14
North Cardigan pier.....		274 97		274 97
Port Selkirk do.....	2,325 25			2,325 25
South Rustico do.....		146 94		146 94
St. Peter's Bay breakwater.....		411 13		411 13
Tignish do.....		361 15		361 15
Victoria pier.....		50 08		50 08
<i>New Brunswick.</i>				
Anderson's Hollow.....		59 13		59 13
Black River breakwater.....		319 70		319 70
Campbellton ballast wharf.....	3,448 48			3,448 48
Cape Tormentine breakwater.....	52,889 92			52,889 92
Caraquet harbour—Wharf at Oyster Grounds.....	875 00			875 00
Clifton breakwater.....		1,000 99		1,000 99
Cocayne wharf.....	2,250 39			2,250 39
Dalhousie ballast wharf.....	500 38			500 38
Edgett's Landing.....	1,901 00			1,901 00
Gray's Island breakwater.....	4,873 00			4,873 00
Harbours generally.....			4,771 74	4,771 74
Kingston wharf—on Richibucto River.....	2,355 00			2,355 00
Lower Neguac wharf.....	1,064 34			1,064 34
Quaco breakwater.....		1,350 82		1,350 82
River St. John—Grand Falls shear dam.....	\$2,499 19			
do Oromocto do.....	54 30			
do removal of snags.....	3,014 49		250 00	3,014 49
do generally.....			178 91	178 91
Shippegan breakwater.....	9,714 52			9,714 52
St. John harbour—Partridge Island wharves.....		499 23		499 23
do Negro Point breakwater.....		14,968 20		14,968 20
Tobique River.....	200 00			200 00
Tracadie wharf.....		52 68		52 68
Tynemouth or "Ten Mile Creek".....		1,000 00		1,000 00
West Quaco—new outlet for Irish or Mosher's River.....	1,841 63			1,841 63
<i>Quebe.</i>				
Agnes wharf, Lake Mégantic.....		349 80		349 80
Anse à L'Eau or "Tadouac" pier.....	1,996 47			1,996 47
Anse St. Jean pier.....		775 74		775 74
Baie des Pères pier, Lake Témiscamingue.....	68 12			68 12
Baie St. Paul pier, (Isolated block).....		24 90		24 90
Carried forward.....	516,601 08	231,140 15	324,071 41	1,071,812 64

# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward. ....	516,601 08	231,140 15	324,071 41	1,071,812 64
<b>HARBOURS AND BREAKWATERS—Con.</b>				
<i>Quebec—Concluded.</i>				
Belœil piers .....		1,193 88	117 00	1,310 88
Berthier (en bas) pier .....		485 93		485 93
Berthier (en haut) ice pier .....	13 50			13 50
Cacouna pier .....	355 00			355 00
Carleton do .....		382 11		382 11
Chicoutimi pier .....		2,024 03		2,024 03
Coteau Landing pier—Reconstruction .....	1,496 57	101 85		1,598 42
Etang du Nord Breakwater—Ile aux Groëlands .....			180 00	180 00
Grande Rivière .....	9,454 78	100 00		9,554 78
Grosse Ile quarantine station wharf .....		6,094 33		6,094 33
Harbours generally .....			10,368 17	10,368 17
Ile Verte pier .....		3,999 70		3,999 70
Kamouraska wharf .....		4 80		4 80
Knowlton's Landing pier .....	971 22			971 22
Lanoraie pier .....		416 04		416 04
Laprairie ice piers .....	2,495 10			2,495 10
Lévis graving dock .....	3,479 10	1,502 25	8,298 76	13,280 11
Long Sault wharf—Lake Témiscamingue .....	68 13			68 13
Longueuil pier .....	24 00			24 00
Malbaie do .....		800 37		800 37
Matane do—Enlargement .....	1,258 22			1,258 22
Piers below Quebec .....			6,563 58	6,563 58
Pointe à Valois pier .....	67 67			67 67
Pointe St. Pierre harbour .....	320 70			320 70
Pot au Beurre River—Dredging .....	999 66			999 66
Quebec Queen's wharf .....		110 93		110 93
Rimouski pier .....		4,592 75		4,592 75
Rivière Blanche pier .....		953 03		953 03
do des Prairies—Improvements at St. Raphaël and Ste. Geneviève .....	3,562 00			3,562 00
do du Lièvre .....	35,247 72		193 52	35,441 24
do L'Assomption .....	649 99			649 99
do Matawin .....	291 59			291 59
do Nicolet, harbour of refuge .....	8,888 36			8,888 36
do St. Lawrence, deepening channel between Quebec and Montreal .....	49,956 38			49,956 38
do St. Louis .....	1,999 16			1,999 16
do do head gates .....		14 00	45 00	59 00
do St. Maurice—West channel at mouth .....	2,000 00			2,000 00
do do channel between Grandes Piles and Lauque .....	1,225 26			1,225 26
do Yamaska lock, &c. (Damages Dr. P. E. Mignault) .....	800 00	4,946 74	750 84	6,497 58
Sorel ice piers, River Richelieu .....	1,903 62			1,903 62
Ste. Anne de la Pérade .....	1,992 25			1,992 25
do des Monts pier .....	4,827 10			4,827 10
do du Saguenay pier .....	2,262 11			2,262 11
St. Laurent (Ile d'Orleans) pier .....		206 60		206 60
St. Michel de Bellechasse pier .....		996 70		996 70
St. Zotique .....		90 20		90 20
Three Rivers .....	362 72			362 72
Trois Pistoles .....	1,499 28			1,499 28
Yamachiche .....	73 90			73 90
Carried forward .....	660,146 17	260,156 39	350,588 28	1,270,890 84

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward .....	660,146 17	260,156 39	350,588 28	1,270,890 84
<b>HARBOURS AND BREAKWATERS—Con.</b>				
<i>Ontario.</i>				
Beaverton wharf.....	3,606 50			3,606 50
Belleville harbour.....	2,765 95			2,765 95
do —Dredging.....	1,464 25			1,464 25
Burlington Bay channel.....		310 00	639 96	949 96
Cobourg harbour.....		107 63		107 63
Georgian Bay—Removal Robertson rocks.....	2,370 95			2,370 95
Goderich harbour.....		771 44		771 44
Hamilton harbour—Dredging.....	2,437 74			2,437 74
Harbours generally.....			11,841 14	11,841 14
Kaministiquia River.....	2,924 33			2,924 33
Kincardine harbour.....		21 62		21 62
Kingston graving dock.....	115,108 64	442 33	4,978 90	120,529 87
do harbour.....	6,092 73			6,092 73
Kingsville harbour.....		1,250 00		1,250 00
Little Current, Lake Huron.....	3,662 16			3,662 16
Little Nation river.....	4,000 00			4,000 00
Meaford harbour.....	818 12			818 12
Oakville harbour.....	546 99			546 99
Owen Sound harbour.....	24,795 54			24,795 54
Parry Sound Narrows.....	5,748 58			5,748 58
Port Arthur harbour.....	141 00			141 00
Port Elgin do.....	1,000 00			1,000 00
Port Hope do.....	4,999 42			4,999 42
Port Stanley do.....		4,999 96		4,999 96
Rainy River—Long Sault Rapids.....	182 82			182 82
River Ottawa—Narrows above Pembroke.....	198 64			198 64
Rondeau harbour.....		3,484 26		3,484 26
Sault Ste. Marie—Crib-work.....	1,475 25			1,475 25
Southampton harbour.....	5,473 87			5,473 87
Thornbury harbour—Dredging.....	1,949 35			1,949 35
do do pier.....	169 04	455 95		624 99
Toronto harbour.....	102,823 88			102,823 88
<i>Manitoba.</i>				
Harbours generally.....			2,211 98	2,211 98
<i>North-west Territories.</i>				
Harbours generally.....			2,794 59	2,794 59
<i>British Columbia.</i>				
Columbia River—above Golden.....	\$ 5,979 86			
do —between Revelstoke and Arrow Lake.....	5,995 51			
do —between mouth of Kootenay R. & Int. boundary.....	6,522 67			
	18,498 04			18,498 04
Courtney River—Protection work at junction with Isolume.....	1,014 68			1,014 68
Cowichan River.....	1,310 67			1,310 67
Esquimalt graving dock.....	51 60		16,591 36	16,642 96
Fraser River.....	20,300 83			20,300 83
Harbours generally.....			3,589 46	3,589 46
Nanaimo harbour—Removal of Nicol Rock, &c.....	4,172 29			4,172 29
Carried forward .....	1,000,250 03	271,999 58	393,235 67	1,665,485 28

# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward . . . . .	1,000,250 03	271,999 58	393,235 67	1,665,485 28
<b>HARBOURS AND BREAKWATERS—Concluded</b>				
<i>British Columbia—Concluded.</i>				
New Westminster wharf—Shed for snag-boat . . . . .	528 07			528 07
Nicomeckel River . . . . .	483 76			483 76
Skeena do . . . . .	2,000 00			2,000 00
Somas do . . . . .	499 55			499 55
Victoria harbour—Dredging inner harbour. \$6,192 31				
do do outer do . 1,178 23	7,370 54			7,370 54
<b>HARBOURS AND RIVERS GENERALLY.</b>				
Dredge repairs . . . . .		30,846 04		30,846 04
New dredging plant—Maritime Prov. . . \$ 15,946 68			6,936 42	6,936 42
GENERALLY . . . . .	2,950 01			18,896 69
	18,896 69			18,896 69
<b>DREDGING.</b>				
(REFERENCE No. 133048.)				
<i>Nova Scotia.</i>				
Barrington (Shelburne) . . . . . \$ 1,731 16				
D'Escousse (Richmond) . . . . . 3,004 83				
East River (Pictou) . . . . . 7,230 86				
Mabou harbour (Inverness) . . 3,300 83				
Port Hood (do) . . . . . 318 99				
Pictou Acadia Coal Co.'s wharf . . . . . 259 61				
St. Peter's Canal (Cape Breton) 1,344 27				
	\$17,241 55			
<i>Prince Edward Island.</i>				
Georgetown (Queen's) . . . . . \$ 378 00				
Pownal (do) . . . . . 1,223 43				
Sturgeon (King's) . . . . . 5,129 14				
Summerside (Prince) . . . . . 5,108 39				
	11,838 96			
<i>New Brunswick.</i>				
Hampton (King's) . . . . . \$ 2,443 54				
do (Sunbury) . . . . . 5,035 58				
Richibucto (Kent) . . . . . 8,067 41				
	15,546 53			
GENERALLY . . . . .	431 47			
Total Maritime Provinces . . . \$ 45,058 51				
Carried forward . . . . . \$ 45,058 51	1,030,028 64	302,845 62	400,172 09	1,733,046 35

[1892]

## APPENDIX No. 1—Continued.

Name of Work.		Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$/ cts.
Brought forward.....	\$45,058 51	1,030,028 64	302,845 62	400,172 09	1,733,046 35
<b>DREDGING—Concluded.</b>					
<i>Quebec.</i>					
Lake of the Two Mountains..\$	733 91				
Lévis graving dock basin.....	418 37				
Longueuil.....	75 00				
Ottawa River.....	4,305 42				
do Queen's basin, Rideau Canal.....	356 35				
River Nicolet.....	16 25				
Yamaska River.....	356 34				
Generally.....	1,804 22				
	8,065 86				
<i>Ontario.</i>					
Amherstburg.....\$	558 99				
Cobourg.....	276 77				
Collins Bay.....	329 94				
Collingwood.....	1,800 12				
Frenchman's Bay.....	40 00				
Gananoque.....	1,434 31				
Goderich.....	592 48				
Kincardine.....	2,722 08				
Kingston.....	742 15				
Meaford.....	279 12				
Oakville.....	453 01				
Ottawa River.....	417 83				
Owen Sound.....	2,893 00				
Pickering.....	1,326 67				
Port Credit.....	1,214 75				
Port Hope.....	2,895 91				
River Thames.....	1,131 00				
Thornbury.....	172 10				
Trenton.....	2,926 19				
Generally.....	3,597 20				
	25,803 62				
<i>Manitoba.</i>					
Red River.....\$	10,998 21				
White Mud River.....	3,994 30				
	14,992 51				
<i>British Columbia.</i>					
Fraser River.....\$	5,486 15				
Victoria harbour.....	8,241 41				
	13,727 56				
GENERAL SERVICE.....	8,459 54				
		116,107 60			116,107 60
<b>SLIDES AND BOOMS.</b>					
Saguenay District.....		292 17	3,334 75	1,047 53	4,674 45
St. Maurice do.....		514 91	4,332 75	15,658 83	20,506 46
Vermilion River, St. Maurice District.....			877 53		877 53
Carried forward.....		1,146,943 32	311,390 65	416,878 45	1,875,212 42

# Department of Public Works.

## APPENDIX No. 1—Continued.

Name of Work.	Con- struction and Im- provements.	Repairs.	Staff and Main- tenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,146,943 32	311,390 65	416,878 45	1,875,212 42
<b>SLIDES AND BOOMS—Concluded.</b>				
Ottawa District .....			23,915 77	23,915 77
do River slides, Gatineau boom, legal expenses . . . \$ 4,869 07	8,716 67			8,716 67
do do reconstruction works at des Joachims and Calumet .....	674 69			674 69
Black River slides . . . \$ 1,625 61				
Petewawa do . . . . . 889 93	2,722 87			2,722 87
Coulonge do . . . . . 1,341 76				
Gatineau do . . . . . 2,049 83				
Madawaska do . . . . . 4,928 62				
		15,704 82		15,704 82
Newcastle District .....		3,999 54	1,908 20	5,907 74
<b>ROADS AND BRIDGES.</b>				
<i>Ontario.</i>				
Ottawa City bridges and approaches—				
Cartier Square . . . . . \$ 541 50				
Chaudière bridges . . . . . 3,635 49				
Dufferin bridge . . . . . 35 88				
Maria Street old bridge . . . . . 241 40				
do new do . . . . .	15 54			15 54
Nepean Point . . . . . 584 51				
New Iron Truss Bridge (Chaudière) . . . . . 10 00				
Sappers' bridge . . . . . 225 70				
Wellington Street . . . . . 2,688 40				
York bridge, over Grand River .....	8,498 30		7,962 88	7,962 88
				8,498 30
<i>North-west Territories.</i>				
Battleford bridge, Battle River .....	1,059 42			1,059 42
Belly River bridge, Lethbridge .....	6,998 84			6,998 84
Bow River bridge .....	62 00			62 00
Old Man's River bridge, Fort Macleod .....	24,968 63			24,968 63
<b>TELEGRAPH LINES.</b>				
<i>Nova Scotia.</i>				
Cape Sable . . . . . \$ 422 95				
Cheticamp . . . . . 1,098 86				
Low Point . . . . . 50 00				
Meat Cove—Repoling . . . . . 1,930 27	2,136 87			2,136 87
do and White Point				
Loop line .....	200 69			200 69
	\$ 3,502 08			
<i>Prince Edward Island.</i>				
Prince Edward Island and Mainland—Subsidy .....			1,946 66	1,946 66
<i>New Brunswick.</i>				
Bay of Fundy . . . . . \$2,662 66				
Escuminac . . . . . 613 61	\$ 3,276 27			
Carried forward .....	\$ 6,778 35	1,202,997 84	331,095 01	452,611 96
				1,986,704 81

APPENDIX No. 1—*Concluded.*

Name of Work.	Construction and Improve- ments.	Repairs.	Staff and Main- tenance.	Total.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
Brought forward. ....	\$ 6,778 35	1,202,997 84	331,095 01	452,611 96	1,986,704 81
<b>TELEGRAPH LINES—<i>Concluded.</i></b>					
<i>Quebec.</i>					
Anticosti Island. ....	\$3,434 21				
Grosse Ile quarantine station. . .	605 26				
Magdalen Islands. ....	3,113 27				
North Shore—Towards Pt. aux Esquimaux. ....		2,975 40			2,975 40
do East Bersimis. . .	6,370 58				
do West do. . .	4,260 47				
	\$ 17,783 79				
<i>Newfoundland.</i>					
Cape Ray. ....	250 00				
GENERALLY. ....	3,395 88				
Total, Telegraph lines, lower St. Lawrence. ....			28,208 02		28,208 02
<i>Ontario.</i>					
Pelé Island. ....			705 09		705 09
<i>North-west Territories.</i>					
Telegraph lines generally. ....			19,959 61		19,959 61
<i>British Columbia.</i>					
Nanaimo to Comox. ....	1,085 84				1,085 84
Telegraph lines generally. ....			8,191 39		8,191 39
TELEGRAPH SERVICE GENERALLY. ....			6,956 43		6,956 43
<b>MISCELLANEOUS.</b>					
Agent and contingencies, B. C. . . . .			6,352 17		6,352 17
Surveys and inspections. . . . .			15,403 88		15,403 88
Surveys and plans of Government properties. . . . .			1,212 00		1,212 00
St. John, N.B., Fort Howe. . . . .	23 00				23 00
Régina, Wascana dam. . . . .			8 20		8 20
Gratuities—Widow late Thos. Pruneau. . . \$ 198 25					
do do W. O. Strong. . . . .	1,110 00				
do P. O. Bonenfant. . . . .	83 33				
do G. A. Brown. . . . .	450 00				
Extra clerks preparing returns ordered by Parliament. . . . .			1,841 58		1,841 58
			112 80		112 80
<b>COLLECTION OF SLIDE AND BOOM DUES.</b>					
St. Maurice District. ....	\$1,236 51				
Ottawa District. ....	2,505 24				
do Upper Ottawa Improvement Co. :—			3,741 75		3,741 75
Logs, Cheneaux boom, 1891-92. . . . .			1,162 41		1,162 41
Totals. ....		1,207,082 08	331,095 01	546,467 29	2,084,644 38

O. DIONNE,  
Accountant.DEPARTMENT OF PUBLIC WORKS,  
OTTAWA, 15th December, 1892.



Department of Public Works.

APPENDIX No. 2.

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REPORT

ON THE

PUBLIC BUILDINGS

THROUGHOUT THE DOMINION,

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892,

BY THE

CHIEF ARCHITECT

OF THE

DEPARTMENT OF PUBLIC WORKS.



Department of Public Works.

APPENDIX No. 2.

REPORT OF THE CHIEF ARCHITECT.

DEPARTMENT OF PUBLIC WORKS, CANADA,  
CHIEF ARCHITECT'S OFFICE,  
OTTAWA, 29th December, 1892.

SIR,—I have the honour herewith to transmit report of the various works performed under my charge during the fiscal year ended the 30th June, 1892.

I have the honour to be, sir,

Your obedient servant,

(Signed), THOMAS FULLER,

*Chief Architect.*

E. F. E. ROY, Esq.,  
Secretary, Department of Public Works.

PROVINCE OF NOVA SCOTIA.

ANNAPOLIS.

POST OFFICE, &C., BUILDING.

Alterations and repairs of a minor nature have been made to the inside and roof, the tide-waiters' room divided to make room for savings bank, lamps furnished to customs, and platform raised, &c.

Clerk of works, Mr. J. E. Turnbull, St. John, N.B.

BADDECK.

PUBLIC BUILDING.

Inside walls of this building have been cleaned and tinted, and the woodwork painted.

Clerk of works, J. E. Turnbull, St. John, N. B.

DARTMOUTH.

PUBLIC BUILDING.

A site for this building has been selected on the corner of Water and Portland streets, 78 x 59 feet, and plans and specifications are in course of preparation.

HALIFAX.

DOMINION BUILDING.

Ceilings of post office have been whitened, walls, woodwork and furniture painted and repaired, and bulletin board put in.

Clerk of works, J. E. Turnbull, St. John, N.B.

## IMMIGRATION BUILDING.

Offices for the Direct Cable Company and for the Canadian Pacific Railway were fitted up, skylights repaired, w. c.'s and baths with all necessary plumbing and some additional electric lights put in.

Plans prepared and work superintended by J. C. Dumaresq, architect, Halifax.  
Clerk of works, Mr. Donald Grant, Halifax.

## NAPPAN.

## EXPERIMENTAL FARM BUILDINGS.

An implement, cart and wagon-shed and piggery are being constructed, both of wood; the former 60 x 25 ft., having ahennery 20 x 25 ft. and wagon-shed 40 x 25 with loft over all, and the latter 41 x 25 ft., one story, and consisting of eight pens and a feed room.

Plans, &c., prepared by this department.  
Clerk of works, Col. W. M. Blair, Nappan, N.S.

## PICTOU.

## QUARANTINE STATION.

New storehouse and latrines have been built, and repairs made to hospital floor, kitchen, windows and locks, wainscotting put on walls, ladders supplied and the sinking of a well is in progress.

Clerk of works, J. E. Turnbull, St. John, N.B.

## SYDNEY.

## POINT EDWARD—QUARANTINE STATION.

The wharf which had been damaged was renewed and enlarged.

Clerk of works, J. E. Turnbull, St. John, N.B.

## PROVINCE OF EDWARD ISLAND.

## CHARLOTTETOWN.

## DOMINION BUILDING.

Some alterations of and addition to heating apparatus and some minor repairs to the building generally were made.

Superintending architect, W. C. Harris, Charlottetown, P.E.I.

## PROVINCE OF NEW BRUNSWICK.

## BATHURST.

## PUBLIC BUILDING.

Some slight repairs have been made to the building and new grate bars put in the heating boiler.

Clerk of works, J. E. Turnbull, St. John, N.B.

## CARLETON.

## POST OFFICE.

Repairs were made to the chimney, stove, stove pipes, and locks and broken glass replaced.

Works carried out under the supervision of W. J. McCordock, C.E., St. John, N.B.

# Department of Public Works.

## CHATHAM.

Negotiations for the purchase of part of the Fraser property as a site for the proposed public building at this place are in progress.

## DALHOUSIE.

### POST OFFICE.

Drains have been repaired and window fastenings renewed.

## FREDERICTON.

### POST OFFICE, &C., BUILDING.

Window screens and other small articles supplied, down pipes repaired, new urinal put in, water closets ventilated and lighted, 122 drawers and box locks repaired and furnished with keys, &c., &c.

Clerk of works, J. E. Turnbull, St. John, N.B.

## NEWCASTLE.

### PUBLIC BUILDING.

The walls of this building have been tinted and the woodwork painted, defective lock boxes replaced with new ones, and repairs and improvements made to plumbing.

Clerk of works, J. E. Turnbull, St. John, N.B.

## PORTLAND.

### POST OFFICE.

Slight repairs to counter, stoves, stove pipes, &c., were made, under supervision of W. J. McCordock, C. E., St. John, N.B.

### METEOROLOGICAL OFFICE.

This office and a small house for instruments have been fitted up.

A stone pier for transit was built on top of vault to the roof of the building.

Works supervised by W. J. McCordock, C.E., St. John, N.B.

## ST. JOHN.

### CUSTOM-HOUSE.

This building, during the past fiscal year, and up to the 19th March at which date it was destroyed by fire, received the usual attention as regards repairs, cleaning, &c. The boilers, furnaces and machinery were carefully looked after, new springs placed in valves and the valves tested and set at 25 lb. pressure. The furnaces lined and new dead plates put in. Water closets, urinals, steam heating, gas, electric bells, locks, roofs, radiators, hydraulic hoist, sashes and window cords and weights repaired and rearranged. New winter sashes furnished for windows of long room, and furniture repaired.

On the 19th March, 1892, as above stated, this building was entirely destroyed by fire, leaving only the stone and brick walls and towers standing. The debris was at once removed and all the iron, &c., which could not be used in the reconstruction of the building sold by public auction. Temporary quarters were secured for the several departments in the Pugsley building, which was leased, offices fitted up and furniture purchased.

Works carried out under the supervision of W. J. McCordock, C.E., St. John, N.B.

### SAVINGS BANK.

Repairs during the year were made to mason work, furnace, gas fixtures, closets and urinals and flag pole.

Works carried out under the supervision of W. J. McCordock, C.E., St. John, N.B.

## MARINE HOSPITAL.

In this building repairs were made to plumbing, chimneys, iron roof, slating, conductors and gutters, baths, urinals, closets, water pipes, cooking range and furnace. The ceiling of the surgery, which had fallen, was replaced by a new one.

Works carried out under the supervision of W. J. McCordock, C.E., St. John, N.B.

## POST OFFICE.

The furnace, water closets, urinals, water pipes, heating, gas and speaking tubes, electric bells, locks, radiators, roof, hydraulic hoist, sashes, window cords and weights, furniture, clocks, letter boxes and doors were repaired, cleaned and rearranged. Lamps were furnished, asphalt repaired, janitor's quarters cleaned, ceilings whitened and walls and woodwork painted. A flag staff and yard for time ball, storm and shipping signals were erected on the building house. A portion of the roof, which is iron, was covered with plank flooring as a protection, and quarters were prepared for the signal officer.

Works carried out under the supervision of W. J. McCordock, C.E., St. John, N.B.

## SUSSEX.

## PUBLIC BUILDING.

Slight repairs have been made during the year.  
Clerk of works, J. E. Turnbull, St. John, N.B.

## WOODSTOCK.

## PUBLIC BUILDING.

Slight repairs have been effected during the year.  
Clerk of works, J. E. Turnbull, St. John, N.B.

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 PROVINCE OF QUEBEC.

## FRASERVILLE (RIVER DU LOUP).

## POST OFFICE, &amp;C., BUILDING.

This building is roofed in and is expected to be completed and fitted up by this autumn.

Plans, &c., prepared and work superintended by this department.  
Clerk of works, Elzéar Marquis, Fraserville.  
Contractor, Alfred Lortie, Quebec.

## GROSSE ISLE.

## QUARANTINE STATION.

A search-light apparatus was furnished for the steamer "Challenger" and some further fittings for the laboratory.

Works done under supervision of this department.  
Contractor for fittings, Mr. F. Poitras, Quebec.

## LACHINE.

## POST OFFICE, &amp;C., BUILDING.

This building which was described in a previous report has been fitted up and occupied.

Plans, &c., prepared and work supervised by this department.  
Clerk of works, Jos. Mettayer, Lachine.  
Contractor, Jos. Fitzpatrick, Joliette.

## Department of Public Works.

### MONTREAL.

#### CUSTOM-HOUSE.

Usual and ordinary repairs to heating apparatus and plumbing were made.

#### EXAMINING WAREHOUSE.

Repairs of a minor nature were done during the year to machinery and heating apparatus.

#### POST OFFICE.

The woodwork and fittings throughout the building were cleaned and put through repair. Alterations to the registry office were made and a large amount of new fittings supplied of the various departments, repairs and alterations to plumbing, &c.

Supervising architect, James Nelson, Montreal.

Contractor, Em. St. Louis, Montreal.

### QUEBEC.

#### CULLER'S OFFICE.

Carpets were supplied and furniture repaired.

#### CITADEL—GOVERNOR-GENERAL'S QUARTERS.

The usual annual cleaning, painting and preparations for His Excellency's annual visit were done.

#### EXAMINING WAREHOUSE.

The steel wire cables of elevator were renewed, and plumbing, spouts and conductors repaired.

#### POST OFFICE.

New springs and checks were supplied to all the entrance doors. A postal-bag rack of 100-bag capacity was supplied and a burglar-proof safe for the stamp branch. The inside walls of the post office flat were cleaned, scraped and repainted. Alterations of the registration office and in the post office screen were made. Some furniture supplied for the post office. Inspection and general repairs to woodwork, &c.

Works done under the supervision of this department.

### ST. JÉROME.

#### PUBLIC BUILDING.

Some portions of heating pipes in examining warehouse which had been destroyed by frost were renewed.

### ST. HYACINTHE.

#### POST OFFICE, &C., BUILDING.

The contractors for this building failed to carry out their contract in a satisfactory manner, and from examination the work done was found to be so defective, both as regards materials and workmanship, as to endanger the building.

The work was, therefore, assumed by the Government, and a competent officer was sent from this department, under whose supervision portions of the walls were taken down and are being rebuilt in a substantial manner, and new tenders for the completion invited.

### ST. VINCENT DE PAUL.

#### PENITENTIARY.

The following works were carried out, as far as was possible, by convict labour, under the supervision of this department:—

Stone floor, 3,600 square feet, and brick ceilings with iron joists in south wing.

A block of 42 stone cells with iron doors was built. Marechal locking apparatus was put on 132 cells. An organ was furnished for the Protestant chapel. The barn, stable, cart-sheds, fire-hose house, and warden's quarters were painted. Repairs were made to buildings, water works and heating apparatus.

Clerk of works, Mr. Elz. Dagneault, St. Vincent de Paul.

### THREE RIVERS.

#### CUSTOM-HOUSE.

The roof of this building was resingled, and general repairs done throughout. Superintending architect, Mr. O. Z. Hamel, Three Rivers.

#### POST OFFICE.

General repairs, painting, new floor and fittings supplied. Superintending architect, Mr. O. Z. Hamel, Three Rivers.

### VALLEYFIELD.

#### POST OFFICE.

The attic was fitted up and altered to serve as quarters for the caretaker. A new stairway was built from ground floor to attic.

Contractors, Messrs. Bélanger & Préfontaine, Valleyfield.

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## PROVINCE OF ONTARIO.

### ALMONTE.

#### POST OFFICE, &C., BUILDING.

Some minor improvements were made during the year, and furniture supplied for the customs offices.

Clerk of works, Mr. A. Bell, Almonte, Ont.

### BARRIE.

#### PUBLIC BUILDING.

The city watermain was connected with the plumbing of the building, and the closet drain connected with the town sewer.

### BROCKVILLE.

#### PUBLIC BUILDING.

The roof covering was repaired; some additional hangers were supplied for large main heating pipe, and some essential minor repairs to fittings, executed.

### BERLIN.

The hot water heating apparatus mains in basement were altered and covered with non-conducting material.

Work done under the supervision of this department.

### COBOURG.

#### POST OFFICE, CUSTOM-HOUSE, &C.

The Customs and Inland Revenues offices were fitted up and furnished under the supervision of this department.



## Department of Public Works.

### CARLETON PLACE.

POST OFFICE, &C., BUILDING.

This building which was described in my report of last year, has been completed and is being fitted up and furnished with a hot water heating apparatus.

Plans, &c., prepared by this department. Clerk of works, Mr. Andrew Bell, Almonte, Ont.; contractor for building and fittings, Mr. R. Cameron, Almonte, Ont.

Contractor for heating, Mr. N. Landry, Ottawa.

### HAMILTON.

POST OFFICE, &C., BUILDING

Extensive alterations were made in screen, partitions, and fittings of the post office, and the Gas Inspector's office was fitted up and furnished for the Post Office Inspector.

Work done under the supervision of this department.

### ORILLIA.

PUBLIC BUILDING.

A contract was entered into for this building on the 5th April, 1892, and the work is in satisfactory progress. It is to be a 2½ story brick building, with stone dressings, on stone foundation 55 x 43 and a one story brick annex 40 x 24.

The basement of the main building will be occupied by the heating apparatus, and for the storage of fuel, &c.; the ground floor as post office; the first floor as Customs and Inland Revenue Offices; the attic as caretaker's residence, and the annex as examining warehouse.

Plans, &c., prepared and work supervised by this department.

Contractor, J. R. Eaton, Orillia.

Clerk of works, W. H. Croker, Orillia.

### OTTAWA.

EASTERN BLOCK—DEPARTMENTAL BUILDING.

Alterations to the rooms in attic occupied by Interior Department and Privy Council, repairs to rooms in basement and cleaning, tinting and painting various rooms throughout the building.

Works carried on under the supervision of this department,

CENTRAL EXPERIMENTAL FARM.

Additions to the poultry and piggery buildings were constructed, additional heating surface supplied at the chemist's and agriculturist's residences and paper hanging at the chemist's. Also some additional fittings at the laboratory building.

All done under the supervision of this department.

LANGEVIN BLOCK.

Furniture, packing cases, &c., were supplied, shelving put up and furniture repaired for the various departments occupying this building.

Alterations and additions to gas fittings, heating and plumbing, ladders of iron pipe furnished for inside of the two large vent shafts, and the basement cleaned, white-washed and repainted under the supervision of this department.

GEOLOGICAL MUSEUM.

A new granolithic sidewalk was laid at this building and repairs made to roofs, &c., under the supervision of this department.

[1892]

## GOVERNMENT HOUSE.

At the Hall a partition with doors was put up in basement passage and at foot of tennis court stairs to prevent draughts; a portion of still-room ceiling was sheeted with wood; part of the basement passage wall was restrapped, lathed and plastered; 11 squares of basement floor were renewed; 10 circular panelled doors were provided to match those in book-cases; 234 yards new carpet laid in drawing-room and library; coppers were retinned; new culinary utensils, linen and blankets, and a new cooking stove were purchased; and the furniture, curtains, &c., repaired and kept in order.

The ceiling of w. c.'s of cottage was sheeted in pine, 2,215 yards distempering, 350 yards painting, and 620 yards papering were done at the Hall, cottage and stables, which were all thoroughly cleaned during His Excellency's absence.

In the conservatory 125 feet of plant tables were put in, a two-inch plank floor was put in potting-room; four squares of flooring were laid in flower pits, and 300 feet of broken glass in conservatories and vineries were glazed.

Repairs were made to plastering and glazing in all the buildings; the double windows and blinds were cleaned, taken down and put up as required, and the furnaces, stoves, pipes and chimneys were cleaned, repaired, &c.

There were built 245 feet, lineal, of 7-ft. boundary fence, 1,030 feet of 4-ft. picket fence, 350 feet of 10-ft. close board fence, 95 feet of 6-ft. close board fence, 875 feet of 4-ft. 3-rail fence and 150 feet of 3-ft. 6-in. 3-strip fence, together with 57-ft. picket gates, and two new gate posts at avenue gate similar to those existing. Some repairs to cricket fence were made and a turnstile put in.

Ten squares of 3-inch plank floor were laid in the west stable; 120 yards of paving of east stable were tarred and gravelled; 230 feet lineal of 3-ft. wide side-walk were laid from Avenue gate to McKay street; 130 feet lineal of 3-inch plank crossings were relaid; new stairs with cedar steps were built from lower to upper level of sidewalks at end of tennis court, and three new hydrant chambers built, two surface water pits rebuilt.

A new vine trellis 100 feet long was put up in garden; the toboggan slides were repaired; the band room and bridge were put up and removed, the curling and skating rinks were kept in good condition, the ice house filled, the snow cleaned from roads, foot-paths and roofs, and the conservatories and gardens kept in good condition. A clump of 75 ornamental trees from the Experimental Farm was planted in a corner of the cricket field.

Works carried on under the supervision of this department.

Clerk of works, Mr. Wm. Hutchison, Ottawa.

Contractors for maintenance of grounds, &c., Messrs. Sorley & Sims, Ottawa.

Contract for removing snow, M. Cardiff, Ottawa.

## PARLIAMENT BUILDING.

Repairs to sky-lights over the House of Commons and Senate Chamber, alterations and repairs to Serjeant-at-Arms' rooms, ventilators in Senate, alterations and repairs in the Library, pointing stonework of Library and repairing roof.

New window sashes in railway committee room and room 50, and extension of ventilating apparatus in each, and furniture supplied and repaired throughout various offices in the building.

Works done under the supervision of this department.

## WESTERN BLOCK—DEPARTMENTAL BUILDING.

Extensive cleaning, tinting and painting of corridors, and rooms were made, alterations and improvements in attic for the Marine Department, including extension of water, gas and electric bell heating services, and new rooms and staircase in record room of this department and repairs to roofs and sky-lights. Work carried on under supervision of this department.

## POST OFFICE.

The extensive damages done to this building by fire which occurred on the 17th day of January last have been repaired. The greater part of the interior of the building

## Department of Public Works.

had to be re-lathed and plastered and much of the fitting renewed, furniture repaired, and water, gas and electric bell services reconstructed. Work supervised by the department.

### MAJOR'S HILL PARK.

The contractor has maintained the grounds to the satisfaction of this department. Painting and glazing were done to the greenhouse and some additional shrubbery supplied.

Contractor for maintaining grounds, Mr. L. Garello, Ottawa.

### PARLIAMENT GROUNDS.

The contractor has maintained the ground to the satisfaction of this department. Contractor, Mr. N. Robertson, Ottawa.

Contractor for removal of snow, Mr. Wm. Moore, Ottawa.

### PRINTING BUREAU.

Painting and glazing were done and new fence built around the premises, under supervision of the department.

### PUBLIC BUILDINGS, REPAIRING STREETS, &C.

Scraping, cleaning and repairs were done to the roadways of East and West Canal streets, Nepean Point roadway, Wellington, Bank, Metcalfe, Elgin and St. Patrick streets, Major's Hill roadway, Little Sussex street, also the yards of the Printing Bureau, Museums, Post Office and Old Pump House. The side-walks and crossings of Wellington street, Cartier Square, St. Patrick street and at the Museums were repaired, the grass at Geological Museum and Cartier Square was kept clipped; and the ashes removed from the Langevin Block, Museums and Printing Bureau.

The various roadways, side-walks, footpaths, roofs and yards were kept clear of snow during the winter.

Contractor for the removal of snow, Mr. Wm. Moore, Ottawa.

### SUPREME COURT.

The additions described in my report of last year have been completed and rooms fitted up, including shelving and book cases for library, plumbing and gas-fitting, extension of the heating and electric bell service, also furniture, carpets, &c.

Plans, &c., prepared by this department.

Contractor for building and fittings, Wm. Stewart, Ottawa.

Contractor for plumbing and gas fittings, Mr. O. Higman, Ottawa.

### VICTORIA HALL.

Repairs were made to roof of this building, under the supervision of this department.

## PETERBOROUGH.

### CUSTOM-HOUSE.

This building, which was described in my report of last year, is now nearly completed, and plans for a hot water heating apparatus are being prepared.

Plans, &c., prepared by this department.

Superintending architect, J. E. Belcher, Peterborough.

Contractor for building, J. E. Askwith, Ottawa.

## PETROLEA.

### POST OFFICE, &C., BUILDING.

A contract was entered into for the construction of this building, on the 29th January, 1892, and the work is in progress. It is to be a 2½-story brick building with stone dressings, and stone foundation 56' 6" x 42' 0" and a one-story brick annex 44' 6" x 21' 6". The basement will be occupied by the heating apparatus, and for the

storage of fuel; the ground floor as post office, the first floor as customs and inland revenue offices, the attic as caretaker's residence, and the annex as an examining warehouse.

Plans prepared and work supervised by this department.

Contractor, Joshua Garrett, Petrolea.

Clerk of works, J. Sinclair, Petrolea.

#### PORT ARTHUR.

##### PUBLIC BUILDING.

A site 100' 0" x 100' 0" on the corner of Count and Arthur streets was conveyed to Her Majesty for the purposes of this building free and a contract for the erection and completion of the building entered into on the 8th January, 1892, since which time the work has been in progress. The main portion of the building is 43' 0" x 56' 0" two-stories, basement and attic, and a one-story wing 40' 0" x 20' 6". The walls are to be of brick on stone foundation and stone dressings; partitions, floor and roof of wood, the last mentioned covered with galvanized iron. The basement will contain the heating apparatus and fuel; the ground floor the post office; the first floor the custom and inland revenue offices and the attic the caretaker's quarters. The addition will contain the examining warehouse and the weights and measures. Brick vaults are provided for the postal, customs and inland revenue offices.

Clerk of works, Mr. Powley, Port Arthur.

Plans, &c., prepared by this department.

Contractors, Tobin & O'Keefe, Ottawa.

#### ST. CATHARINES.

##### PUBLIC BUILDING.

A new wall coil was furnished and connected in public lobby, the caretaker's rooms were kalsomined and some repairs and alterations made to post office fittings and plumbing.

#### TORONTO.

##### CUSTOM-HOUSE.

Repairs were made to the heating apparatus and plumbing, sky-lights and roof, under the supervision of this department.

Superintending architects, Denison & King, Toronto.

##### DRILL HALL.

The site for the above building was transferred by the Corporation of the city of Toronto to the Government. It comprises a block (270 x 497) with frontage on Osgoode, University, Chestnut and Armory streets. A contract was entered into on the 10th of November, 1891, for the erection of the building which is being proceeded with,

The building will be of brick with stone dressings and stone foundation, 300 feet long by 185 feet wide, exclusive of projecting towers on Osgoode street front.

The Drill Hall is 280 feet long, 125 feet wide and 36 feet high from floor to springing of roof. The basement under is 125 feet by 140. On either side of hall are armouries extending the full length of building and 22' 6" wide, forming a lean-to on each side of building, that on the north side being one story high. On the south side two stories high and basement.

The towers at corners and central projections are four stories high, and are appropriated to band-rooms, w. c., &c. Over the armouries on south side are officers' quarters, and in basement under are furnace, storerooms, kitchens, cellars, w. c., &c. The basement under hall is appropriated for bowling and shooting alleys, store-rooms, &c., cleaning-rooms &c.

Plans, &c., prepared by this department.

Supervising architect, Mr. R. C. Windeyer, Toronto.

Contractor, Major John Stewart, Ottawa.

# Department of Public Works.

## EXAMINING WAREHOUSE.

Repairs were effected to boilers, hoist and plumbing, under supervision of this department.

Engineer in charge, John A. Wills, Toronto.

## INLAND REVENUE OFFICES.

The heating apparatus was in part remodelled and repaired and minor repairs executed to plumbing, &c., under the supervision of this department.

Engineer in charge, Mr. John A. Wills, Toronto.

## POST OFFICE.

Further work in connection with alteration of heating apparatus was done, and some repairs to plumbing, also painting, varnishing, paper-hanging and general minor repairs.

Work done under the supervision of this department.

Superintending architects, Denison and King, Toronto.

## TRENTON.

### PUBLIC BUILDING.

A new force pump was supplied and various minor repairs effected.

## WALKERTON.

### PUBLIC BUILDINGS.

This building, which has been described in a previous report, has been completed, the various offices fitted and furnished and hot water heating apparatus put in.

Clerk of works, J. J. Tolton.

Contractor for fittings, J. C. Oppenheiser, Walkerton.

Contractor for heating apparatus, McGuire & Bird, Toronto.

## WINDSOR.

### PUBLIC BUILDING.

The inland revenue offices were altered and provided with some new fittings, and an office was provided, fitted up and furnished for the inspector of gas.

Minor repairs were effected to roof, plumbing and post office fittings.

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## PROVINCE OF MANITOBA.

### BRANDON.

#### POST OFFICE.

Building and hot water heating apparatus completed, and the building occupied.

Contractor for building, James Hanbury, Brandon.

Clerk of works, T. J. Chubb, Brandon.

Superintending architect, W. R. Marshall, Brandon.

### WINNIPEG.

#### IMMIGRATION BUILDING.

This building has been completed and fitted up with baths, tubs and hot water service, cooking range and furniture, also fences, platforms and side-walks.

Plans, &c., prepared by this department

[1892]

Resident clerk of works, D. Smith, Winnipeg.  
Contractors, Messrs. Brydon & Charlesworth, Winnipeg.

## POST OFFICE.

Fittings were supplied for Dominion Lands office. Steam boiler of heating apparatus was re-tubed and some minor carpenter's work performed.  
Clerk of works, D. Smith.

## NORTH-WEST TERRITORIES.

## CALGARY.

## BARRACKS.

The water service was put into the building.

An addition, consisting of two cells, dining-room and kitchen has been made to the guard-room, latrines built and a fence to inclose yard in rear erected. Repairs were made to offices and doctor's quarters.

Clerk of works, H. D. Johnson, Calgary.

## COURT-HOUSE.

The water service was put into this building, the necessary plumbing made and the drains repaired.

Clerk of works, H. D. Johnston, Calgary.

## EDMONTON.

## IMMIGRANT SHED.

A site for this building was furnished by the Hudson Bay Company near the Canadian Pacific Railway station, and a wooden building 25' x 40' erected thereon.

Plans prepared by this department.

Contractor, H. D. Johnson, Calgary.

## MAPLE CREEK.

## MOUNTED POLICE BARRACKS.

An additional story, 16' x 30', to hospital has been built and closed in; it is now ready for plastering and finishing.

Clerk of works, H. J. Peters, Regina.

## RED DEER.

## INDUSTRIAL SCHOOL.

A contract was entered into for the erection of this building on the 11th September, 1891, and the work is now in progress. The building is to be of stone 65x48', two stories and basement, with wooden floors, partitions and roof. The basement will be occupied by the heating apparatus, pump and cistern, with separate rooms for fuel, water-closets, baths, etc. On the ground floor there will be the dining-room, reception room, matron's room, office, sewing room, sick room, bedroom, a kitchen, pantry and storeroom, and on the first floor a school-room, girls' dormitory, boys' dormitory, employees' room, infirmary and assistant matron's room.

Plans prepared by this department.

Clerk of works, H. D. Johnson, Calgary.

Contractor for building, Mr. John Stewart, Ottawa.

# Department of Public Works.

## REGINA.

### COURT-HOUSE.

Alterations have been made to entrance to Dominion Lands Office to facilitate the business of the office.

Clerk of works, H. J. Peters, Regina.

### IMMIGRANT BUILDING.

The inside walls and ceilings have been lined with seasoned lumber, sleeping platforms made, storm sash put on, small fuel shed erected and side-walks laid.

Clerk of works, H. J. Peters, Regina.

### NEW GOVERNMENT OFFICES.

Electric lighting has been introduced; hot water apparatus put in and the offices fitted up and furnished. The building is now occupied.

Contractors for heating apparatus, Dunlop & Chapman of Pembroke, Ont.

Clerk of works, H. J. Peters, Regina.

### COUNCIL CHAMBER.

Alterations and repairs were made after removal of officials to the new offices, committee rooms and rooms for the Speaker and Clerk of the Assembly fitted up, additional members' desks and new chair for Speaker, as well as stoves and other fittings provided, and electric lights put in.

Clerk of works, H. J. Peters, Regina.

### NEW GOVERNMENT HOUSE.

This building is occupied by His Honour the Lieutenant-Governor. A system of electric lighting has been introduced and is now in operation, and a fence inclosing twenty-five acres of ground immediately surrounding the building has been constructed.

Clerk of works, H. J. Peters, Regina.

## GENERAL.

Various and numerous repairs and renewals have been made by police labour at the Mounted Police posts and connected outposts at Prince Albert, Battleford, Fort Saskatchewan, St. Albert, Calgary, Fort Macleod, Lethbridge, Maple Creek and Regina.

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## PROVINCE OF BRITISH COLUMBIA.

### AGASSIZ.

#### EXPERIMENTAL FARM.

The superintendent's residence referred to in my last report has been completed and occupied. On the 20th November, 1891, a contract was entered into for the erection of a barn 61' 0" x 86' 0" x 58' 0" from level of ground to apex of roof. It consists of a stone basement for implement shed, coal cellar, silo and carpenter shop, ground floor for sheep pens, harness room, drive way and general storage; a first floor containing loft granary and tool room, &c.

Clerk of works, Jos. Brown.

Contractor, Messrs. Mathew & Rockett.

Plans, &c., prepared by this Department.

Works supervised by F. C. Gamble, C.E., Victoria.

## KAMLOOPS.

## INDUSTRIAL SCHOOL.

Minor repairs to this building were made during the year under the supervision of F. C. Gamble, C.E., Victoria.

## NANAIMO.

## POST OFFICE, &amp;C.

Several additions and alterations have been effected and furniture supplied in connection with the post office or ground floor portion of the building. These additions and alterations comprise (1) a 22-bag Harrison Postal Rack, (2) the making and placing in position 4,200 letter boxes with brass fronts, (3) a stamp cabinet and newspapers distributing table, (4) a storm porch with swinging doors, (5) cutting a hole through the exterior wall and setting therein a brass letter drop and minor repairs to gas fixtures.

Under supervision of F. C. Gamble, C.E., Victoria.

## NEW WESTMINSTER.

## PUBLIC BUILDING.

Works were carried out to meet the demands of the post office occupying the ground floor, for increased postal facilities; moving the Land office to the 1st and 2nd floors, moving the Fishery Inspector's office to make room for the Land office, fitting up office of the collector of inland revenue and supplying furniture to customs.

Works carried out under the supervision of Mr F. C. Gamble, C.E., Victoria.

## VANCOUVER.

## POST OFFICE, &amp;C., BUILDING.

The contractor was unable to carry on the work, therefore new tenders were asked for by advertisement, and a contract awarded to Mr. T. Tompkins, of Brockville, Ont. Work now in progress.

Plans prepared by this department.

Superintending architect, Mr. C. O. Wickenden, Vancouver.

## VICTORIA, B. C.

## NEW DRILL HALL.

A site for this building has been secured on Melzies Street 250'  $\times$  200' and a contract entered into on the 23rd May, 1892, for its erection. The walls are to be of brick on stone foundation. The drill hall will be 75'  $\times$  160' having a two story lean-to 27 feet wide extending the entire length of the building. On the ground floor are five armouries, gun shed, an officer's room, orderly room, sergeant's room, and two rooms for quarter-master's stores. On first floor a band room, officer's room, reading and store rooms.

Plans prepared by the Militia Department.

Works supervised by F. C. Gamble, C.E., Victoria.

Clerk of works, Wm. Hassard, Victoria.

## CUSTOM-HOUSE.

Additions and alterations have been made to the cashier's desk, linoleum supplied for one of the offices, and a few trifling repairs effected. A shed has been built on the custom-house wharf for the storage of fuel for the various public buildings in Victoria.

Works done under supervision of F. C. Gamble, C. E., Victoria.



# Department of Public Works.

## PUBLIC BUILDING.

Repairs have been made during the year to gas and water services, water closets, urinals, floors, locks, doors and windows ; sorting table and desks for letter carriers have been supplied and a burglar alarm placed in the vault of the Dominion Savings Bank and connected with the Police Station.

Works carried out under the supervision of F. C. Gamble, C.E., Victoria.

## " C " BATTERY BARRACKS.

The house drains of the officers' quarters have been overhauled and partly renewed, and lumber for sidewalks and gravel for roads supplied.

Works done under the supervision of Mr. F. C. Gamble, C.E., Victoria.

## IMMIGRANTS' HOME.

A few trifling and necessary repairs have been made to this building during the year under the supervision of Mr. F. C. Gamble, C.E., Victoria.

## ENGINEERS, FIREMEN, &c.—PUBLIC BUILDINGS.

The various engineers, firemen and caretakers, and the heating apparatus of Dominion Public Buildings, with the exception of those at the various penitentiaries and the military buildings, are under the control of this branch of the department, and number 140, including the staff of Ottawa buildings.

## HEATING DOMINION BUILDINGS (FUEL.)

Tenders were invited by public advertisement for the supply of coal at 123 of the public buildings, and coal and wood supplied to over 160 buildings in all.

## LIGHTING DOMINION BUILDINGS.

The lighting of the various Dominion buildings, excepting the penitentiaries and military buildings, is under the control of this branch of the department. Of these buildings, 73 were lighted by gas, 31 by incandescent electric light, 2 by gasoline, 1 by natural gas, and the remainder by coal oil, but at several of the last mentioned the entrance is illuminated by an arc light outside.

## WATER FOR DOMINION BUILDINGS.

The water supply for the various public buildings, excepting the penitentiaries and military buildings, is controlled by this branch of this department ; 73 buildings at 44 localities have water services connected with the water supply of the local waterworks companies, the remainder being in general supplied with wells, pumps, and tanks.

## GENERALLY.

Repairs and alterations have been executed and sundry articles of furniture, &c., provided, cleaning, painting and other improvements carried out in connection with a number of buildings not herein referred to.



Department of Public Works.

APPENDIX No. 3.

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REPORT

ON

HARBOURS AND RIVERS, DREDGES, DREDGING AND SURVEYS

THROUGHOUT THE DOMINION,

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892,

BY THE

CHIEF ENGINEER

OF THE

DEPARTMENT OF PUBLIC WORKS.



# Department of Public Works.

## APPENDIX No. 3.

DEPARTMENT OF PUBLIC WORKS OF CANADA,

CHIEF ENGINEER'S OFFICE,

OTTAWA, 30th December, 1892.

No. 47729.

SIR,—I have the honour to transmit herewith a report on the works performed in the different harbours, &c., throughout the Dominion, during the fiscal year ended 30th June, 1892.

I have the honour to be, sir,

Your obedient servant,

E. F. E. Roy, Esq.,  
Secy. Dept. Public Works.

LOUIS COSTE,  
*Chief Engineer.*

### PRINCE EDWARD ISLAND.

#### BAY FORTUNE.

Bay Fortune, King's County, is on the south side of Rollo Bay, on the east coast of Prince Edward Island, about five miles south-west from Souris, the eastern terminus of the Prince Edward Island Railway. The breakwater is at the entrance of the Fortune River, sand beaches extend out on both sides from the mainland to the edge of the channel, the one on the south side being only about 300 feet long, while that on the north side has fully a length of a quarter of a mile. The village of Bay Fortune is situated about two miles from the mouth of the river and at the head of its navigation.

The inhabitants, to improve the depth of water outward from the mouth of the river, and to prevent the sand, of which the extensive flats to the eastward is composed, being carried into the channel, many years ago commenced the construction of a breakwater on the beach, at the eastern side of the channel, starting it at a point 50 feet from the eastern side of the crib-work approach to the north pier, and extending outward in a south-easterly direction, a distance of about 400 feet, its object being to give direction to the current at ebb-tide, and when extended, to maintain, by scouring, a channel through the "bar" of 8 to 10 feet of water, the depth at low water on the bar being generally only 4 feet, thus preventing vessels of any size from entering.

At the last session of Parliament the sum of \$1,500 was appropriated towards an extension of the breakwater, and a plan and specification therefor have been prepared. The work proposed consists in an extension of 400 feet to the present work, and in repairs to the original structure.

#### BAY VIEW PIER.

Bay View Pier is situated on the eastern side, and near the mouth of the Hope River which enters New London Harbour, about  $3\frac{1}{2}$  miles to the south-east from its entrance.

This pier is not exposed to any heavy sea, but the extreme high tide of the 1st December ult., which with the prevailing gale caused so much damage elsewhere, rose to some 18 inches above the top of the work, washed out the brush, stone and clay filling in part, leaving the structure almost unballasted, and in this condition it was partially lifted, breaking the bolts which secure the pile fenders to the work, or splitting the heads of the piles, and had it not been for the piles around the work, the structure would undoubtedly have floated off.

The work of repair, &c., consisted first in rebuilding the top of the outer end for a distance of 40 feet, to an average depth of 5 feet and in placing 14 new pile fenders around it; second, in rebuilding the top on 60 feet of the pier, inside of the outer end, to a depth of 2 feet.

In October and November, 1891, the pier was again damaged, a breach being made through the inner portion of the work. This was made good during the fiscal year.

#### BELFAST PIER.

Belfast Pier, Queen's County, is situated on the south side of Orwell Bay, about one mile distant from the village of Eldon.

This pier is 600 feet in length and from 24 to 35 feet in width, with an L at the outer end 105 feet in length, 28 feet wide, giving a channel face of 140 feet. Excepting two small openings, the work is constructed with square timber faces, the inner end for a distance of 390 feet being filled in with brush, stone and clay, while the outer end and the L are floored over.

Since its assumption by the department the outer end and the L, as well as the inner end for a distance of 150 feet, have been put in thorough repair.

During the past fiscal year, the sum of \$700 has been expended in making up with brush, stone and clay the roadway of the inner portion of the pier over a length of 350 feet, two tiers of timber on each side for a length 74 feet, or 148 feet in all, also being put in, 81 feet of the planked portion of the pier was raised and new cross ties and stringers put in; 18 pile fenders driven and secured to face, 2 span beams put in, one of the spans filled in with poles, brush and stone, 47 lineal feet of guard timbers renewed, and 624 square feet of new planking laid, besides other repairs, thus placing the structure in fairly good condition.

#### BRAE HARBOUR.

Brae Harbour, Prince County, is situated on the northern shore of Egmont Bay, about 8 miles to the eastward of West Point, and 12 miles to the northward of Cape Egmont, the two headlands between which Egmont Bay is formed. The harbour is distant about 6 miles from Coleman Station, on the Prince Edward Island Railway, this station being 36 miles northward from Summerside, the shiretown of the county.

The harbour is at the mouth of the Brae River, and is formed by the protection of Brae Island, which, running nearly parallel to the shore, at a distance of from a quarter of a mile to a mile, and being about a mile and a half in length, gives complete shelter. The area inclosed is very large, but as most of it dries out at low water springs, and these rise but 4 feet, only a small portion of it is available for boats and small vessels.

The entrance to the harbour is about 900 feet in width, and is protected from southerly gales by a large sand bar, called in the locality the "outer bar." This lies about half a mile off shore, breaking the sea during gales from that quarter. An "inner bar," almost dry at low water, obstructs the entrance, rendering almost useless the good anchorage and shelter that otherwise would be afforded for boats and small vessels, and preventing the shipment of produce.

For the improvement of the entrance, the inhabitants of the district in 1890 commenced the construction of a brush and stone breakwater, for the purpose of narrowing the entrance, and directing the increased current formed on to the bar, with a view of deepening by scour the water over it, constructing in all a length of 350 feet.

At the session of Parliament 1890-91, \$1,000 was appropriated for the extension of the breakwater, and a plan and specification having been prepared, a contract was entered into for the construction of a length of 200 feet, which was satisfactorily finished 13th April, 1892. The work built has a width of 20 feet from outside to outside of cap timbers, the bottom consisting of layers of brush 2 feet in depth; from this up to within 2½ feet of the top the work is constructed of small spruce spars, and the top of squared timber; two ballast floors are placed in the work, and securely ballasted; the faces are protected by fenders at 10 feet centres, and on the top, a roadway is formed by brush, stone and clay filling.

# Department of Public Works.

## CAMPBELL'S COVE BREAKWATER.

Campbell's Cove, King's County, is situated on the north coast of the Island, about 9 miles west from East Point, and 14 miles distant from Souris, the eastern terminus of the Prince Edward Island Railway.

In 1872, the Provincial Government constructed a detached breakwater 300 feet in length and 30 feet wide, on the reef which extends out from the western end of the cove, for the protection of small fishing vessels and boats.

During 1882-83 the department repaired the old structure, raised it 2 feet in height, connected it with the shore (a distance of 70 feet), and constructed an extension thereto, 250 feet long and 20 feet wide on top, making its total length 620 feet. The whole work is constructed of square timber, the faces of the old portion, and of the connection with the shore being built plumb; the extension has a timber slope of 1 to 1 on the seaward side.

The repairs and additions made by the department being of a substantial character, the work continued in good condition for many years, notwithstanding its exposed situation, and up to 1888-89, when some planking and fenders were replaced. Slight repairs were again found to be required in 1889-90, but before these could be effected, a severe storm occurred which forced a heavy sea through the broken face of the work, lifting the top timbers, washing out the ballast and doing other damage.

During the fiscal year 1891-92, the inner face of the work has been rebuilt over a length of 80 feet near the end, the entire sloping face has been re-floored, the whole work re-ballasted, and fenders, capping, etc., put on.

## CLIFTON PIER.

Clifton Pier, Queen's County, is on the south side of the South-west River about  $2\frac{1}{2}$  miles from its entrance into New London Harbour, and immediately below the Clifton bridge.

The pier is 260 feet in length and  $17\frac{1}{2}$  to 20 feet in width for a distance of 202 feet, the remaining 58 feet being 25 feet wide. It is constructed of alternate blocks of timber, and poles and brush for a distance of 175 feet; then comes an opening or "span" of 27 feet; the outer block 58 feet long, being of solid timber close faced. The roadway out to the opening is formed of clay filling placed on top of the stone and brush. The opening is spanned by 5 stringers planked over, as is the outer 26 feet of the outer block, the remainder being clay filled. The pier has at the outer end 14 feet of water at low water springs, or at high water 18 feet, affording good shipping facilities as it admits of the largest class of vessels, that enter New London Harbour, lying at it afloat at all stages of the tide.

Having been damaged by a high tide, repairs were made during the year at a cost of \$50, and the pier placed in serviceable condition.

## GEORGETOWN.

Georgetown, the shiretown of King's County, is situated on the northern side of the Montague River, near its entrance into Cardigan Bay, and is the terminus of the Georgetown Branch of the Prince Edward Island Railway. Its harbour is well known as being one of the best and safest in the Island.

On the 2nd December, 1891, the dredge "Prince Edward" commenced work in front of the railway wharf, making a cut 354 feet in length, 67 feet in width and 16 feet deep at the inner, and  $19\frac{1}{2}$  feet deep at the outer end, the work being closed on the 7th December.

## HIGGINS SHORE, PIER.

Higgins Shore Pier, Prince County, is situated on Egmont Bay, about ten miles north of Cape Egmont and about 6 miles west of Richmond Station on the Prince Edward Island Railway. It has a width of 20 feet 6 inches and is 453 feet long extending out to a depth at low spring tides of 3 feet, giving at high water a depth of 8 feet.

The pier, which was constructed very many years ago by the Local Government, has solid close-faced timber sides, and end securely tied together by cross ties placed at

10 feet centres and central longitudinal timbers in each course that extend all of its length, the interior body of the work being filled with brush and stone, with clay on top to form the roadway.

During the past year, the sum of \$511.56 has been expended in renewing its top portion, filling in ballast, brush and stone, with clay filling on top to make up the roadway, putting on new fenders, and other general repairs, placing the work in good condition.

#### MALPEQUE BREAKWATER.

Malpeque Breakwater, Prince County, lies within the eastern or principal entrance of Richmond Bay, on the north shore of the Island, about ninety miles from East Point, and 40 miles from North Cape.

During 1877-78-79 a breakwater 600 feet in length was constructed by the department, on the western end of "Royalty-Sands," on the eastern side of the harbour, to shelter the anchorage from north-east winds, and to afford a shipping place for the produce of the surrounding country.

Since the construction of the breakwater, the sands inside began to waste away by the action of the sea during easterly storms; and to prevent this action, a breastwork was constructed from the inner end of the breakwater to Royalty Point, a distance of 2,370 feet.

The sum of \$350 has been expended during the fiscal year in reconstructing the top portion of the outer 400 feet of the breakwater, which was carried away in the fall of 1890.

#### MIMINIGASH.

Big Miminigash, Prince County, is situated on the north-west coast of the Island, about 15 miles from North Cape, and 18 miles from West Point.

Before its improvement, Big Miminigash was one of the numerous ponds along this coast which empty into the Northumberland Strait, through sand beaches, being sheltered to a great extent by Miminigash Reef, a ledge of rock nearly a mile long, which lies parallel to the shore, at a distance of about half a mile, it had the advantage over the other ponds, and it was the one mostly sought by fishermen during stormy weather.

The outlet of the pond, called the "run," being through sandy soil, often changed its course. To make it permanent and to improve the depth of water in it, it was confined to a width of 56 feet, by works on either side, the department having expended about \$9,000 since 1878.

The works consist, on the north side, of a solid timber pier 417 feet in length, and 150 feet of close-piling, and on the south side, of a pier constructed of piles, brush and stone, 150 feet long.

#### MINK RIVER.

Mink River Pier, King's County, also known as "Murray Harbour North," is situated on the east side, and near the mouth of Mink River where it enters the southern side of Murray Harbour. It is one of the piers assumed by the department in 1884, and being at that time a very old structure, much out of repair, it required in 1885 an expenditure of \$400 to render it even passable, by putting on new flooring, floor stringers, fenders, &c.

The pier is 400 feet long, consisting of a shore approach of 200 feet "blocks" and "spans" 20 feet wide for 130 feet, and the outer 70 feet, 32 feet wide. The depth of water at the outer end is about 6 feet at low water, and 12 feet at high water springs.

The pier having become unfit for traffic owing to the decay of the flooring floor stringers and top portion of the blocks the sum of \$1,000 was expended during the year in the renewal of the same, the pier being put in good condition.

An appropriation having been made for extending and strengthening the south pier, plans and specifications were prepared, and tenders, to be received at the end of the fiscal year, were invited.



# Department of Public Works.

## NORTH CARDIGAN PIER.

North Cardigan Pier, King's County (known in the locality as Newport Pier) is situated on the north side of Cardigan River, five miles below Cardigan Bridge (the head of navigation and railway station on the line of the Prince Edward Island Railway), and near the point where the river enters Cardigan Bay.

The pier, which was built by the Local Government, is 380 feet long, consisting of a shore abutment and seven blocks with intervening openings or spans. The structure being old, it has, since its assumption by the department in 1884, required extensive repair. During 1884-85 the two outer blocks were close-piled on their sides, to prevent their falling apart. In 1885-86 the flooring of the outer block was renewed, and the tops of inner blocks and abutments levelled up. In 1888-89 all of the span beams, flooring and cap, excepting those of the outer block, were renewed, and the shore abutment, as well as the inside blocks levelled up with brush, stone and clay. In 1890-91 four mooring posts were put in, and the shore abutment and inner blocks made up where settlement had taken place.

During 1891, the Local Government built a ferry wharf, extending from the west side of the pier, making use of about 230 feet of the pier for an approach. This ferry wharf has since its construction been largely used as a place of shipment, greatly to the injury of the revenue of the pier, masters of vessels and shippers of produce preferring to make use of the ferry pier, where the accommodation was equally good and no wharfage charged.

During the past year, the sum of \$248.68 has been expended on repairs of the outer three blocks by inserting face timbers where found destroyed by ice and sea-worms, renewing covering of outer block, and adding fender piles along the end and faces of the work.

## PORT SELKIRK PIER.

Port Selkirk Pier, Queen's County, is on the south side of the mouth of the Orwell River, at its entrance into Orwell Bay.

The pier was constructed by the Local Government, and is in the form of a **T**, its length from the shore to the channel face being 252 feet, and the length of the pier-head, 200 feet. The width of the approach is 23 feet and that of the pier-head 35 feet.

The pier-head was originally 250 feet in length on the channel face, but as the upper block was in danger of tumbling into the channel, it was removed, together with the span connecting it with the next block, and thus the length was lessened by 50 feet.

On the 25th February, 1891, a contract was entered into for the construction of a block and span at the upper end of the pier, and the work was completed on the 31st August, 1892.

The reconstruction and strengthening of the lower 80 feet of the pier were commenced by the department, under contract, in May, 1891, and the work undertaken was finished on the 30th November, 1892.

## POWNAL PIER.

Pownal Pier, Queen's County, is situated at the head of Pownal Bay, the north-eastern corner of Hillsboro' Bay, and is distant about 9 miles from the city of Charlottetown.

The "Prince Edward" widened the basin at the wharf, and improved the entrance from the harbour, completing the work on the 16th of November, when 3,243 cubic yards of sand and mud had been removed.

## RUSTICO (SOUTH) PIER.

South Rustico Pier, Queen's County, is situated immediately below the Oyster Bed Bridge, at the mouth of the Wheatley River, which enters Rustico Bay at its southern end. It is distant about six miles from Hunter River Station, on the Prince Edward Island Railway, and about thirteen miles to the northward of the city of Charlottetown.

The pier was constructed by the Local Government, to accommodate the shipping of produce from and the importation of coal and lumber to the locality. It is 593 feet

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in length and consists of a shore abutment 450 feet long and  $17\frac{1}{2}$  feet wide, and of three detached blocks about 25 feet apart. The inner block is 17 feet wide and  $23\frac{1}{2}$  feet long, the two outer blocks are respectively 29 and 30 feet wide and 20 and 24 feet in length. The approach or shore abutment and the blocks are built of square timber, filled in with brush, stone and clay. The outer block and the spans are covered with plank.

During the storm of the 1st December, 1890, the top of the outer block was badly damaged and the span connecting it with the inshore portion also suffered, but with an expenditure of \$120, the pier was placed in a serviceable condition.

#### ST. PETER'S BAY.

St. Peter's Bay, King's County, entered from the Gulf of St. Lawrence, about 35 miles west of East Point, is situated on the north coast of the Island. It is of considerable extent, running inland some 8 miles, with an average width of  $\frac{3}{4}$  of a mile and carrying a depth of from 2 to 3 fathoms at low tide. The entrance is obstructed by a sand bar having over it only from 6 to 7 feet at low water springs, rendering the bay available for vessels of only small size, of which large numbers resort to it during the fishing season. During 1878 the department constructed a breakwater 226 feet in length on the western side of the mouth of the harbour, to afford shelter to the fishing fleet, connecting the inner end with a breastwork or beach protection, extending 800 feet inward over the sands towards the high land, to prevent a channel being formed on its inner side.

After the construction of the western breakwater, it was proposed to further contract the width of the entrance and thus by increasing the current improve the depth of water over the bar, and to accomplish this a contract was entered into 10th February, 1883, for the construction of a breakwater 1,900 feet long, on the eastern side of the mouth of the harbour, but the contractor abandoned the work when less than half built, and little remains now of the work.

The beach protection inward of the western breakwater, consisted of two rows of piles, placed 5 feet apart, and driven at 8 feet centres, the space between the rows of piles being filled in with alternate layers of brush and stone, the top course being covered with poles placed longitudinally and secured by cross braces bolted to the piles. Sand, however, not accumulating about the work as had been expected, the brush became worn and settled, and the severe storm of 1st December, 1890, completely carried it and the stone filling away, leaving only the rows of piling standing.

In view of the unsatisfactory result obtained from the use of brush to withstand the action of the sea, for the reconstruction of this protection work a contract was entered into 23rd May last, for a work of round log open cribwork to be solidly filled with ballast, making use of the piles in place for bolting to, instead of placing fenders.

At the close of the fiscal year the work was in progress, and the greater portion of the materials required for the work had been delivered.

#### STURGEON PIER.

Sturgeon Bay, King's County, is situated on the south side of Cardigan Bay, about 6 miles south of Georgetown, the terminus of the Georgetown Branch of the Prince Edward Island Railway.

The pier was constructed by the Local Government to accommodate the shipping of produce from the locality. Its total length is 436 feet, and is from 20 to 25 feet in width, its height at the outer end is 13 feet, with a depth of 4 feet at low water springs, which rise 5 feet. It consists of a shore abutment 250 feet in length, and four blocks of from 20 to 25 feet in length, with intervening spans of from 22 to 25 feet long. The faces of the approach and blocks are constructed of squared timber, filled in with brush, stone and clay. The two inner openings are filled in with brush at the bottom, and with stone and clay on the top, the sides above the brush being timbered up to keep the stone and clay in place. The two outer openings and the outer block are covered with plank.

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On the 9th May, 1892, the "Prince Edward" commenced work at this place and continued operations until the close of the fiscal year, up to which time it had removed 13,596 cubic yards of mud, clay, stone and sand.

The work done consisted of a cut 720 feet in length, and 103 feet in width from the channel to the wharf; a basin at the end of the wharf of 169 feet; a berth at the west side of the wharf, 100 feet long, 55 feet wide and 11 feet deep at low water spring tides.

### SUMMERSIDE.

At the railway wharf, Summerside, the dredge "Prince Edward" made a cut 310 feet in length, 150 feet in width and 15 feet in depth, at low water springs, while off the north side of the middle grounds in the channel between the railway wharf and Beacon light a strip 1,330 feet in length by 65 feet in width, was removed to a depth of 15 feet at low water springs.

### TIGNISH HARBOUR.

Tignish Harbour, Prince County, is situated on the northern Gulf Coast of the Island, about 6 miles southwardly from North Cape, and is formed by the mouth of the Big Tignish River where it enters the Gulf of St. Lawrence. The coast in the vicinity of the mouth of the river and for 6 miles on either side of it is almost straight, and gales from the north-east to the south-east throw in a very heavy sea, the entrance at times being completely filled in by the shifting sands of which the surrounding beaches are composed, and remain blocked until broken through by a freshet or other natural causes.

To keep the mouth of the river open and increase its depth for the fishermen of the locality, the Government of Prince Edward Island in 1868 commenced the construction of works on either side of the mouth of the river, contracting it to a width of 40 feet, whereby the current at ebb tide was so increased that the entrance has remained open, the cost of the works being \$8,149.56.

Since 1875, the department raised, repaired and extended the original structures, constructed breastwork on the low-lying sand beaches on either side of the mouth of the river to prevent the sea from breaking through, dredged a portion of the channel, and constructed other works for its improvement and enlargement.

During the fiscal year the sum of \$361.15 has been expended in replanking the outer 300 feet of the northern breakwater, replacing the fenders and iron strapping of corners and repair of close piling and sheathing.

### VICTORIA PIER.

Victoria, Queen's County, is a thriving settlement at the head of navigation on Crapaud Basin. It is about 11 miles south from "Emerald Junction" on the line of the Prince Edward Island Railway, and about midway between the towns of Charlottetown and Summerside. Victoria is the outlet of probably the best farming district on the Island, and as a place of shipment, ranks next to Summerside on the south-west side of the Island, in importance.

The Government pier (Victoria) so called to distinguish it from the provincial wharves, has a total length of 468 feet, of which the approach 268 feet long is 20 feet wide, the next 143 feet being 37 feet wide, and the outer 75 feet, 58 feet wide, giving a large area for top wharfage. Its height at the outer end is 19 feet with a depth of 15 feet of water at high tides. With the exception of the approach which is solid timber work, the pier is composed of "blocks" and "spans" or "openings." The approach from the deep water outside was some years ago much improved by dredging, a channel carrying about 9 feet at low water or 16 feet at high tides having been made.

During the past year the sum of \$50 was expended on filling in of the roadway where settlement had taken place, and replacing fenders carried away by the ice, placing the whole pier in good condition.

## PROVINCE OF NOVA SCOTIA.

## ABERCROMBIE.

Abercrombie Point, is in Pictou County, N.S., on the south side of Pictou harbour, between the entrances to the East and Middle Rivers, and nearly opposite the town of Pictou.

A wharf was built at this place in 1889 by the Harbour Commissioners, to take the place of an old ferry wharf. It is a block and span structure 666½ feet in length and 21 feet in width, with a **T** head, on flats dry at extreme low water to within 167 feet of the outer end. The depth at the outer end at extreme low water is 2 feet. Spring tides rise 6 feet, neaps rise 4 feet.

When taken in charge by the department, it consisted of 14 blocks (two being in the **T** head), roughly constructed of round spruce or hemlock timber, 9 inches in diameter at the small end, and only partially ballasted. The blocks are from 21 to 24 feet in length on line of work, and from 13½ to 21 feet apart. Three of them near the inner end had been moved out of place, and had a great deal of unsound timber in them. There were floor stringers over the blocks, and openings from the fifth block to the outer end, but no covering.

During the year ended 30th June, 1892, the sum of \$864.22 was expended in repairs and renewals, viz., a brush and stone approach 41 feet in length and 4 feet in height was built. The inner block was reconstructed, and the 2nd and 4th blocks from the inner end were placed in position and repaired. Five stringers were placed from the inner end to the 5th block and one central stringer from this to the outer end. The whole of the block and span work was covered with 3-inch plank and provided with guard rails. A small quantity of ballast was placed in 3 of the inner blocks and the ballast was adjusted in some of the other blocks. A small slip was made between the two blocks forming the **T** head and 12 piles were driven against the outer face of these blocks. Fifty feet out from the head of the work, 3 piles were driven together on each side of the approach to the slip.

## ARISAIG.

Arisaig, Antigonish County, N. S., is on the Northumberland Strait, 15 miles to the eastward of Merigonish, the nearest harbour.

A pier commenced by the Government of Nova Scotia, came under the charge of the Federal Government in 1870. It was thoroughly repaired in 1873, and small amounts were expended in 1880 and 1881, in repairing damage caused by ice.

A contract entered into in 1886 for repairs to the pier, and for the construction of a breakwater on the eastern side of the harbour, was completed in 1888.

At the time of the completion of the works referred to, the pier was 440 feet in length, consisting of an approach, and an outer portion 195 feet in length, and from 40 to 44 feet in width. There was at extreme low water a depth of but one foot along its inner face over a distance of 100 feet; from the outer end, and over the area sheltered by it, nowhere more than 3 feet.

The breakwater is 300 feet in length and 20 feet in width, on top, with an **L** at its outer end 40 feet in length. The depth at the outer end, at extreme low water is, 6 feet.

In 1889 the pier was extended 100 feet and a portion of its seaward face was protected by a deposit of heavy stone. The extension was founded on a bottom dredged to from 8 to 10 feet at extreme low water, and a cutting 70 feet in width was carried along the inner face of the extension and of the pier, over a distance of about 130 feet from its outer end.

Spring tides rise 5 feet.

In December, 1889, the covering and cap timbers of the extension were disturbed in places and during the great gale of 1st December, 1890, further damage was done to the top work of the extension; 50 feet of the seaward face of the pier, next its junction with the extension, was carried away down to 1 foot below low water, leaving only

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the inner face standing; the covering over a further distance of 50 feet was disturbed, and the side walls and top of the approach badly damaged.

During the year 1891-92, the sum of \$3,000 was expended in reconstructing the outer 50 feet of the pier, renewing the stringers, top ballast and covering over a further distance of 150 feet, in repairs to the approach, and in extensive repairs to the extension, including the renewal of the covering over half its width from the outer to within 25 feet of the inner end, close fendering the seaward face over a distance of 60 feet from the inner end and, the placing of a quantity of large stone against the seaward face near the junction with the pier.

### ASPY BAY.

Aspy Bay, Victoria County, is near the northern extremity of Cape Breton Island, between White Point and Cape North.

At the head of the bay there are three extensive sheets of water, known as the North, Middle and South Aspy ponds, or harbours, inclosed by a beach of sand  $4\frac{1}{2}$  miles in length. The entrances to these ponds are shoal and intricate, the best being that of the North Aspy pond.

During the fiscal year 1891-92, the sum of \$200 was expended in repairs to a small wharf on the west side of the North harbour.

The wharf is a lightly constructed block and span structure, 11 feet wide, extending 107 feet to 8 feet 8 inches at low water. It is the joint property of Zephirin Charron and Ronald McIsaac, by whom an agreement was signed, permitting the public the use of it free of charge or hindrance. The road leading from the wharf to the highway is free to the public.

The wharf was strengthened and improved by the addition of 59 fenders, 4 mooring posts, 218 lineal feet of cap timber and 2 ring bolts. The outer block was levelled up, and it and the central block were partially ballasted.

### BARRINGTON.

Barrington, Shelburne County, is distant 45 miles to the south-east of Yarmouth, and 30 miles south-west from Shelburne, and is within 10 miles of Cape Sable, the most southern point of Nova Scotia.

There being no wharves in the district having a greater depth than 2 or 3 feet at their outer ends at low water, and the need of such a wharf being greatly felt, the department began the construction of the present Barrington pier in 1888-89, and completed it in 1890, at a cost of \$7,150. This wharf is 885 feet long, and extends across the flats to Sherrow's Channel (so called), in which there is 12 feet of water at low tide. On the channel end of the structure a block 70 feet in length was constructed for steamers, &c., to lie at, which is provided with a suitable warehouse and drop landing.

To meet the additional requirements of the district, the sum of \$600 was voted during the past session, for the purpose of constructing a triangular piece of wharf work between the approach and the channel block or **L** so as to form an additional berth for steamers to lie at.

On the 11th June the "St. Lawrence" left St. John for Barrington, where she arrived on the 14th and took up the work of improving Sherrow's Channel, making a channel 14 feet in depth on a length of 175 feet, the amount of material removed being 4,375 cubic yards of mud, and the work was completed on the 27th June.

### BEAVER RIVER.

Beaver River, Yarmouth County, flows into the Bay of Fundy near the mouth of St. Mary's Bay, and forms part of the division line between Digby and Yarmouth Counties.

The mouth of the river was completely closed for some years by a gravel bar, but was opened by the department in 1886-87. Two expenditures were subsequently made on the construction of works on either side of the new river mouth. These works not only prevent the gravel bar from again forming, but the southern work forms a break-

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water and makes the river mouth a safe and convenient harbour for boats and small vessels, so that shipments of products can now be made, and quite an extensive shore fishery is carried on.

The rush of water during freshets having begun to undermine the work, the sum of \$450 was expended during the year in close-piling a portion of the river face of the southern work, and in levelling up and repairing the top, which was leaning over into the stream.

#### BIG POND.

Big Pond, Cape Breton County, is on the south side of East Bay, an arm of the Great Bras d'Or Lake and 13 miles from the head of the bay.

A wharf commenced in 1887-88 was completed the following year. It is 260 feet in length and 20 feet in width, and consists of an approach of 110 feet in length of brush and stone, with 10 feet of cribwork at the outer end, and four blocks each 20 by 20 feet, with openings of 17 feet 6 inches. The depth at the outer end is 8 feet at low or 9 feet at high lake level.

During the year 1891-92 the sum of \$40 was expended in placing 11 fenders at the sides and outer end of the outer block, and in partial repairs to a break in the brush and stone-work near the outer end.

#### BIRD ISLANDS.

The Bird Islands, Victoria County, lie in the Atlantic Ocean, several miles off Cape Dauphin, between Ste. Anne harbour and the entrance to the Great Bras d'Or.

Ciboux Island, the largest of the group, is the resort during the season of 60 or 70 fishermen.

During the fiscal year 1891-92 the sum of \$142.84 was expended in improving the landing place on Ciboux Island by removing rocks, and by cutting down the end of an old block of round cribwork, so as to form a slip or approach from the narrow beach to the steep path leading to the cliff above, but the work was not completed.

#### BROAD COVE.

Broad Cove Marsh, Inverness County, is on the Gulf of St. Lawrence, 12 miles south from Margaree harbour.

The wharf at this place was completed in 1888. It was 400 feet in length and 25 feet in width on top, and was constructed in separate blocks up to a little above low water with continuous top work. The outer block and the block next it were respectively 56 and 68 feet in length. The depth at the outer end at extreme low water was 12 feet 10 inches. Spring tides rise 4 feet 5 inches.

In 1890, slight repairs were made to the covering and cap timbers near the outer end, and several of the outer pockets on the east side were reballasted.

In December, 1890, the work was badly damaged. The above low water portion was destroyed over a distance of 100 feet from the outer end, and the top broken up for a further distance of about 60 feet. The outer block went down 4 or 5 feet below low water, and the second block to low water over 44 feet of its length. Ballast went out of the face chambers on the east side over a distance of 80 feet, or to within 160 feet of the inner end.

During the year 1891-92 the sum of \$1,500 was expended in placing pieces of timber vertically inside the faces, and reballasting the outer pockets on the seaward side, cutting down the second block to about 6 inches below and rebuilding to 2 feet above low water. All the timber and iron required to complete the reconstruction of the work to within 56 feet of the original outer end, with the exception of part of the covering, was also procured.

#### CAPE SABLE ISLAND (SOUTH SIDE).

On the south side of Cape Sable Island, Shelburne County, and distant southerly about  $1\frac{1}{2}$  mile from the breakwater now under construction at Stony Island, there is a small wharf or breakwater built some years ago by the local authorities to protect the mouth of a pond, which forms a convenient boat harbour.

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This work was never completed, and during the present fiscal year the department expended the sum of \$300.00 in putting the work in repair and building it up to its proper height. The wharf is too short, however, to be of much practical benefit.

### CHETICAMP.

Cheticamp Harbour, Inverness County, is on the west coast of Cape Breton Island, 18 miles north of Margaree.

It is a secure harbour, being sheltered from the west and south by Cheticamp Island and a connecting beach. The entrance is from the north through a dredged channel.

A wharf was built on the eastern side of the harbour in 1890. It consists of an approach 125 feet in length and 30 feet in width over a distance of 60 feet from its outer end, with side walls and centre filling of stone; and an extension 80 feet in length, in two blocks, with openings of 17 feet 6 inches. The outer block is 60 feet in length along the channel face. The depth at the outer face of the 60 feet block at extreme low water is 11 feet. Spring tides rise 3 feet 6 inches.

During the year 1891-92 a small sum was expended in placing extra fenders at the channel face and ends of the outer block; in slight repairs to the retaining wall of the approach; and in placing 9 fenders on each side of the retaining wall of the approach, in place of the original posts and braces.

The "Canada" arrived at Cheticamp on the 3rd August, 1891, and commenced work in the channel, when a cut 800 feet in length and 100 feet in width was dredged up to the 24th September, and 10,620 cubic yards of gravel, stone and boulders removed. On the 1st November the same dredge resumed work at Cheticamp, where it remained until the 7th of that month, in which time a cut 80 feet long by 65 feet wide was made, and 720 cubic yards of sand and gravel removed. Again from the 4th June to the 29th, the same dredge was operating, completing the channel to 14 feet in depth removing a further quantity of 7,110 cubic yards of sand and gravel.

The dredge "Geo. McKenzie" worked at this place from the 1st July to the 28th, during which time 6,970 cubic yards of sand, gravel, kelp, &c., were removed.

### CHURCH POINT.

Church Point, Digby County, is one of the most important shipping places on St. Mary's Bay.

It is 9 miles south from Weymouth, and almost directly opposite Petite Passage, Digby Neck.

This work was begun many years ago, and the pier has been extended, from time to time, as the gravel collects in large quantities on the back of the work and finally overlaps its outer end, and forms a bar which prevents vessels reaching or leaving the dock or sheltered area.

Several methods have been tried to remedy this evil but extending the work seemed the only way of reaching a satisfactory result. The work, however, at last became so long that an extension was made at right angles, instead of continuing the work in a northerly direction. This worked admirably for some four years, and an immense amount of gravel collected behind it, but it finally also overlapped the outer end, and it was necessary to again extend the work in a northerly direction. The gravel has lately got past this last piece of work, and has caused much trouble during the last year or so.

The river face of the older portions of the work, having become very much decayed and in places falling down into the dock, the department during the last fiscal year expended the sum of \$1,500 in repairing it, and in removing the highest part of the gravel bar, so that vessels could utilize the pier.

The repairs extend over almost the entire length of the river face. The inner end or oldest portion was taken down and rebuilt in cribwork, and the remainder was close-piled, small general repairs being also made to other parts of the work, and it is now in good condition, but the gravel still causes inconveniences.

## CLYBURN BROOK.

Clyburn Brook, Victoria County, empties into a small pond at the head of the North Bay of Ingonish.

The pond is separated from the bay by a beach of sand with shingle on top. The pond level is 3 feet above extreme low water and the bottom, which is of very soft mud, is about the level of extreme low water. Spring tides rise 5 feet.

During the fiscal year 1891-92 the sum of \$200 was expended in making a cutting 180 feet in length, 10 feet wide at the bottom, down to about 14 inches below high water, between the pond and the bay.

This work was done in December and January. When examined in April, it was found that the cutting had been filled in to within 2 to 4 feet of the original surface by the winter gales.

## COW BAY.

Cow Bay, Cape Breton County, is on the eastern coast of Cape Breton Island, about 18 miles north-east of Sydney Harbour. Owing to the extensive coal mines in its vicinity it is a place of considerable importance.

The bay is  $2\frac{1}{2}$  miles wide at its mouth, and being open to the Atlantic from the east, affords no safe anchorage during gales from that quarter.

A breakwater was built on the north side of the bay, some 20 or 25 years ago by Messrs. Archibald & Co., proprietors of the Gowrie mines, with some aid from the Government of Nova Scotia. It is 1,386 feet in length, and was originally about 44 feet in width, and had a depth, at the outer end at low water, of 20 feet. The area of the basin inclosed between it and the loading pier of the Gowrie mines is about 17 acres, 10 acres of which had originally a depth of from 9 to 20 feet at low water. Spring tides rise 5 feet.

In 1873 while repairs were in progress by the department, the breakwater was seriously damaged by the great gale of the 24th August. After the gale, operations were resumed, the balance of the amount appropriated being largely supplemented by Messrs. Archibald & Co.

In 1874, Messrs. Archibald & Co.'s interest in the breakwater was acquired by the Dominion Government, and a contract entered into in May, 1876, for repairing and strengthening the structure was completed in July, 1877.

Extensive repairs have been made nearly every year since 1877, and the work has been strengthened by the addition of counterforts or outer face works, and by close-piling.

The breakwater now consists of an inner work extending from within 220 feet of the shore end to the outer end with counterforts, and connecting works on the seaward side from within 580 feet of the shore end to the outer end. The outer and inner works are from 20 to 25 feet apart. They are connected at intervals by tie walls, and the spaces are filled with ballast.

During the year 1891-92 the sum of \$3,500 was expended in general repairs to the outer works, in repairs to the covering of the inner work, in renewing the covering of the roof of the warehouse with cedar shingles, and in procuring 450 piles for close-piling a portion of the inner work, and some hardwood for sheathing.

The repairs to the outer work included refilling where ballast had gone out with about 1,845 tons of stone, a good deal of which was large stone at the bottom of face work between counterforts on the seaward side, in renewing the close-piling of 50 feet of face work, in renewing about 7,000 feet board measure of covering over the two central counterforts, in constructing a break 10 feet wide and 2 feet in height across the inner end of the counterforts nearest the shore end, and in sheathing horizontally with hardwood over 60 lineal feet of close-piling to a height of 7 feet above low water at the angle made by the inner counterfort with the face work between it and the second counterfort.

## CRIBBINS POINT.

Cribbins Point, Antigonish County, is on the west side of St. George's Bay, 8 miles south from Cape George, and 5 miles north from the entrance to Antigonish harbour.



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In 1890-91 a contract was entered into for the construction of a wharf to extend 300 feet in a southerly direction from the point, with an approach 195 feet in length. The wharf to be 20 feet in width on top over a distance of 120 feet from the inner end and 20 feet over the remaining 180 feet. The inner 50 feet to be of stone, and the outer 250 feet of close faced timber work, full ballasted and protected by sheathing and fenders. The approach to consist partly of side cutting and embankment with stone retaining wall and partly of through cutting 18 feet wide at the bottom with sides sloping  $1\frac{1}{2}$  to 1. At the close of the year 1890-91 the approach was nearly completed, there being in place over 45 feet of the retaining wall of the same, averaging 8 feet in height, and 40 feet of side wall of the shore end of the wharf, averaging  $4\frac{1}{2}$  feet in height, while there had also been delivered a large quantity of the timber, and nearly all the iron required, and the whole was completed before the 30th June, 1892.

The depth at extreme low water, at the outer end of the wharf is 11 feet. Spring tides rise 4 feet.

### D'ESCOUSSE.

D'Escousse Harbour, on the north side of Ile Madame, lies inside of Bernard Island at the eastern end of Lennox passage.

Between the 28th August and the 11th October the dredge "Geo. McKenzie" was engaged in improving the channel opposite Le Visconte's wharf, and on the Gland Shoal, making at the former a cut 200 feet in length by 140 feet in width with a depth of 12 feet at low water, while on the Gland Shoal the length of cut was 125 feet in length and 40 feet in width, leaving from 9 to 12 feet deep of water.

### DIGBY.

The town of Digby is situated at the western end of the Annapolis Basin.

During the past season, the sum of \$30.00 was expended on Digby pier in patching holes in the covering, and in placing a few long fenders on the outer end, to prevent the guards of the steamers from catching on top of the caps at high water, during stormy weather.

A contract for the construction of a new pier 50 feet wide and 780 feet long, extending into 16 feet of water at low tide, was entered into on the 18th November, 1890. The site of this proposed work is on the north side of the Raquette about 1 mile to the north of the present pier and town of Digby.

Owing to numerous delays and the death of the contractor, actual construction was not begun during the fiscal year 1891-92.

A large quantity of timber, both hardwood and soft, has been delivered near the site, and is now in the booms at the Raquette, or yarded in the vicinity of the railway track.

### EAST BAY.

East Bay, Cape Breton County, is at the head of East Bay, an arm of the Great Bras d'Or Lake.

A wharf was built at this place by the residents in 1881. It was a lightly constructed block and span structure, 160 feet in length and 15 feet in width, with a T head 17 feet wide and 70 feet in length. In 1882-83 a block 70 feet in length and 18 feet in width, was built at the outer end by this department. In 1883-84 the inshore, or original work, was put in thorough repair, and in 1888-89 the covering of the outer end was repaired, and two blocks of the approach were reconstructed.

During the year 1891-92, the sum of \$811 was expended in reconstructing a block at the shore end of the approach from 2 feet below low water; in removing the end blocks in the old T, and cutting off the connecting work between them and the back of the 70 feet block; in reconstructing the central block in the old T from about 7 feet below low water, and in close-piling the outer and end faces of the 70 feet block.

### FRENCH RIVER.

French River, Victoria County, is on that part of the east or Atlantic coast of Cape Breton Island, known as the "North Shore," midway between the harbours of St. Ann's and South Ingonish.

In 1890-91 a contract was entered into for the construction of an isolated breakwater, 50 feet in length and 27 feet in width on top, to be placed in from 6 to 7 feet at extreme low water. Up to the close of that year, nothing was done except in the way of procuring materials.

During the year 1891-92, the work under contract was completed consisting of squared timber close-faced, and close-fendered from top to bottom at the sides and outer end.

#### GEORGEVILLE.

Georgeville, Antigonish County, is on the Northumberland Strait,  $6\frac{1}{2}$  miles south-west from Cape George, and distant by land from Arisaig, on the Northumberland Strait, and McNair's Cove, on St. George's Bay, eight miles.

In 1890-91 a contract was entered into for the construction of a wharf, and at the close of that year there was in place 45 feet of the stone approach. A small quantity of timber, and nearly all the iron required for the outer work, had been delivered.

During the year 1891-92 the work under contract was completed.

The wharf is 207 feet in length and 20 feet in width on top, with an L 20 by 20 feet. The approach, which is 87 feet in length, is of stone, and the remainder of the work of squared timber fully ballasted, and protected by sheathing and fenders.

The depth at the outer end, at extreme low water is 5 feet. Spring tides rise 4 feet.

#### GRAND NARROWS.

Grand Narrows, Cape Breton County, is on the south side of the Grand Narrows, a strait connecting the Great and Little Bras d'Or Lakes.

The wharf at this place is 287 feet in length, including 67 feet of cribwork filled with brush and stone, and covered with gravel; 80 feet of pile work built in 1885-86 by the department over the remains of the outer portion of an old landing pier built by the Provincial Government; and an extension, 140 feet in length, built by the department in 1883-84.

The extension consists of three blocks each 20 by 20 feet, and an outer block 20 by 60 feet of round timber cribwork, with openings of about 16 feet.

The depth at the outer end of the extension is 12 feet at low, or 13 feet at high lake level.

During the year 1891-92 the sum of \$749.75 was expended in renewing the piles in one bent of the pile work, and replacing the stringers; in raising, repairing and close-piling the channel and end faces of the outer block of the extension; in placing 25 fender piles where required, and in renewing the covering over 105 feet of pile work and extension.

#### IRISH COVE.

Irish Cove, Cape Breton County, is on the south-east shore of the Great Bras d'Or Lake, near the entrance to East Bay. The distance to the head of East Bay is 20 miles; to St. Peter's Canal about 22 miles; and across the Lake to Grand Narrows 10 miles.

During the fiscal year 1891-92, the sum of \$1,200 was expended in completing a wharf for which most of the material was procured and which was partially constructed during the preceding year.

The wharf is 160 feet 8 inches in length and 20 feet in width, including a shore block 47 feet long, a central block 20 feet 4 inches long and an outer block 57 feet long with an L 20 by 20 feet. The openings are respectively 17 feet 6 inches and 18 feet 10 inches, and the depth at the outer end varies from 12 feet 3 inches to 13 feet, at low lake level.

#### JORDAN BREAKWATER.

Jordan Bay, Shelburne County, is on the Atlantic Coast of Nova Scotia, about midway between Shelburne and Lockeport.

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A breakwater, 550 feet long, was built on the eastern side of the bay in 1875, to give shelter to vessels loading lumber, a considerable quantity of which is cut on the Jordan River which flows into the head of the Bay. The work was badly damaged shortly after it was built, and 100 feet of its outer end was reconstructed, and the seaward face protected with a stone slope.

During the fiscal year, the inner end of the work which was damaged by a high tide and heavy sea was repaired. The plank covering and floor stringers for a distance of 100 feet, as well as some of the face timbers, were carried away, and a considerable amount of ballast was washed out. All this was replaced by new work, and a considerable amount of stone was placed along the inner end of the slope, where this had been washed out in places. These repairs were effected at a cost of \$750.00.

### L'ARDOISE.

L'Ardoise, Richmond County, is on the east side of St. Peter's Bay, about 9 miles south-east of St. Peter's Canal.

A breakwater, 400 feet in length built off Martin's Point, Lower L'Ardoise in 1876, in from 5 to 9 feet at low water, was almost entirely destroyed in 1883.

During the year 1891-92 a contract was entered into for the reconstruction of the breakwater. The new work to consist of a cribwork core, 400 feet in length and 20 feet in width, placed over the remains of the old work, in from 1 to  $4\frac{1}{2}$  ft. at low water, built up to 1 foot above high water, and covered with stone sloping, on the seaward side and ends 3 to 1, and on the inner side 2 to 1, the whole of the covering above low water to be ripped with large stones laid as closely together as possible, with the spaces filled with cement concrete. At the close of the year there had been placed three-fifths of the cribwork core, and about 1,000 cubic yards of stone in the slope, and all the timber and iron required to complete the cribwork, and a large quantity of stone for slopes and rip-rap had been delivered.

### LISMORE.

Lismore, Pictou County, is on the Northumberland Strait 10 miles to the eastward of the entrance to Merigomish Harbour, and the same distance from Merigomish Station on the eastern extension of the Intercolonial Railway.

A wharf 200 feet in length and 20 feet in width, extending to 1 foot 9 inches, at extreme low water, commenced in 1886-87 was completed the following year. In 1890-91, a portion of the amount appropriated for that year was expended in procuring timber enough to extend the wharf 181 feet, and in placing and building up to 2 feet above extreme low water, 150 feet of work.

During the year 1891-92, the sum of \$1,300.00 was expended in completing the work undertaken the preceding year.

The extension is of round timber, full ballasted and closely fendered.

The depth at extreme low water at the outer end is 4 feet. Spring tides rise 4 feet 6 inches.

### LOUIS HEAD.

Louis Head is a thriving fishing settlement on the western side of the mouth of Sable River, Shelburne County, and is about 10 miles east of Lockeport.

During the year, a contract was entered into for the construction of a breakwater for the protection of the fishing boats and boat landing to cost \$4,072.00. Materials for the structure have been obtained, but no actual construction has yet been begun, but it is the intention of the contractors to have the work completed before the winter storms set in.

### MABOU.

Mabou Harbour, Inverness County, is on the west coast of Cape Breton Island, 6 miles north-east from Port Hood.

The entrance was formerly at the northern extremity of a range of sand hills, by an intricate channel obstructed by a bar, over which there was a depth of only 4 feet at low water.

In 1870, a survey was made and a report submitted, on the project of opening a new channel through the sand hills at their northern extremity, and closing the existing channel.

The work was commenced in 1872. A pier on the south side of the new channel, 753 feet in length was completed in 1876, and the same year the old channel was closed. Expenditures have been made nearly every year since 1876, in constructing a brush and stone dam on the south side near the outer end of the pier; constructing and repairing a breast work on the north side of the channel, repairing and close-piling the pier; and since 1885 in constructing a work of brush and stone, in shoal water on the south side of the channel.

In December, 1890, a portion of the pier 290 feet in length, 90 to 380 feet from the outer end was carried away, and the remaining 90 feet more or less damaged. The breast work on the north side of the channel was destroyed several years ago.

In 1890-91, a dam of brush and stone 250 feet in length and 10 feet in width on top, was constructed, between the pier head and the sand hills, and the brush and stone work, then extending 1,087 feet beyond the head of the pier, was raised nearly to high water level from end to end.

During the year 1891-92, the sum of \$8,398.84 was expended in extending and raising the brush and stone work on the south side of the channel, and in constructing groins on the north side to collect sand and gravel, and thus form a natural protection to an exposed clay bank; the work done consisting in extending the brush and stone work on the south side 600 feet, in from 9 to 6 feet at low water. The inner end of this extension was built up to a little above, and the outer end to about two feet below low water. A brush and stone work 60 to 20 feet in width and 5 feet in average height was also built, extending 380 feet *in* from the original head of the pier, and *out* over the brush and stone work about 120 feet; the remains of the pier head were removed, and 4 groins were constructed on the north side of the channel, 55, 40, 45 and 55 feet in length, 5 feet in width and 5 feet in height. These groins were made by driving piles in pairs, 5 feet apart, filled in with brush and secured with cross caps at each pair of piles.

On the 1st July, 1891, the "Canada" was engaged in dredging at the entrance of the harbour. She continued working to the 2nd August removing 8,100 cubic yards of gravel, stone and sand, and extending the cut in the channel 600 feet by 85 feet, over which 4 feet were taken off, as well as making a cut, at the Gypsum Company's new wharf, of 100 feet in length and 60 feet in width. Work was again resumed by the "Canada" on the 11th October, where it remained until the 29th, making a cut 360 feet in length and 100 feet in width in front of the breakwater, 1,980 cubic yards of gravel, stone and old timber being removed. She again resumed work on the 10th May, 1892, in improving the channel, removing a further quantity of 5,940 cubic yards of material.

#### MARGAREE.

Margaree Harbour, Inverness County, is at the mouth of Margaree River, on the west coast of Cape Breton Island, about thirty miles north-east of Port Hood.

The entrance is by a narrow channel obstructed by a bar of shifting sand, over which there is at times only 5 feet at extreme low water. Spring tides rise 4 feet.

A pier constructed on the west side of the entrance to the harbour by the Provincial Government, was repaired and extended by the department in 1876 and 1879. In 1890-91 the work was extended 200 feet, and some repairs to the old work were effected.

During the great gale of December, 1890, the old Provincial Government work was almost totally destroyed, and the covering, cap timbers and top ballast of the outer work were disturbed in places.

In 1891-92 the sum of \$586.08 was expended, and 2 face chambers at the outer end of the new extension were re-ballasted, and the covering, cap timbers and top ballast of outer works were replaced where required. A new crib work 130 feet in length was built over the remains of the old Provincial Government work, between the

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outer works and the shore to within  $1\frac{1}{2}$  feet of required height. Of this, 65 feet averaged 2 feet in height and 20 feet in width, and the remaining 65 feet  $4\frac{1}{2}$  feet in height and 18 feet in width.

### MARGARETVILLE.

Margaretville, Annapolis County, is on the south shore of the Bay of Fundy, and is about 42 miles east of Digby Gut.

In October, 1890, the outer end of the breakwater was badly damaged by a severe storm. A block, 86 feet by 40 feet wide at the extreme outer end, was badly damaged but left standing, while the next section, 117 feet in length, was entirely destroyed down to the level of the beach.

The broken end of the work was repaired in the autumn of 1891, so as to prevent further damage, and during the last half of the present fiscal year these repairs were made permanent, and a new block built to tie the broken end into. Besides this, most of the wreckage was cleared away, the outer end of the "break" was repaired and the sheathing on the seaward face renewed where old and broken.

### PICTOU.

Pictou Harbour is pronounced by Admiral Bayfield to be in every respect the finest on the southern shore of the gulf eastward of Gaspé. It is situated at the head of a bay which is  $1\frac{3}{4}$  miles wide and  $1\frac{1}{2}$  deep. The mouth of the harbour is over  $\frac{1}{4}$  of a mile wide, and there is a depth of from 30 to 40 feet in the channel as far as the town, which stands on the north side 2 miles distant from the lighthouse. The flats, however, extend some distance beyond the ends of the wharves. On the south side is the terminus of the Pictou branch of the Intercolonial Railway, the principal point of connection between Nova Scotia and Prince Edward Island.

Opposite the town the harbour divides into three large arms called the East, Middle and West Rivers. The last two may be navigated without much difficulty for 2 or 3 miles above their confluence, but higher up they become divided into several small channels obstructed by oyster beds.

Before placing the "Canada" on the marine slip for the winter, she resumed work at the Pictou market wharf, and a cut of 280 feet long, 65 feet wide was made, 1,530 cubic yards of mud being removed. Work closed on the 25th November, and the dredge was placed in winter quarters. At the Acadia Coal Company wharves near Pictou Landing, work was resumed by this dredge in the spring, for which the company paid the sum of \$275. Work was commenced by the "George McKenzie" on the 23rd October, in the East River of Pictou, continuing until the 21st November, between which dates a cut of 1,150 feet in length by 50 feet in width and with a depth of 9 feet at low water spring tides was made, the quantity removed amounting to 5,555 cubic yards of mud and shells. It resumed work on the 2nd May and was still engaged thereon at the close of the fiscal year, when a further quantity of 14,665 cubic yards of gravel, clay, sand, mud, &c., had been removed.

### PICTOU ISLAND.

Pictou Island, Pictou County, N.S., in the Strait of Northumberland, and about 10 miles north-east of the entrance to Pictou Harbour, is 5 miles long and  $1\frac{1}{2}$  miles wide.

There are two wharves on the south side of the island; one near the west end commenced by the Provincial Government, repaired and strengthened by the department in 1880, and extended 62 feet 6 inches in 1887-88, and one near the centre known as the "East Wharf" built by the Department in 1882-83, and extended 100 feet in 1887-88. The east wharf and the extension of the west wharf, are 20 feet in width, of round timber, full ballasted and close-fendered.

During the year ended 30th June, the sum of \$2,096.29 was expended in repairing and extending the east wharf, and in extending the west wharf.

Of the above, the sum of \$1,187.26 was expended on the east wharf, in stripping and levelling up, over a distance of 75 feet from the outer end, and in removing 50 cubic yards of ballast from the upper floor in the outer 30 feet; and in placing a block

68 feet in length at the outer end and building it up to within 6 feet of finished height.

The sum of \$909.03 was expended on the west wharf, in placing and nearly completing a block 50 feet in length at its outer end. The work remaining to be done to complete the extension includes placing the covering, a small quantity of ballast and some of the fenders.

The depths at extreme low water are at outer end of east wharf 4 feet 6 inches, and at outer end of west wharf 2 feet 6 inches. Spring tides rise 6 feet.

#### PORT HOOD.

Port Hood, the shire town of the County of Inverness, is on the west coast of Cape Breton Island, and 2 miles north of the northern entrance to the Strait of Canso.

The harbour was formerly a secure one, Smith's Island, which is 2 miles in length and forms its western side, having been connected with the main land by a range of sand hills. In 1839 the sea made a breach through this protection. The opening, at first narrow, was enlarged by the tidal currents with increasing rapidity until it was swept entirely away and its site occupied by 15 feet of water. The harbour is now unsafe during northerly gales, except in a small cove on the east side of Smith's Island.

The pier which is on the eastern side of the harbour was commenced by the Provincial Government in 1865-66. It was originally 550 feet in length and 24 feet in width, with an L at the outer end 100 feet in length and 25 feet in width. It came under the charge of the Federal Government in 1871, since which time extensive repairs and renewals have been made, including the construction of a new block 125 feet by 25 feet at the outer end in 1873; the placing of slopes of heavy stone on each side in 1883-84; the construction of a block 48 feet by 22 feet at the south end of the L in 1888-89, and the construction of a block 71 feet by 24 feet at the outer end in 1889-90. In 1890-91, the 71 feet block, which had settled, was cut down and rebuilt from about 3 feet below low water, and extensive repairs were effected including the reconstruction of 80 feet of the north face (50 to 130 feet from the outer end) from low water, and the renewal of the covering, cap timbers and floor stringers from the inner to within 50 feet of the outer end.

During the fiscal year 1891-92, the sum of \$800.00 was expended in driving 50 piles to complete the close-piling at the back of the L, and in repairing the talus on the north side by placing about 200 cubic yards of large stone.

The depth at the outer end of the pier at the face of the 71 feet block, varies from 11½ to 15 feet at extreme low water, but there is less water over a sand bar further out. Spring tides rise 4 feet.

The "Canada" arrived at Port Hood on the 24th September, when she took up the work at the public wharf making a cut 185 feet in length by 60 feet in width, removing 1,553 cubic yards of sand, and leaving a depth of 12 feet at low water.

#### PORT LORNE.

Port Lorne, formerly Port William or Marshall's Cove, is in Annapolis County, and 30 miles east of Digby Gut.

During the fiscal year the sum of \$1,000.00 was expended in repairing the centre portion of the seaward face of the breakwater, which was very old and rotten, and in building a piece of cribwork inside the dock, to divert the brook which during freshets tore away the loading berth of vessels, and threatened to undermine and destroy the breakwater.

#### PORT MAITLAND.

Port Maitland, formerly Green Cove, Yarmouth County, is situated at the mouth of the Bay of Fundy, about 13 miles north of the town of Yarmouth.

The harbour, which is dry at low water, is formed by a western breakwater and an eastern loading pier. The western structure was badly damaged in 1887-88 by severe storms, and a breach 86 feet in length was made through the centre of the work. This was rebuilt in 1890, the contract including close-piling nearly the whole seaward face of the breakwater, and some general repairs.

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During the present year the sum of \$300.00 was expended in repairing the loading wharf, the work consisting of the removal and rebuilding of almost the entire top, to a depth of 3 feet.

### ROUND HILL.

Round Hill, Annapolis County, is situated on the Annapolis River, about midway between Annapolis and Bridgetown.

The river at this point takes a sharp turn, the bank on its northern side being a dyked marsh, while on the convex side of the bend of the river is a high steep hill which gives the settlement its name. For many years the river has been eating into and undermining the hill, and several acres have already fallen into the river, thus destroying not only valuable property, but the material being afterwards washed away by the current, forms banks and bars in the channel and otherwise injures navigation.

To prevent further damage, it was decided to try the effect of a shear dam, on the up river side of the hill, to divert the stream from the foot of the bank. A contract for the sum of \$4,750.00 was entered into for this work in November last, and since the opening of navigation satisfactory progress has been made with the work. The dam is not yet completed, but it is noticed that already the point of marsh on the opposite side of the river is wearing away, and it is thus probable that the dam will have the desired effect.

### SOUTH GUT.

South Gut, Victoria County, is the local name of the south arm at the head of St. Ann's Harbour. The latter is a fine basin 7 miles in length, the entrance to which is a few miles to the westward of the principal entrance to the Great Bras d'Or Lake.

A wharf was commenced at this place in 1890-91. During that year nearly all the material required to complete it was procured, and the work was built up to within 3 or 4 feet of finished height.

During the year 1891-92, the sum of \$499.66 was expended, and the wharf completed with the exception of the approach the placing and bolting of 12 fenders, and the cutting off the tops of the fenders previously placed.

The wharf extends 198 feet, to 6 feet at extreme low water. It consists of a shore abutment 48 feet long and 20 feet wide on top, and of 3 central blocks each 20 by 20 feet, and an outer block 20 by 40 feet.

### STONY ISLAND.

Stony Island is on the east side of Cape Sable Island, about midway between Cape Sable and North-East Point.

During the present year, the construction of a breakwater to cost \$4,650, was begun at this place for the protection of fishing boats. The inshore section of the structure, which is of cribwork, was completed during the first half of the fiscal year, before the winter storms set in, and the outer section which was of pile work was begun, but owing to various delays on the part of the contractor, was not completed, and became almost a wreck during the storms of last winter. This spring, a satisfactory arrangement was made with the contractor, by which the pilework section should be replaced by cribwork without additional charge. This work is still in progress and is nearly completed.

### TROUT COVE.

Trout Cove, Digby County, now called Centreville, is on the Bay of Fundy side of Digby Neck, nearly midway between Digby Gut and Petit Passage.

The original breakwater built by the local authorities in 1858, was 200 feet long and 30 feet wide. In 1876, an extension 175 feet in length was added by the department, and in 1880, and again in 1881, extensive repairs were made to the old breakwater, 100 feet of which was completely destroyed in 1879.

The situation is much exposed to northerly storms off the Bay of Fundy, and since the above mentioned date, the work has been several times repaired, the total expenditure to date by the department being \$8,981.30.

During the present fiscal year, the sum of \$100 was expended in repairing the outer end, which is now in fair order, but portions of the inner face require strengthening and partial renewal.

## WEST ARICHAT.

West Arichat, Richmond County, is a small but safe harbour on the south side of Isle Madame, sheltered from the south and west by Creighton Island and a breakwater between it and the main land.

The breakwater is 1,285 feet in length and 23 feet in width. A portion of it extending 628 feet from the Island, was built by the Provincial Government in 1867, and the remainder by the department in 1879. It is of round timber open faced, and was full ballasted. The top of the covering is 11 feet above extreme low or 6 feet above extreme high water, the bottom being dry at low water except near a 25-foot opening between the old and new work.

In 1883-84 fenders were placed on the south face 3 to 9 inches apart, over a distance of 490 feet.

During the year 1891-92 the sum of \$496 was expended in removing the covering over 140 feet at the west end, and over 120 feet at the east end, and filling in with stone and gravel, and in renewing 15,000 feet board measure of covering, along the centre of the work.

## PROVINCE OF NEW BRUNSWICK.

## BLACK RIVER.

Black River, St. John County, empties into the Bay of Fundy, about 12 miles east of the entrance to St. John Harbour.

In 1879, the department constructed a breakwater, 160 feet in length, near the mouth of the stream, in order to provide a shelter for vessels frequenting the bay, and also to form a convenient shipping place for lumber, piling, &c.

During the present fiscal year, the sum of \$500 was appropriated for repairing the covering and approach to the work. The outer part of the covering was repaired and refastened, and the inner portion was renewed with new material, and the approach, which lies through a narrow, deep valley or gulch, was ditched, &c., to prevent the freshets from washing down material upon the surface of the pier and again rotting out the covering.

## CAMPBELLTON.

Campbellton, Restigouche County, is situated on the southern side of the Restigouche River, about fifteen miles west of Dalhousie, the shire town, and where the river enters the Baie des Chaleurs. It is an important station on the line of the Intercolonial Railway, as well as a thriving and growing town, which does an extensive business in the shipment of lumber.

Campbellton is practically at the head of navigation, although the tide flows up the river some 9 miles further, but shoals and the intricacy of the channel prevent the passage of vessels of any size. Except on the "Traverse," about 4 miles below Campbellton, where the depth is only about 12½ feet, a depth of 18 feet at low water springs can be carried up to the town, which, with a rise of 10½ feet at springs and 7 feet at neaps, affords a good depth of water for the class of vessels engaged in trading to and from the port, which are generally barques of from 400 to 900 tons. The greatest number of these arrive in ballast, the disposal of which has been a matter of serious inconvenience, owing to there being no convenient place of deposit.

To remedy this, a contract was entered into on the 23rd April, 1889, for the construction of a "ballast wharf," the structure being an isolated block, 140 feet in length by 35 feet in width on top, and having a minimum depth of 18 feet at low water spring tides. This work, which had been in progress during the previous year, was completed on the 30th of August, 1890.



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A contract has been entered into with Messrs. G. and J. Robertson for the extension of the present wharf to connect with the lower or eastern end of Ferguson's wharf (so called), this extension to cost \$3,975.00, not including superintendence and contingencies.

To complete the landing and approach required for the accommodation of the ferry steamer plying between Campbellton and Cross Point (directly opposite), on the Quebec shore of the river, a contract was entered into 31st March, 1891, for the construction of the work, to extend 250 feet in length from the outer end of the work built by the department by day's labour in 1889-90, at the site selected and provided by the Campbellton Town Council. The work contracted for consists of four crib work blocks, respectively 50, 20, 20 and 100 feet long, and 3 spans or openings of 20 feet each, the latter spanned by four 10 by 12 inch stringers, the work being covered with 4 inch planking. The first three blocks and all the spans are to be 20 feet in width from outside to outside of cap timber, the fourth or outer block for a distance of 40 feet, to be 30 feet wide, while its remaining length, or that portion of it forming the incline will be 20 feet in width. This work was commenced early in July and completed on the 18th September, 1891.

### CAPE TORMENTINE.

Cape Tormentine is on the New Brunswick coast of Northumberland Strait, and is the nearest point to Prince Edward Island, from which it is distant about 9 miles.

During the fiscal year 1891-92, the substructure of the pier has been extended a distance of 800 feet, and the superstructure a distance of 565 feet.

Two cribs have been sunk in the angles of the pier-head, and 1,080 cubic yards of stone have been placed in the talus, on the north side of the work.

On the 30th June, 1892, there remained 100 feet of substructure to be put in, while 500 lineal feet of superstructure and 800 feet of hardwood sheathing, together with the superstructure of the angle cribs, had not been built.

### CARAQUET.

Bridgetown, Gloucester County, is the name of the railway station situated at the upper or western end of Caraquez Harbour and Settlement, and is 2 miles east of the bridge crossing the Caraquez River, and 6 miles west of the existing public wharf near Caraquez church.


Directly off Bridgetown, extensive oyster beds are situated, causing this portion of Caraquez Harbour to be known as the "Oyster Grounds."

To provide shelter and a landing place for boats, a contract was entered into on the 25th October, 1890, for the construction of a work 350 feet long, consisting of a shore approach 160 feet long, 4 blocks each 15 by 15 feet, 5 spans or openings of 20 feet each and an outer block 30 by 30 feet. The shore approach and the several blocks to be constructed of round logs open cribwork, the spaces or spans between each being spanned with four 10 by 12 stringers, the blocks and approach to be fendered on the sides and full ballasted, the whole being covered with 3-inch planking.

This work, which was in progress during the previous year, was completed in October, 1891, the expenditure thereon amounting to \$1,308.72.

As built, the work only extends out to extreme low water springs, although at low tide there is generally from 1 to 1½ feet of water at the end, thus giving fair accommodation to those engaged in the oyster fishery.

### CLIFTON.

Clifton, Gloucester County, is on the south shore of the Bay des Chaleurs, about midway between Bathurst and Caraquez Harbours. Extensive stone quarries are worked in the district, the stone being used for building purposes and in the manufacture of all the different grades of scythe and grind-stones. Two firms, Messrs. Henry Read & Co., and Messrs. Lombard & Co., are largely engaged in this business, and, to facilitate shipments, the former firm, many years ago, built a breakwater 480 feet in length, and in 1878 transferred the same to the Crown. This breakwater was then extended 100 feet with a return—or —200 feet in length in a westerly direction, inclosing an area sufficient to shelter vessels and fishing craft.

[1892]

During the year general repairs were made to the outer portions of the breakwater, hardwood sheathing was put on in places, new face timbers put in where required, floor stringers replaced, the work reballasted and covering repaired, and a rip-rap of large stone placed along the east side near the outer end, the whole expenditure amounting to \$1,000.

## COCAGNE.

Cocagne Harbour, Kent County, is situated on the south-west coast of the Strait of Northumberland, about 10 miles north of Shediac harbour. The entrance is obstructed by a bar of sand and gravel, the channel carrying a depth of about 9 feet at low water spring tides. Inside the "bar" there is anchorage in from  $2\frac{1}{2}$  to 4 fathoms in a narrow basin, about  $\frac{3}{4}$  of a mile long, while in the bay or harbour inward of this (which is about  $2\frac{1}{2}$  miles by 4 miles), only a depth of from 4 to 6 feet is obtained at low water, until the mouth of the Cocagne River which enters the bay at its south-west corner is reached, where a pool or basin about half a mile long and about 500 feet wide, carries a depth of from 10 to 14 feet, affording good anchorage and shelter for vessels.

During 1881-82, the department built, under contract, a wharf 400 feet long on the west side of the pool, connecting it with the public road bridge to provide shipping facilities for the district. This wharf originally was 20 feet in width for 370 feet, the outer 30 feet being 40 feet wide, the depth of water along its outer face being 9 to 11 feet. In 1888 to afford increased space for shipment of lumber, tan-bark, &c., 100 feet in length of the outer end was widened 20 feet, and levelled up where settlement had taken place. Further settlement having taken place over the remaining portion of the work, and further wharfage accommodation being needed, as well as a renewal of the covering, the sum of \$2,250, voted at the last session of Parliament has been expended in levelling up and widening all of the inner portion of the wharf, in renewal of the planking, fendering, putting in new floor stringers, guard-logs, &c., where required, and in placing all of the work in good condition.

## DALHOUSIE.

Dalhousie Harbour, Restigouche County, is situated at the head of Bay des Chaleurs and a short distance below the mouth of the Restigouche River. Dalhousie, the shire town, is on the south side of the harbour, on its eastern or lower end. A branch line of railway connects the town with the Intercolonial, the branch extending down to a wharf, having a depth of from 12 to 15 feet of water at low water spring tides. The principal export of the place is lumber, and vessels visiting the port for cargoes usually arrive in ballast. For the disposal of this ballast a contract was entered into, December, 1886, for the construction of a ballast wharf, where vessels could also take in their cargoes.

The wharf built has a length of 300 feet, averages in height 27 feet; it carries a depth at low water along its outer face of about 14 feet, the work being satisfactorily finished in October, 1887, since when, each season, it has been used as a place of discharge for ballast. Owing, however, to proper care not being exercised in the disposal of ballast from vessels, the wharf has become in part displaced, and with the amount available the necessary repairs and improvements have been undertaken, and though not completed at the end of the fiscal year, will shortly be satisfactorily finished.

## EDGET'S LANDING.

Egdet's Landing, Albert County, is on the west side of the Petitcodiac River, about 2 miles south of the railway station, and village of Hillsboro'.

Many years ago before communication was opened by the Albert Railway, the Local Government constructed a steam-boat wharf at this place, which was destroyed in the fall of 1869, by the "Saxby gale."

In 1889 the construction of a new wharf was undertaken by the department, and the work has been going at intervals since this date.

During the past fiscal year, the sum of \$900 was expended in forwarding the work and constructing two "gridirons."

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The whole work is now nearing completion, and it is the intention of the department to finish the work during the coming fiscal year. It will be 400 feet in length, reaching to within 150 feet of low water mark, and having 30 feet of water at its outer end at high water spring tides. The first section of 200 feet is 20 feet wide on top, the next 100 feet 30 feet wide, and the last 100 feet 40 feet wide.

### GRAY'S ISLAND.

Gray's Island (so called), Albert County, is situated on the western bank of the Petitcodiac River, about two miles distant from the village of Hillsboro'. A quite extensive shipping business is carried on from Gray's Island, it being the principal shipping place for the district, having good wharves which are approached both by public road and railway, a branch line extending from the main line of the Albert County Railway to the wharves. These wharves, however, at times are difficult and dangerous for the approach or departure of large vessels, and great difficulty being experienced in holding them at the wharves during ebb tide, which sets very strongly against them, a contract was entered into, 27th October, 1890, for the construction of a breakwater 300 feet in length for their protection. The first 100 feet or inner end of the work is merely ordinary "clay dyking" 5 feet wide on top, sloping 1 to 1 on the sides. The next 100 feet outwards is of round logs open cribwork 15 feet wide on top, and sloping 1 in 4 on the sides. The next 50 feet has its upper 30 feet similar to that last described, excepting that the upper or northern sides, has the outer longitudinal face timbers of square timber and close sheathed with flat wood spruce spars, dressed to 6 inches in thickness, the bottom being built plumb, and its northern or upper side protected by close-piling. The outer 50 feet is 25 feet wide on top, and its upper 30 feet having a slope of 1 in 12 on the end, 1 in 4 on the north side and 1 in 2 on its southern or lower side, the bottom being built plumb and having both sides and end protected by close-piling, and the upper portion by close sheathing of spruce and hardwood.

Materials for the work being procured during the winter of 1891, construction was commenced early in 1892, the work being finally completed 28th May, 1892.

### KINGSTON.

Kingston, Kent County, is situated on the Richibucto River, 3 miles south of Richibucto, the shire town, and 6 miles from the mouth of the river, which enters the Strait of Northumberland.

The river above Kingston being poorly provided with shipping facilities, a contract was entered into in May, 1890, for the construction of a wharf on the upper side of the Kingston bridge, to provide additional accommodation and a means of warping vessels through the "draw." The work is 200 feet long and 35 feet wide on top, the ends and outer or north face, being built close faced of square timber, and the inner or south side open faced, both sides and ends having a slope of 1 in 18. It is connected with the public road bridge by an approach 63 feet long (measured along its centre) and 20 feet wide, built of round logs, open cribwork, ballasted, with floor stringers and planked over, the whole having been completed on the 1st December, 1891.

### NEGRO POINT BREAKWATER.

St. John Harbour, on the north side of the Bay of Fundy, is the estuary of the River St. John, and lies at the head of a small bay, the distance between "Red Head" and "Negro Town Point" at the eastern and western sides of the mouth being about  $2\frac{1}{2}$  miles. Partridge Island, which lies a little more than a half mile outside of the line of points named, divides the entrance of the harbour into two channels. During south-easterly winds the sea is broken by Inner Mispec Point (which bears south by west 2 miles from Red Head), and by the shoal water between Red Head and the main or eastern channel. South-westerly winds throw in a heavy sea through the western channel, which rendered it difficult for vessels to enter the harbour, as they were in danger of being driven on the "Foul Ground," on the eastern side of the main channel.

During 1874-75 a thorough survey of the harbour was made by the engineers of the department, and in the spring of 1875 a breakwater 2,250 feet long, to partially close the western channel, was begun, and in September, 1875, completed.

Injury having been done to portions of the slopes, top and outer end of the work by storms, a contract was entered into 19th January, 1891, for supplying a quantity of stone for its repair, delivery of which was in progress by end of fiscal year; about 1,000 cubic yards having been delivered and placed at the most exposed parts of the work.

Delivery of stone to the amount contracted for was resumed on 9th May, and completed by the close of the fiscal year; the quantity delivered amounting to 8,114 cubic yards.

The work done consisted in repairing a length of 420 feet of the structure, outward from the end of the wooden portion, including the refilling and repairs of some of the most serious breaches through the work.

#### NEGUAC.

Lower Neguac, Northumberland County, is situated near the northern entrance to Miramichi Bay, about 35 miles east from Newcastle and some 20 miles south of Tracadie, Gloucester County. There is a good and safe shelter for boats and small vessels, and it is in the centre of one of the best fishing grounds in the Gulf of St. Lawrence, the district also possessing excellent soil while the surrounding country is thickly settled and an extensive business carried on from the place, principally by water, to accommodate which a steamer of the "Miramichi Steam Navigation Co.," during the season of navigation, makes daily trips between Neguac, Chatham, Newcastle and other points on the bay and river.

The shipping facilities at Neguac being very poor, consisting of an isolated crib-work block, built some 4 years ago by the Steam Navigation Co. assisted by the Local Government, to and from which access is had by a plank walk supported on trestles, necessitating the carriage of all freight by hand or boating it to the steamer or other vessel calling for cargo, to better accommodate the large business a contract was entered into on the 14th April, 1892, for the construction of a public wharf, consisting of a shore abutment 370 feet long, 19 blocks 20' x 21' each, 20 spans or openings of 20 feet each, and the outer block or landing pier 40 x 62 feet, making in all a length of 1,190 feet.

By the close of the fiscal year, material was being delivered, and work of construction about to be commenced.

#### OROMOCTO.

The Oromocto shoals (St. John River) are about 10 miles below Fredericton in Sunbury County.

The river at this point is divided into three channels by Oromocto and Thatch Islands, the main channel being the centre one between the two islands.

A large amount of dredging has been done on these shoals, to keep open navigation between St. John and Fredericton, and a shear dam 1,600 feet in length has been constructed between the head of Thatch Island, and the western bank of the river to confine the current, and make more scour through the dredged cut on the shoals.

During the past fiscal year the sum of \$500 was expended on repairs to this dam. The plank covering was renewed in part, as was also the planking on the up river or sloping face. On other portions of these faces the planking was repaired and refastened, and the inner end of the dam, where it joins the shore, was protected with brush and stone.

Between the 6th of July and the 5th of November, 1891, the "New Dominion" was engaged in deepening the channel between Oromocto and Thatch Islands, removing during that period 36,785 cubic yards of sand and mud, leaving a depth of 14 feet of water in the channel.

#### PARTRIDGE ISLAND.

Partridge Island, lies directly off the entrance to St. John Harbour, dividing the approach into two channels, the principal of which is to the eastward of the island.

On the island is situated an important lighthouse, a quarantine station, fog whistle, &c., and to facilitate the landing of coal, and other supplies for these, the department constructed many years ago two small piers with a landing dock between; these piers are on the north-east end of the island and facing the harbour and city of St. John.

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During the present fiscal year, the sum of \$500 was expended in repairing the approach to the eastern work, which was much decayed, and in planking portions of the western work, and both structures are now in good condition.

### QUACO.

Quaco Bay, is on the north-east coast of the Bay of Fundy, about 30 miles east of St. John Harbour.

A small river discharges into the eastern end of the bay, and a harbour of refuge is formed by the breakwaters each 300 feet in length, one on either side of the river's mouth. This harbour is accessible for coasting vessels and schooners which come here to load timber, &c., for about 4 hours in each tide, but owing to the rise and fall of tide, about 30 feet, it is bare at low water.

During the present fiscal year, the sum of \$1,350 was expended in general repairs to both structures. The sheathing on the seaward face of the western work was re-fastened where loose, and renewed where torn off, while the repairs to the eastern work were mostly to the covering and upper timbers, new floor stringers, cross-ties and plank covering being added to the inshore end, and fenders and plank covering to the outer.

Both structures are now in fair order, except that the eastern work requires some additional repairs to the covering.

### QUACO WEST.

During the past fiscal year, the sum of \$1,841.63 was expended by the department in opening a new mouth, and otherwise improving the exit of the river at West Quaco. This work was undertaken in consequence of a high gravel bar and sea-wall having forced the original opening to the westward, making the entrance to the harbour both difficult and dangerous.

A dam 205 feet in length and 12 feet high, was first constructed across the river, a short distance below the proposed new opening.

This dam, owing to the bad foundations, was carefully built with plank sheathing, sheet piling and brush and stone mats on either side, as there was a reverse head of water at high tide, and provided with a suitable sluice and gate, and has a row of close-piling driven through the centre of the work. After the completion of the dam a cutting 400 feet long and 7 feet deep, in its deepest part, was made through the gravel bar, and after shutting down the gates a new channel was torn out down to the level of the bottom of the harbour. Schooners and small vessels now enter by the new channel, and it is proving in every way satisfactory.

### RICHIBUCTO.

Richibucto Harbour, Kent County, is situated on the south-west shore of the Gulf of St. Lawrence, about 40 miles north from Pointe du Chêne (Shediac Harbour) the eastern terminus of the Intercolonial Railway.

At the close of the last fiscal year the "St. Lawrence" was engaged in improving the Albion or middle channel leading into the Harbour of Richibucto, and continued work until the 28th October.

The total quantity of material removed was 20,388 cubic yards of fine sand. Full details of the work done, will be found in the report on dredging under the heading of the "St. Lawrence."

### RIVER KENNEBECASIS.

The Kennebecasis takes its rise near the sources of the Petitcodiac, and after a south-west course of about 20 miles, enters the St. John through Kennebecasis Bay.

On the 12th May the dredge "New Dominion" was taken to Hampton to resume the work at that place where it operated until the 30th of June. During this period one cut 800 feet in length, by 43 feet in width, and leaving 10 feet at summer level, was made through a long flat in the channel, and a cut of 110 feet in length by 40 feet in width, to 10 feet at low water, was made in front of the public wharf.

[1892]

## SHIPPEGAN.

Shippegan Harbour, Gloucester County, is situated near the entrance of the Baie des Chaleurs, about 60 miles east of Bathurst.

At the southern end of Shippegan Harbour, connection is made with the Gulf of St. Lawrence, by "Shippegan Gully," a shoal and difficult channel, formerly used during fine weather by the smaller fishing boats and vessels of very light draught.

By the use of the "gully" a saving in distance is made of from 25 to 40 miles, for the fishermen going or returning to their homes from the fishing grounds situated off this part of the shore, while the harbour is also a most desirable shelter during storms, being perfectly protected from all winds, and largely used by all of the fishing vessels of the extensive fishing establishments of Caraquet, and other parts of the south shore of the bay.

To make the "gully" available for vessels of a larger class and permit of it being entered at all time of tide or during stormy weather, the department in 1875 commenced the construction of a breakwater to protect the entrance, and a "dam" to close an opening known as the "east gully." Difficulty was had with the contractors, who suspended operations at the close of the summer of 1876, and the work was relet in December, 1877, operations being resumed April, 1878, but the second contractors, about the end of July, stated their inability to proceed further with the work, and it was taken over by the department.

At this time the "dam" was completed, about 900 feet of breakwater was raised to its proper height, and a further length of 500 feet partly built.

In October, 1879, a storm occurred during which the tide rose much higher than before known, seriously injured the "dam," while the unfinished outer 500 feet of the breakwater was completely destroyed, and the inner portion much damaged. In 1880-81 the dam was repaired, raised and strengthened by piles driven 10 feet apart, connected by caps and walings. During 1883, portions of it that had again settled were raised where deemed unsafe, and an extension of 120 feet added to the remains of the breakwater, a gap that had been made being closed as well, and the other portions of the structure raised.

General repairs were again made in 1884-85, when 50 feet of the outer end was close-piled, the "dam" at the time being raised, where settlement had taken place. Further close-piling and some general repairs of the work were also done in 1886-87, while during 1888-89, a length of 60 feet which had been seriously damaged the previous winter, was reconstructed.

In November, 1889, a contract was entered into for an additional block of 50 feet, at the end of the eastern or existing breakwater, and the construction of a breakwater to extend 1,000 feet, in a southerly direction, from the beach west of the "gully," the whole being complete in January 1892.

A length of 137 feet of the inner end of the work built in 1875, was reconstructed under direct charge of an officer of the department, and other necessary works of repairs and improvements were effected.

## ST. JOHN RIVER.

During the fiscal year, the sum of \$250 was expended by the department in removing snags and sunken logs from the channel of the St. John River, between St. John and Fredericton.

These obstructions are brought down annually by the spring freshets, and, as they often lie directly in midchannel, are very dangerous to navigation, especially to the steamers which ply on the river during night.

## ST. JOHN RIVER—GRAND FALLS SHEAR DAM.

During the year 1883-84 the construction of a shear dam, was begun by the department on the eastern side of the river, immediately above Grand Falls and at the mouth of Little River, for the purpose of preventing logs and timber, during times of freshet, from being stranded on the rocks, and to direct them in their passage over the

## Department of Public Works.

falls. Besides building the shear dam, a portion of the rock projecting over the falls was blasted away so as to destroy the eddy in the basin below, where a large amount of timber usually gathered and remained.

During the fiscal year, the dam was extended, and the upper and older portions, which had become rotten, were removed, and the work raised 2 feet 6 inches in height and rebalasted.

### TOBIQUE RIVER.

The Tobique is one of the most important tributaries of the St. John and falls into the main river, a short distance above the village of Andover, in Victoria County.

The country on either side is excellent farming land, and, as the settlers have, up to the present, no railways by which to reach their markets, the river has formed their principal highway. Large quantities of timber are also driven down the river every spring.

The river itself is rapid, and, except in times of freshets, shallow, with numerous gravel bars and rocks, which are brought down by the spring floods. Communication is kept up principally by flat-bottomed tow-boats, drawn by horses, and the department has for some years expended various sums in blasting rocks, removing bars, improving tow-paths and otherwise improving the navigation of the stream.

During the fiscal year the sum of \$200 was expended in continuing this work, and now the channels are in fairly good condition.

Owing to the improved state of the river, and the construction of the Tobique Valley Railway, which extends from the river mouth 28 miles to Plaster Rocks, no further expenditures will be required for the lower portion of this river.

### TRACADIE.

Tracadie Harbour, Gloucester County, is situated on the east coast of New Brunswick, about midway between Shippegan Gully and the entrance into Miramichi Bay, and is entered from the Gulf of St. Lawrence by what is known as the "North," "South" and "Old" "Gullies." The harbour is some 6 miles in length by  $\frac{1}{4}$  to 1 mile or more in width, but excepting in the river channels (North and South Tracadie Rivers) and in the channels entering from the different gullies is quite shoal, being almost dry at low water spring tides.

To provide wharfage facilities for the district, which is a large and populous one, containing fully 2,000 inhabitants, a contract has been entered into for the construction of a public landing pier, 1,430 feet long, and extending to the edge of the North Gully channel, the work consisting of a shore approach 250 feet long, 28 "blocks" 20 x 25 feet, one "block" 40 x 45 feet, and 29 "spans" or openings of 20 feet each, the latter spanned by 7 floor stringers 10 x 12 inches, and the entire top of the work covered with 3-inch planking. The blocks and shore approach are to be constructed of round logs open cribwork, and fully filled with ballast, fendered, &c.

At the close of the fiscal year active work of construction had not been commenced.

### TYNEMOUTH CREEK.

Tynemouth Creek, St. John County, is on the north-east coast of the Bay of Fundy, about 21 miles east of St. John Harbour.

The stream enters the bay through a sea wall of gravel and shingle, immediately inside of which there is a basin, which, at high water, forms a safe and convenient harbour.

To prevent the erosion of the sea wall and to facilitate the entrance into the basin, the department, in 1875, and again in 1883, constructed works on either side of the river mouth; the work on the western side being the last to be constructed.

During the present fiscal year, the eastern work which was becoming undermined was repaired and strengthened. Both works are now in fair condition and no further expenditure is immediately required, although parts of the older work are becoming much decayed.

## PROVINCE OF QUEBEC.

## ANSE ST. JEAN.

Anse St. Jean is on the south-west bank of the Saguenay, about 25 miles from its mouth.

The renewal of the flooring of the wharf was completed over a length of 250 feet with red spruce plank 5 inches in thickness. Twenty-five toises of stone were placed in the wharf, and the shed painted. The movable slip was also completely renewed.

## BAIE LA VALLIÈRE.

Baie la Vallière is a bay near the mouth of the River Yamaska, 9 miles below Sorel. This bay at low water had no outlet and remained a marsh. A channel 6 feet deep, 25 feet in width, was commenced in November, 1891, from River Yamaska towards the Pot au Beurre River, and completed in June, 1892. A total length of 650 feet was dredged, partly through a clay bank and the remainder through marsh.

Approximate quantity dredged, 4,800 cubic yards, consisting of blue clay and decayed vegetation.

## BELCÉIL.

Belcél piers and booms are on the Richelieu River, south of the Grand Trunk Railway bridge, which crosses the river at Belcél; they were built to facilitate the passage of steamers and barges through the swing of the bridge, and to prevent them from being carried into shallow water.

There are 5 mooring piers, which hold the heavy booms in position. Three of these booms were repaired in 1890, and the other two in the fall of 1891.

This spring one of the booms was made anew at a cost of \$1,129.94.

## BERTHIER (EN BAS).

Berthier, 24½ miles below Quebec, is on the south shore of the St. Lawrence, and in the County of Montmagny.

The repairs to this wharf during the year consisted in attending to the steps of the slips, the amount expended being \$485.93.

## CACOUNA.

Cacouna is on the south shore of the St. Lawrence, 131 miles below Quebec, and on the line of the Intercolonial Railway.

Work in connection with the construction of an isolated block at this place was continued during 1891-92. When completed this block will be 102 feet in length on top, 27 feet in width on bottom and 24 feet on top, with a height at the outer end of 17 feet 8 inches.

## CARLETON.

Carleton, Bonaventure County, is situated on the south shore of the Baie des Chaleurs, and is distant some 35 miles from Campbellton, and 5 miles from Dalhousie.

The sum of \$382.11 was expended during the year 1891-92 in effecting urgent necessary repairs to the wharf at this place.

## CHICOUTIMI.

Chicoutimi is at the head of navigation of the River Saguenay, 71½ miles above Tadousac.

The flooring of the wharf has been completely renewed on a length of 210 feet and a width of 110 feet, with red spruce plank 5 inches in thickness; the east side of the wharf, where the sheds are built, was raised 18 inches; the waiting room was painted both inside and outside, and seats constructed. Two mooring posts were renewed.

## COMO.

Como is a village in the County of Vaudreuil, situated on the south shore of the Lake of Two Mountains, 37 miles from Montreal.

The government dredge "Nipissing" worked 3 days removing a portion of the wreck of the steamer "Dagmar" at the Como wharf.



## Department of Public Works.

### COTEAU LANDING.

Coteau Landing is situated on the north side of the River St. Lawrence, at the foot of Lake St. Francis. It is the chef-lieu of the County of Soulanges, two miles from Coteau Station, Grand Trunk Railway, and 36 miles west of Montreal. It is also a station on the Canada Atlantic Railway.

During the season of navigation, the Richelieu and Ontario Navigation Company's steamers, besides several local lines of boats, call at Coteau Landing.

There are several wharves at Coteau Landing, but the wharf known as the Richelieu's is the one referred to in this report.

It is 904 feet in length, including a block 279 feet by 24 feet at the outer end. The bridge or approach has a general width of 12 feet, with 2 sidings for the crossing of teams.

The reconstruction of the whole work was commenced in 1889, and completed last fall.

### GRANDE RIVIÈRE.

Grande Rivière is in the County of Gaspé, and is situated on the Baie des Chaleurs.

During the year the wharf under construction by contract at Robin's Point was completed. It has a total length of 457 feet, with a width varying from 25 feet 9 inches on top to 38 feet at its outer end, where there is a depth of water of 19 feet at low water springs.

On the northern side of the wharf, a slip and two stairways, for the accommodation of those using the wharf at different stages of the tide, have been built.

### GROSSE ISLE QUARANTINE STATION.

Grosse Isle is an island on the St. Lawrence, 33 miles below Quebec, and is the place where steamers and vessels on their way to Quebec report any case of infectious diseases they may have on board.

The outer end of the wharf having become much damaged owing to natural decay, it was found necessary to repair the same to make it available for any vessel or steamer that might have to tie up to it. Accordingly, extensive repairs and renewals were commenced in 1890-91, and completed during the past fiscal year.

### ILE VERTE.

Ile Verte, on the south shore of the St. Lawrence, is in the County of Témiscouata, 17 miles below Rivière du Loup.

During the past fiscal year, the work of connecting the roadway with the isolated block has been continued, 80 feet in length having been completed, and the remaining 110 feet built up to within four courses of the required height.

### KNOWLTON'S LANDING.

Knowlton's Landing is situated on the west shore of Lake Memphremagog, in the County of Brome, Province of Quebec, and about 11 miles from the town of Magog, which is at the foot of the lake.

The repairs made to the wharf, consisted in building an extension of 51 feet by 75 feet. This extension was built of hemlock piles, covered with stringers and 3-inch planking, the cost being \$971.22. There is a depth of 9 feet at low water at the end of the present wharf, which will permit of the steamers calling at all stages of water.

### LAKE MÉGANTIC.

Lake Mégantic is a fine sheet of water, 14 miles in length, with a width varying from 1 to 2 miles.

It is the source of the Chaudière River, which flows into the St. Lawrence about 3 miles above Point Lévis. It is part of the dividing line between the Counties of Beauce and Compton.

During the fiscal year, the pier at the village of Lake Mégantic, known as Agnes, was repaired. These repairs consisted in removing the plank covering, and making a permanent roadway of stone and gravel. The work, however, was not completed.

## LAKE OF TWO MOUNTAINS.

This lake is an expansion of the River Ottawa, 36 miles from Montreal.

A cut of 40 feet wide and 500 feet long was made through a shoal below Jones Island, to a depth of 10 feet, by the dredge "Nipissing," material dredged, consisting of clay and sand, 8,340 cubic yards.

## LANORAIE.

The village of Lanoraie is situated in the County of Berthier, on the north shore of the St. Lawrence,  $36\frac{1}{4}$  miles below Montreal, and at a distance of 6 miles from the Canadian Pacific Railway.

In 1884, a landing pier 70 x 30 feet at the bottom, and 54 x 27 feet on top was built at the village, and in the following year an approach 240 feet in length, 25 feet in width, with an average height of 12 feet was built to connect the landing pier with the shore.

The upper side of this approach for a height of 6 feet from the top, is built on a slope of 6 inches per foot, and sheathed with 4-inch tamarack plank. The surface of the approach is built on a grade of four feet per hundred.

In 1887 the approach was damaged by the ice shove, which curved it towards the east. No further damage occurred until the spring of 1891. In the autumn of 1890, when the ice formed, it did not pack along the upper side of the approach as it usually does, thus affording some protection.

The consequence was that the second shove of the ice at the beginning of April, in 1891, had the effect of moving the approach on two-thirds of its length 160 feet from the landing pier. The vertex of the curve, which is at about 80 feet from the landing pier, measures 4 feet. Besides this damage, two tiers of the face timbers, on a length of 42 feet of the approach on the lower side near the landing pier, were torn up by the ice; five fenders, on the lower side of the approach, were also removed.

Repairs were commenced on the 5th November, 1891, and finished on the 28th of the same month, consisting of pile work along the upper and lower side of the approach, and the renewal of the face timbers.

## LAPRAIRIE.

Laprairie is the chef-lieu of the county of the same name, and is situated on the south shore of the River St. Lawrence, seven miles above Montreal. It is one of the stations of the Champlain Division of the Grand Trunk Railway. One of the steamers of the Richelieu and Ontario Navigation Company plies between Laprairie and Montreal, making several trips every day during the season of navigation.

With the amount voted by Parliament, the retaining wall at the lower end of the village was extended a further distance of 131 feet, at a cost of \$2,495.10.

## POINTE LÉVIS.

Pointe Lévis, is a town in the County of Lévis, situated on the south shore of the River St. Lawrence opposite Quebec.

Government ship-channel dredge No. 11 worked here for 15 days near the entrance to the graving dock, making a cut 300 feet wide through a shoal.

The material dredged consisting of 3,330 cubic yards, hard-pan, sand and stones at a cost of \$2,447.78.

## LÉVIS GRAVING DOCK.

During the latter part of June and first part of July, 1891, the sluice valves in the caisson and culverts were taken off their seats, cleaned of all rust and put back in good working order. The inside of the caisson was scraped and two coats of cement wash applied; the outside of the caisson, and the folding bridge were painted and the joints in the masonry of the dock, repointed.

The caisson berth and recess were cleaned of alluvial deposit, and during the winter the engines of the auxiliary pumps—which had been run daily for five years—were repaired in the dock shop, and all the steam pipes from the boilers to the different engines

## Department of Public Works.

were lagged with thick felt and asbestos, and covered with canvas to prevent condensation of the steam.

During the year three vessels were docked, the revenue derived therefrom, including \$45.53 proceeds of sales of scrap iron, amounting to \$4,690.93.

### LÉVIS FERRY WHARF.

The ferry wharf on the west side of the entrance of the graving dock being in need of repairs, the top part was renewed on its whole length of 200 feet, for a height of 6 feet, the top flooring and floor stringers were renewed and four new mooring posts provided. Considerable repairs were also made to the pontoon, and the wharf is now in good condition.

Spring tides rise 19 feet ; neap tides, 14 feet.

### LONGUEUIL,

The chef-lieu of the County of Chambly, is situated on the south shore of the River St. Lawrence, nearly opposite Montreal.

The dredge "St. Louis" began work here towards the close of the fiscal year, but found the material too hard for her machinery, and after removing 45 cubic yards of hard-pan, it ceased work.

### MATANE.

Matane, on the south shore of the River St. Lawrence, is in the County of Rimouski, 240 miles below Quebec.

During the past year the block previously built at this place, was connected with the shore by a block and span structure 160 feet long and 12 feet wide. The block itself was raised and general repairs were effected.

### MURRAY BAY.

Murray Bay—or Malbaie—is in the County of Charlevoix, and is situated on the north shore of the St. Lawrence, 90 miles east of Quebec.

Towards the end of the fiscal year, materials were procured for the repairs required to the wharf at this place, but no actual work had been done up to 30th June, 1892.

### NICOLET.

The River Nicolet empties into the St. Lawrence on its southern shore, at the foot of Lake St. Peter.

In order to protect schooners loading in the harbour from the force of the storms on Lake St. Peter, a jetty was commenced in 1881 and added to each consecutive year.

This work, in 1891, was resumed on the 29th September, the water having been too high to admit of its being commenced before.

The pile-work was discontinued on the 14th October, and the stone-filling at the end of November. During this time 200 feet of pile-work were built, making the jetty 3,762 feet in length. It is 13 feet 2 inches in width, and 4 feet above low water, with an average height of 5 feet 6 inches.

Some dredging was done in the channel along the jetty, between the 24th September and the 28th October, 1891, the quantity removed amounting to 11,502 cubic yards of sand.

Some damage was caused to the jetty at the beginning of December, 1891, about 200 feet of the outer part having been carried away. The remaining section was repaired in the spring at a cost of \$1,815.77.

### QUEBEC—QUEEN'S WHARF.

The work of repairs to this wharf, consisted in renewing part of the top planking, and in small repairs to the slip or incline, and to the ladder at the west end, the amount expended being \$110.93.

The dredge "St. Louis" worked from the 8th to the 27th May, 1892, cleaning out the basin at the wharves, the material dredged consisting of 890 cubic yards clay, hard-pan and gravel.

## RIMOUSKI.

Rimouski is on the south shore of the St. Lawrence, in the County of Rimouski, 180 miles below Quebec.

A distance of 976 feet of the east wharf, was, during the fiscal year, protected with 9-inch sheathing, at a cost of \$4,413.48.

## RIVER BLANCHE.

River Blanche, Rimouski County, is on the south shore of the St. Lawrence, 9 miles west of Matane.

General repairs were made to the wharf at this place, at a cost of \$953.03.

## RIVER MATTAWIN.

St. Michel des Saints is a parish in the County of Berthier (en haut), 53 miles north of the Joliette branch of the Canadian Pacific Railway, and is situated on the Riv<sup>er</sup> Mattawin, one of the tributaries of the St. Maurice.

The work of removing boulders which obstructed the river, was commenced on the 7th December, 1891, and was discontinued on the 16th, 78 being removed, measuring 121 cubic yards, at an expenditure of \$291.59.

## RIVIÈRE L'ASSOMPTION.

Rivière L'Assomption flows into the St. Lawrence at Repentigny.

Chute Monte-à-peine, which is 25 miles above the town of Joliette, and in the County of Joliette, was the most troublesome point on the river to the lumbermen. Every year thousands of logs stuck on the rocks, where they lay until the high water the following spring. In 1889 a side dam was built, which had the effect of keeping the logs in the main channel, and since its construction very little trouble has been experienced, to the satisfaction of the parties interested.

During the year, further improvements were made: the protection works on the river, commenced last year, were extended further up stream, and points of rock and large boulders which obstructed the channel were removed at an expenditure of \$649.99.

## RIVIÈRE DU LIÈVRE—LOCK AND DAM.

The Rivière du Lièvre flows into the Ottawa River, 18 miles below the city of Ottawa. Its general course is northerly and its width for 25 miles above the mouth varies from 300 to 600 feet. The lock and dam commenced in 1887 at the Little Rapids, 12 miles above the village of Buckingham, were completed in April last, the first boat being locked up on the 19th April.

The lock is 150 feet in length between the gates, and the width is 31 feet, the lift being 13 feet 9 inches at low water. It is built of stone.

The dam has a length of 310 feet, between the western abutment and the retaining wall. A slide 18 feet in width has been built in the dam to provide for the passing of logs, and three mooring piers were built for the fastening of the booms.

## RIVER ST. LOUIS.

This river flows through the County of Beauharnois, into Lake St. Louis, at the town of Beauharnois.

It is connected with Lake St. Francis, at the head of the Beauharnois Canal, by means of a feeder and canal, which has a width of about 20 feet and an average depth of 3½ feet.

Last May, the construction of a bridge across the river at St. Clément, 3 miles above the town of Beauharnois, was commenced, and will shortly be completed.

This bridge consists of two abutments and a span of 70 feet. It is built of wood. The municipality of St. Clément contributed \$400 towards its construction.

## RIVER ST. MAURICE.

The River St. Maurice flows southward and empties into the St. Lawrence at Three Rivers.

## Department of Public Works.

The river at its outlet is divided into three channels by two islands—l'Isle Bellerive and l'Isle aux Cochons.

In order to enable the barges used by the lumber merchants to load at the highway bridge, the western channel of the St. Maurice has, during the past season, been dredged to a depth of 9 feet at low water.

On the 26th October, 1891, a dredge was set to work to cut a channel through a shoal at the outlet of the river. Operations were discontinued on the 12th November, 1891, and during this time 7,605 cubic yards of sand were removed and dumped on the south shore of the St. Lawrence, below Doucet's Landing.

The channel dredged during the previous years has filled in considerably.

From its outlet to Grandes Piles, a distance of 37 miles, this river is not navigable, owing to the numerous falls and rapids which follow each other without much intermission, but above Grandes Piles up to La Tuque, a distance of 75 miles, there is a good channel for vessels drawing less than 2 feet of water.

There are four steamers now plying on this section of the river, all drawing from 3 to 4 feet of water, which is too great a draught for some portions of the route.

The greatest impediments to navigation are at the Rapid Manigance, and the shoals at the Mekinac and Pointe à Thom.

Two gangs of men worked on the shoal opposite the River Mekinac, the plant employed being two scows rigged as spoon dredges, and worked by winches, while another gang worked at the Rapid Manigance.

Owing to the season being much advanced, only blasting of rock could be done. This work was commenced on the 16th October, 1891, and was discontinued on the 18th November.

### RIVER VERMILION—CHUTE DES IROUOIS.

The Iroquois Falls are situated on the River Vermilion, 4 miles from its mouth.

The Vermilion is one of the chief tributaries of the St. Maurice, into which it empties from the west, 93 miles north of Three Rivers.

In 1874, the main channel at the head of the Iroquois Falls was closed by a dam in order to divert the course of the river into the eastern channel, and so facilitate the descent of timber.

This dam having partly given way at two places, there was not enough water flowing through the eastern channel to admit of the timber being driven through it.

The repairs commenced in April, 1891, were continued on the 1st February, 1892, and the work closed on the 29th March, of the same year. It consisted in making the dam water-tight with fascines, stone and timber, and cost \$877.53.

### RIVER YAMASKA.

This river flows through the County of Yamaska, and empties into the St. Lawrence on its southern shore, at the head of Lake St. Peter, 8 miles below Sorel.

A lock and dam at Ile à Cardin,  $1\frac{3}{4}$  miles below the village of St. Michel de Yamaska, about  $4\frac{1}{2}$  miles from the mouth of the river, were built in 1880.

By the construction of these works, and by dredging done subsequently on the shoals below the lock, the river has been rendered navigable for vessels of moderate draught up to Belle Pointe, or St. Aimé, a distance of 20 miles.

During the winter, some stone ballast was supplied, and put in front of the dam on the upper side.

In April, 1892, when the Yamaska bridge was swept away, it carried in its course one of the gates of the lock, and also tore off the upper part of an ice pier at the head of the lock; these damages have since been repaired.

The dredge "Queen" continued the work began last year, making a channel above the lock 20 feet wide and 7 feet deep at low water over a length of 625 feet.

### SOREL ICE PIERS.

The River Richelieu takes its rise in Lake Champlain, and empties into the St. Lawrence at Sorel.

In order to protect the properties at the outlet of this river, and the boats which winter there, from ice shoves in the spring, an additional ice breaker was built at the outlet of the river, at the northern end of the western shore of the Richelieu. The pier measures 30 feet by 24 feet and 23 feet in height, with a sloping face like those previously built, the amount expended being \$1,832.79.

## SHIP CHANNEL—MONTREAL TO QUEBEC.

The work done during the fiscal year was the continuation of the deepening of the Channel at Cap à la Roche, from its present depth of 24 feet to a full depth of 27½ feet at low water.

Dredge No. 11 worked a total of 140 days, near the upper end of the Cap à la Roche Channel, completing a length of 1,270 feet, the full width of the channel.

Dredge No. 13 worked in all 139 days at the head of the Cap à la Roche curve, completing a total length of 3,150 feet, on an average width of 170 feet, and to the full depth of 27½ feet at low water.

Stone Lifter No. 1 was employed assisting these two dredges all the time they were working. Total quantity dredged at Cap à la Roche consisting of hard shale rock was 140,865 cubic yards, at a cost of \$46,583.02 or 33.1 cents per yard.

Work was not resumed at Grondines or Lotbinière this year for lack of appropriation, though it is a fact that the obstructions at these places are now a greater hindrance to navigation than what remains to be done at Cap à la Roche.

To complete the Cap à la Roche Channel, there remains to be dredged two pieces, one about the middle of the channel, 925 feet long, and the other at the upper end 1,350 feet long. It is confidently expected that this will be finished by the close of the fiscal year ending 30th June, 1893.

Elsewhere are tables giving further particulars and details of work done.

## STE. ANNE DE LA PÉRADE.

The River Ste. Anne takes its rise in the County of Quebec. It crosses the Counties of Portneuf and Champlain, and empties into the St. Lawrence on the north shore, at the parish of Ste. Anne de la Péraide, 54 miles above Quebec, and 23 miles below Three Rivers. It is for the most part very shallow.

On the 22nd June, 1891, a dredge was set to work to deepen the channel, at the outlet of the river, and operations were discontinued on the 6th July, 1891, during which time 7,670 cubic yards of sand were removed.

The channel dredged, during the previous years, has filled in considerably.

## STE. ANNE DES MONTS.

Ste. Anne des Monts, Gaspé County, is on the south shore of the St. Lawrence, 108 miles east of Rimouski.

In November, 1890, a contract was entered into for the construction of an isolated block of cribwork, 100 feet in length by 46 feet in width, measured on top.

On the 30th June, 1892, the work was practically completed, an estimate amounting to \$9,225.20 on a contract of \$9,294.00 having been given in favour of the contractor.

## STE. ANNE DU SAGUENAY.

Ste. Anne du Saguenay is in the County of Chicoutimi, on the River Saguenay, opposite Chicoutimi.

A crib, 60 feet long 30 feet wide and 20 feet high, with a depth at low water at its outer end of 7½ feet, was built, 250 feet distant from the existing wharf.

## ST. LAURENT.

St. Laurent is situated on the south shore of the Island of Orleans, 15 miles east of Quebec.

On the 24th August, 1891, during a heavy storm the pontoon was carried away and the wooden axle supporting the bridge was broken.

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The wooden axle was replaced by an iron one 4 inches square, properly fitted into cast-iron boxes, and a platform of timber was built in the recess to support the pontoon and bridge at low water, the cost of these repairs amounting to \$186.60.

Spring tides rise 19 feet ; neap tides 13 feet.

### ST. MICHEL.

St. Michel is on the south shore of the St. Lawrence in the County of Bellechasse, 16 miles below Quebec.

The work performed at this place during the fiscal year 1891-92, consisted in tearing down and rebuilding 144 feet of the old wharf, shorewards from the end that was repaired last year. The average height of the new work is 7 feet with a width of 30 feet.

### ST. ZOTIQUE.

This pier is situated on the north shore of Lake St. Francis, in the County of Soulanges, about  $2\frac{1}{2}$  miles above Coteau Landing. It consists of a block or wharf proper 132 feet 4 inches in length, by 24 feet in width, and the approach which consists of 34 cribs vary from 8 to 12 feet in width placed at intervals of 20 feet. Its total length is 1,103 feet, and the approach 12 feet in width.

Some necessary repairs were made to the covering of the wharf, at a cost of \$90.20.

### TADOUSAC, OR ANSE À L'EAU.

Tadouzac or Anse à l'Eau is at the mouth of the River Saguenay, on its southern bank.

The old wharf has been renewed over a breadth of 28 feet, and a depth of 31 feet, and the crib constructed the previous year has been extended to connect with the old wharf. Sheathing of red spruce, 6 inches in thickness, has been placed on a length of 60 feet of the wharf, and the old inclined landing has been completely renewed.

### TROIS PISTOLES.

Trois Pistoles is in the County of Témiscouata, on the south shore of the St. Lawrence, 148 miles below Quebec.

Cribs have been sunk to close the two outer spans of the wharf in order to offer shelter to vessels, as the tide flowing through these open spaces made it difficult and dangerous.

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## PROVINCE OF ONTARIO.

### AMHERSTBURG.

Amherstburg is a port of entry in the County of Essex, situated on the Detroit River, 5 miles above Lake Erie.

Dredging was done towards the end of the fiscal year by the Government dredge "Ontario," deepening the channel in front of the wharves, the quantity of material removed, consisting of clay and gravel, being 1,410 cubic yards.

### BEAVERTON.

Beaverton is situated on the east shore of Lake Simcoe, in the electoral district of the County of Ontario.

On the 10th May last, the sum of \$1,000 was authorized to be expended in placing brush and stone to protect the cribs from the scouring action of the water. Work was commenced at once, and the whole of the appropriation was expended by the 30th June, 1892.

A large quantity of stone and brush has been placed alongside each crib, and, in order to prevent as much as possible the current of the lake running to the south-west, from scouring around the cribs, a quantity of the stone and brush has been placed on the north side of the mouth of the river, forming a breakwater, over 200 cords of stone being used and the labour cost \$493.40.

## BELLEVILLE.

Belleville, the chief town of the County of Hastings, is situated on the Bay of Quinté, and is by rail 57 miles west of Kingston.

The government dredge "Ontario" worked here about two weeks in September, 1891, removing deposits of sand and clay from opposite the wharves.

The dredge "Queen" also commenced work here on 23rd May, removing decayed piers, and deepening the channel in front of the wharves, continuing the work till the end of fiscal year.

Quantity of clay, gravel and stones removed 7,676 cubic yards.

## BURLINGTON CHANNEL.

Burlington Channel is a channel through Burlington Beach, connecting the water of Lake Ontario with Burlington Bay, which forms the harbour of Hamilton.

On the 26th June, 1891, orders were issued to obtain and place in position a "life line" along the front, or channel face, of the pier, and to provide two life buoys and place same in position. This work was performed at a total cost of \$183.

Early in November last, the stage of the water was so low in the lake, that it was found impossible to float the scow, which is used as a ferry at this place. Temporary pontoons were constructed, at a cost of \$127, and served the purpose they were intended for until the water rose and the tops of some old piles being cut off, at the outer end of the "apron," allowed the scow to be used again.

## CLAPPERTON CHANNEL.

Clapperton Channel is the main passage between Clapperton and Croker's Islands, Georgian Bay, through which vessels pass from ports on the Georgian Bay to Sault Ste. Marie and Lake Superior.

This channel is obstructed by dangerous points of rocks called "Robertson's Rocks" and in order to remove these and so give a safe, navigable channel, having a depth of 18 feet at low water, the department commenced the removal of these points of rock.

After the scows and plant had been repaired and put in order, work was commenced on the 1st June, and was still going on at the end of the fiscal year. The total expenditure up to the 30th June was \$2,370.95.

## COBOURG.

Cobourg is a port of entry on Lake Ontario, and the chief town of the County of Northumberland. It is 69 miles by rail east of Toronto.

The government dredge "Ontario" worked for a few days, on a bar, between the piers, removing 3,240 cubic yards of sand and clay.

## COLLINGWOOD.

Collingwood is a town in Simcoe County, situated on the south shore of the Georgian Bay and distant by rail from Toronto 94 miles.

Shoals of considerable extent obstructed the channel, both inside and outside the harbour breakwater, to vessels drawing more than 10½ feet. Channels about 75 feet wide and 14 feet deep, were cut through these by the Government dredge "Challenge."

Quantity dredged, consisting of hard-pan, stones and clay, 5,970 cubic yards. This work was still in progress at the end of the fiscal year.

## COLLINS' BAY.

Collins' Bay is a village in the County of Frontenac, situated on the Bay of Quinté. The dredge "Nipissing" worked 11 days, making a channel through a mud bar, removing 3,300 cubic yards.



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### FRENCHMAN'S BAY.

Frenchman's Bay, or Pickering Harbour, is on Lake Ontario, 21 miles west of Toronto.

On the 4th June the sum of \$1,200 was authorized to be expended upon dredging in the harbour. Active operations were commenced on the 11th instant, and the work was all completed by the 29th June instant, the dredge having worked 153 hours, during which time 12,425 cubic yards of material were removed.

### GANANOQUE.

Gananoque is a port of entry on the north bank of the St. Lawrence River, in the County of Leeds, 18 miles east of Kingston.

The dredge "Nipissing" worked towards the close of navigation in 1891, removing some shoals from the front of the wharf.

Quantity of sand and boulders removed, 4,860 cubic yards.

Work was resumed in the spring on a bar at the entrance to the harbour, when 6,460 cubic yards of sand and sawdust were removed.

### GODERICH.

Goderich is situated in the County of Huron, at the mouth of the Maitland River, about 68 miles north of Sarnia.

On the 9th October last, the sum of \$1,000 was authorized to be expended in repairs to the outer end of the northern pier; the work to be done by day's labour, which was at once commenced and the whole completed in March last, the appropriation being all expended.

An accumulation of sand and drift-wood at the entrance to the harbour, together with the low stage of water on the lakes, left Goderich Harbour with an available depth at low water of only 8 feet.

Government elevator dredge No. 9 and plant was transferred from the ship channel between Montreal and Quebec to the Ontario dredging fleet, and arrived at Goderich 21st June, 1892. A commencement was made towards removing the shoal at the entrance to the harbour to a depth of 18 feet, and this work was in progress at the close of the fiscal year.

### HAMILTON HARBOUR.

At last session of Parliament the sum of \$6,000 was voted for dredging in the harbour, in removing a shoal or bar at the western end of the same, in front of the wharves. In May last a contract was let to Mr. F. B. McNamee, of Montreal, to do the work.

The contractor's dredge "Nish" commenced active operations on the 16th May, and up to the 30th June instant had removed 23,709 cubic yards of material, costing \$2,370.

### KINCARDINE.

Kincardine is situated at the mouth of the Penetangore River, which empties into Lake Huron, 31 miles north of Goderich.

Owing to the extraordinary low stage of water in the lakes, this harbour has been almost useless during the greater part of last year. During the summer months vessels could not reach the usual landing, and had to unload at the outer end of the north pier. There being no mooring posts fit to make fast to on this structure at the western end, the town council requested the Government to provide some new ones, and on the 19th August last, orders were issued for three, which were placed in position and secured; the cost was \$21.62.

A dredge having been engaged by the department, it commenced work on the 24th May, and by the 30th June instant, has taken out two cuts, extending from the 14-foot line out in the lake through the channel, between the piers, into the inner harbour, across same to the salt works and lumber yards, thus giving the relief necessary.

[1892]

The dredge worked 328½ hours, and removed 14,159 cubic yards (scow measurement) of material, the cost being \$2,626 for the dredging and \$96 for inspection. Total \$2,722.08.

## KINGSTON.

Kingston is at the foot of Lake Ontario ; 172 miles west of Montreal.

The work which has been going on at Point Frederick shoal, for several seasons, was continued during the past fiscal year.

In 1891, work was stopped for the season on the 7th November, and was resumed on the 28th May, 1892, the total number of yards of stone removed amounting to 2,751.

The plant received a thorough overhauling, the hoisting scow being redecked and otherwise strengthened.

The dredge "Nipissing" worked about three weeks deepening approaches to the wharves, removing 4,330 cubic yards of clay.

## KINGSTON GRAVING DOCK.

During the fiscal year 1891-92 the dock, pumping plant, caisson, engine house, and chimney which were under contract were completed.

A travelling crane capable of lifting 3 tons was erected in the engine room. The department constructed and placed in position by day's labour 32 bilge blocks, with the necessary chains for hauling the same.

The first vessel which was placed in the dock was the steamer "St. Lawrence" of the Thousand Island Steamship Company. This vessel was docked on the 28th November, 1891, remaining in the dock until the 9th April, 1892.

From the opening of the dock, until the close of the fiscal year, 21 vessels of various descriptions were docked, the revenue derived therefrom amounting to \$2,105.70.

The dock is in thorough working order, the machinery and everything connected therewith being of the very best description.

## KINGSVILLE.

Kingsville is in the electoral district of South Essex, on Lake Erie ; it is also a station on the Detroit, Essex and Lake Erie Railway, and is distant about 25 miles from the mouth of the Detroit River.

At the last session of Parliament, the sum of \$1,500 was voted for repairs at this place, and on the 9th October last, authority was given to expend \$1,250 out of the sum voted for effecting most urgent repairs to the eastern pier. Work was at once commenced and the amount authorized, viz., \$1,250 was all expended for materials and labour by the end of December last. 35,727 feet board measure pine, 2,200 feet board measure oak, 320 feet board measure elm, and 11,188 lbs. iron being used in the work, and the labour cost \$445.12

## LITTLE CURRENT.

Little Current is the passage between Cloche Island and Great Manitoulin Island, and is distant from Collingwood, by water, about 140 miles. This passage or channel is used by vessels which take the northern channel, bound for Sault Ste. Marie from Georgian Bay ports.

After the arrival of the plant from Parry Sound, work in the channel was resumed on the 19th October, and continued until the 7th of November, when the scows, &c., were hauled out and the plant placed in winter quarters.

The amount of rock removed between the above-named dates, was 440 cubic yards, at a cost of \$259.92.

In the spring the plant was thoroughly overhauled in readiness for the season's work.

## MEAFORD.

Meaford is a town in the County of Grey, on the south shore of the Georgian Bay, 115 miles north of Toronto.

The dredge "Challenge" worked here from the commencement of the fiscal year, until 21st August, making a channel 50 feet wide and 675 feet long, between the piers, to a depth of 15 feet.

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Quantity dredged, consisting of hard-pan, gravel and clay, 12,750 cubic yards.

### NATION RIVER.

Parliament voted at the session of 1891 the sum of \$4,000 for the purpose of aiding the united Counties of Stormont and Dundas in the large expenditure incurred by them in the drainage of the Nation River.

The work consisted in the removal of the Chesterville dam, and the deepening of the river at certain points, so that a channel of 50 feet in width, with an average depth of 2½ feet, has been obtained, and valuable lands on both sides of the river will no longer be submerged during high water in the spring.

The work cost \$61,003.24, the Government of Ontario contributing \$7,000 and the Dominion Government \$12,500, including the \$4,000 voted at the session of 1891.

### OAKVILLE.

Oakville is situated on Lake Ontario, in the County of Halton, 22 miles west of Toronto and 18 miles east of Hamilton.

A balance of \$546.99 being to the credit of Oakville, on the 17th May last instructions were issued to expend same upon dredging; this amount was increased to \$1,000, the difference between the amount being taken from the vote "Dredging, Ontario."

A dredge was engaged, and active operations were commenced on the 2nd June, and the appropriation had all been expended on the 17th. The contractor worked 120 hours, removing 5,190 cubic yards of material.

The municipal authorities paid for the inspection, and also kept the dredge at work some days at their own expense.

Vessels can now call at this place.

### OTTAWA RIVER.

During the fiscal year, Government dredge "Nipissing" worked making a channel 50 feet wide about 4,000 feet long and 10 feet deep at low water, through the shoal known as No. 5, about 9 miles below Ottawa.

Quantity removed, consisting of clay, sand and sawdust, 25,110 cubic yards.

Dredge "Queen" also worked several months on the same shoal, making one cut 25 feet wide about 5,000 feet long to a depth of 10 feet at low water.

Quantity removed, consisting of sand and sawdust, 23,402 cubic yards.

Dredge "St. Louis" also worked on shoal No. 5, for about two months, removing 6,150 cubic yards of sand.

### OWEN SOUND.

Owen Sound, is a port of entry and is the chief town of the County of Grey. It is situated on a sheltered arm of the Georgian Bay, 122 miles distant from Toronto.

At the opening of navigation in 1892, owing to the very low stage of the water in the harbour to allow the large steamships to safely leave port, Messrs. Porter, Reid and Canan's largest dredge was engaged to remove four shoals and some obstructions near the wharf to a depth of 14½ feet at low water.

Quantity of material removed from 23rd April to 31st May, consisting of soft clay, sand and gravel 18,422 cubic yards, at a cost of \$2,934.94 or 15.9 cents per yard.

### PARRY SOUND NARROWS.

These narrows are situated respectively 7 and 2 miles south of Parry Sound, and form a portion of the channel called the North or Inner Channel of Georgian Bay, usually taken during rough weather and in the autumn by steam-boats plying between Midland, Penetanguishene and Parry Sound.

At low water both these channels are impracticable to boats drawing over 5 feet, and it often happens, when heavily laden, they are obliged to follow the outside channel regardless of weather.

To obviate this necessity of taking the outside channel, the department during the fiscal year commenced the necessary work of improvement to give a depth of 8 feet at lowest stage of water in Lake Huron.

Work was commenced on the 1st June, 1891, and was in progress at the beginning of the fiscal year.

The work at the Two Mile Narrows was extremely difficult. The shoal consisted of the hardest description of conglomerate granite, and owing to the fact that blasting had already been done here by the Ontario Government the surface or face of the rock was shattered and left in holes, and this made it very difficult to drill. After working for some time it was found that little progress could be made with hand drills, accordingly steam drills were procured, and put to work on 30th June, which greatly facilitated and pushed the work. The channel at this place is now 67 feet wide with an average depth of 8 feet.

On the 15th of August, the plant was removed to the Seven Mile Narrows. Operations commenced there and continued until the 13th of October, when the work was completed.

The work at this place was similar to that of the Two Mile Narrows with a little more gravel, quicksand and hard-pan, and the bottom very irregular, and it was next to impossible to drill as the holes were constantly filling up with sand and gravel. The total quantity of rock removed from this place was 1,236 cubic yards. The channel now is 50 feet wide with an average depth of 7 feet 9 inches to 8 feet.

The total quantity of solid rock removed from both Narrows was 2,262 cubic yards, at a cost of \$3.25 per yard, and the total expenditure during the fiscal year was \$5,748.59.

#### PICTON.

Picton is a port of entry and the chief town of Prince Edward County, situated on the Bay of Quinté.

Dredge "Nipissing" was at work at the close of the fiscal year dredging around the dock, having removed up to 30th June, 1,080 cubic yards of clay.

#### PORT CREDIT.

Port Credit is on the north-west shore of Lake Ontario, 14 miles west of Toronto, at the mouth of the Credit River, in the electoral district of Peel.

On the 8th June instant, the sum of \$1,500 was authorized for expenditure upon dredging in this harbour, and an agreement was made with Messrs. Manning & Macdonald, to do the necessary work.

Active operations were commenced on the 16th June, and up to the 30th instant, the contractors had worked 131 hours and removed 4,535 cubic yards of material.

The work was still in progress at the close of the year.

#### PORT ELGIN.

Port Elgin, in the electoral division of the southern portion of the County of Bruce, is on the eastern shore of Lake Huron, about 24 miles north of Kincardine.

At the last session of Parliament the sum of \$1,000 was voted for the purpose of completing the sheathing of the groin; and orders were issued on the 24th November last to do the work by day's labour.

The work was completed in March last and effectually prevents the silting in of the sand into the harbour, from the shore side. The whole of the appropriation, viz., \$1,000, was expended.

#### PORT HOPE.

Port Hope is a port of entry on Lake Ontario, in the County of Durham, 63 miles east of Toronto.

With the amount appropriated, general repairs were made to different portions of the superstructure of the harbour works.

## Department of Public Works.

The dredge "Ontario" worked here cleaning up some shoals in the harbour from 20th September to 30th November, 1891.

Quantity of sand, clay and gravel removed, 16,090 cubic yards.

### PORT STANLEY.

Port Stanley is about 85 miles from the entrance to the Welland Canal, and 8 miles south of the city of St. Thomas. It is in the electoral district of Elgin, and the terminus of the Grand Trunk Railway from London.

At the last session of Parliament the sum of \$5,000 was voted for repairs to the piers or wharves at Port Stanley, and authority to expend the amount was issued on the 9th November last.

A careful examination was made in order to decide the best way of doing the work, and it was found that the sum voted being only sufficient to do the most urgent repairs, the work could not be specified or shown by a plan. Consequently, the only satisfactory way to do the repairs was by day's labour, and on the 11th November, orders were given to commence active operations at once.

Work was continued all winter and the appropriation expended by the 31st May last. Six hundred feet in length of the western pier at its northern end has been entirely rebuilt up from low water and replanked, giving every facility for vessels to load and unload at the warehouses. Eighty-four feet in length of the eastern pier at the shore end was also rebuilt from low water and replanked. The whole of the western and eastern piers were replanked, and new stringers placed in position where required, also guard timbers and walings.

### RIVER KAMINISTQUIA.

The River Kaministiquia empties into Thunder Bay, Lake Superior, to the westward of Port Arthur.

From this river, large quantities of wheat are shipped to the east, and to accommodate these a large amount of dredging has been done on the bar in the bay and in the river itself.

At the elevators, the river is narrow, and vessels could not turn without much difficulty, so to obviate this, a contract was entered into in April, 1892, for the formation of a turning basin at McKellar's Creek, and for dredging at other points where necessary, and at the close of the fiscal year the works were in progress.

### RIVER THAMES.

This river empties into Lake St. Clair, and is navigable as far as the town of Chatham, Kent County.

On the 21st April last, the sum of \$1,200 was authorized to be expended in dredging a channel through the bar, at the entrance of the river, into the lake, and an agreement was made with the Chatham Dredging Company to do the work for 18 cents per cubic yard, measured in the scow. Operations were commenced on the 14th May, and continued until the 18th June, when the contractors had removed 5,550 cubic yards for which they were paid \$999. The inspector's wages and expenses were \$132. Total expended, \$1,121.

Vessels can now run in and out of the river without any trouble.

Dredging at this place will be necessary, from time to time, until the shorter and more direct line into deep water, in the lake, is adopted and the channel protected.

### RONDEAU.

Rondeau is situated on the north shore of Lake Erie, about 140 miles west of Port Colborne, the Lake Erie entrance to the Welland Canal; it is a harbour of refuge.

At the last session of Parliament the sum of \$3,500 was voted for repairs to the works, and on the 9th October last, authority was given to expend this sum in rebuilding the remaining portion of the old dilapidated superstructure of the eastern pier, over the outer 135 feet of the end, and also in effecting such slight repairs to the western pier as might be required.

[1892]

Work was commenced as soon as possible, and good progress made until January, when the weather became too severe for work. In March, work was again commenced and completed, \$3,404.21 being expended by the 30th June, 1892.

Rondeau Harbour is at present useless for vessels of large size, either trading, or running in for shelter, as the mouth is blocked with a bar and the basin inside the harbour is very shallow, and small. The structures at this harbour are now in perfect repair.

#### SOUTHAMPTON.

Southampton is in the electoral district of North Bruce, and is situated at the mouth of the Saugeen River, which empties into Lake Huron, 143 miles above Sarnia. It is the terminus of the Wellington, Grey and Bruce division of the Grand Trunk Railway.

The harbour is formed by a breakwater, extending from the mainland out towards Chantry Island, a distance of some 2,000 feet, and a landing pier, some 600 feet to the southward of this breakwater, extending 960 feet out into the roadstead. The roadstead is formed by a breakwater extending from Chantry Island, towards the mainland. On the south side of these breakwaters, a refuge for shipping is formed.

At the last session of Parliament the sum of \$5,000 was voted to complete the extension of the Landing pier, 200 feet in length, commenced by Messrs. Nicholson & Bates in 1889, and taken from them in April, 1891. A contract was let to Mr. George E. Smith, of Southampton, on the 9th April last, to complete this work, and this he did by the 21st of June, 1892. The contract was let for \$5,700, Mr. Smith taking over the materials delivered by the late contractors and paid for by this department.

#### THORNBURY.

Thornbury is situated on the west side of the Georgian Bay, at the mouth of the Beaver River, in the County of Grey, 13 miles west of Collingwood. It is a station on the northern division of the Grand Trunk Railway.

On the 26th October last, an order was issued to expend the sum of \$600 out of the general vote—"Harbours and Rivers, Ontario"—to repair the approach to the landing pier, the work to be done by day's labour.

The work consisted in removing the wreck of 100 feet of old-pile protection-work, on the inside of the approach to the pier, and rebuilding same with new material and making up the embankment with gravel.

The work was completed in May last, and the sum of \$599.99 was expended.

A channel was made by the dredge "Challenge" through a bar of hard-pan and stones, at the entrance to the harbour, to a depth of 13 feet, the quantity removed being 9,840 cubic yards.

#### TORONTO.

The harbour of Toronto is formed by the Island and has its principal entrance at present from the westward. For purposes of navigation, dredging was continued during the year, to keep the eastern channel opened to a depth of 12 feet, 125,984 cubic yards of sand having been removed during the year.

For the protection of this channel, two rows of cribwork are being constructed, one on each side of the channel, and during the past fiscal year 26 cribs were sunk in place, namely: 9 on the east side and 17 others connecting the east pier with Fisherman's Island, making to the present time, 33 cribs sunk, besides which, there are 8 other cribs in different stages of construction. 1,900 lineal feet of superstructure was constructed and filled with stone.

A further quantity of heavy stone talus was placed in front of the island breakwater, making a total of 5,900 feet in length thus protected. 2,000 lineal feet of talus was also placed on the bay side of the breast-work, and a crib was sunk at its west end to form the commencement of a groyne to protect the shore as this point from erosion.

# Department of Public Works.

## TRENTON.

Trenton is a port of entry on the Bay of Quinté, at the mouth of the River Trent, 101 miles by rail east of Toronto.

At the beginning of the fiscal year the dredge "Ontario" was at work dredging a channel between the town of Trenton and the Murray Canal. This channel was made 90 feet wide and 10 feet deep, and the dredging extended over a length of 1,350 feet, the quantity of clay, gravel, hard-pan and stones removed being 10,410 cubic yards.

The dredge "St. Louis" also worked here in conjunction with the "Ontario" and removed 4,475 cubic yards of clay.

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## PROVINCE OF MANITOBA.

### RED RIVER.

At a point 18 miles from Selkirk, the river is divided into three branches known as the east, centre and west. The west channel is the one adopted as the best in the interests of navigation, and it is at the mouth of this branch in Lake Winnipeg, that dredging operations have been going on during several seasons past.

The bar at the mouth of the west branch through which a channel has been dredged, is a little more than a mile in length. This year the work has been much delayed by the constant high water. The total number of cubic yards of material removed was 48,780.

### WHITE MUD RIVER.

The mouth of the White Mud River is 9 miles west of Westbourne in the County of Marquette. Westbourne is on the Manitoba and North-western Railway and is the place of transhipment to and from Lake Winnipeg, and is 17 miles from the town of Portage la Prairie. During the past year the dredge "Priestman" continued the work of improving the channel, but owing to the machinery and the scows being much out of repairs, the quantity of work performed was not as large as it might otherwise have been, 40,973 cubic yards of material being removed.

This channel should be at least 100 feet wide throughout, with a depth of 6 feet at low water.

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## NORTH-WEST TERRITORIES.

### BATTLE RIVER BRIDGE.

This bridge which spans the Battle River at Battleford, was painted and repaired during the year at a cost of \$1,059.42.

### BELLY RIVER BRIDGE, LETHBRIDGE.

Belly River bridge is situated in the north-west quarter of Section 1, Township 9, Range 22, west of the Fourth Principal Meridian, and about 2 miles from the town of Lethbridge.

The construction of the east and west approaches to the bridge, has been completed during the year ended 30th June, 1892, and communication established between the two sides of the river.

### BOW RIVER BRIDGE.

Slight repairs were made to the roadway of this bridge, which crosses the Bow River, at the town of Calgary.

### OLD MAN'S RIVER BRIDGE.

This structure crosses the Old Man's River about 1½ miles west of the town of Macleod, in the centre of the west half of Section 10, Township 9, Range 26, west of the 4th Initial Meridian.

In April, 1891, a contract was entered into for the construction of a bridge across the river, to consist of two spans of 150 feet each, one pier, two abutments and excavations and trestle work approach on the north side, and an embankment on the south side. The whole being completed by 31st December, 1891. Wind braces were also put in, the work being done under the direct charge of an officer of this department.

## PROVINCE OF BRITISH COLUMBIA.

### COLUMBIA RIVER ABOVE GOLDEN.

In consequence of the lateness of the season when authority was received to commence operations above Golden, but little beyond strengthening and repairing some of the dams, was done last fall.

Early this spring before the ice began to move in the river, men were employed getting out brush and stones, preparatory to building the proposed dams at Red Rock. However, as the ice moved, several of the existing dams below Red Rock showed signs of weakness, and demanded repair and in part rebuilding. This was done, as it would have been useless to improve the river at Red Rock if it was impossible to reach that point, owing to bars forming lower down, which would have happened, if the dams mentioned above, had not been attended to. In consequence of this, and a rapidly rising river, only about 1,200 feet of dams were built at Red Rock.

The general result of the work has been satisfactory; the steamer has been enabled thereby to run later in the fall and resume running in the spring at lower stages of the water than usual.

### COLUMBIA RIVER BELOW KOOTENAY.

Between January and April last, work was carried on over that portion of the Columbia River lying between the head of the Kootenay Rapids and the International boundary line, a distance of about 30 miles. The winter time is the most favourable for carrying on river work, because, notwithstanding the low temperature and the depth of the snow, the river itself never freezes up, and consequently as the water falls sunken rocks are exposed and easily removed.

It being impossible to obtain labour in this locality in the winter, it was arranged that the men who had been employed on the upper portion of the river should immediately upon the first signs of the river closing there, which it does every winter, proceed by steamer "Dispatch" to Robson, and there await a favourable stage of water to commence work.

The works executed embraced: (1) the strengthening and repairing of the wing dams in the Kootenay Rapids; (2) the blasting and removal of 5 large rocks and the middle ground in the Tin Cup Rapids,  $2\frac{1}{2}$  miles below the Kootenay Rapids; (3) the building of a wing dam at these latter rapids 145 feet long to increase the depth over the bar; (4) the blasting and removal of 14 rocks, large and small, between the Tin Cup Rapids and Rock Island, the latter 7 miles above the boundary; (5) the removal of a point of rock on the left hand side, 50 x 25 x 6, just above Rock Island, to relieve the high water flow and building a wing dam out from the same point with the excavated material to divert the low water flow into one channel, and (6) the removal of 7 sunken rocks just below Rock Island.

The expenditure amounted to \$6,522.67.

### COLUMBIA RIVER BELOW REVELSTOKE.

Work was resumed between Revelstoke and the Arrow Lakes last October and continued until the cold weather set in. In the spring it was again proceeded with until the appropriation was exhausted.

During both periods operations embraced: (1) renewing the wing dam, and removing boulders by blasting, from the channel of the river at Six Mile Bar, below Revelstoke, and blowing up an old dam at the head of the bar; (2) removing, with



## Department of Public Works.

dynamite, snags from the channel and cutting overhanging trees between Revelstoke and the lakes ; (3) erecting pile beacons of three piles each to mark the channel between the two lakes, and (4) removing boulders from the bed of the river abreast of the landing at Robson.

The expenditure amounted to \$5,995.51.

### COURTNEY RIVER.

The Courtney River flows into Baynes Sound, on the east coast of Vancouver Island.

The construction of protection works on this river at its junction with the Trent (Isolume) was commenced in March last, and continued until the appropriation was exhausted.

The site of the work is at a point where the Trent River, a mountain stream, meets the Courtney almost at right angles, with the result that the current impinges strongly against the bank of the latter, washing it away.

The method adopted to arrest the destructive action of the current may be briefly described as follows : a row of piles at about 8 feet centres was driven in the stream at a varying distance from the bank, but conforming generally to the bend of the river. Each pile was then firmly secured to the bank by a tie-piece bolted to the top of the pile, and to an anchor pile sunk in the ground, a secure distance back from the edge of the bank. To the inside of the piles were bolted, top and bottom, waling pieces 8 inches by 10 inches, and to the outside, 2 inch plank was spiked so that a smooth surface would be presented to the current, thus avoiding the stoppage of floating timber. The space between the piles and the bank was closely packed with brush and stone. In all about 276 lineal feet of this protection was built.

### COWICHAN RIVER.

The Cowichan River empties into Cowichan Bay, which is situated on the east coast of Vancouver Island.

During the past year the sum of \$1,310.67 was expended in removing buried logs and roots and drift-timber from the channel of the river.

### ESQUIMALT GRAVING DOCK.

In accordance with authority received, various pressing repairs were effected to the pump-wells and foundations of the large pump engines as follows : (1) the brickwork for about 18 inches in depth above the iron rims, to which are attached the barrels of the two large pumps, was cut out, having shown signs of weakness, and repaired with cut sandstone laid in Portland cement, mortar or compo ; (2) the brick lining of the pump wells on which a part of the iron engine bed or frame rested was badly cracked and shaky, and was cut out down to the bottom of the holding-down bolts, a depth of 10 feet, and replaced with solid sandstone masonry, the bottom and top stones in both pump-wells being 10 feet long by 3 feet wide by 18 inches deep ; (3) a large portion of the floor of the engine-house, which was badly cracked by settlement, was broken up and relaid with Portland cement concrete, and (4) about half of the wall of the engine-house facing the dock was pulled down and rebuilt on a solid foundation.

Upon completion of these repairs the engine bed frame was levelled and the engines lined up. It is now probable that no more settlement of foundation will occur. The expenditure amounted to \$2,410.49.

In addition to these extraordinary repairs, many minor repairs have been from time to time effected, such as painting generally, rebedding and lining large centrifugal pump and engine, and boring out 16-inch steam cylinder and turning up engine shaft.

During the year, 18 vessels in all occupied the dock for various periods, the revenue derived therefrom amounting to \$18,416.23.

### FRASER RIVER.

During the past year, the sum of \$13,413.88 has been expended in continuing the work of improving the channel through the sand banks at the mouth of this river. The

remaining portion of the appropriation of \$20,000, was devoted to protection works above Miller's Landing, 60 miles from the mouth.

The 40 mattresses sunk were 80 feet long each. Of these 10 were sunk on the north side extending the north jetty 800 feet, and 30 were sunk on the south side, extending the south jetty, 2,400 feet.

It is proposed this season to extend the jetties seawards simultaneously in parallel straight lines, keeping the general direction of the south jetty.

#### MILLER'S LANDING.

In accordance with instruction, work was commenced last February upon the construction of a wing dam, on the south bank of the Fraser River, about  $1\frac{1}{4}$  miles above Miller's Landing, for the purpose of protecting the bank of the river, between the site of the works and Mr. Miller's house, which has been rapidly washing away for many years, resulting in the loss of many acres of valuable land.

The cost of this work, was to be defrayed out of \$5,000 deducted from the appropriation for the improvement of the channel at the mouth of the river.

As the work progressed it was apparent that unless the dam was at least 500 feet out from the bank to deep water, its stability was questionable, and that more harm than good would be accomplished. For these reasons, it was decided to build the dam that length before stopping work.

#### NICOL ROCK, NANAIMO HARBOUR.

The city of Nanaimo is situated on the coast of Vancouver Island, about 72 miles north of Victoria. It is the port from which the whole of the coal produced at present in the province is shipped, consequently a great number of ships of large tonnage visit the harbour.

On the 23rd June last, after continuous work extending over a period of  $4\frac{1}{2}$  years, Nicol Rock (Sandstone) lying dangerously close to the wharves of the New Vancouver Coal Company, was successfully removed to a depth of 16 feet at low water spring tides.

During the period of operations above mentioned, 6,101 lineal feet of holes were drilled, and then exploded with 7,160 pounds of highest grade giant powder. The amount of rock afterwards removed by dredging amounted to, calculated by average areas from cross sections, 3,014 cubic yards or 6,507 tons, allowing, by experiment, 2.16 tons to the cubic yard. During the progress of the work an account was kept by the foreman of the number of scows loaded, and the draft of each loaded and unloaded; from this the number of tons of rock dredged was calculated by the displacement of the scow, and was found to amount to 6,597 tons, only 90 tons in excess of the quantity calculated by cross sections. This points in a satisfactory manner to the care and attention displayed by the foreman in charge.

#### NICOMECKLE RIVER.

The Nicoméckle River is situated in the southern part of the district of New Westminster, and empties into Boundary Bay.

The sum of \$483.76 has been expended in clearing the channel of the river above the Clover Valley Road bridge, of snags, brush and overhanging trees.

#### SKEENA RIVER.

The Skeena River is situated in the northern part of British Columbia.

The sum of \$2,000 appropriated for the improvement of the navigation of this river, has been expended in removing various rocks which obstructed navigation in the Gitchilache Canon of this river.

#### SOMAS RIVER.

The Somas River empties into the Alberni Canal, which forms the upper portion of Barclay Sound on the west coast of Vancouver Island.

The amount available was expended during the past year, in removing snags from the navigable channel between the mouth and the Post Office at Saywards.

## Department of Public Works.

### VICTORIA HARBOUR.

Work was resumed in October last, in connection with the improvement of the Inner Harbour, Victoria, and consisted in lowering to a depth of 14 feet mean low water springs, two rocks known as Pinnacle and Beaver Rocks, at an expenditure of \$5,998.09.

During the season 839 lineal feet of holes were drilled, and exploded with 1,126 pounds of No. 1 giant powder, with the result, that, 229 cubic yards or 504 tons, allowing 2.2 tons to the cubic yard, were dredged and removed. Of this quantity 282 tons were disposed of to several persons at the rate of 50 cents per ton, and the proceeds amounting to \$141.00 were deposited to the credit of the Receiver-General of Canada at the Bank of British Columbia.

In accordance with instructions received, the offer of R. P. Rithet & Co. (Limited) to dredge with their dipper dredge "Mud Lark," the Outer Harbour abreast of the wharves of that Company, to a depth of 30 feet mean low water springs, at the rate of 20 cents per cubic yard of dredged material, was accepted. On the 7th March last operations were commenced, but after working for a little more than a month the Company found that the price they were getting was not sufficient to pay running expenses. They therefore concluded to cease work.

The amount expended was only \$1,152.53, which includes the wages of the inspector.

### SURVEYS AND EXAMINATIONS.

During the year surveys and examinations were made at the undermentioned localities; and with some exceptions, plans, reports and estimates have been submitted:—

Bay View,	Queen's Co.	P. E. I.	Hiltz Narrows,	Lunenburg,	N. S.
Campbell's Cove,	King's,	do	Iona,	Victoria,	do
Higgin's Pier,	Prince,	do	La Have Islands,	Lunenburg,	do
Hurd's Point,	do	do	Little Harbour	do	do
Mink River,	King's,	do	Mackay's Point,	Victoria,	do
McGie's Shore,	Prince,	do	Maitland,	Hants,	do
Newport, North Cardigan	King's,	do	Malignant Cove,	Antigonish,	do
Souris,	do	do	Meagher's Beach,	Halifax,	do
Souris east	do	do	Merigomish,	Pictou,	do
South Rustico,	Queen's,	do	Mill Cove,	Lunenburg,	do
Stephen's Pier,	Montague, King's,	do	Morden,	King's,	do
Sturgeon,	King's,	do	New Haven,	Victoria,	do
Victoria, (Crapaud),	Queen's,	do	Parrsboro, Partridge Is-		
West Cape,	Prince,	do	land River,	Cumberland,	do
Advocate Harbour,	Cumberland,	N. S.	Petite Rivière,	Lunenburg,	do
Apple River,	do	do	Pickett's Pier,	King's,	do
Aspy Bay,	Victoria,	do	Salmon River,	Digby,	do
Boularderie Island	do	do	Saw Pit Wharf,	Lunenburg,	do
Baddeck	do	do	Scotch Cove,	Victoria,	do
Bayfield,	Antigonish,	do	Soldier's Cove,	Richmond,	do
Bear River,	Digby,	do	Spencer's Island,	Cumberland,	do
Bear Trap,	Lunenburg,	do	Summerville,	Queen's,	do
Big Tracadie,	Antigonish,	do	Volger's Cove,	Lunenburg,	do
Blue Rock	do	do	West Arichat,	Richmond,	do
Canada Creek,	King's,	do	Western Head		do
Cape John,	Pictou,	do	Brown's Wharf,	Richibucto,	N. B.
Caribou Island	do	do	Buctouche,	Kent,	do
Chipman's Brook,	King's,	do	Campbellton,	Restigouche,	do
Digby,	Digby,	do	Cape Tormentine,	Westmoreland,	do
Dunn's Lake,	do	do	Clifton,	Gloucester,	do
False Bay Beach,	Cape Breton,	do	Emerson's Creek,	St. John,	do
Five Islands,	Colchester,	do	For. Dufferin	do	do
Fox Island,	Halifax,	do	Grande Anse,	Westmoreland,	do
Georgeville,	Antigonish,	do	Grassy Island, St. John		
Halifax Quarantine Stn,	Halifax,	do	River,		do
Hall's Harbour,	King's,	do	Lower Caraquet,	Gloucester,	do
Herring Cove,	Halifax,	do	Mispec,	St. John,	do

Partridge Island, St.			St. Zotique,	Soulanges,	P. Q.
John Harbour,	St. John,	N. B.	Burlington Channel,	Wentworth,	Ont.
Pointe du Chene,	Westmoreland,	do	Colpoys,	Bruce,	do
Rampasture Neck,	do	do	Dyer's Bay,	do	do
Richibucto,	Kent,	do	Goderich,	Huron,	do
Tracadie,	Gloucester,	do	Hamilton,	Wentworth,	do
Baie des Bacons,	Saguenay,	P. Q.	Lakeport		
Bic,	Rimouski,	do	L'Original,	Prescott,	do
Cedars Rapids, River			Madawaska River		do
St. Lawrence		do	Maria Street Bridge,		
Côte Ste. Catherine		do	Ottawa		do
Father Point,	Rimouski,	do	Otonabee River		do
Grande Rivière,	Gaspé,	do	Ottawa River Narrows		
Grandes Bergeronnes,	Saguenay,	do	above Pembroke		do
Lacolle,		do	Owen Sound,	Grey,	do
Longueuil,	Chambly,	do	Port Albert,	Huron,	do
Quebec Customs House			do Arthur,	Algoma,	do
Wharf,	Quebec,	do	do Rowan,	Norfolk,	do
River L'Assomption,	L'Assomption,	do	do Stanley		do
do Noire,	Charlevoix,	do	Portage du Fort Bridge		do
do Ouelle,	Kamouraska,	do	River Beaudette,	Glengarry.	do
do St. Lawrence,		do	River Sydenham		do
do St. Louis,	Beauharnois,	do	Southampton		do
Sandy Bay,	Rimouski,	do	Thessalon,	Algoma,	do
Ste. Anne de la Perade,	Champlain,	do	Vermillion River		do
do des Monts,	Saguenay,	do	Gimli,	Lake Winnipeg	Man.
St. Denis			Icelandic River		do
St. Felicien, River			Bow River Bridge		N. W. T.
Ashuapmouchonan,	Saguenay,	do	Wascana Dam		do
St. François d'Orleans,	Montmorency,	do	Esquimalt Dock		B. C.
St. Jean des Chaillons,			James Creek,		do
Riv. St. Lawrence,		do	Okanagan River		do
St. Simeon,	Charlevoix,	do	Skeena River		do
St. Valentin					

## DREDGING.

## "THE ST. LAWRENCE."

At the close of the last fiscal year, this dredge was at Richibucto, a harbour in Kent County, New Brunswick, on the south-west shore of the Gulf of St. Lawrence north from Shediac Harbour, the eastern terminus of the Intercolonial Railway. The entrance of the Richibucto is nearly 350 fathoms wide, between two sand bars, several miles in length, called the north and south beaches, on which are high sand hills; vessels that can go over the bar can be taken 12 or 13 miles up the river, and smaller vessels go up nearly 20 miles. Ordinary spring tides rise 4 feet; neaps  $2\frac{1}{2}$  feet.

The improvement of the Albion or middle channel, through this shifting bar, to permit vessels of a deeper draft over it, is the work of the "St. Lawrence" at Richibucto.

The dredge remained working there when tides and weather permitted until 28th October last, when orders were received for her removal to Halifax, N.S.

The dimensions of the work performed on the middle channel are as follows: whole length of cutting 145 fathoms; width of cutting, first length of 75 fathoms, 125 feet at entrance to 90 feet; width of second cut length of 70 fathoms 90 feet, decreasing to 65 feet; depth of first length 15 feet, second length 11 to 13 feet, bringing the work in to 9 feet at low tide.

The total quantity of material removed during the season at Richibucto was 20,388 cubic yards of fine sand.

On 30th October, the dredge sailed for Halifax, N.S., where she was placed on the marine slip and had her bottom scraped and painted. Leaving Halifax on 19th November, she arrived at St. John, N.B., on the 22nd, and was placed in winter quarters at York Point slip, and preparations made for the removal of the old boiler and placing of the new one, then building under contract by Mr. James Fleming, of the Phoenix works, St. John, and for other repairs necessary.

## Department of Public Works.

Owing to a flaw in the lower tumbler of the bucket-ladder, a new one was constructed and two spare flanges fitted ready for use.

The engines, condenser pumps and deck winches were taken down, repaired and placed in working order, and work on the new boiler was prosecuted by the contractor to completion. A new Stratton steam separator and tap was put in. On the 9th day of June last, a trial trip of the dredge was made, when everything was found to work to satisfaction, especially the new boiler and separator. The engineer of the dredge reports that on the trial, the boiler steamed easily and the engines made ten revolutions per minute more than with the old boiler.

On the 11th June, this dredge was ordered to Sherrows' Channel, Barrington, Shelburne County, N.S., to prepare further accommodation for vessels arriving and lying at the new pier. On the 12th it left St. John, N.B., arriving on the 14th at its destination. A tug was required and authorized to assist the dredge at this work owing to the narrowness of the channel and shoalness of the place to be dredged.

The dimensions of the excavation made are : width of cutting, first length outside 65 feet, second, or middle length 62 feet, and third or inside length 50 feet, are to the depth of 14 feet. The length of cut made is 175 feet and the material removed was 4,375 cubic yards of mud. Work was completed 27th June and according to orders the dredge left for St. Peter's Canal, Richmond County, N.S.

The total quantity removed by this dredge during the year was 24,763 cubic yards of sand and mud, at an average cost of 55 cents per cubic yard including expenditure for repairs, &c.

There was received from the steamer "Weymouth" and R. P. McGivern for coal at Weymouth the sum of \$98.57, which was placed to the credit of the Honourable the Receiver-General.

### "CANADA."

The above dredge was on 1st July, 1891, operating at the entrance to Mabou Harbour, Inverness County, N. S. It continued work to the 2nd of August, when a further quantity of 8,100 cubic yards of gravel stone and sand was removed, extending the cut in the channel 600 feet by 85 feet, over which 4 feet were taken off. A cut at the Mabou Gypsum Co.'s new wharf, 100 feet by 60 feet was made over which 3 feet were taken off. Springs rise 4 feet and neaps 2 feet, and at low water the tide runs over 4 knots. Leaving Mabou, the dredge arrived at Cheticamp 3rd August, and commenced work in the channel at that place ; 800 feet in length by 100 feet wide was dredged, from 1 to 6 feet being taken off by 24th September, and with the running in of slopes the quantity removed was 10,260 cubic yards of gravel, sand and boulders. Spring tides rise 3½ feet and neaps 2 feet.

The dredge left for and arrived at Port Hood 24th September, where work was taken up at the public wharf, and a cut made 185 feet in length by 60 feet wide in front of the same, over which 3½ feet were taken off leaving, a depth of twelve feet at low water, 1,553 cubic yards of sand having been removed.

The dredge left for Mabou 11th October, resuming work there until the 29th of the same month, making a cut in front of the breakwater 360 feet long by 100 feet wide, from which 1 to 6 feet were taken off, removing 1,980 cubic yards of gravel, stone and old timber. The dredge left Mabou at the above date, and arrived at Cheticamp the 1st of November, where it operated until the 7th of that month, making a cut 80 feet long by 65 feet wide, over which 5 feet were taken off, 720 cubic yards of sand and gravel being removed.

Owing to stormy weather the dredge was detained at Cheticamp, and it only arrived at Pictou, N.S., on the 11th November, where, previously to going on the marine slip for the winter, work was resumed at the Pictou Market Wharf, and a cut 280 feet long by 60 feet wide was made, over which from 3 to 6 feet were taken off and 1,530 cubic yards of mud removed, the work closing on the 25th November, when the dredge was placed on the marine slip. The necessary repairs to dredge and machinery were made and completed by the 27th April ; orders were received and the dredge worked for the Acadia Coal Company at their wharves near Pictou Landing, N.S., removing 1,260 cubic yards of mud and clay, giving an increased depth of water at the wharves.

West side of West Wharf, 100 feet long by 40 feet wide ; east side of West Wharf, 250 feet long by 40 feet wide ; west side of East Wharf, 100 feet long by 40 feet wide ; east side of East Wharf, 50 feet long by 40 feet wide. For this work the sum of \$275 was received and placed to the credit of the Honourable the Receiver-General.

Orders having been received for this dredge to resume work at Mabou, it left Pictou 5th May, for that place, and arrived on the 7th, after a stormy passage. Work was under way by the 10th May, and consisted in the removal of shoals in the channel. The material excavated was gravel and sand amounting to 5,940 cubic yards, and on the 2nd June, work was closed and the dredge removed to Cheticamp, Inverness County, N.S.

On the 4th June, work was commenced at Cheticamp, N.S., continuing until 29th June, completing the channel to 14 feet depth, removing the further quantity of 7,110 cubic yards of sand and gravel.

The total quantity excavated by this dredge during the year was 38,453 cubic yards at an average cost of 25·97 cents per yard.

At the close of the fiscal year this dredge was under orders for Bathurst but detained by unfavourable weather.

“ NEW DOMINION.”

On the first day of July, this dredge had finished work at Perry's Point, Kennebecasis River, King's Co., N.B., and was awaiting the arrival of a steamer to remove it to the Oromocto shoals, between Oromocto and Thatch Islands, Sunbury County, N.B., where it commenced work on the 6th July, from which time to the 11th August it worked on the lower end of the channel on the eastern side of the shoal, making a cut 850 feet in length 45 feet wide to the depth of 14 feet, 6 feet having been taken off.

It then commenced in the channel, at the lower end of Thatch Island on the 12th August, and made a cut towards the Oromocto channel 1,530 feet in length and 45 feet wide, 14 feet deep, taking 7 feet off.

The number of yards excavated up to the 5th day of November was 36,785 of sand and mud, when operations were suspended for the season and the dredge was towed to St. John for winter quarters and usual repairs. Orders were received for this dredge to proceed as early as navigation permitted to operate at Hampton, Kennebecasis River, N.B. On 12th May, it was towed there and resumed the work of deepening and improving the channel at the public wharf.

By the 30th June, 17,850 cubic yards of sand and mud were removed. The dimensions of the work done were one cut 800 feet in length, through a long flat in the channel, 45 feet wide, taking off 7 feet and leaving 10 feet at summer level. One cut 110 feet in length, 40 feet wide, to 10 feet low water, on which 7 feet were taken off, was also made in front of the public wharf.

The quantity removed by this dredge during the year was 54,635 cubic yards, principally sand and mud, at an average cost of 16·99 cents per yard, wintering and repairs included.

“ PRINCE EDWARD.”

At the beginning of the fiscal year, the dredge “ Prince Edward ” was at Alberton, Prince Edward Island. The contract for the new crane being completed, the dredge left Alberton on the 10th of July and arrived at Summerside, Prince County, P.E.I., the following day. There was considerable delay before and after the work was commenced at the eastern side of the railway wharf, on account of unfavourable weather, also through the mail steamer “ Northumberland ” occupying the berth being dredged, from her arrival each day at 4 p.m., until 9 a.m., the following morning.

At the railway wharf a cut was dredged 310 feet in length, 150 feet wide and 15 feet deep at low water springs, 7,316 cubic yards of mud and sand being removed.

Off the north side of the middle ground in the channel between the railway wharf and Beacon light, a strip 1,340 feet in length, 65 feet wide, was removed to a depth of 15 feet, low water spring tides, 6,225 cubic yards of sand and mud being removed. Spring tides rise 7 feet and neaps 5 feet. The work was closed on 16th October and the dredge ordered to Montague.

## Department of Public Works.

The dredge left Summerside 28th October, having been detained by unfavourable weather and arrived at Charlottetown the same evening. On the 31st, owing to orders which were received, and in accordance therewith, the dredge was towed to Pownal Wharf and commenced work deepening around the wharf, widening the basin and making the entrance from the harbour easier of access for steamers. This work was completed by the 16th November, 3,243 cubic yards of sand and mud being removed.

On the 21st November, the dredge and plant were removed to Georgetown, King's County, P.E.I., and worked there from the 2nd to the 7th December, in front of the Prince Edward Island Railway wharf. The cut dredged was 254 feet in length, 67 feet wide, 16 feet at the inner end and 19½ feet deep at the outer end, at low water springs, and the material removed was 1,002 cubic yards of sand.

At the last mentioned date, the dredge and plant were placed in winter quarters at this place. Necessary repairs were made to dredge, machinery and scows, and on the 9th of May, the dredge and plant were taken to Sturgeon Bay, King's County, P.E.I., about 6 miles south of Georgetown, where it operated until the end of the fiscal year, at which time a quantity of 13,596 cubic yards of mud, clay, stone and sand was excavated, the dimensions of the work being a cut from channel to wharf 720 feet in length, 103 feet wide; width of basin at end of wharf 169 feet; a berth at west side of wharf 100 feet in length, 55 feet wide, to 11 feet low water spring tides.

The total quantity removed by this dredge during the year was 31,382 cubic yards of sand, mud and clay at an average cost of 40.75 cents per yard.

For 3 condemned anchor posts sold to the Prince Edward Island Railway the sum of \$20 was received, and placed to the credit of the Honourable the Receiver-General.

### "GEORGE M'KENZIE."

On the 1st of July, the above-named dredge was engaged at Cheticamp, Inverness County, N.S., where it remained until the 28th July, when a further quantity of 6,970 cubic yards of sand, gravel, kelp, &c., were removed.

The channel had previously been dredged to a width of 60 feet and a depth of 12 feet, but it had filled up in places, leaving the depth but 7 feet.

The cut now made is 1,200 feet in length, widening the channel 40 feet and leaving 14 feet depth at low water springs.

From Cheticamp the "George McKenzie" went to St. Peter's, Richmond County, N.S., where it arrived the 5th August, to prepare a foundation for a new pier. The dimensions of the excavation were 200 feet long by 30 feet wide, depth 18 feet 6 inches at low water springs, and the material excavated of clay and stone 3,825 cubic yards.

The work having been completed by the 28th August, the dredge was removed to D'Escousse, Richmond County, N.S., to operate on obstructive points in the channel opposite L'avisconte's Wharf. Dimensions of this work, 200 feet by 140 feet, leaving 12 feet at low water. On the Gland Shoal a cut was made 125 feet in length by 40 feet wide, leaving from 9 to 12 feet depth. The material removed at D'Escousse was 8,550 cubic yards of sand and mud up to the 11th October, when the weather became unfavourable and the dredge left for Pictou, arriving there on the 19th October, having been detained by bad weather. At East River, in the County of Pictou, N.S., work was commenced on the 23rd October and closed the 21st November, a cut having been made up the channel 1,150 feet in length by 50 feet wide to the depth of 9 feet at low water springs, over which from 2 to 5 feet were taken off, the quantity removed being 5,555 cubic yards of mud and shells.

At the last mentioned date, the weather proving unfit for further operations, work was closed and the dredge placed on the marine slip at Pictou, N.S., and the necessary repairs were made during the winter and early spring.

This dredge resumed work at the New Glasgow Wharf on East River, Pictou, the 2nd day of May, and was prosecuting the work at the close of the fiscal year, at which date the following work had been done, viz. :—

A cut in front of public wharf 170 feet in length by 20 feet wide to 9 feet at low water; previous depth, dry at side of wharf at low water sloping off to 9 feet. A cut

across toward the old loading ground wharf 926 feet in length, with a width of about 50 feet to a depth of 9 feet at low water, and from the end of the public wharf, a distance of 800 feet by 50 feet, 9 feet deep down the channel.

The depth in the channel before being dredged ranged from 4 to 6 feet at low water. The quantity removed was 14,265 cubic yards of gravel, clay, sand, mud and old trees. This work is more than ordinarily expensive, owing to the great distance the material has to be removed for deposit, some 12 to 15 miles, and two tugs are required for the purpose, eight dump scows or lighters being used.

The total quantity of material removed by this dredge during the year was 39,167 cubic yards, scow measurement, at a cost of 38 cents per cubic yard.

For the work performed at St. Peter's Canal, Cape Breton, the sum of \$1,755 was received from the Department of Railways and Canals and placed to the credit of the Honourable the Receiver-General.

“ CHALLENGE.”

On the 2nd July, the dredge “ Challenge ” and plant resumed work at Meaford, Ont., deepening the channel between piers and in the basin, continuing work there up to 21st August, making two cuts 675 feet long to a depth of 15 feet, the average width being 50 feet, the materials removed consisting of 12,750 cubic yards of hard pan, clay and gravel.

On the 22nd August, the plant was towed to Thornbury, Ont., arriving there the same day, commencing work on 23rd and continuing up to 14th November, making a channel through a bar of hard-pan and stones at the entrance to the harbour, also to the proposed turning basin. Three cuts 500 feet long, 75 feet wide and to a depth of 13 feet were made, removing 9,840 cubic yards of hard pan gravel, clay and stone and sand.

On the 14th of November, the plant was towed to Collingwood, and the dredge was placed in dry-dock to receive such repairs and over-hauling as was necessary to enable it to resume work again in the spring, and on the 14th May, 1892, the dredge started to work at Collingwood on bars both inside and outside of the breakwater, and continued to do so up to the end of the fiscal year, leaving a depth of 14 feet of water, removing 5,970 cubic yards of hard pan and clay.

“ NIPISSING.”

On the 1st July, 1891, the dredge “ Nipissing ” was working on a clay and sand shoal below Jones Island, Lake of Two Mountains, continuing to work there until 30th July, making a cut 500 feet long, 40 feet wide, and to an average depth of 10 feet at low water, removing 8,340 cubic yards of clay and ordinary sand.

On the 1st August, 1891, the plant was taken to Como and was engaged in clearing away a portion of the wreck of steamer “ Dagmar,” at Como Wharf, which work was ended on the 3rd August, after which the dredge and plant was taken to the Ottawa River, on shoal No. 5, to work on a sand bar 9 miles below Ottawa, commencing on 8th August, remaining there up to the 30th October, making two cuts of about 4,000 feet long, 50 feet wide and 10 feet deep, at low water.

The materials removed consisted of 25,110 cubic yards of sand and clay.

On the 1st November, 1891, the plant was taken to Gananoque, arriving there on the 8th, commencing work in the harbour on the 9th, and continuing till the close of navigation, dredging in front of wharves, removing 4,860 cubic yards of sand and boulders.

Much difficulty was experienced here on account of sunken and decayed timber necessitating delay in order to allow of the mechanical appliances being cleaned and readjusted. The plant was laid up at Gananoque for the winter on the 2nd December.

After getting a thorough overhaul and outfit in the spring, the dredge resumed work at Gananoque on 22nd April, 1892, continuing up to the 16th May, on a bar at entrance to harbour, composed of sand and sawdust, removing 6,460 cubic yards.

On the 17th May, the plant was taken to Kingston, arriving there same day, starting to work in the harbour on the 18th, opposite the wharves, deepening the approaches thereto, and continued to work up to 11th June, removing 4,530 cubic yards of mud.



## Department of Public Works.

On the 12th June, the dredge was taken to Collins Bay, arriving on the 13th, commencing work same day, until the 25th on a mud bar, removing 3,300 cubic yards of mud.

The plant was then taken to Picton, Ont., leaving Collins' Bay on 27th and arriving at Picton on 28th, commencing work around the docks on same day, continuing up to end of fiscal year, removing 1,080 cubic yards of mud.

### "ONTARIO."

At the beginning of the fiscal year, 1st July, 1891, the dredge "Ontario" was working at Trenton, Ont., on a shoal between the town of Trenton and the Murray Canal, continuing to work there up to the 5th September, 1891, making three cuts of 1,350 feet long and 90 feet wide, to a depth of 10 feet, removing 10,410 cubic yards of mud, boulders, hard pan and gravel.

On the 6th September, the plant was taken to Belleville, and continued to work there up to the 18th September, working opposite wharves cleaning out deposits, removing 1,800 cubic yards of mud and sand.

On the 19th September, the plant was taken to Port Hope, Ont., arriving there same day, and started to work on 20th cleaning out the harbour, working up to the 30th November, removing 16,090 cubic yards of sand, mud and gravel.

On the 2nd December, the plant was laid up for the winter at Port Hope. After receiving the usual spring overhaul and repairs, it resumed work at Port Hope commencing on the 28th of April and continuing up to the 30th May, 1892, deepening the entrance at old harbour to a depth of 10 feet, removing 9,840 cubic yards of mud and sand.

On the 31st May, the plant was taken to Cobourg, Ont., and started to work there same day, until the 8th June, working on a bar between the piers, removing 3,240 cubic yards of mud and sand.

On the 9th June, the plant was towed to Amherstburg, Ont., arriving there on 18th, beginning work on 22nd, and continuing up to the end of fiscal year, deepening the channel in front of wharves, removing 1,410 cubic yards of gravel and clay.

### "QUEEN."

On the 1st July, the dredge "Queen" resumed work in the Yamaska River, Que., above the lock, continuing to work there until the 12th, making one cut 625 feet long 20 feet wide, to a depth of 7 feet at low water, removing 3,181 cubic yards of clay and sand.

On the 13th July, the plant was taken to the Ottawa River, 9 miles below Ottawa, and started to work on a shoal called No. 5, consisting of sand and sawdust, continuing to work up to close of navigation 12th November, 1892, making a cut 5,000 feet long, 25 feet wide to a depth of 10 feet at low water.

The material removed consisting of 23,402 cubic yards of sand and sawdust.

The plant was then laid up for the winter at Ottawa, on 14th November.

On the 15th of May, the dredge and plant was taken to Belleville, arriving there on the 22nd, commencing work on the 23rd, and continuing up to the end of the fiscal year, working opposite the wharves in the harbour removing decayed piers, &c., and deepening channel in front of same, the materials removed consisted of 7,676 cubic yards of clay and stone, clay, gravel and boulders.

### "ST. LOUIS."

On the 1st July, 1891, the dredge "St. Louis" was working at Trenton, Ont., in conjunction with the dredge "Ontario" and plant, on a shoal between the town of Trenton and the Murray Canal, making a channel through a bar, continuing to work up to the 22nd August, removing 4,475 cubic yards of mud.

On the 22nd August, the plant was taken to the Ottawa River, arriving there on 31st, commenced to dig on the 8th September on a shoal called No. 5, some 9 miles below the city of Ottawa, and continued work there until the 2nd November, 1891, removing 6,150 cubic yards of sand.

On the 2nd November, the dredge was taken to Baie la Vallier and proceeded to dredge a channel between the Yamaska River and Pot a Barre River until the 20th November, the material removed consisted of 1,755 cubic yards of clay.

The plant was taken to Sorel on the 21st November to winter.

In the spring of 1892, after receiving the usual overhaul and outfit, the dredge left Sorel for Quebec, arriving there on the 8th May, 1892, started to work in the Queen's Wharf Basin, continuing up to the 27th, removing 890 cubic yards of clay, hard-pan and gravel.

On the 27th of May, the dredge and plant left Quebec for Baie la Vallié, arriving there on 29th, working up to the 26th June, making a channel through a marsh, one cut 300 feet long, 20 feet wide to a depth of 6 feet, throwing over the material dredged.

On the 26th of June, the plant was taken to Longueuil, arriving there on the 27th, beginning work on a shoal of hard-pan in front of the Government Pier on 29th, and continued to do so until close of fiscal year, removing 45 cubic yards of hard-pan.

“THE WINNIPEG.”

During the past fiscal year this dredge operated in the west channel at the mouth of the Red River in Lake Winnipeg, and the work was very satisfactory throughout the first part of the fiscal year, but owing to constant high wind, the dredging of the channel out to the lake was much delayed, and the out-put in consequence, was not as large as could be desired.

A considerable expenditure was made necessary by the purchase of extra anchor timber, also repairs to dipper, and the purchase of a new dipper was found necessary in order that the work might not be delayed and the plant is now in a good state of repair. The total amount of material removed by this dredge was 48,780 cubic yards, and the cost to remove the same was 28 cents per cubic yard.

“PRIESTMAN.”

During the past fiscal year, this dredge continued work in the channel of the White Mud River, but being much out of repairs and leaking badly it required a thorough overhauling, which was not completed until 12th August, 1891.

These repairs consisted in recaulking the bottom and some of the side seams of the dredge, putting on new deck, and placing hog bars in the dredge, which has strengthened it very much. The tug and scows were also repaired, but the scows attached to this dredge will have to be almost entirely rebuilt to make them available for another season's work, and the machinery of the dredge is also in a very bad state of repairs, the amount of work that could be accomplished even under the more favourable circumstances being most unsatisfactory. The quantity of material removed during the year, was 4,973 cubic yards, at a cost of 95 cents per cubic yard.

DREDGE “PACIFIC.”

The dredge “Pacific” and plant have been employed since the 1st of October last in dredging the southern portion of the Inner Harbour Victoria, adjacent to James Bay. The object in view is to increase as much as possible the capacity of the Inner Harbour, by dredging close up to low water mark, as indicated by zero on the tide gauge, to obtain a depth of 17 feet at mean low water springs, thereby obviating the necessity of building wharves far out into the water, which, if permitted, would very much curtail the harbour room.

Up to the 30th June last, 33,390 cubic yards of mud and stiff clay, with boulders intermixed, had been dredged at a total cost of, inclusive of repairs, \$11,642.50, the cost per cubic yard is therefore 34 cents, this may be considered a very fair seasons work.

The repairs embraced, renewal of straps, links, buckets, and new tumbler and grate bars, repairs to the various running parts of the plant and vessels, painting throughout, caulking, renewing ropes and chains, and making generally minor repairs when necessity arose.

All the vessels are at present in an efficient condition.

## Department of Public Works.

### SNAG-BOAT "SAMSON."

When not employed with works connected with the improvement of the Fraser River, the snag-boat "Samson" was employed in removing snags from the channel of the river and in attending to the buoys marking the channel at its mouth for the Department of Marine.

In all 203 large snags were lifted, cut up, and placed where they would no further endanger the safety of steam-boats.

The expenditure, exclusive of the share borne by the Department of Marine, but inclusive of repairs, amounts to \$5,963.87.

The repairs effected, include painting throughout, various renewals to engine and wheel, extensive repairs to boiler, repairs to anchor and many other minor but necessary repairs to the boat generally. In addition new rope, &c., was supplied.

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### DREDGING PLANT.

The dredging plant belonging to the Department, is as follows:—

#### *In the Maritime Provinces.*

- The steam hopper dredge "St. Lawrence."
- do do "Canada."
- The dipper dredge "New Dominion," and 8 scows.
- do "Prince Edward," 5 scows and 1 water scow.
- do "Geo. McKenzie," and 5 scows.
- One stone scow, boiler, engine and grips.

#### *In Quebec and Ontario.*

- The dipper dredge "Queen," 2 scows and tug "Ottawa."
- do "Nipissing" 2 scows and tug "St. Paul."
- do "St. Louis" 2 scows living scow and tug "Sensation."
- The sand dredge "Octopus."
- Stone lifters, Nos. 1 and 2.
- The elevator dredge No. 9, 3 scows and tug "Delisle."
- The dipper dredge "Challenge," 2 scows and tug "Trudeau."
- do "Ontario" 2 scows and tug "Sir John."

#### *In Manitoba.*

- Dredge "Winnipeg," tug "Sir Hector," and 2 scows and 1 coal barge.
- Dredge "Priestman," tug "Victoria," and 2 scows.

#### *In British Columbia.*

- The elevator dredge "Pacific," scows and tug "Princess."
- The snag-boat "Samson."

#### *Ship Channel, River St. Lawrence.*

Four elevator dredges, tugs "John Pratt," "St. James," "St. Francis," "C. J. Brydges," "Minnie Parsons," 3 stone lifters, 2 coal barges, 1 store ship, 12 dump scows of 80 yards capacity, 2 scows of 150 yards capacity, 1 sounding scow and 2 flat scows.

CLASSIFICATION OF DISBURSEMENTS OF THE DREDGE "St. Lawrence," during the Year ending 30th June, 1892.

Items.	July.		August.		September.		October.		November.		December.		January.		February.		March.		April.		May.		June.		Grand Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
Wages.....	508	33	508	33	506	01	508	33	506	78	408	33	408	33	431	34	408	33	408	33	439	22	508	33	5,549	99	
Coal.....	18	50	348	19	266	27	266	27	266	27	105	00	105	00	19	36	105	00	105	00	439	22	468	68	1,226	00	
Provisions.....	88	68	130	66	177	71	234	04	234	04	94	85	160	85	93	73	97	42	105	99	168	99	400	43	1,813	35	
Stores.....	18	20	120	73	.....	.....	.....	.....	4	62	10	00	.....	.....	.....	.....	.....	64	56	.....	40	00	588	33	756	44	
Equipment.....	23	70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Water.....	.....	.....	.....	.....	9	50	34	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Repairs.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Pilotage.....	29	67	65	00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Towage.....	67	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Wharfrage.....	2	00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Contingencies.....	4	85	37	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Totals.....	761	43	1,210	35	762	94	1,218	14	1,218	14	1,518	77	618	18	603	54	525	07	686	48	850	31	3,411	30	12,792	65	
Working expenses.....	791	76	1,210	35	762	94	1,218	14	1,218	14	640	44	618	18	602	19	525	07	Nil	579	68	1	64	1,920	05	8,810	44
Repairs, ordinary.....	29	67	Nil	.....	Nil	.....	Nil	.....	15	05	.....	.....	Nil	.....	1	35	Nil	.....	Nil	.....	.....	.....	.....	.....	.....	.....	
D. V. repairs and wintering.....	Nil	.....	Nil	.....	Nil	.....	Nil	.....	863	28	.....	.....	Nil	.....	Nil	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Totals.....	761	43	1,210	35	762	94	1,218	14	1,218	14	1,518	77	618	18	603	54	525	07	686	48	850	31	3,411	30	12,792	65	

## Department of Public Works.

### CLASSIFICATION OF DISBURSEMENTS OF THE DREDGE "CANADA," DURING THE YEAR ENDING 30TH JUNE, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages . . . . .	413 01	409 36	363 22	415 33	415 33	315 26	221 66	290 33	290 33	404 92	415 33	415 33	4,369 41
Coal . . . . .	267 33	267 33	..	41 40	41 40	72 00	..	..	..	27 60	176 52	198 50	783 35
Provisions . . . . .	114 91	60 51	7 10	130 09	99 15	..	87 66	34 85	80 95	61 15	173 59	101 81	951 77
Stores . . . . .	77 15	..	..	..	28 70	..	23 58	..	..	18 28	..	..	147 71
Equipment . . . . .	..	..	..	..	..	..	..	..	..	723 19	..	21 00	744 19
Water . . . . .	..	..	..	..	..	..	..	..	178 79	21 40	946 68	105 52	1,411 10
Repairs . . . . .	25 71	60 00	55 00	60 00	40 00	..	..	..	..	17 50	52 50	57 50	410 00
Pilotage . . . . .	67 50	..	..	..	..	..	..	..	..	..	..	..	..
Towage . . . . .	..	20 00	..	..	..	..	..	..	..	409 28	..	..	429 28
Wharfage . . . . .	10 21	9 70	..	..	15 06	..	..	..	..	15 31	..	7 65	57 93
Contingencies . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals . . . . .	708 49	826 90	425 32	605 42	772 64	387 26	332 90	325 18	550 07	1,698 63	1,704 62	907 31	9,304 74
Working expenses . . . . .	682 78	826 90	425 32	605 42	639 64	387 26	332 90	325 18	Nil	1,267 95	817 94	801 79	7 113 08
Repairs, ordinary . . . . .	25 71	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	5 38	31 09
D. V. repairs and wintering . . . . .	Nil	Nil	Nil	Nil	133 00	Nil	Nil	Nil	550 07	430 68	946 68	100 14	2,160 57
Totals . . . . .	708 49	826 90	425 32	605 42	772 64	387 26	332 90	325 18	550 07	1,698 63	1,764 62	907 31	9,304 74

CLASSIFICATION of Disbursements of the Dredge "New Dominion," during the Year ending 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	498 52	494 50	494 50	497 75	316 69	157 50	155 00	178 80	166 71	452 74	496 02	494 50	4,403 24
Coal.....		65 02	41 25	29 00						230 14			365 41
Provisions.....					6 00	7 16	20 41				94 69	337 98	466 24
Stores.....													
Equipment.....													
Water.....											18 50		18 50
Repairs.....	27 22	24 18	51 38	8 06					36 10	8 75	880 65		1,036 34
Pilotage.....													
Towage.....	464 00	312 00	312 00	372 75	42 00						268 00	524 00	2,294 75
Wharfage.....												9 16	13 40
Contingencies.....							4 24						
Totals.....	989 74	895 70	899 13	907 56	364 69	164 66	179 65	178 80	202 81	691 63	1,757 86	1,415 64	8,647 87
Working expenses.....	962 52	871 52	847 75	899 50	364 69	164 66	179 65	178 80	Nil	385 14	858 71	1,018 50	6,731 44
Repairs, ordinary.....	27 22	24 18	51 38	8 06	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	110 84
D. V. repairs and wintering.....	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	202 81	306 49	899 15	397 14	1,805 59
Totals.....	989 74	895 70	899 13	907 56	364 69	164 66	179 65	178 80	202 81	691 63	1,757 86	1,415 64	8,647 87

Department of Public Works.

CLASSIFICATION OF Disbursements of the Dredge "Prince Edward," during the Year ending 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages	493 74	484 75	494 50	497 75	491 25	325 66	155 00	152 50	157 50	155 00	447 83	493 96	4,349 44
Coal		163 01									113 85	96 60	373 46
Provisions											121 78		368 78
Stores	136 78	10 82		99 45									17 56
Equipment					17 56						40 00	40 00	302 44
Water	26 04	40 00	48 40	43 00	45 00	20 00					258 56	64 60	909 44
Repairs	25 60	343 80	134 52	11 74			64 62	6 00			13 50		21 00
Pilotage	7 50												
Towage	920 00	650 00	650 00			2,030 00					625 00	650 00	5,325 00
Wharfage							40 88						
Contingencies.	3 19												44 07
Totals	1,612 85	1,692 38	1,327 42	651 94	553 81	2,375 66	260 50	158 50	157 50	155 00	1,620 47	1,345 16	11,911 19
Working expenses	1,587 25	1,348 58	1,192 90	640 20	553 81	2,375 66	195 88	152 50	Nil	155 00	1,371 51	1,280 56	10,833 85
Repairs, ordinary	25 60	Nil	Nil	11 74	Nil	Nil	64 62	6 00	Nil	Nil	Nil	Nil	107 96
D. V. repairs and wintering	Nil	343 80	134 52	Nil	Nil	Nil	Nil	Nil	157 50	Nil	248 96	64 60	949 38
Totals	1,612 85	1,692 38	1,327 42	651 94	553 81	2,375 66	260 50	158 50	157 50	155 00	1,620 47	1,345 16	11,911 19

CLASSIFICATION OF Disbursements of the Dredge "Geo. McKenzie," during the Year ending 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	497 75	494 50	494 50	513 55	1,079 97	181 97	157 63	152 50	210 25	268 21	593 13	609 46	5,253 42
Coal.....		34 20	72 60	26 18	12 90							90 40	236 28
Provisions.....			1 35										6 15
Stores.....	4 80						8 45						20 45
Equipment.....													278 73
Water.....	57 50	71 76	86 90	11 50	12 00	15 00			13 60	133 02	206 12	12 32	1,337 81
Repairs.....		15 85	177 75		484 04							357 84	
Flotage.....													6,514 90
Towage.....	702 00	830 00	650 00		703 65	1,154 25				255 72	1,175 00	1,300 00	255 72
Wharfage.....							30 03						30 03
Contingencies.....													
Totals.....	1,262 05	1,446 31	1,483 10	551 23	2,266 31	1,351 22	196 11	152 50	223 94	656 95	1,974 25	2,369 52	13,933 49
Working expenses.....	1,262 05	1,430 46	1,305 35	551 23	1,291 40	1,351 22	196 11	152 50	Nil	214 21	1,768 13	2,012 18	11,534 84
Repairs, ordinary.....	Nil	15 85	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	15 85
D. V. repairs and wintering.....	Nil	Nil	177 75	Nil	974 91	Nil	Nil	Nil	223 94	442 74	206 12	354 34	2,382 80
Totals.....	1,262 05	1,446 31	1,483 10	551 23	2,266 31	1,351 22	196 11	152 50	223 94	656 95	1,974 25	2,369 52	13,933 49



## Department of Public Works.

### Classification of Disbursements of the Dredge "Nipissing," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Wages.....	308 00	343 00	341 33	629 00	413 94	89 91	89 27	89 26	164 11	314 49	375 00	323 00	3,480 31
Coal.....	927 56	91 35	.....	204 35	183 34	.....	.....	.....	.....	63 57	248 51	282 90	2,001 58
Wood.....	2 50	1 25	4 00	.....	.....	.....	.....	.....	.....	3 00	.....	1 50	12 25
Provisions.....	93 15	98 06	100 60	108 25	160 93	.....	.....	.....	.....	43 33	112 67	100 00	816 99
Stores.....	96 50	5 72	1 60	1 11	5 94	.....	.....	.....	.....	50 37	.....	9 20	100 44
Equipment.....	39 60	.....	74 66	67 29	100 43	266 33	193 88	202 91	93 88	173 38	34 20	49 89	138 85
Repairs.....	100 13	29 14	.....	.....	219 96	.....	.....	.....	.....	.....	.....	.....	1,386 12
Pilotage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	219 96
Towage.....	.....	9 22	11 65	5 35	20 55	6 63	1 50	.....	13 18	1 65	6 05	4 94	120 03
Contingencies.....	89 31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	1,586 75	577 74	533 84	1,015 35	1,105 09	362 87	284 65	292 17	271 17	749 04	776 43	771 43	8,276 53
Working expenses.....	1,436 62	548 60	459 18	948 06	1,004 66	96 54	90 77	89 26	177 29	575 66	742 23	721 54	6,890 41
Repairs, ordinary.....	70 90	45 52	45 52	38 15	6 55	72 45	.....	.....	.....	79 50	5 05	20 74	338 95
do extraordinary.....	29 14	29 14	29 14	29 14	93 88	193 88	193 88	202 91	93 88	93 88	29 15	29 15	1,047 17
Totals.....	1,586 75	577 74	533 84	1,015 35	1,105 09	362 87	284 65	292 17	271 17	749 04	776 43	771 43	8,276 53

CLASSIFICATION OF DISBURSEMENTS OF THE DREDGE "St. Louis," DURING THE YEAR ENDED 30th JUNE, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	283 50	283 50	303 50	567 00	360 67	59 26	59 27	59 26	59 27	49 83	253 94	30 61	2,650 61
Coal.....	122 25	128 23			168 15							53 35	471 96
Wood.....													
Provisions.....	91 35	96 02	93 85	92 75	84 00							83 23	623 20
Stores.....	18 60	4 34			8 41								31 35
Equipment.....					9 00								20 44
Repairs.....	31 54	15 10	19 88	212 37	216 27	212 38	212 38	212 38	212 38				1,355 93
Pilotage.....		6 45											6 45
Towage.....												75 00	75 00
Contingencies.....	102 25	2 40	1 90	2 25	4 65						9 72	35 25	158 42
Totals.....	649 40	536 04	419 13	874 37	851 15	271 64	271 65	271 64	271 65	61 83	356 35	558 42	5,393 36
Working expenses.....	617 95	520 94	399 25	662 00	634 88	59 26	59 27	59 26	59 27	61 83	345 10	558 42	4,037 43
Repairs, ordinary.....	31 54	15 10	19 88		3 90						11 25		81 67
do extraordinary.....					212 37	212 38	212 38	212 38	212 38				1,274 26
Totals.....	649 40	536 04	419 13	874 37	851 15	271 64	271 65	271 64	271 65	61 83	356 35	558 42	5,393 36

Department of Public Works.

CLASSIFICATION OF Disbursements of the Dredge "Queen," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Wages	343 00	299 94	316 06	594 00	248 50	59 26	65 27	59 26	59 27	240 66	310 75	385 00	2,980 97
Coal	723 51										66 60	335 94	1,146 05
Wood			4 00								94 46	100 00	4 00
Provisions	95 25	96 31	90 90	90 90	63 00					15 97	75 65	8 40	630 82
Stores	24 28	4 43	1 60	2 27							146 61	46 66	56 95
Equipment													92 30
Repairs	54 74	85 14	65 40	66 81	64 39	70 38	64 38	96 66	64 38	159 48	146 61	46 66	985 03
Pilotage	10 00												10 00
Towage													
Contingencies.	21 81	4 95	9 55	6 95	13 15	3 00			12 47			7 78	79 66
Totals	1,272 59	490 77	487 51	760 93	389 04	132 64	129 65	155 92	136 12	416 11	694 07	920 43	5,985 78
Working expenses, ordinary	1,217 85	405 63	422 11	694 12	324 65	62 26	65 27	59 26	71 74	256 63	547 46	873 77	5,000 75
Repairs, ordinary	25 60	56 00	36 26	2 42		6 00		32 25		130 34	117 47	17 52	423 89
do extraordinary	29 14	29 14	29 14	64 39	64 39	64 38	64 38	64 38	64 38	29 14	29 14	29 14	561 14
Totals	1,272 59	490 77	487 51	760 93	389 04	132 64	129 65	155 92	136 12	416 11	694 07	920 43	5,985 78

CLASSIFICATION of Disbursements of the Dredge "Ontario," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages	301 00	311 52	338 00	620 00	400 03	89 26	89 27	89 26	89 27	379 34	411 00	358 50	3,476 45
Coal	247 52	321 95	147 07	227 36	160 51					100 75	223 00	309 95	1,738 11
Wood		1 50										2 75	4 25
Provisions	92 58	95 00	100 00	100 00	106 45						102 75	100 00	696 78
Stores	19 92	15 30		9 90	2 88					51 54	6 41		105 95
Equipment										139 16			139 16
Repairs	73 03	45 84	163 77	48 24	191 62	177 32	177 32	177 32	177 33	213 05	244 02	133 94	1,822 80
Pilotage													
Towage													
Contingencies	18 80	5 65	7 93	7 26	2 91			14 55			17 27	33 26	107 63
Totals	752 85	796 76	756 77	1,012 76	864 40	266 58	266 59	281 13	266 60	883 84	1,004 45	938 40	8,091 13
Working expenses	679 82	750 92	593 00	964 52	672 78	89 26	89 27	103 81	89 27	670 79	760 43	804 46	6,268 33
Repairs, ordinary	43 89	16 70	134 63	19 10	14 30					183 91	66 70	104 80	584 03
do extraordinary	29 14	29 14	29 14	29 14	177 32	177 32	177 32	177 32	177 33	29 14	177 32	29 14	1,238 77
Totals	752 85	796 76	756 77	1,012 76	864 40	266 58	266 59	281 13	266 60	883 84	1,004 45	938 40	8,091 13

Department of Public Works.

CLASSIFICATION OF Disbursements of the Dredge "Challenge," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	332 00	332 00	332 00	633 00	295 13	89 26	96 26	89 26	89 27	257 84	401 00	342 00	3,289 02
Coal.....			318 50	161 00							252 83	196 86	928 69
Wood.....			14 50	33 25	106 15								133 90
Provisions.....	100 00	100 00	100 00	106 00	76 66						101 70	100 00	678 36
Stores.....	22 68		9 16	5 13						41 02	18 57	66 65	163 21
Equipment.....													
Repairs.....	140 61	29 14	126 60	215 99	197 49	232 57	192 91	192 90	192 92	297 07	55 42	71 40	1,945 02
Flotage.....													
Towage.....													
Contingencies.....	4 75	19 22	11 90	4 70	52 67				13 41	4 87	5 44	43 63	160 59
Totals.....	600 04	480 36	912 66	1,153 07	728 10	321 83	289 17	282 16	295 60	600 80	834 46	820 54	7,318 79
Working expenses.....	459 43	451 22	786 06	937 08	530 61	89 26	96 26	89 26	102 68	303 73	779 04	749 14	5,373 77
Repairs, ordinary.....	111 47		97 46	23 10	4 60	203 43				104 15	26 26	42 25	612 72
do extraordinary.....	29 14	29 14	29 14	192 89	192 89	29 14	192 91	192 90	192 92	192 92	29 16	29 15	1,332 30
Totals.....	600 04	480 36	912 66	1,153 07	728 10	321 83	289 17	282 16	295 60	600 80	834 46	820 54	7,318 79

## PUBLIC WORKS

## STATEMENT showing Classification of Cost of Dredging on Ship Channel

Vessel.	Fuel.	Wages.	Board.	Stores and Materials.	General Repairs.	General Expenses.	Salaries and office Expenses.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dredge No. 11. ....	2,111 97	2,825 38	1,122 24	862 84	436 60	4,996 95	1,457 08
do No. 13. ....	2,288 92	2,459 90	983 69	665 25	898 13	4,758 84	1,387 69
Stone lifter No. 1. ....	53 27	340 64	70 00	58 90	456 66	904 22	263 70
Tug "John Pratt" .....	580 93	1,350 90	495 82	317 47	256 39	2,331 75	680 02
do "St. Francis" .....	1,224 55	1,315 23	489 80	193 54	68 26	1,951 35	569 00
do "M. F. Parsons" .....	411 65	441 26	136 33	105 40	99 98	761 37	222 05
do "C. J. Brydges" .....	86 93	.....	.....	.....	342 77	332 77	97 15
do "St. James" .....	630 81	1,031 35	439 43	117 96	271 37	1,760 84	513 50
Totals. ....	7,389 03	9,764 66	3,737 31	2,321 36	2,830 16	17,798 09	5,190 19

## Department of Public Works.

OF CANADA.

between Montreal and Quebec, for Fiscal Year ended 30th, June 1892.

Total Cost.	Stone Lifter No. 1 Service.	Proportion of Tug Service.	Total Cost of Dredge and Plant.	Number of Working Days.	Cost per Day.	Number of Cubic Yards dredged.	Cost per Cubic Yard.
\$ cts.	\$ cts.	\$ cts.	\$ cts.		\$ cts.		
13,813 06	1,132 13	10,348 09	25,293 28	155	163 18	85,845	29·4 cents.
13,442 42	1,015 26	9,279 84	23,737 52	139	170 77	58,350	40·6 cents.
2,147 39							
6,013 28							
5,811 73							
2,178 04							
859 62							
4,765 26							
49,030 80	2,147 39	19,627 93	49,030 80	.....	.....	144,195	34·0 cents.

CLASSIFICATION of Disbursements of the Dredge "Pacific," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages							625 00	615 00	599 50	630 48	550 48	565 00	5,022 65
Coal				24 00	384 50	1,220 00	321 75	89 37	186 50	87 50		375 00	1,444 62
Wood					4 17	4 98				5 30			14 45
Water					158 42	139 96	150 63	136 29	139 00	139 46	137 31	289 61	1,290 68
Provisions					34 00	38 16	6 75	47 03	15 75	48 95	32 34	80 40	303 38
Stores					7 75	14 33	72 80	3 50	3 50	3 50		44 21	146 09
Equipment													
Repairs.				406 75	666 53	346 42	171 90	33 25	234 96	170 44	10 00	1,360 88	3,401 13
Pilotage													
Towage													
Wharfrage													
Contingencies					14 00						5 50		19 50
Totals				430 75	1,462 56	1,763 85	1,348 83	924 44	1,175 71	1,085 63	735 63	2,715 10	11,642 50
Working expenses.				24 00	796 03	1,417 43	1,176 93	891 19	940 75	915 19	725 63	1,354 22	8,241 37
Repairs, ordinary				23 75	150 90	70 43	34 48	33 25	28 13	25 00	10 00	350 88	726 82
do extraordinary				383 00	515 63	275 99	137 42		206 83	145 44		1,610 00	2,674 31
Totals.				430 75	1,462 56	1,763 85	1,348 83	924 44	1,175 71	1,085 63	735 63	2,715 10	11,642 50

[1892]



## Department of Public Works.

### CLASSIFICATION of Disbursements of Snag Boat "Samson," during the Year ended 30th June, 1892.

Items.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Wages	33 29	711 60	401 85	17 46	1,045 78	504 04	540 40	540 00	540 00	540 00	652 59	958 04	*6,484 65
Coal			83 20	•	345 60	96 00	64 00	140 80	82 30	122 95	421 10	17 00	1,373 95
Wood			27 50		68 00	27 50	22 00	27 50	22 00	27 50	27 50	109 50	331 50
Water					318 54	154 35	129 07	104 78	174 88	149 10	151 58	327 63	1,800 98
Provisions		67 30	221 75		47 66	18 80			39 32		76 50		182 37
Stores					38 30				10 03	39 93		163 31	251 57
Equipment					150 85	18 63			10 53	62 38	124 65	300 54	1,146 80
Repairs		2 25	476 97										
Pilotage													
Towage													
Wharfrage			10 25		8 60	6 50	3 50		6 75		6 25		41 85
Contingencies													
Totals	33 29	781 15	1,221 52	17 46	2,023 33	827 91	758 57	818 35	885 81	941 86	1,432 67	1,876 02	11,617 94
Working expenses	33 29	778 90	744 55	17 46	1,872 48	809 28	758 57	818 35	875 28	879 48	1,308 02	1,575 48	10,471 14
Repairs, ordinary		2 25	78 97		150 85	18 63			10 53	62 38	124 65	300 54	624 15
do extraordinary			368 00										522 65
Totals	33 29	781 15	1,221 52	17 46	2,023 33	827 91	758 57	818 35	885 81	941 86	1,432 67	1,876 02	11,617 94

\* \$598.84 of this amount was paid by the Marine Department.

CLASSIFICATION and Quantities of Material removed by the following Dredges during the year ending 30th June, 1892.

"ST. LAWRENCE."

Description of Material dredged.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.
Sand—very fine.....	7,875	5,950	4,725	1,838								4,375	20,388
Mud.....													4,375
Totals.....	7,875	5,950	4,725	1,838								4,375	24,763

"CANADA."

Hard-pan.....	180	180		1,080									1,440
Gravel.....	6,570	2,900	700	900							5,400	630	17,100
Clay.....											90		90
Sand—ordinary.....	1,350	2,950	4,115	968								7,020	16,403
Sand—very fine.....				720									720
Mud.....				1,530								180	2,700
Totals.....	8,100	6,030	4,815	2,948	2,250					990	5,670	7,650	38,453

"NEW DOMINION."

Sand—ordinary.....		8,295	10,150	8,570	1,155							5,635	46,020
Sand and saw-dust.....	6,895	420		1,300									7,315
Mud.....													1,300
Totals.....	6,895	8,715	10,150	9,870	1,155						5,635	12,215	54,635

Department of Public Works.

"PRINCE EDWARD."

Clay .....													2,674
Clay and stone .....													1,841
Sand—ordinary.....	800	3,051	2,694	2,016									7,547
Sand and shells.....	855	3,000	1,125	3,243									3,141
Mud.....													16,179
Totals.....	1,655	6,051	3,819	2,016	3,243	1,002						5,517	31,382

"GEO. MCKENZIE."

Gravel.....	3,400	3,825											2,360	9,750
Clay and stone.....													675	4,500
Sand—ordinary and kelp .....	3,570	45	4,000	1,200	4,240								2,365	16,045
Mud and shells.....			3,155	1,465										8,860
Totals.....	6,970	3,870	7,155	2,665	4,240								5,400	39,165

"NIPISSING."

Boulders.....					1,800									1,800
Clay.....	6,330			3,510										9,840
Sand—ordinary .....	2,010	6,450	9,090	5,070	3,060				2,940					32,140
Mud.....														8,910
Totals.....	8,340	6,450	9,090	8,580	4,860				2,940					52,690

"ST. LOUIS."

Hard-pan .....														
Gravel.....													480	525
Clay.....													270	270
Clay and stone .....					1,755								210	4,896
Sand—ordinary .....			2,325	3,675	150								140	140
Mud.....	2,950	1,525												6,785
Totals.....	2,950	1,525	2,325	3,675	1,905								1,100	17,091

CLASSIFICATION and Quantities of Material removed by the following Dredges during the year ending 30th June, 1892.

"QUEEN."

Description of Material dredged.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Grand Total.
	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.	c. yds.
Hard-pan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boulders	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gravel	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay	1,638	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay and stone	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sand—ordinary	2,663	6,426	6,688	6,880	2,288	.....	.....	.....	.....	.....	.....	.....	.....
Totals	4,301	6,426	6,688	6,880	2,288	.....	.....	.....	.....	.....	1,914	6,362	34,859

"ONTARIO."

Hard-pan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boulders	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gravel	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay	780	720	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay and stone	1,620	2,430	450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sand—ordinary	2,100	690	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mud	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	4,980	4,530	4,080	10,690	1,005	.....	.....	.....	.....	.....	.....	.....	.....

"CHALLENGE."

Hard-pan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gravel	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay	4,380	1,830	2,100	1,560	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay and stone	.....	6,720	.....	500	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sand—ordinary	.....	2,160	240	580	1,400	.....	.....	.....	.....	.....	.....	.....	.....
Totals	4,380	10,710	2,340	2,640	2,620	.....	.....	.....	.....	.....	.....	.....	.....

Department of Public Works.

ABSTRACT of work done in deepening the Ship Channel in the River St. Lawrence between Montreal and Québec, for the Fiscal Year ended 30th June, 1892.

Vessel.	Locality of Dredging.	Time of Service.		Nominal working time 12 hours per day.		Dredging machinery in motion.		Quantity dredged in cubic yards, scow measurement.			Character of Soil.	Quantity dredged in cubic yards.	
		Days.	Total days.	Hours.	Total hours.	Hours.	Total hours.	Earth.	Rock.	Total.		Cap à la Roche.	St. Joseph de Lévis.
Dredge No. 11. . . . .	Cap à la Roche. . . . . Lévis . . . . .	140		1,680		1,821½						82,515	
		15		180		963		3,330					3,330
			155		1,860		1,417			85,845			
Dredge No. 13. . . . .	Cap à la Roche. . . . .	130		1,688		1,197½						58,350	
			139		1,688		1,197½		3,330	140,865	144,195		58,360

[1892]

DETAILS of Dredging in the Maritime Provinces

Dredge.	Locality.	County.	NEW BRUNSWICK.		
			Quantity.	Cost of each Work.	Total Cost.
			C. yds.	\$ cts.	\$ cts.
"New Dominion"	Oromocto	Sunbury	36,785	6,251 27	9,284 71
	Hampton	King's	17,850	3,023 44	
"Canada"	Mabou	Inverness			
	Cheticamp	do			
	Port Hood	do			
	East River	Pictou			
"Prince Edward"	Acadia Coal Co. Wharf	do			
	Summerside	Prince			
	Pownal Wharf	Queen's			
	Georgetown	do			
"St. Lawrence"	Sturgeon	King's			
	Richibucto	Kent	20,388	11,308 14	11,308 14
	Barrington	Shelburne			
"Geo. McKenzie"	Cheticamp	Inverness			
	St. Peter's Canal	Cape Breton			
	D'Ecousse	Richmond			
	East River	Pictou			
			75,023		20,592 85

Dredge.	NEW BRUNSWICK.		NOVA SCOTIA.	
	Quantity.	Cost.	Quantity.	Cost.
	C. yds.	\$ cts.	C. yds.	\$ cts.
"New Dominion"	54,635	9,284 71		
"Canada"			38,453	9,989 95
"Prince Edward"				
"St. Lawrence"	20,388	11,308 14	4,375	2,426 57
"Geo. McKenzie"			39,165	14,959 56
	75,023	20,592 85	81,993	27,376 08

## Department of Public Works.

for the Year ending 30th June, 1892.

NOVA SCOTIA.			PRINCE EDWARD ISLAND.			Quantity by each Dredge.	Total Expenditure.
Quantity.	Cost of each Work.	Total Cost.	Quantity.	Cost of each Work.	Total Cost.		
C. yds.	\$ cts.	\$ cts.	C. yds.	\$ cts.	\$ cts.	C. yds.	\$ cts.
						54,635	9,284 71
16,020	4,161 86						
18,090	4,699 77						
1,553	403 48						
1,530	397 49						
1,260	327 35	9,989 95				38,453	9,989 95
			13,541	5,518 03			
			3,243	1,321 54			
			1,002	408 32			
			13,596	5,540 45	12,788 34	31,382	12,788 34
4,375	2,426 57	2,426 57				24,763	13,734 71
6,970	2,662 31						
3,825	1,460 99						
8,550	3,265 81						
19,820	7,570 45	14,959 56				39,165	14,959 56
81,993		27,376 08	31,382		12,788 34	188,398	60,757 27

PRINCE EDWARD ISLAND.		Total Quantity.	Expenditure Dredging.	Superinten- dence.	Total Expenditure.	Cost per Cubic Yard.
Quantity.	Cost.					
C. yds.	\$ cts.	C. yds.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
		54,635	8,647 87	636 84	9,284 71	0 16·994
		38,453	9,304 74	685 21	9,989 95	0 25·979
31,382	12,788 34	31,382	11,911 19	877 15	12,788 34	0 40·750
		24,763	12,792 65	942 06	13,734 71	0 55·465
		39,165	13,933 49	1,026 07	14,959 56	0 38·196
31,382	12,788 34	188,398	56,589 94	4,167 33	60,757 27	0 32·249

DREDGE STATEMENT showing Material removed at different localities, Total Annual Expenditure on each Dredge and Average Cost per cubic yard.

## DREDGE "CHALLENGE."

Location.	Hard Pan.	Boulders.	Gravel.	Clay.	Clay and Stone.	Sand, Ordinary.	Sand, Fine.	Mud.	Totals.
Meaford.....	6,210		4,380	2,160					12,750
Thornbury.....	3,660		3,960		240	1,980			9,840
Collingwood.....	2,960			3,010					5,970
	12,830		8,340	5,170	240	1,980			28,560
Total annual expenditure, \$7,318.79. Cost per cubic yard, 25½ cents.									

## DREDGE "NIPISSING."

Jones' Island.....				6,330		2,010			8,340
Ottawa River.....				3,510		20,610			24,120
Gananoque.....		1,800				9,520			11,320
Kingston.....								4,530	4,530
Collins' Bay.....								3,300	3,300
Picton.....								1,080	1,080
		1,800		9,840		32,140		8,910	52,690
Total annual expenditure, \$8,276.53. Cost per cubic yard, 15 <sup>7</sup> / <sub>8</sub> cents.									

## DREDGE "ONTARIO."

Belleville.....						1,380		420	1,800
Port Hope.....			780		990	22,530		2,620	26,920
Cobourg.....						2,430		810	3,240
Trenton.....	1,500	4,500	3,240					1,170	10,410
Amherstburg.....			585	825					1,410
	1,500	4,500	4,605	825	990	26,340		5,020	52,690
Total annual expenditure, \$8,091.13. Cost per cubic yard, 18 <sup>7</sup> / <sub>8</sub> cents.									

## DREDGE "QUEEN."

Yamaska.....				1,638		1,543			3,181
Ottawa River.....						23,402			23,402
Hog's Back.....	100				500				600
Belleville.....		1,978	1,976	380	3,342				7,676
	100	1,978	1,976	2,018	3,842	24,945			34,859
Total annual expenditure, \$5,985.78. Cost per cubic yard, 17½ cents.									

## DREDGE "ST. LOUIS."

Trenton.....								4,475	4,475
Ottawa River.....						6,150			6,150
Baie la Vallier.....				4,896		635			5,531
Quebec.....	480		270		140				890
Longueuil.....	45								45
	525		270	4,896	140	6,785		4,475	17,091
Total annual expenditure, \$5,393.36. Cost per cubic yard, 31 <sup>7</sup> / <sub>8</sub> cents.									



## Department of Public Works.

EXPENDITURE for Dredging in Nova Scotia, for the Twenty Years ended 30th June, 1892.

County.	Locality.	Total for the Nineteen Years ended 30th June, 1891.				For the Year 1891-92.				Total Quantities.	Total Cost.	Cost for each County.
		Quantity.		Cost for County.		Quantity.		Cost for County.				
		c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.			
Antigonish	Antigonish	22,025	3,649 15			22,025	3,649 15			22,025	3,649 15	
	Harbour au Bouche	10,568	2,498 48			10,568	2,498 48			10,568	2,498 48	
	Tracadie	12,245	5,530 29			12,245	5,530 29			12,245	5,530 29	
	McNair's Cove	1,725	4,443 82			1,725	4,443 82			1,725	4,443 82	
	Bayfield	1,719	4,405 19			1,719	4,405 19			1,719	4,405 19	
	Arisaig	3,540	3,853 30			3,540	3,853 30			3,540	3,853 30	24,380 23
Annapolis	Annapolis	2,825	1,685 68			2,825	1,685 68			2,825	1,685 68	1,635 68
	Lingaa	22,287	9,275 56			22,287	9,275 56			22,287	9,275 56	
Cape Breton	Sydney	54,600	17,781 54			54,600	17,781 54			54,600	17,781 54	
	Little Glace Bay	46,460	16,986 02			46,460	16,986 02			46,460	16,986 02	
	Fort Caledonia	17,413	8,242 21			17,413	8,242 21			17,413	8,242 21	
	Benacatie Pond	20,869	5,993 90			20,869	5,993 90			20,869	5,993 90	
	Christinas Island	19,045	3,364 98			19,045	3,364 98			19,045	3,364 98	
	Cow Bay	3,255	1,892 32			3,255	1,892 32			3,255	1,892 32	
	Main à Dieu	4,680	2,720 76			4,680	2,720 76			4,680	2,720 76	66,207 29
	Tatamagouche	65,480	20,373 07			65,480	20,373 07			65,480	20,373 07	20,373 07
	Parrsboro'	42,595	12,904 68			42,595	12,904 68			42,595	12,904 68	
	Wallace	60,885	14,573 49			60,885	14,573 49			60,885	14,573 49	27,378 17
Digby	Digby	12,565	5,056 29			12,565	5,056 29			12,565	5,056 29	
	Weymouth	88	28 62			88	28 62			88	28 62	5,084 91
Guysboro'	Guyaboro'	5,400	1,413 53			5,400	1,413 53			5,400	1,413 53	
	Larry's River	26,250	6,546 70			26,250	6,546 70			26,250	6,546 70	
	Fort Mulgrave	3,532	1,749 78			3,532	1,749 78			3,532	1,749 78	
	Sherbrooke	1,260	496 49			1,260	496 49			1,260	496 49	10,206 50
Halifax	Chezetcook	3,920	2,593 71			3,920	2,593 71			3,920	2,593 71	
	Halifax Ferry	6,177	2,063 38			6,177	2,063 38			6,177	2,063 38	
	Herring Cove	12,111	8,015 05			12,111	8,015 05			12,111	8,015 05	
	Ketch Harbour	2,989	985 59			2,989	985 59			2,989	985 59	
	Richmond Wharf	7,792	182 53			7,792	182 53			7,792	182 53	

EXPENDITURE for Dredging in Nova Scotia, for the Twenty Years ended 30th June, 1892.

County.	Locality.	Total for the Nineteen Years ended 30th June, 1891.				For the Year 1891.				Total Quantities.	Total Cost.	Cost for each County.
		Quantity.		Cost.		Quantity.	Cost.	Cost for County.				
		c. yds.	\$ cts.	\$ cts.	\$ cts.				c. yds.			
Inverness	Roche's Wharf.....	1,750	620 28	1,750	620 28	1,750	620 28	1,750	620 28	1,750	620 28	620 28
	Halifax railway terminus.....	19,290	6,187 38	19,290	6,187 38	19,290	6,187 38	19,290	6,187 38	19,290	6,187 38	6,187 38
	Jeddore.....	21,515	4,958 56	21,515	4,958 56	21,515	4,958 56	21,515	4,958 56	21,515	4,958 56	4,958 56
	North-west Arm.....	7,350	2,970 39	7,350	2,970 39	7,350	2,970 39	7,350	2,970 39	7,350	2,970 39	2,970 39
	Cunard's Wharf.....	1,400	530 04	1,400	530 04	1,400	530 04	1,400	530 04	1,400	530 04	530 04
	Whyecomagh.....	19,760	3,491 31	19,760	3,491 31	19,760	3,491 31	19,760	3,491 31	19,760	3,491 31	3,491 31
	Campbell's Pond.....	4,940	872 83	4,940	872 83	4,940	872 83	4,940	872 83	4,940	872 83	872 83
	Fort Hastings.....	4,270	190 37	4,270	190 37	4,270	190 37	4,270	190 37	4,270	190 37	190 37
	Cheticamp.....	122,100	38,350 65	122,100	38,350 65	25,040	7,362 08	122,100	38,350 65	147,160	45,712 73	45,712 73
	Mabou.....	100,597	41,978 86	100,597	41,978 86	16,020	4,161 86	100,597	41,978 86	116,617	46,140 72	46,140 72
Port Hood.....	2,800	855 44	2,800	855 44	1,553	403 48	2,800	855 44	4,353	1,258 92	1,258 92	
Lunenburg	Lunenburg.....	70,510	22,194 57	70,510	22,194 57	70,510	22,194 57	70,510	22,194 57	70,510	22,194 57	22,194 57
	Mahone Bay.....	21,844	5,958 65	21,844	5,958 65	21,844	5,958 65	21,844	5,958 65	21,844	5,958 65	5,958 65
	Vogler's Cove.....	11,610	5,075 53	11,610	5,075 53	11,610	5,075 53	11,610	5,075 53	11,610	5,075 53	5,075 53
Pictou	Acadia Coal Co.'s Wharf.....	10,240	3,560 26	10,240	3,560 26	1,260	327 35	10,240	3,560 26	11,500	3,887 61	3,887 61
	Albion Mines.....	9,475	2,181 25	9,475	2,181 25	9,475	2,181 25	9,475	2,181 25	9,475	2,181 25	2,181 25
	East River.....	104,795	25,067 22	104,795	25,067 22	21,350	7,967 94	104,795	25,067 22	126,145	33,035 16	33,035 16
	Halifax Coal Co.'s Wharf.....	1,650	359 95	1,650	359 95	1,650	359 95	1,650	359 95	1,650	359 95	359 95
	Pictou Public Wharf.....	7,020	1,634 82	7,020	1,634 82	7,020	1,634 82	7,020	1,634 82	7,020	1,634 82	1,634 82
	do Market Wharf.....	73,980	20,527 55	73,980	20,527 55	73,980	20,527 55	73,980	20,527 55	73,980	20,527 55	20,527 55
	do Railway Wharf.....	32,164	9,959 31	32,164	9,959 31	32,164	9,959 31	32,164	9,959 31	32,164	9,959 31	9,959 31
	do Landing.....	7,345	2,880 01	7,345	2,880 01	7,345	2,880 01	7,345	2,880 01	7,345	2,880 01	2,880 01
	Vale Colliery Wharf.....	1,395	682 15	1,395	682 15	1,395	682 15	1,395	682 15	1,395	682 15	682 15
	River John.....	85,173	22,243 98	85,173	22,243 98	85,173	22,243 98	85,173	22,243 98	85,173	22,243 98	22,243 98
	Granton.....	25,110	10,707 59	25,110	10,707 59	25,110	10,707 59	25,110	10,707 59	25,110	10,707 59	10,707 59
	New Glasgow.....	26,310	5,705 09	26,310	5,705 09	26,310	5,705 09	26,310	5,705 09	26,310	5,705 09	5,705 09
	Middle River.....	7,000	2,138 60	7,000	2,138 60	7,000	2,138 60	7,000	2,138 60	7,000	2,138 60	2,138 60
	Dwyer's Wharf.....	720	283 22	720	283 22	720	283 22	720	283 22	720	283 22	283 22
Queen's	Liverpool.....	12,940	4,762 38	12,940	4,762 38	12,940	4,762 38	12,940	4,762 38	12,940	4,762 38	4,762 38
	D'Escousse.....	11,860	5,962 13	11,860	5,962 13	11,860	5,962 13	11,860	5,962 13	11,860	5,962 13	5,962 13
Richmond	St. Peter's Canal.....	79,161	24,434 52	79,161	24,434 52	3,825	1,460 99	79,161	24,434 52	82,986	25,895 51	25,895 51
	St. Peter's.....	7,150	2,407 41	7,150	2,407 41	7,150	2,407 41	7,150	2,407 41	7,150	2,407 41	2,407 41

Department of Public Works.

Grand Goulet .....	5,570 49	23,584					5,570 49	
River Bourgeois .....	4,468 87	18,920					4,468 87	
Marine Ship .....	56 53	320			4,726 80		56 53	47,626 75
Shelburne .....	10,591 41	34,048					10,591 41	
Lockeport .....	7,656 50	20,205		4,375	2,426 57		10,085 07	20,076 48
Barrington .....								
Yarmouth .....	38,951 26	105,524					38,951 26	
Hants .....	1,627 60	5,450					1,627 60	1,627 60
Victoria .....	1,569 95	3,820					1,569 95	1,569 95
Dredge "C. B." losses .....	762 98						762 98	
Totals .....	520,095 98	1,608,247	81,993	27,376 08	27,376 08		547,472 06	547,472 06

EXPENDITURE for Dredging in New Brunswick for the Twenty Years ended 30th June, 1892.

County.	Locality.	For the Nineteen Years ended 30th June, 1891.		For the Year 1891-92.		Total Quantity.	Total Cost.	Cost for each County.
		Quantity.	Cost.	Quantity.	Cost.			
Gloucester..	Bathurst.....	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	\$ cts.
		72,607	20,629 52			72,607	20,629 52	20,629 52
Kent.....	Richibucto.....	67,185	20,985 64	20,388	11,308 14	87,573	32,293 78	
	Cocagne.....	27,180	9,601 45			27,180	9,601 45	
	Buctouche.....	13,005	4,984 24			13,005	4,984 24	
	do Priest's Point.....	3,510	1,110 70			3,510	1,110 70	
	do Chapel Point.....	4,140	1,310 07			4,140	1,310 07	
	do Robertson's Wharf.....	45	14 23		11,308 14	45	14 23	49,264 47
[Northumberland	Horse Shoe, Miramichi.....	160,417	44,594 13			160,417	44,594 13	
do	Outer Bar.....	13,125	4,032 67			13,125	4,032 67	
do	Grand Dune.....	37,975	58,748 47			37,975	10,121 67	58,748 47
Queen's.....	Grand Lake.....	93,555	16,372 96			93,555	16,372 96	
	do McMann's Cove.....	20,440	4,522 82			20,440	4,522 82	
	Jensseg.....	61,305	12,117 74			61,305	12,117 74	
	Washademook.....	48,975	6,340 83			48,975	6,340 83	39,354 35
Restigouche.....	Dalhousie.....	22,301	6,543 08			22,301	6,543 08	
	Traverse.....	29,400	9,008 64			29,400	9,008 64	15,551 72
	I. C. Ry. terminus.....	189,810	37,130 01			189,810	37,130 01	
	Navy Island.....	25,294	9,286 79			25,294	9,286 79	
	Marble Cove.....	23,925	4,374 40			23,925	4,374 40	
	Murray's Mills.....	23,880	3,441 65			23,880	3,441 65	
	Indiantown Wharf.....	1,615	132 83			1,615	132 83	
	Long Wharf.....	7,137	2,680 24			7,137	2,680 24	
	Adams Wharf.....	7,513	3,247 29			7,513	3,247 29	
	Miller & Woodman's.....	9,275	1,090 42			9,275	1,090 42	
	Hayford & Stetson's.....	8,015	942 29			8,015	942 29	
	International Wharf.....	460	52 90			460	52 90	
	Anchor Line Wharf.....	4,695	986 81			4,695	986 81	63,445 63
Sunbury.....	Oromocto.....	188,678	36,311 11	36,785	6,251 27	225,463	42,562 38	42,562 38
Westmoreland..	Point du Chêne.....	69,709	21,125 92			69,709	21,125 92	21,125 92

# Department of Public Works.

York	Frederickton	7,699 15	39,395	18,906 03	76,99 15	39,395	76,99 15
	St. Mary's Ferry	6,827 36	15,570		6,827 36	15,570	6,827 36
	Gibson	4,379 52	30,395	18,906 03	4,379 52	30,395	4,379 52
	King's						
	Bellisle Point	8,156 76	60,170		8,156 76	60,170	8,156 76
	Hampton	2,505 33	14,130	3,083 44	5,538 77	31,980	5,538 77
	Ferry's Point	5,085 81	38,020		5,085 81	38,020	5,085 81
	Lamb's Point	3,189 65	22,925	19,537 55	3,189 65	22,925	3,189 65
		331,566 63	1,411,757	331,566 63	352,159 48	1,486,780	352,159 48

EXPENDITURE for Dredging in Prince Edward Island for the Twenty Years ended 30th June, 1892.

County.	Locality.	Total for the Nineteen Years ended 30th June, 1890.				For the Year 1891-92.				Total Quantity.	Total Cost.	Cost for each County.
		Quantity.		Cost.		Quantity.		Cost.				
		c. yds.	\$ cts.	\$ cts.	\$ cts.	c. yds.	\$ cts.	\$ cts.	\$ cts.			
King's	Grand River.....	46,110	8,963 97			46,110	8,963 97			46,110	8,963 97	
	Montague River.....	106,140	17,119 43			106,140	17,119 43			106,140	17,119 43	
	Murray Harbour.....	44,430	7,378 33			44,430	7,378 33			44,430	7,378 33	
	Sturgeon.....			33,461 73		13,595	5,540 45			13,596	5,540 45	39,002 18
	Charlottetown Wharf	41,303	10,264 56							41,303	10,264 56	
	do Ferry.....	4,045	670 61							4,045	670 61	
	Crapaud.....	89,782	27,493 03							89,782	27,493 03	
	Pownal.....	44,400	9,604 55			3,243	1,321 54			47,643	10,926 09	
	Rocky Point.....	91,440	14,661 16							91,440	14,661 16	
	Vernon River.....	17,860	6,326 72							17,860	6,326 72	
Queen's	Wood Islands.....	2,780	548 00			2,780	548 00			2,780	548 00	
	Nine Mile Creek.....	31,650	6,286 46			31,650	6,286 46			31,650	6,286 46	
	Hickey Wharf.....	750	150 51			750	150 51			750	150 51	
	Carr's Point.....	12,165	2,441 28							12,165	2,441 28	
	Pinette.....	3,825	756 24							3,825	756 24	
	Fort Augustus.....	3,195	631 68							3,195	631 68	
	South Port Ferry.....	33,015	5,528 75							33,015	5,528 75	
	Red Point.....	7,161	3,879 60							7,161	3,879 60	
	Ch'town Steam Nav. Co.	7,668	4,904 15							7,668	4,904 15	
	do Connolly's Wharf	5,843	3,417 17							5,843	3,417 17	
Prince	do Peake Bros do	5,355	3,424 85			5,355	3,424 85			5,355	3,424 85	
	Nordo P. E. I. Ry. do	4,950	2,077 52			4,950	2,077 52			4,950	2,077 52	
	rth Rustico.....	13,536	4,775 38			13,536	4,775 38			13,536	4,775 38	
	South do.....	11,649	4,109 67			11,649	4,109 67			11,649	4,109 67	
	Gauthier's Creek	17,847	8,305 50							17,847	8,305 50	
	Georgetown.....			120,257 39		1,002	408 32			1,002	408 32	121,967 25
	Summerside.....	15,855	2,495 34			13,541	5,518 03			29,396	8,013 37	
	Hurd's Point Pier	41,070	7,289 95							41,070	7,289 95	
	Tignish.....	11,387	13,005 45							11,387	13,005 45	
	Cascumpec.....	1,157	538 42							1,157	538 42	
		715,868	177,048 28			31,382	12,788 34			747,250	189,836 62	

EXPENDITURE for Dredging in Quebec for the Twenty Years ended 30th June, 1892, from Appropriations—Maritime Provinces.

Magdalen Islands, Co.									
Gaspé.....	House Harbour.....	6,800	2,392 92	2,634 97	.....	.....	.....	2,392 92	.....
	Anherst Harbour.....	495	242 05	825 47	.....	.....	.....	242 05	2,634 97
Témiscouata.....	River du Loup.....	2,587	825 47	3,997 59	.....	.....	.....	825 47	825 47
*Rimouski.....	Rimouski.....	8,123	3,997 59	7,458 03	.....	.....	.....	3,997 59	3,997 59
		18,005	7,458 03	7,458 03	.....	.....	.....	7,458 03	7,458 03

\*From amount voted Quebec dredging.

STATEMENT of Dredging showing Quantities removed in each Province, and cost of each work for the Twenty years ended 30th June, 1892.

Fiscal Year.	NEW BRUNSWICK.		NOVA SCOTIA.		QUEBEC.		PRINCE EDWARD ISLAND.		Total Quantity.	Total Expenditure.	Cost per cubic yard.
	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.			
	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	\$ cts.
1872-73.	38,060	13,240 50	23,250	8,422 70	6,800	2,392 92	.....	.....	61,320	21,663 20	0 35 328
1873-74.	57,725	14,395 57	18,600	6,545 61	.....	.....	.....	.....	83,125	23,334 10	0 28 071
1874-75.	73,223	17,325 05	24,416	13,238 83	.....	.....	.....	.....	121,294	40,456 77	0 33 354
1875-76.	79,335	17,040 52	91,974	21,865 90	.....	.....	.....	.....	230,192	49,818 22	0 21 642
1876-77.	97,690	23,161 90	127,785	34,846 74	.....	.....	.....	.....	289,985	70,766 91	0 23 594
1877-78.	81,070	23,323 92	106,857	29,607 94	.....	.....	.....	.....	270,787	64,943 04	0 23 983
1878-79.	132,555	27,400 22	116,307	28,267 59	.....	.....	.....	.....	295,356	64,531 88	0 21 951
1879-80.	63,540	16,581 70	127,584	34,765 84	.....	374 08	.....	.....	238,379	64,396 69	0 28 197
1880-81.	44,315	12,385 85	87,118	23,061 64	.....	693 44	.....	.....	150,085	45,439 46	0 25 232
1881-82.	79,640	18,626 87	89,566	33,363 71	.....	.....	.....	.....	216,531	61,347 15	0 23 331
1882-83.	48,565	13,422 70	143,616	42,996 93	.....	.....	.....	.....	67,500 00	27,500 00	0 25 890
1883-84.	47,058	17,103 38	157,560	49,050 58	.....	.....	.....	.....	284,368	79,509 01	0 27 959
1884-85.	128,997	24,460 35	76,164	25,230 73	.....	3,997 59	.....	.....	238,359	62,376 68	0 23 242
1885-86.	68,905	14,874 63	56,790	21,482 05	.....	.....	.....	.....	142,432	46,706 34	0 32 792
1886-87.	69,440	11,452 86	53,400	25,621 19	.....	.....	.....	.....	128,977	43,288 79	0 33 56
1787-88.	50,152	9,252 50	84,175	29,847 60	.....	.....	.....	.....	138,102	45,000 00	0 32 58
1888-89.	63,633	16,598 08	56,910	32,697 00	.....	.....	.....	.....	146,783	64,798 63	0 27 29
1889-90.	80,068	20,544 93	59,783	22,821 55	.....	.....	.....	.....	177,273	54,451 87	0 30 71
1890-91.	96,668	20,375 09	61,698	24,386 57	.....	.....	.....	.....	177,290	53,605 55	0 30 23
1891-92.	75,023	20,592 85	81,993	27,376 08	.....	.....	.....	.....	188,398	60,757 25	0 32 249
Totals.	1,486,782	362,159 56	1,645,656	535,536 78	18,006	7,458 03	747,255	189,836 62	3,899,698	1,084,990 94	0 27 82



Department of Public Works.

STATEMENT of Dredging showing Quantities removed by hand in each Province, and cost of each Dredging for the Twenty years ended 30th June, 1892.

Fiscal Year.	NEW BRUNSWICK.		NOVA SCOTIA.		QUEBEC.		PRINCE EDWARD ISLAND.		Total Quantity. c. yds.	Total Expenditure. \$ cts.	Cost per cubic yard. \$ cts.
	Quantity.		Quantity.		Quantity.		Quantity.				
	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.	c. yds.	\$ cts.			
1878-79			245	555 13					245	555 13	2 26 58
1879-80			12,370	3,666 90					12,370	3,666 90	0 29 64
1880-81			11,140	2,560 25					11,140	2,560 25	0 22 98
1881-82			10,640	2,650 00					10,640	2,650 00	0 24 60
1882-83			8,190	2,500 00					8,190	2,500 00	0 30 52
1883-84			5,460	2,500 00					5,460	2,500 00	0 45 78
1884-88											
1888-89											
1889-90											
1890-91											
1891-92											
Totals			48,045	14,432 28							

STATEMENT of Dredging in the Maritime Provinces, showing Quantities removed by and Expenditure of each Dredge for Twenty Years ended 30th June, 1892.

Dredge.	Total Quantities and Cost for Nineteen Years ended 30th June, 1891.			1891-92.			Total for Twenty Years ended 30th June, 1892.		
	Total Quantity.	Cost.	Per Cubic yd.	Quantity.	Cost.	Per Cubic yd.	Total Quantity.	Total cost.	Cost per Cubic yd.
	Yds.	\$ cts.	Cts.	Yds.	\$ cts.	Cts.	Yds.	\$ cts.	Cts.
"New Dominion"	806,883	150,910 46	18.70	54,635	9,284 71	16.99	861,468	160,195 17	18.59
"Canada"	531,546	186,553 71	35.09	38,453	9,989 95	25.97	569,999	196,543 66	34.53
"Cape Breton"	534,938	139,074 33	25.99	.....	.....	.....	534,938	139,074 33	25.99
"Prince Edward"	726,703	178,790 91	24.60	31,382	12,788 34	40.75	758,085	191,587 55	25.27
"St. Lawrence"	725,081	226,432 31	31.22	24,763	13,734 71	55.46	749,844	240,167 02	32.02
"Geo. McKenzie"	372,616	135,966 08	36.48	39,165	14,959 56	38.19	411,781	150,925 64	36.65
Totals.....	3,697,717	1,017,736 10	27.52	188,398	60,757 27	32.24	3,886,115	1,078,493 37	27.62

STATEMENT of Dredging performed by hand in the Maritime Provinces, showing Quantities removed and Expenditure at each Locality, for Twenty Years ended 30th June, 1892.

Locality.	1872-73 to 1890-91.			1891-92.			1890-91.		
	Total Quantity.	Total cost.	Per cubic yard	Total Quantity.	Total cost.	Per cubic yard	Total Quantity.	Total cost.	Per cubic yard
	Yds.	\$ cts.	Cts.	Yds.	\$ cts.	Cts.	Yds.	\$ cts.	Cts.
Parroboro', N.S.	42,595	12,804 68	30.06	42,595	12,804 68	30.06	42,595	12,804 68	30.06
Windsor, N.S.	5,450	1,627 60	29.86	5,450	1,627 60	29.86	5,450	1,627 60	29.86
Totals.....	48,045	14,432 28	30.03	48,045	14,432 28	30.03	48,045	14,432 28	30.03

Department of Public Works.

APPENDIX No. 4.

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REPORT

ON THE

OTTAWA DISTRICT SLIDES AND BOOMS

FOR THE

FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.



# Department of Public Works.

## APPENDIX No. 4.

### OTTAWA RIVER WORKS.

No. 41053.

DEPARTMENT OF PUBLIC WORKS OF CANADA,

CHIEF ENGINEER'S OFFICE,

OTTAWA, 31st October, 1892.

SIR,—I transmit herewith the report by Mr. G. P. Brophy, Superintending Engineer of the Ottawa River District Works, on the works under his charge for the fiscal year ended 30th June, 1892.

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

LOUIS COSTE,  
*Chief Engineer.*

E. F. E. ROY, Esq.,  
Secretary, Department of Public Works,  
Ottawa.

OTTAWA RIVER WORKS OFFICE,

OTTAWA, 3rd August, 1892.

SIR,—I have the honour to submit the following report on the works under my charge, on the Ottawa River and its tributaries, for the fiscal year ended 30th June last.

In the late summer and autumn months of 1891, before the close of navigation, the waters of the various streams in the Ottawa valley were at a comparatively fair pitch for driving logs, and most of the timber, whether in the shape of square or sided stuff or cut for saw-logs, reached its destination at a somewhat later date than usual.

The foundations of the slides, dams and piers were examined. After the running season, and in the autumn months, a commencement was made to carry out the necessary work of repairs and reconstruction, which may be described as follows:—

#### REPAIRS AT STATIONS ON THE MAIN STREAM OR OTTAWA RIVER.

*At Carillon Station.*—A portion of the stiff guide boom above the head of the slide, where there is a strong cross current, had become sagged and out of line, it became necessary therefore to straighten and strengthen the same by planting on side timbers bolted to the original sticks. This boom section was also replanked and new spindles provided where required.

*At the Ottawa or South Chaudière Station.*—The support piers at both sides of the second bulk-head, where the timbers had become decayed, were reconstructed by placing new timbers and refilling the stone; the bulk-head foundation timbers renewed; the side pier of slide replanked, to form a platform for storage and working purpose; the cribwork and sheeting of the slide repaired, and the general store-house, sheds and fences painted or whitewashed, and certain repairs executed at and near the official residence of the slidemaster.

*Hull or North Chaudière Station.*—At this place some of the bulk-head equipment was repaired and the slide planking patched.

*Bridge Approaches and Roadway between the Cities of Ottawa and Hull.*—The mud from this busy avenue was cleaned off from time to time and road metal spread where required. As mentioned in former reports it is very desirable that some

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durable system of paving should be adopted for this piece of road which has to accommodate a constant stream of heavy traffic.

BRIDGES AT OTTAWA AND HULL.

*Union Bridge.*—The roadway planking was renewed throughout—the middle being of elm and the sides of red pine. The iron work was overhauled as follows: the nuts on floor beam stirrups and pin connection nuts (bottom and top) tightened; counter rods (bottom and top), lateral and transverse rods adjusted; broken cast iron washers removed and replaced by wrought iron washers; portal stay rods repaired; changes made at intersections of top laterals to prevent rattling; bolts tightened and nuts checked on rods, pins, floor beam stirrups, &c., and the railing where loose was braced and strengthened.

*Bridge across Slide and Hydraulic Channels at Chaudière.*—The through trusses (north and south) had their counter rods slackened in order to adjust the tension; the floor beams and top struts plumbed; the rust scraped of the bottom chord bars, post feet and stirrups, and off the floor beams, about three feet on each side of the chords where the water and dust had lodged and the parts scraped covered with a coat of paint. On the other spans of this bridge the lateral and transverse rods were adjusted and bolts put in the loose struts; additional braces put in position to strengthen the iron railing, and the roadway planking partially renewed where it had worn thin. The side-walk approach at the south-easterly end of this bridge was renewed for a distance of about twenty-five feet.

*Hull Bridge,* over the slide channel, had a new covering of red pine planking placed on the road-way, and its hand-rail strengthened and partially renewed. The sidewalk approach to this bridge near the pond was thoroughly repaired; decayed foundation timbers having been replaced by sound ones, and the railing strengthened and braced.

*Sappers' Bridge over the Rideau Canal.*—The roadway plank was patched in places and the side-walk on the northerly side completely renewed.

*Dufferin Bridge,* over the same waterway, had its side-walk at the south-easterly end, near its junction with the approach to Sappers' Bridge, renewed.

*Maria Street Bridge,* which spans the canal immediately south of the basin, should be replaced by a more substantial structure than the one which has been in use there for the past twenty years. It is understood that your department has plans for a new bridge at that place—the piers to be of stone and the superstructure of iron or steel. I would recommend that the new bridge be constructed as soon as possible, as notwithstanding the repairs that were carried out there last year by the insertion of support timbers and braces, the whole structure is unsightly and cannot much longer, with safety, accommodate the traffic over it. Repairs to the planking, &c., have been done as required, but very little more can be done in that way with useful effect.

*Chats Station.*—At this place the side-pier timbers of the slide where decayed and worn out were renewed and refilled with stone; new planking laid in the bottom of the slide where required and the governing bulk-head repaired.

*Chenaux Station.*—The booms here were strengthened by the insertion of heavy timbers skein-chains clevises and rings, and the capstan and float were repaired.

*Portage du Fort Station.*—Certain portions of the guide-booms having decayed, new timbers were spliced in white pine plank covering spiked on, and an elm picket provided for pier at slide.

*Mountain Station.*—The outside pier of slide adjacent to the rapids was, for the most part, reconstructed, and hardwood plank placed on side; stone filling removed and replaced; new bulk-head substituted for old structure; new cross sills furnished for supporting the slide where necessary, and hardwood posts placed in the works.

*Calumet Station.*—A new set of stop-logs was procured for one of the bulk-heads here, and timber laid up for repairs at the basin.

*Rocher Capitaine Station.*—The side pier timbers of the slide where rotten and worn out, were removed and replaced by sound material, and the bottom planking repaired.

## Department of Public Works.

### REPAIRS ON TRIBUTARIES OF THE OTTAWA.

*Gatineau River.*—The workmen's camp house in connection with the boom was repaired; sand and miscellaneous deposits excavated from the upper canal; mill rubbish, bark and other debris removed from the outlet creek near the lower sorting-gaps, and a wing boom placed to catch timber of small dimensions that might escape in the swift current under the main boom.

*Madawaska River.*—The principal repairs executed on this stream were at McFadden's Shoal dam and the flat and pier dam at the foot of Long Rapids, which had been damaged by fire. The boom and piers at Little Rapids were also repaired as well as the dams and piers at Barrett's Chute and Chain Rapids.

A break having taken place in the planking of the High Falls slide, the damage was made good and certain minor repairs were executed at the lower stations on this stream, where the action of the spring freshets and jamming of timber and logs had strained the booms and stripped off some of the dam and slide planking.

*Coulonge River.*—Foot planking was laid along the High Falls slide for its whole length and certain necessary repairs done to the bottom planking stringers, sills and posts of the slide.

The river at this place—about four miles from its mouth—flows through a rocky gorge forming a cleft in a spur of the Laurentian Mountain range; and on its left bank the single stick slide (about 3,000 ft. in length) is built. A rock slide from the almost perpendicular cliffs took place and carried away portions of the timber slide which had to be rebuilt; and as there were large pieces of detached rock and boulders influenced by climatic changes and threatening a descent at any time precautions were taken to fasten some of them in their places and to remove others through the agency of dynamite.

*Black River.*—The foundation timbers of a portion of the slide at High Falls on this stream having originally been laid on a slab-pile resting on a rocky shelf slanting downwards towards the rapids and falls and without provisions being made to hold the same in place a lateral movement of about 120 feet in length of the slide in the direction of the chute was the result, with a sag in the superstructure corresponding to the depression of the rock. This had to be remedied by removing the old work with a view of securing reliable foundations and renewing the bents, stringers, posts and planking required to fill the gap. The pier timbers and planking of other portions of the works were also repaired at this station.

*Petewawa River.*—At the 1st and 3rd chutes on this stream the foundations and superstructures of the slides were repaired; as also the foundation timbers and sheeting of the dam at the head of the 2nd chute slide. At Crooked Chute station the dams and side piers had new timbers and planking substituted for a like class of materials worn out and decayed.

### WORK OF RECONSTRUCTION.

At the Bois-dur Station on the Petewawa River the dams and booms were to a considerable extent renewed; and also portions of the main retaining dam at Cedar Lake and the bulk-head and entrance works of the slide at McDonell's Chute, at Crook Chute on the same stream, a portion of the regulating dam was rebuilt and made serviceable for the supplying of water to the slide.

The spring of 1892 opened favourable for a successful "drive" on the tributary streams; but colder weather having set in within a few days after operations had fairly commenced a sudden check was given to the passage of timber and logs on the small upper creeks, and the waters passed to the lower reaches of the rivers gradually without having the desired effect of floating all the material to the larger streams where it would be better under control. Heavy rains prevailed later in the season in some of the lumber districts and these with the water let off from the reservoirs or retaining dams, maintained a comparatively favourable pitch for the business of the river drivers and raftsmen. On other streams, however, very low water was experienced and the improvements for facilitating the descent of timber were subjected to greater tear and wear than usual.

It is hoped that the great bulk of the timber will have reached its destination before the end of the present season of navigation and that the late drives and sweeps will be so far advanced as to insure the early use of the timber and logs for next spring's business.

The formation of bars (composed principally of sand and other deposits) in the Gatineau River in proximity to the main boom has had the effect of changing the direction of the currents, undermining the left bank of the river for a considerable distance and proving detrimental to the successful navigation of this stream by steam-boats, and their tows; to say nothing of the extra cost involved in the booming out of logs, etc. Dredging will have to be resorted to as a means of relief and an early commencement of this work would be very desirable.

The following statement furnished by the collector of slide dues in your department shows the quantities of the various descriptions of timber that passed the Government works, together with the amount of revenue accrued as tolls for the fiscal year covered by this report:—

STATEMENT of the number of pieces of timber, saw-logs, etc., that passed through the Government slides and works on the river Ottawa and its tributaries during the fiscal year ending 30th June, 1892.

	Pieces.
White Pine Timber.....	14,961
Red do .....	2,947
Flat, boom and dimension timber.....	10,453
Round spruce.....	2,619
Dimension timber.....	47,473
Cedars .....	6,458
Railroad ties.....	107,122
Saw logs.....	2,123,226
Sided timber mixed.....	3,640
	2,318,899

and 3,778 cords pulpwood and 9 cribs traverses.

The revenue accrued on the above was \$44,260.42.

In respectfully submitting the above

I have the honour to be, sir,

Your obedient servant,

GEO. P. BROPHY,

*Superintending Engineer Ottawa River Works.*

LOUIS COSTE, Esq.,

Chief Engineer, Department of Public Works,  
Ottawa.



## Department of Public Works.

### APPENDIX No. 4.—Statement of Expenditure, of Reconstruction and Repairs on the Ottawa River and Tributaries, for the year ended 30th June, 1892.

Name of Work.	District.	Letter of Authority.		Expenditure authorized.	Expenditure or Liabilities incurred, 1st July, 1891, to 30th June, 1892.	Remarks.
		No.	Date.			
Dufferin Bridge, Ottawa, Ont.	City of Ottawa.			\$ cts.	\$ cts.	Repairs.
Sappers do	do				53 30	do
Maria Street Bridge do	do				391 46	do
Iron bridges over slides, bridges storehouses, Ont	do				147 31	do
Union Bridge, Ont. and Que.	do			4,000 00	879 42	do
Roadway and bridge approaches between Ottawa and Hull, Ont. and Que.	City and County of Ottawa	36613	26th Oct.		945 96	do
Hull Bridge, Que.	do				1,429 06	do
Carillon Station, Ottawa River, Ont.	County of Ottawa.				147 06	do
South Chaudière do	do Prescott.				379 99	do
Cheneaux Station do	City of Ottawa.				713 22	do
Portage du Fort Station do	North Riding of Lanark.				596 63	do
Mountain Station, Ottawa River, Que.	South do Renfrew				239 48	do
Calmet Station do	North do				57 80	do
Rocher Capitaine Station do	County of Pontiac.	36614	26th Oct.	16,000 00	2,479 74	do
Gatineau River, Que.	do do				496 53	do
Madawaska River, Ont.	do Ottawa				1,688 28	do
Coulouge do Que.	South Riding of Renfrew				4,905 07	do
Black do Ont.	County of Pontiac.				1,341 76	do
Petewawa do Ont.	do do				989 93	do
do do Ont.	North Riding of Renfrew.				1,625 61	do
Total	do	36611	26th Oct.	3,000 00	2,722 87	Reconstruction.
					22,835 52	



Department of Public Works.

APPENDIX No. 5.



REPORT

ON THE

NEWCASTLE DISTRICT SLIDES AND BOOMS

FOR THE

Fiscal Year ended 30th June, 1892.



Department of Public Works.

APPENDIX No. 5.

REPORT ON THE NEWCASTLE DISTRICT SLIDES AND BOOMS.

Ref. No. 136802.

DEPARTMENT OF PUBLIC WORKS,  
CHIEF ENGINEER'S OFFICE, OTTAWA, 21st December, 1892.

SIR,—I transmit herewith a report by Mr. R. B. Rogers, Superintending Engineer of the Trent and Newcastle District works, on the works under his charge for the fiscal year ended 30th June, 1892.

I have the honour to be, sir,

Your obedient servant,

LOUIS COSTE,  
*Chief Engineer.*

E. F. E. Roy, Esq.,  
Secretary, Department of Public Works.

RIVER TRENT AND NEWCASTLE DISTRICT WORKS,  
SUPERINTENDING ENGINEER'S OFFICE,  
PETERBOROUGH, 19th Dec., 1892.

SIR,—I have the honour to submit the annual report on the works under my charge, for the fiscal year ending 30th June, 1892.

The works in this district are constructed for two purposes, namely: Those constructed to benefit navigation, and those constructed to facilitate the descent of timber. The former are under the control of the Department of Railways and Canals, the latter are under the control of the Department of Public Works.

The works are situated along the River Trent, between the Bay of Quinté and Balsam Lake—a distance of about 170 miles.

There is a very large water shed, and as the country becomes cleared the storage of the water in the reservoirs above, is every year becoming a more important question to the various interests depending upon the supply of water.

The water last spring only reached an ordinary spring level.

The water in the fall of 1891 was very low, lower than it has been for many years, owing partly to its not being properly stored in the reservoirs above, during the spring, and partly to the very dry season.

There was a greater number of logs than usual brought down this route last year.

Some regulations regarding the sizes of the bags or booms of logs which are moved down should be passed. At present the logs come down in booms ranging from fifteen to sixty thousand logs. When they come to a contracted part of the channel, the right of way for navigation, as well as for other lumbermen is blocked sometimes for days at a time, by large booms. One of the largest firms brought their logs this year down in small booms with the aid of steam tugs, and they assured me that it was a much cheaper and quicker way than by the old method of large booms. This firm's logs did not stop navigation one hour during their whole descent. Some stringent regulations should also be passed in order to stop the constant removal of the buoys placed along the route to mark the navigation channel.

The following repairs were executed at the different stations :—

FENELON FALLS.

The south side of the slide, on which rests the end of the Smith estate saw-mill, and the up stream portion forms the mill pond, for the mill, became very much decayed and was falling in at several places. Rather than go to the expense of rebuilding the cribwork in its former condition I reduced the width of the slide seven feet, and rock-bolted a line of bents from the lower side of the slide pier, and the inside of the bents I planked with 6-inch plank, which formed the new side for the slide. Two piers were also rebuilt at the lower end of the slide. The floor of the slide was also repaired. This slide is now in first class condition.

BUCKHORN.

The glance booms were repaired, and 1,000 feet of single stick boom procured.

PETERBOROUGH.

The floor of the slide which was taken out by the Dickson Company's logs was replaced.

LAKEFIELD.

Two snubbing-piers were built above the "Narrows" at Lakefield in order to prevent the large booms of logs blocking the navigation channel.

TRENT RIVER.

Part of the shoal below the village of Hastings was removed, but the high water prevented the work being completed.

I inclose a table showing the number of pieces of timber which passed through the slides during the past year.

I have the honour to be, sir,

Your obedient servant,

RICHARD B. ROGERS,  
*Superintending Engineer.*

LOUIS COSTE, Esq.,  
Chief Engineer, Department of Public Works.

STATEMENT showing the number of pieces of Timber, &c., which passed over the different slides on the River Trent and Newcastle District Works, during the Fiscal Year ended 30th June, 1892.

Station.	Saw-logs.	Cedar, 8 feet.	Cedar, 16 feet.	Boom Timber.	Railroad Ties.	Bolts.	Square Timber.
Fenelon Falls	180,000	8,880		30			
Bobcaygeon	115,000	8,880		30			
Buckhorn	115,000	8,880		216			
Lovesick	224,000	8,880		216			
Burleigh	224,000	8,880		216			
Young's Point	160,500	27,500		1,430			
Lakefield	110,000	27,500		2,096			
Peterboro'	110,000	27,500		2,096			
Hastings	42,659			1,496			
Heeley's Falls	42,659			1,496			
Chisholm's Rapids	107,344	86,808	57,256	1,619	6,781	4,588	63

Department of Public Works.

APPENDIX No. 6.

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REPORT

ON THE

ST. MAURICE DISTRICT SLIDES AND BOOMS

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.





Department of Public Works.

APPENDIX No. 6.

SLIDES AND BOOMS, ST. MAURICE DISTRICT.

Ref. No. 44422.

DEPARTMENT OF PUBLIC WORKS OF CANADA,  
CHIEF ENGINEER'S OFFICE,  
OTTAWA, 1st December, 1892.

SIR,—I transmit herewith a report by Mr. Thos. Berlinguet, Superintending Engineer of the Slides and Booms on the St. Maurice District, on the works under his charge during the fiscal year ended 30th June, 1892.

I am, sir, your obedient servant,  
LOUIS COSTE,  
*Chief Engineer.*

E. F. E. ROY, Esq.  
Secretary, Department of Public Works.

Ref. No. 39425.

THREE RIVERS, 16th November, 1892.

SIR,—As requested in your letter No. 39425, I have the honour to submit the following report on the St. Maurice works, for the fiscal year 1891-92 ended 30th June last.

The St. Maurice is one of the chief tributaries of the St. Lawrence, not only on account of its length but also on account of the volume of its waters. The three branches which form its outlet unite about a mile above the St. Lawrence, and from thence the river has an average width of a quarter of a mile, as far as Weymontachingue, that is to say, for more than 300 miles above its mouth.

The course of the St. Maurice is impeded by a great number of rapids and falls, nevertheless there are considerable stretches which are navigable.

The history of the commencement of the timber trade on the St. Maurice is somewhat interesting.

It was only in 1825 that the Government took measures for the dividing into regular sections of the vast territory of the St. Maurice.

In 1852 the timber limits were erected definitely and systematically. The following year great improvements were made in the river to facilitate the descent of the wood.

These improvements were afterwards continued each year, and thus the vast territory of the St. Maurice timber limits grew to their present importance.

The first saw-mill of any importance erected on the St. Maurice was at Les Grès, about sixteen miles above Three Rivers,—it was built in 1846; the second was built at La Pointe des Américains in 1853.

In 1867 a third saw-mill was built on Ile Bellerive, at the mouth of the St. Maurice, now known as Baptist's Island.

To-day there are four large saw-mills on the St. Maurice, three at Three Rivers and one at Grandes Piles, each able to saw 2,000 logs per day of 24 hours.

Besides these saw-mills there is at Grand Mère, on the River St. Maurice, a large pulp factory which consumes from 150,000 to 200,000 logs per annum.

During the summer of 1891, 276,236 saw-logs were passed down through the St. Maurice works. This wood was chiefly pine and spruce.

[1892]

A small proportion of this timber was cut on the St. Maurice. It came chiefly from timber limits along the Mackinac, Rat River, the Grande Bostonnais above La Tuque. The timber cut last season at the head of the Vermilion, also a tributary of the St. Maurice, could not reach the St. Maurice on account of the lowness of the water on the Vermilion.

The freshets in 1891 were comparatively small in comparison with those of previous years. The water in the St. Maurice commenced to rise on the 12th of April, and reached its maximum height on the 24th of the same month, corresponding to seventeen feet above the lowest water level, and then gradually fell to its normal stage, and on the 11th of June the water level was two feet lower than the lowest we ever had for the last five years at the same period.

At the end of August, 1891, the water rose about five feet, which gave a good pitch for the floating of timber.

The booms at the different stations were stretched in April and May, 1891, and were put in winter quarters in October of the same year.

The following repairs were executed during the winter, under the supervision of the boommasters at the respective stations:—

*Grand' Mère.*

The building of two anchor piers 30 feet square on the bottom and 18 feet square on the top, with an elevation of 10 feet.

*Shawinigan.*

The work done at that station consists of the rebuilding pier No. 10 in the Bay of Shawinigan. This pier was built in 1854, and has been repaired several times since. The dimensions of the section of the pier rebuilt are 32 feet by 19 at the low water level, and 15 feet by 11 on the top, with an elevation of 30 feet above low water.

*Cap aux Corneilles.*

The work done consists of the building of a pier for the distribution of logs at the head of Cap aux Corneilles booms, at a distance of about 800 feet below the Canadian Pacific Railway bridge. The pier measures 29 by 17 feet at low water level. Three other piers were also repaired.

*Entrance of the St. Maurice.*

The planking of three piers was renewed and some repairs done to a shed. A new scow was also built.

Amount of expenditure for staff maintenance and repairs for fiscal year ended 30th June, 1892:—

Staff and maintenance expenses .....	\$13,374 22
Repairs at Grand Mère.....	743 12
do Shawinigan.....	1,209 07
do Cap aux Corneilles.....	1,521 75
do Entrance of the St. Maurice.....	507 72
Total expenditure for 1891-92.....	\$17,355 88

The expenses for maintenance this year are \$3,344.31 less than those for 1890-91.

I have the honour to be, sir,

Your obedient servant,

F. X. THOS. BERLINGUET,  
*Acting Superintending Engineer.*

LOUIS COSTE, Esq.,  
Chief Engineer, Department of Public Works,  
Ottawa.

Department of Public Works.

APPENDIX No. 7.



REPORT

ON THE

SAGUENAY SLIDE

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.



Department of Public Works.

APPENDIX No. 7.

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SAGUENAY SLIDE.

DEPARTMENT OF PUBLIC WORKS OF CANADA,  
CHIEF ENGINEER'S OFFICE,

OTTAWA, 31st October, 1892.

SIR,—I transmit herewith a report by Mr. Joseph Rosa, Assistant Engineer on the Saguenay Slide for the fiscal year ended the 30th June, 1892.

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

LOUIS COSTE,  
*Chief Engineer.*

E. F. E. Roy, Esq.,  
Secretary, Department of Public Works.

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QUEBEC, 15th August, 1892.

SIR,—I have the honour to report as follows with regard to works executed and the operations of the Saguenay Slide, during the fiscal year ended 30th June, 1892.

Repairs of an ordinary character were made to the slide, booms and dams, and timber, for the reconstruction of about 150 feet of the slide, was procured.

A channel was made on the east side of dam No. 6, to carry off the surplus water not required for the passing of timber and which flooded lands above the dam.

A pier, 22 feet by 35 feet, was completed at Mistook, on the Grand Décharge, and 900 feet of booms placed in position. Three small piers respectively, 6, 8 and 12 feet square, were built for the purpose of fastening the booms, and 420 feet of new booms prepared.

The number of logs of various dimensions that passed through the slide during the year was 24,814, composed as follows:—

23,909	spruce logs	12 to 14 feet.
550	pine do	12 to 14 feet.
126	spruce do	14 to 25 feet.
229	do	25 to 35 feet.

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

JOSEPH ROSA,  
*Superintendent.*

LOUIS COSTE, Esq.,  
Chief Engineer  
Dept. of Public Works,  
Ottawa.

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Department of Public Works.

APPENDIX No. 8.

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REPORT

OF THE

COLLECTOR OF SLIDE AND BOOM DUES

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.





# Department of Public Works.

## APPENDIX No. 8.

DEPARTMENT OF PUBLIC WORKS OF CANADA,  
CHIEF ENGINEER'S OFFICE,  
OTTAWA, 14th November, 1892.

No. 41218.

SIR,—I transmit herewith a report by Mr. E. T. Smith, Collector of Slide and Boom Dues, on the work of his office for the fiscal year ended 30th June, 1892.

I have the honour to be, sir,

Your obedient servant,

LOUIS COSTE,  
*Chief Engineer.*

E. F. E. ROY, Esq.,  
Secretary, Department of Public Works,  
Ottawa.

DEPARTMENT OF PUBLIC WORKS,  
COLLECTOR'S OFFICE,  
OTTAWA, 11th November, 1892.

SIR,—I have the honour of submitting my report on that branch of the service committed to my charge, namely, the collection of slide and boom dues, during the fiscal year ending 30th June last.

### OTTAWA DISTRICT.

Again this year the revenue accrued, as well as the collections compare unfavourably with those of the preceding corresponding period.

The deficiency is largely attributable to the very small quantity of square timber taken to market as compared with the preceding year; the quantity taken to Quebec in 1890-91 being 121,704 pieces, and during the year ending 30th June last, there were only 17,908 pieces which passed through the works. Again the number of saw-logs on which dues were chargeable was smaller by 777,064 pieces than in 1890-91, which shortage is accounted for partly by the withdrawal from the sawed lumber business of two large firms, and the saw-mill of another firm having been burned, caused the latter to reduce very considerably their output of logs.

Of the dues outstanding uncollected on the 1st July, 1889, there was recovered during the past year \$2,035.96.

Of the dues accrued during the year ended 30th June, 1890, nothing remains unpaid but the charges for Chaudière boomage, which are disputed.

On the 30th June, 1891, there remained unpaid of the dues of 1890-91, \$3,808.51, all of which has been collected but \$425.92, which is composed of \$397.50 secured on a raft of timber still unsold in Quebec and an account for \$28.42, which is in the hands of the Government solicitors for collection.

Of the dues of last year, there was outstanding unpaid only \$613.10, of which \$590.70 has been paid and the balance, an overcharge of \$22.40, written off since 30th June last.

The total revenue for the year ending 30th June, 1892,  
from the Ottawa District, including interest was, \$44,380 80  
Of which there was collected..... \$43,767 70  
Leaving outstanding, 30th June, 1892..... 613 10  

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44,380 80

The collections were as follows:—

Of dues accrued during the fiscal year 1891-92.....	\$43,767 70
do do do 1890-91.....	3,382 59
do prior to 1st July, 1889.....	2,035 96
	\$49,186 25

The amounts outstanding unpaid on 30th June last were:—

Of dues accrued during year ending 30th June, 1889, prior to the collection being transferred to this department.....	\$56,073 00
Accrued during year ending 30th June, 1890.....	\$6,903 05
Accrued during year ending 30th June, 1891.....	425 92
Accrued during year ending 30th June, 1892.....	613 10
	7,942 07
Total outstanding .....	\$64,015 07

The amount outstanding at Quebec, on 1st July, 1889, viz., \$1,151.75, remains unchanged. Statement No. 5 herewith fully explains this matter.

Herewith inclosed are five statements relating to the Ottawa District, viz.:—

No. 1.—Statement of dues accrued on each of the slides and works on the Ottawa River during the year ending 30th June, 1892.

No. 2.—Statement of the number of pieces of timber, &c., which passed through the works during the same period.

No. 3.—Statement of slide and boom dues accrued from Ottawa River Works since 1st July, 1889, uncollected 30th June, 1892.

No. 4.—Statement of slide and boom dues outstanding on 30th June, 1889, uncollected 30th June, 1892.

No. 5.—Statement of slide dues outstanding at Quebec, 30th June, 1889, uncollected 30th June, 1892.

#### ST. MAURICE DISTRICT.

The revenue accrued from this district during the past fiscal year was \$4,596.39.

The collections for the same period amounted to \$7,759.84.

The amount outstanding unpaid on 30th June last, was \$16,612.94, full details of which will be found in Statement No. 6 herewith.

Of the latter amount two accounts were transferred to the Department of Justice for collection, viz.:—

Ross & Co., \$627.68, which was paid on the 5th inst., and Hall, Neilson & Co., \$1,440.90, regarding which I am not aware of the action taken, if any.

#### SAGUENAY DISTRICT.

On the 30th June last, the amount outstanding was \$8,900.03, Messrs. Price Bros. & Co. having paid on that date \$8,847.55, retaining the above balance on account of an alleged claim against the Fisheries Department. Payment of this balance has been demanded, and the firm has promised early attention to the matter.

#### NEWCASTLE DISTRICT.

During the past fiscal year no dues were collected from this district, the amount outstanding increasing to the sum of \$6,490.77 on the 30th June last. See Statement No. 8 for details.

Since the 1st July last, \$753.72 has been collected, and \$8.60 written off, besides the further sum of \$2,245.81 paid into the Exchequer Court by Messrs. M. Boyd &

## Department of Public Works.

Co., who are contesting the legality of the charge and the action taken to enforce payment of the same. Pending the decision in this case, it was deemed better not to press for settlement of other accounts.

In conclusion I beg leave to say, that there is every indication that the revenue from the Ottawa and St. Maurice Districts will be largely increased in the near future, as a number of new and wealthy firms have begun, or will shortly commence operations on an extensive scale, and the loss caused by the withdrawals of other firms, as mentioned in the early part of this report, will be to a great extent compensated for by the revenue to be derived from the timber and saw-logs to be manufactured by the new firms.

At this writing, I may say that present indications point to a decreased output of square timber as compared with last winter, but on the other hand the quantity of saw-logs from which the bulk of our revenue comes will be largely increased.

I have the honour to be, sir,  
Your very obedient servant,

EDWARD. T. SMITH,  
*Collector of Slide and Boom Dues.*

LOUIS COSTE, Esq.,  
Chief Engineer, Department of Public Works,  
Ottawa.

No. 1.—STATEMENT showing the Dues accrued on each of the undermentioned Government Slides and Works on the River Ottawa, and its tributaries, during the fiscal year ending 30th June, 1892.

Name of River.	Name of Slide or other Improvement.	Accrued to each slide.	Accrued to each river.
		\$ cts.	\$ cts.
Ottawa.....	Rocher Capitaine slide .....	98 00	
	Des Joachim do .....	91 00	
	Calumet do .....	332 51	
	Portage du Fort do .....	107 13	
	Chats do .....	492 00	
	Chaudière do .....	4,560 85	
	Chenau boom.....	5,063 69	10,745 18
Petawawa.....	Cedar Lake to Meno Rapids.....	991 78	
	New slide near Lake Traverse.....	2,317 71	
	Lake Traverse, Front Lake.....	1,624 11	
	Crooked Chute.....	1,540 49	
	Bois Dur to River Ottawa.....	4,298 35	
			10,772 44
Madawaska.....	Ragged Chute and High Falls slide and improvements.....	8,084 00	
	Improvements below High Falls to Arnprior.....	2,338 71	
	Slide at Arnprior.....	941 87	
	Boom at the mouth.....	1,163 03	
			12,527 61
Dumoine.....	High Falls slide.....		
	Improvements below High Falls.....		
Coulange.....	Coulange slide.....		207 44
Black River.....	Black River slide.....		3,712 34
Gatineau.....	Gatineau Boom.....		6,295 81
	Total .....		44,260 82

No. 2.—STATEMENT of the number of pieces of Saw-logs, &c., that passed through the Government Slides and Works on the River Ottawa, and its tributaries, during the fiscal year ending 30th June, 1892.

White pine timber .....	14,961 pieces.
Red do .....	2,947 do
Flat, bouon and dimension timber .....	10,453 do
Round spruce.....	2,619 do
Dimension timber.....	47,473 do
Cedars.....	6,458 do
Railway ties.....	107,122 do
Saw-logs.....	2,123,226 do
Sided timber, mixed.....	3,640 do
Total .....	2,318,899 do

also 3,778 cords pulpwood and 9 cribs traverses.

The revenue accrued on the above was \$44,260.82.

EDWD. T. SMITH,  
Collector of Slide and Boom Dues.

OTTAWA, 30th June, 1892.

Department of Public Works.

No. 3.—*STATEMENT of Slide and Boom Dues accrued from the Ottawa River Works, since 1st July, 1889, outstanding on 30th June, 1892.*

NAME.	Year to which Dues belong.	Chaudière Boomage in Suspense.	Ordinary Dues.	Total outstanding.	REMARKS.
		\$ cts.	\$ cts.	\$ cts.	
J. R. Booth	1889-90	2,561 69		2,561 69	
The Bronsons & Weston Lumber Co.	1889-90	2,056 96		2,056 96	
Perley & Pattee	1889-90	1,203 26		1,203 26	
Wm. Mason & Sons	1889-90	167 66		167 66	
Pierce & Co.	1889-90	913 48		913 48	
Wm. Mason & Sons	1890-91		590 70	590 70	
W. C. Edwards & Co	1890-91		22 40	22 40	
Robert Gorman	1890-91		397 50	397 50	
Alex. Fraser, acct. of Thos. Stephens	1890-91		28 42	28 42	
Total		6,903 05	1,039 02	7,942 07	Chaudière boomage reported to Council and referred to the Treasury Board. Should be written off.  Dues secured.

[1892]

OTTAWA, 30th June, 1892.

EDWD. T. SMITH,  
*Collector of Slide and Boom Dues.*

154 No. 4—STATEMENT of Slidage and Boomage from the Ottawa Slides and Works, outstanding at Ottawa, previous to 1st July, 1889.

By Whom Due.	Bad and Doubtful Debts.	Chaudiere Boomage in Suspense.	Other Slide and Boom Due disputed.	Total Dues Outstanding June, 1892.	Year to which Dues belong.	Remarks.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
John & Wm. McLean	53 14			53 14	1873	Insolvent.
James Yuill	9 29			9 29	1876	Overcharge.
John Rowan	342 50			342 50	1872 and 1873	Insolvent.
Lemieux & Charrette	51 30			21 30	1873	do
Tallon & Lapierre	148 10			148 10	1873 and 1874	do
Mosgrove & McHarry	261 42			261 42	1873 and 1874	do
W. C. Wells	600 90			600 90	1873 and 1874	do
Dufresne & McFarley	528 80			528 80	1874 and 1875	do
Walton Smith	171 46			171 46	1874 and 1875	do
A. H. Baldwin	3,507 92			3,507 92	1871 to 1874	do
Hon. James Skead	9,807 65			9,807 65	1861, 1863, 1864, 1869, 1875 to 1878	do
Batson & Currier	5,558 70			5,558 70	1875 to 1877	do
A. F. A. Knight	546 30			546 30	1878	do
James Walker	11 25			11 25	1877	do
R. Campbell & Son	1,558 50			1,558 50	1879 to 1881	do
James G. Bryson	73 50			73 50	1886	do
Costello Bros.	90 62			90 62	1882	do
N. E. Cormier	428 34			428 34	1888	do
John R. Booth		9,871 93	398 88	10,270 81	1881 to 1888	\$398.88 counter claim damage by breaking of Coulange Boom.
Perley & Pattee		8,889 85	419 10	9,308 95	1880 to 1888	\$419.10 do do do do
The Bronsons & Weston Lumber Co.		8,180 79		8,180 79	1881 to 1885	Chaudiere Boomage—These parties claim that they have maintained these works wholly at their own expense since 1881
Pierce & Co.		462 18		462 18	1888	
G. A. Grier & Co.		1,060 59		1,060 59	1886 and 1887	
Estate late L. Young		1,461 20		1,461 20	1881 to 1885	
Wm. Mason		413 85		413 85	1881 to 1888	
Gilmour & Co.		406 27		406 27	1884	
John Rochester		258 88		258 88	1881 to 1883	
J. & B. Grier	76 84			76 84	1883	Overcharge.
R. & W. Conroy	95 42			95 42	1882 and 1883	do reported in return S. 38 for March 1886.
A. & P. White	101 00			101 00	1881	Overcharge.

J. & G. Bryson.....	.....	.....	.....	.....	.....	.....	.....	Counter claim for damage by breaking of Coulonge Boom.
B. Caldwell & Son.....	.....	.....	.....	.....	.....	.....	.....	Overcharge.
	4 33	252 20	252 20	252 20	1886.	1887.	1886.	
	23,997 28	1,070 18	1,070 18	4 33	.....	.....	.....	
	31,005 54	56,073 00	56,073 00					

EDWARD T. SMITH,  
*Collector of Slide and Boom Dues.*

OTTAWA, 30<sup>th</sup> June, 1882.

No. 5.—STATEMENT of outstanding Slide Dues, Ottawa District, bonds for which were sent to Quebec for collection, remaining unpaid 30th June, 1892.

Name.	From 1860.	From 1861.	Total.
	\$ cts.	\$ cts.	\$ cts.
Hon. James Skead .....	245 00	210 00	455 00
James Mair .....	.....	696 75	696 75
	245 00	906 75	1,151 75

These amounts were uncollected as the parties claimed damages for loss caused by the Madawaska Boom breaking away in 1860.

A decision on their claim was not arrived at until 2nd August, 1869, on the 5th idem Messrs. Skead and Mair were notified that the Department could not recognize their claim.

To the best of my knowledge their decision was never communicated to the collector of slide dues, consequently their accounts remained in abeyance. Since then both parties died, and I believe both were insolvent at the time of their death.

EDWARD T. SMITH,

*Collector of Slide and Boom Dues.*

OTTAWA, 30th June, 1892.



## Department of Public Works.

No. 6.—STATEMENT of Slide and Boom Dues from the St. Maurice Slides and Works,  
outstanding on 30th June, 1892.

Name.	Year to which Dues belong.	Amount.	Total.	Remarks.
		\$ cts.	\$ cts.	
George Baptist, Son & Co..	1878	469 95		} Have counter claims for damages to logs caused by the booms not being stretched early enough in the spring of 1878 to prevent the logs going over the chutes.
do do	1879	2,110 62		
do do	1880	1,696 18		
do do	1881	293 69		
do do	1882	165 80		
do do	1884	118 50		
do do	1888	4 28	4,859 02	
Ross, Ritchie & Co.....	1878	3,072 84		} These claims were submitted to special commissioner Mr. McDougall, afterwards judge, who after hearing the evidence on both sides recommended that the claims of the parties should be allowed.
do do	1883	2,173 68		
do do	1884	21 96		
do do	1886	1 62		
do do	1887	4 38	5,281 47	
Alexander Baptist.....	1879		2,116 96	
Hall, Neilson & Co. acc't,				} Collector holds a bond from the Banque du Peuple for the amount.
Hall Bros.....	1886	750 46		
do do	1887	690 44	1,440 90	
Ross & Co.....	1888	624 60		} Refuse to pay—give no reason that I am aware of.
do do	1889	3 08	627 68	
William Ritchie & Co.....	1888	779 24		} Of this amount, \$754.20 is claimed to be an over-charge.
do do	1889	332 11	1,111 35	
Ritchie Bros.....	1886	413 43		} This amount is composed of overcharges in 1886 and 1887 of \$842.76 and over payment in 1884 of \$205.38.
do do	1887	634 71	1,048 14	
J. A. Gagnon.....	1891		34 22	} I know of no reason why these amounts have not been paid.
G. B. Hall.....	1890		49 34	
T. E. Normand.....	1890		42 83	
Trefflé Biron.....	1891		92	
Total.....			16,612 84	

To make this balance agree with the Public Accounts there should be deducted \$7.93 overcredited to Alexander Baptist, and \$217.17 added thereto being \$190.40 paid 23rd July, 1884, and \$26.77 overcharged in error to Wm. Little not in any of collectors returns—which will give balance due 30th June, 1892, of \$16,822.08.

OTTAWA, 30th June, 1892.

EDWARD T. SMITH.  
*Collector of Slide and Boom Dues.*

No. 7.—SAGUENAY DISTRICT—Statement of Slide Dues accrued at the Saguenay, outstanding on 30th June, 1892.

Name.	Year to which Dues belong.	Amount.
Messrs. Price Bros. & Co .....	1877 to 1891.	\$ 8,900 03

OTTAWA, 30th June, 1892.

EDWARD T. SMITH,  
Collector of Slide and Boom Dues.

NEWCASTLE DISTRICT.

No. 8.—STATEMENT of Slide and Boom Dues accrued on the Fenelon River Works, outstanding on 30th June, 1892.

Name.	Year to which Dues belong.	Amount.
		\$ cts.
M. Boyd .....	1882 to 1884, 1886 to 1892.....	2,245 81
F. G. Hazlett.....	1881, 1882, 1884 to 1889.....	885 25
J. M. Irwin.....	1882, 1883, 1885 to 1888.....	698 45
D. Ulyott.....	1881 to 1887.....	547 68
George Hilliard.....	1877 to 1883, 1886.....	354 90
Greene & Ellis.....	1880 to 1883, 1885, 1888 and 1889	314 02
Irwin & Boyd.....	1881.....	59 79
*Thomson & McArthur.....	1880.....	52 78
A. W. Parkins.....	1884, 1885, 1888, 1890 and 1891	65 92
The Dickson Estate, T. G. Hazlett, agent.....	1883.....	137 50
*Jabez Thurston.....	1882.....	12 50
Alfred McDonald.....	1888.....	40 80
Smith & Fell.....	1880, 1881, 1882, 1883 and 1885	38 37
John Dovey.....	1888, 1891 and 1892.....	45 45
John Parkins.....	1889 and 1892.....	30 50
R. C. Smith.....	1882.....	7 20
Sadler & Dundas.....	1888, 1890 and 1891.....	81 17
The Rathbun Company.....	1888, 1889, 1890, 1891 and 1892	376 32
*McDougall & Ludgate.....	1879.....	65 07
*Bigelow & Traunce.....	1882 to 1885.....	216 21
*R. & G. Strickland.....	1882, 1883, 1885 to 1887.....	215 08
		6,490 77

\* Insolvent.

OTTAWA, 30th June, 1892.

EDWARD T. SMITH,  
Collector of Slide and Boom Dues.

Department of Public Works.

APPENDIX No. 9.

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STATEMENT

SHOWING THE

NAMES OF THE OFFICIALS EMPLOYED

ON THE

SLIDES AND BOOMS OF CANADA

ON THE 30<sup>TH</sup> JUNE, 1893.

WITH

DATES OF APPOINTMENT, SALARIES, ETC.

APPENDIX No. 9.

STATEMENT showing Names, Dates of Appointment, Salaries, &c., of persons employed on the different Slides and Booms, on 30th June, 1892.

Name.	Date of Birth.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
<i>Collector of Slide and Boom Dues.</i>						
E. T. Smith . . . . .	Nov. 26, 1846	Collector . . . . .	Ottawa . . . . .	July 1, 1889	\$ 1,500 00 per annum.	Date of first appointment to crown timber office, Ottawa, 23rd June, 1864. Clerk, Dept. of Inland Revenue, 1st July, 1870, to 30th June, 1889. Transferred to civil list with rank of first class clerk, 5th January, 1892.
James Slater . . . . .	April 30, 1847	Assistant collector . . . . .	do . . . . .	Nov. 14, 1889	1,000 00 do	Date of first appointment to crown timber office, Ottawa, 21st April, 1877. Clerk, Dept. of Inland Revenue, 1st April, 1883, to 30th June, 1889. Transferred to civil list with rank of 3rd class clerk, 5th January, 1892.
James Steen . . . . .	June 17, 1830	Boatman . . . . .	do . . . . .	July 12, 1889	60 00 per month.	Employed during the season of navigation, for 8 months, each year. Date of first appointment, 26th May, 1861. Timber counter, Ottawa, for Dept. of Inland Revenue, 7th Jan., 1884, to 30th June, 1889.
John Redmond . . . . .	August 2, 1833	do . . . . .	do . . . . .	do 12, 1889	60 00 do	Employed during the season of navigation, for 8 months each year. Date of first appointment, 1st May, 1872. Assistant timber counter, Ottawa, for Dept. of Inland Revenue, 7th Jan., 1884, to 30th June, 1889.
Sévère Dumoulin . . . . .	Feb. 4, 1829	Collector . . . . .	Three Rivers . . . . .	do 12, 1889	200 00 per annum.	Date of first appointment to Dept. of Inland Revenue, 3rd May, 1886.
<i>Saguenay District.</i>						
Arthur Boulanger . . . . .	Sept. 11, 1854	Superintendent . . . . .	Saguenay . . . . .	May 19, 1881	475 00 do	<i>Saguenay Works.</i> —In addition to the Superintendent, there are employed on the Saguenay works, 4 flagmen, at 70c per day each during the passing of the logs through the slides, which lasts one or two months.
Joseph Boulanger . . . . .	Asst. superintendent . . . . .	do . . . . .	do . . . . .	Oct. 1, 1889	30 00 per month.	

# Department of Public Works.

<i>St. Maurice District.</i>							
Nap. Degneau	Paymaster	Three Rivers	Aug. 1, 1886	50 00	per month.		
Cyriac Lymburner	1883 Slide master	Mouth of St. Maurice	April 25, 1881	47 09	do		
Jos. Page	7, 1845 Asst. do	Cap aux Corneilles	Dec. 10, 1879	40 00	do		
Jos. Boulard	Gate keeper	do	April — 1892	25 00	do		
Louis Hamel	do	Mouth of St. Maurice	June 8, 1892	25 00	do		
Art. Rousseau	July 30, 1881 Slide master	Shawenegan	April 12, 1858	3 00	per day		
Chas. Langlois	— 1840 Asst. do	do	Jan. 13, 1880	44 58	per month.		
Arth. Fellerin	do do	do and Grès	August 5, 1885	30 00	do		
Jos. Desaulniers	do do	do do	July 8, 1892	30 00	do		
Thos. LaRue	Sept. 3, 1827 Boom master	Grand Mère	March 15, 1872	62 00	do		
Alex. Taupin	do keeper	Gr. Mère & Gde. Piles	July 7, 1892	30 00	do		
Jos. Brousseau	do do	Grande Piles	June 8, 1892	35 00	do		
<i>Richelieu District.</i>							
Azaire Bienvenue	Boom master	Belœil Station	Jan. 1, 1882	100 00	per annum.		
<i>Ottawa District.</i>							
G. P. Brophy	Feb. 24, 1846 Superintendent	Ottawa	July 6, 1873	2,500 00	do		<i>Ottawa River Works.</i> —In addition to the above officers, &c., there are employed during the running season, one foreman on slide at \$1.50 and one assistant foreman at \$1.25 per day; also 25 to 30 labourers at from \$1 to \$1.40 per working day. Actively employed about 7 months. Oversees repairs in winter.
D. Scott	do do	do	Oct. 1, 1854	1,500 00	do		
J. C. Scott	June 27, 1865 Measurer	do	April 1, 1880	2 50	per day		
J. Kent	Jan. 28, 1864 Clerk	do	Aug. 1, 1886	2 75	do		
Wm. Cain	April 8, 1846 Messenger	Ottawa	Jan. 1, 1892	1 25	per day		
C. Leduc	July 8, 1846 Paymaster	do	May 1, 1888	1,200 00	per annum.		
J. Middleton	Aug. 8, 1834 Deputy slide master	Carillon	April 1, 1891	1 25	per day		
S. D. Noonan	June 17, 1847 Boom master	Gatineau	March 21, 1878	500 00	per annum.		
J. Souliere	Nov. 8, 1829 Deputy slide master	Chaudière	—, 1858	2 00	per day		
J. McDonell	do 1, 1818 do	Hull	March 1, 1877	1 25	do		
D. McFarlane	Feb. 25, 1836 do	Chats.	do 27, 1860	480 00	per annum.		
John Harvey	May 22, 1831 Slide master	Arnprior	July 12, 1882	2 50	per day		
Joseph McCrea	Mar. 26, 1839 Boom master	Springtown	May 15, 1880	300 00	per annum.		
Patrick Barry	do 27, 1856 Slide master	High Falls	March 10, 1888	300 00	do		
Duncan McLaren	Jan. 27, 1860 Deputy slide master	Portage du Fort	Sept. 7, 1881	486 25	do		
J. G. Poupore	Aug. 27, 1857 do	Black River	Oct. 15, 1880	480 00	do		
James Steen Rowan	Aug. 27, 1836 do	Lower Petawawa	March 18, 1887	480 00	do		
Wm. Thomson	May 3, 1843 do	Mountain	Oct. 10, 1879	1 25	do		
D. Carmichael	Sept. 26, 1813 do	Calumet	Aug. —, 1848	40 00	do		
A. Proudfoot	July 17, 1822 do	Coulange	April 1, 1865	1 00	per day		
H. R. Downey	May 16, 1846 do	Des Josephs	July 1, 1889	300 00	per annum.		
Jos Dufault	Jan. 15, 1840 Boom master	Dumoine	April 24, 1882	1 50	per day		
Hugh Grant	Mar. 26, 1829 Deputy slide master	do	do 12, 1872	300 00	per annum.		
A. McEwen	Aug. 20, 1829 do	Rocher Capitaine	May 1, 1874	480 00	do		
A. H. Johnson	Nov. 28, 1839 do	Cheneaux	—, 1865	2 50	do		
G. T. Johnson	Sept. 10, 1841 do	do	—, 1872	1 25	per day		

APPENDIX No. 10.—STATEMENT showing Names, &c., of persons employed on the different Slides and Booms—*Concluded.*

Name.	Date of Birth.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
<i>Newcastle District.</i>						
R. B. Rogers.....	Jan. 17, 1857	Superintendent.....	Peterboro'.....	July 1, 1884	\$ 800 00 per annum.	Receives \$800 per annum from Department of Railways and Canals.
G. H. Giroux.....	.....	Clerk, supt.'s office.....	do.....	do 1, 1880	300 00 do	do \$300 do
Clement Armstrong.....	.....	Slide master.....	Chisholm Rapids.....	April 1, 1883	200 00 do	\$250 per annum as lock master do R.&C.
Wm. McArthur.....	.....	do.....	Penelon Falls.....	Aug. 15, 1892	100 00 do	Receives \$150 per annum from Department of Railways and Canals.
R. T. Hill.....	.....	do.....	Buckhorn.....	July 1, 1891	100 00 do	
F. Peake.....	.....	do.....	Heeley's Falls.....	April 1, 1891	200 00 do	
<i>Burlington Channel.</i>						
Thos. Campbell.....	April 1, 1832	Ferryman.....	Burlington.....	April 12, 1887	400 00 do	
J. A. McDonald.....	.....	Asst. ferryman.....	do.....	do 1, 1890	30 00 per month.	
<i>Yamaska District.</i>						
A. Labbe.....	.....	Lock keeper.....	Yamaska.....	Sept. 1, 1885	1 25 per day.....	
O. Mineau.....	.....	do.....	do.....	do 1, 1885	1 25 do.....	

R. STECKEL.

Department of Public Works.

APPENDIX No. 10.

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REPORT

ON

GOVERNMENT TELEGRAPH LINES

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.





# Department of Public Works.

## APPENDIX No. 10.

### GOVERNMENT TELEGRAPH LINES.

TELEGRAPH SERVICE OFFICE,

DEPARTMENT OF PUBLIC WORKS,

OTTAWA, 20th October, 1892.

SIR,—I beg, leave to submit the following report upon the Telegraph Service for the twelve months ended 30th June, 1892. The accompanying tabular statements of lines, operating staff, &c., established in the several districts, are the same as those appended to former reports, but contain amendments covering changes made in the course of the year.

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

D. H. KEELEY,  
*Acting Supt.*

E. F. E. ROY, Esq.,  
Secretary Department of Public Works.

### TELEGRAPH SERVICE—1891-92.

#### NEWFOUNDLAND.

The line from Port au Basque to Cape Ray has been operated, as heretofore, in conjunction with the Anglo-American Telegraph Company's system.

#### MARITIME PROVINCES.

The Meat Cove line (North Sydney to Meat Cove), the Magdalen Islands cable and land lines, and the cable to St. Paul's Island have been in good working order during the year. A section of the line from near Ingonish up to Meat Cove, a distance of about 50 miles, was repoled in November, 1891, by day's labour, under the supervision of Mr. D. Dunlop, the telegraph agent at Baddeck. The poles for this work were distributed along the line in June, as stated in last year's report. The construction of a loop line to White Point, contemplated last year, was postponed, and it will be built in the course of the present season.

The Cheticamp line (Mabou to Cheticamp) and the Cape Sable line (Barrington to Cape Sable) have continued in satisfactory operation, and nothing beyond ordinary repairs has been called for.

The Bay of Fundy system (Eastport to Campobello, Grand Manan and Whitehead Islands) was maintained continuously in good order as far as the land lines were concerned; but the cable connecting Grand Manan and Campobello which gave out on the 9th May, 1891, as mentioned in the last annual report, remained interrupted until repaired by means of the s.s. "Newfield" on the 7th October. It has from that date continued in satisfactory operation.

[1892]

## RIVER AND GULF ST. LAWRENCE.

The Anticosti Island line was maintained in very efficient operation throughout the year. The cable from Long Point of Mingan to Mechastic Bay, in which an interruption had been located, as stated in last year's report, was repaired by means of the ss. "Newfield," on the 17th September, since when it has been doing good service. The cable from Gaspé to South-west Point has continued in good order. It had been slightly damaged by ice early in the spring and was repaired and more securely placed at the South-west Point landing when the "Newfield" was in the neighbourhood for the repair of the Long Point section.

The Escuminac line (Chatham to Point Escuminac) fell into disrepair and is being overhauled this season. With the exception of a few temporary interruptions it has been in satisfactory operation.

The Grosse Isle quarantine line (Quebec to Grosse Isle) continued in satisfactory operation until the cable between Isle Reaux and Grosse Isle became interrupted on the 12th March by a movement of the ice formed during the winter. The damage was repaired on the 3rd May, since when there has been no trouble on this circuit.

The North Shore lines (Chicoutimi to Point Esquimaux) were in satisfactory operation throughout the year. The work of providing improved facilities for repairs along the line north-east of Manicouagan, where no roadway except the clearance made for the telegraph exists, has been carried a little further in the way mentioned in the last annual report, and after a few more river crossings are arranged for it will be practicable to effect repairs with promptness. As it is, the operation of this line has been maintained in a fairly reliable manner, and the establishment of an alternative route via Long Point and Gaspé affords an outlet for traffic when the westward line to Quebec happens to be interrupted.

## ONTARIO.

The Bath-Amherst Island line, and the Wolfe and Howe Island lines continue in the hands of the lessee, the North American Telegraph Company.

The Pelee Island line (Leamington to Pelee Island) which was interrupted on the 2nd June last year, as mentioned in the last annual report, was found on examination to need a complete overhauling of the circuit and telephonic apparatus. The cable was repaired by means of a tug-boat on the 26th August. The line was subsequently put in proper order, and arrangements made for an improved service which has since then been found to give better satisfaction.

## NORTH-WEST TERRITORY.

The lines from Qu'Appelle to Edmonton, and from Moose Jaw to Wood Mountain have been maintained and operated satisfactorily.

The line from Dunmore to Fort Macleod has continued in the hands of the lessee, the North-west Coal and Navigation Company.

There was no construction work done in this district during the past year. The proposed line to Cannington, for which a sum was voted, will probably be dealt with in the course of the present season.

## BRITISH COLUMBIA.

The Cape Beale line (Victoria to Cape Beale) proved unsatisfactory with its telephonic equipment, and an arrangement was made whereby telegraphic apparatus was substituted therefor, and the line has been operated since the 1st October last in conjunction with the telegraph system of the Canadian Pacific Railway, in the same way as the Barkerville line (Ashcroft to Barkerville) has been operated for some years past. Under this arrangement the department reimburses the company for the expense, in excess of revenue, that is incurred for maintenance and operation of these two lines.

The Comox line (Nanaimo or Wellington to Comox) for which provision was made in the estimates for the past year, is now in course of construction under a contract entered into with Mr. D. J. McLachlin, of New Westminster.

# Department of Public Works.

## REVENUE AND EXPENDITURE.

The revenue and expenditure figures for each of the lines in the several districts hereinbefore mentioned, are given in the following table :—

	Revenue.	Expenditure.	Remarks.
<b>Lower St. Lawrence and Maritime Provinces :—</b>	<b>\$ cts.</b>	<b>\$ cts.</b>	
Anticosti Island lines .....	597 27	3,434 21	
Bay of Fundy do .....	567 87	2,662 66	
Cape Ray do .....	Nil	250 00	
Cape Sable do .....	52 40	422 95	
Cheticamp do .....	296 55	1,098 86	
Escuminac do .....	169 87	613 61	
Low Point do .....	Nil	50 00	
Magdalen Islands do .....	507 27	3,113 27	
Meat Cove do .....	1,393 70	1,930 27	
North Shore of St. Lawrence (E.B.) line .....	1,108 47	6,370 58	
do do (W.B.) do .....	2,566 60	4,260 47	
Quarantine line .....	561 10	605 26	
Subsidies, stationery, line and office material, cable repairs and contingencies chargeable to the appropriation for Gulf lines .....		3,395 88	
	7,821 10	28,208 02	
<b>Ontario: Pelee Island line .....</b>	<b>182 56</b>	<b>705 09</b>	
	8,003 66	28,913 11	
<b>North-west telegraph lines .....</b>	<b>2,211 75</b>	<b>19,959 61</b>	
<b>Total .....</b>	<b>10,215 41</b>	<b>48,872 72</b>	

D. H. KEELEY,

*Acting Supt. Government Telegraph Service.*

OTTAWA, 20th October, 1892.

**GOVERNMENT TELEGRAPH SERVICE.**  
**NEWFOUNDLAND TELEGRAPH SYSTEM.**

STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1 Port au Basque.....	Miles. 0	.....	\$ cts. 50 00 or com'n.....	.....	N.B.—The commission is 25 per cent upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2 Cape Ray Lighthouse.....	14	.....	50 00 do .....	.....	
Totals .....	14	.....	100 00	.....	

N.B.—The above short line is constructed in connection with the Signal Service, and connects at Port au Basque with the land line system of the Anglo-American Telegraph Company.

# Department of Public Works.

## ANTICOSTI TELEGRAPH SYSTEM. ANTICOSTI ISLAND SERVICE.

No.	STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1	*Fox Bay.....	Miles. 0	J. Stubbert.....	\$ cts. 50 00 or com'n....	Nov. 1, 1888.	N. B.—The commission is 25 per cent on all business to and from the office; and commission guaranteed not to be less than at the rate of \$50 per annum.
2	Heath Point lighthouse.....	23	T. Gagné.....	50 00 do	July 20, 1881.	
3	South Point Lighthouse.....	32½	A. Nadeau.....	50 00 do	Oct. 1, 1888.	
4	*Shallop Creek.....	17½	B. Bradley.....	50 00 do	July 7, 1881.	
5	Salt Lake.....	52½	J. Carbray.....	350 00 do	do 1, 1891.	General repairer. Plus \$1 per day when absent on duty.
6	South-west Point lighthouse.....	15	Miss G. Pope.....	200 00 do	Oct. 18, 1880.	Chief operator since 1st August, 1882.
			E. Pope.....	100 00 do	Aug. 1, 1882.	District superintendent. Plus \$1 per day when absent on duty.
7	Jupiter River.....	7	.....	50 00 do	.....	
8	Other River.....	17½	.....	50 00 do	.....	
9	*Beauce River.....	22	M. Duguay.....	50 00 do	Oct. 1, 1886.	
10	Cape Eagle (Ellis Bay).....	10	.....	50 00 do	.....	
11	West Point lighthouse.....	14	A. Malouin.....	50 00 do	Aug. 1, 1881.	NOTE.—A special allowance for maintenance of office \$50 per annum, has been added to the commission for offices marked*, since September, 1887.
12	*English Bay.....	3	F. Cabot.....	50 00 do	July 1, 1882.	
	Totals.....	214		1,160 00		

### GASPÉ SECTION.

1	L'Anse à Fougère.....		N. Bernier.....	17 00 do	.....	N. B.—A special allowance for the cable terminus. A testing station only.
2	Gaspé Basin.....	28	J. J. Annett.....	150 00 do	Oct. 16, 1881.	
	Totals.....	28		200 00		

GOVERNMENT TELEGRAPH SERVICE—Continued.

MAGDALEN ISLANDS TELEGRAPH SYSTEM.  
MAGDALEN ISLANDS SECTION.

No.	STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1	Amherst .....	Miles. 0	Miss J. Shea .....	\$ cts. 50 00 or comm'n.	Oct. 1, 1882.	N. B.—The commission is 25 per cent on all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Amherst lighthouse.....	9	Wm. Cormier.....	50 00 do	June 11, 1881.	
3	Étang du Nord village .....	15	P. Pelletier .....	400 00 do	Dec. 1, 1881.	Plus \$20 per annum for rent. General line repairer.
4	do lighthouse.....	1	N. Arsonault .....	50 00 do	Sept. 1, 1891.	2-wire loop.
5	Cap aux Meules .....		W. Leslie .....	50 00 do	Aug. 9, 1883.	
	do .....		A. LeBourdais, D. Supt.	500 00	do 17, 1880.	Plus \$1 per day when absent on duty.
6	House harbour .....	8	P. L. Jones .....	50 00	June 1, 1888.	
7	Wolfe Island .....	28½	N. Clark .....	200 00	June 1, 1888.	
8	Grosse Isle.....	11	Mrs. F. Atkins .....	50 00	Feb. 18, 1892.	
9	Grand Entry .....	11				
	Totals.....	83½		1,400 00		

MAGDALEN ISLANDS TELEGRAPH SYSTEM.  
CAPE BRETON SECTION.

STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1 Meat Cove (Cable Station) . . . . .	Miles. 0	A. B. McDonald . . . . .	\$ cts. 420 00	Nov. 7, 1880	<p>N. B.—The commission is 25 p. c. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.</p> <p>NOTE.—This line is at present operated and maintained by the Western Union Telegraph Company, but at the cost of the Government.</p>
2 Aspy Bay . . . . .	10½	R. G. Zwicker . . . . .	50 00 or com'n.	Aug. 1, 1882	
3 Neil's Harbour (½ way house). . . . .	15	M. McLeod. . . . .	50 00 do	April 1, 1887	
4 Ingonish, North Bay . . . . .	9	J. M. Burke . . . . .	50 00 do	do 1, 1882	
5 South Ingonish . . . . .	10½	F. C. Brewer . . . . .	50 00 do	Aug. 1, 1891	
6 French River . . . . .	23	John McDonald. . . . .	50 00 do	April 1, 1889	
7 St. Ann's, South Bay . . . . .	19	Miss C. Morrison. . . . .	50 00 do	do 1, 1884	
8 Baddeck, (Loop Line). . . . .	13	Miss Dunlop . . . . .	50 00 do	Jan. 1, 1882	
9 Englishtown . . . . .	6	Miss Bingham . . . . .	50 00 do	July 19, 1882	
10 Kelly's Cove, (N. Campbellton) . . . . .	2	Mrs. M. C. Campbell. . . . .	50 00 do	April 1, 1885	
11 Big Bras d'Or . . . . .	6	Mrs. E. Livingston. . . . .	50 00 do	Jan. 1, 1889	
12 North Sydney. . . . .	12½				
Totals . . . . .	128½		920 00		

GOVERNMENT TELEGRAPH SERVICE—Continued.

NOVA SCOTIA TELEGRAPH SYSTEM.

CAPE SABLE SECTION.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
		Miles.		\$ cts.		
1	Barrington.....	0	W. U. Tel. Co.'s Agent	50 00 or com'n	Dec. 18, 1883	N.B.—The commission is 25 per cent upon all business to and from the offices; said commission guaranteed to be not less than at the rate of \$50 per annum.
2	Newellton (including 1½ miles cable).....	11	Miss E. A. Smith.....	50 00 do	April 1, 1889	
3	Cable Sable Island lighthouse (including ¼ mile cable).....	6½	I. K. Doane.....	50 00 do	Dec. 18, 1883	
	Totals.....	17½		150 00		

LOW POINT, CAPE BRETON SECTION.

1	Lingan.....	0		50 00 or com'n		N.B.—The commission is 25 per cent upon all business to and from the offices; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Low Point lighthouse.....	5	S. Peters.....	50 00 do	Aug. 1, 1881	
	Totals.....	5		100 00		

EAST COAST SECTION.

N.B.—In connection with the Signal Service a land line 208 miles in length was erected in 1881 between Canso and Halifax for a bonus of \$16,000, and is maintained and operated by the Western Union Telegraph Company without further cost to the Government.



Department of Public Works.

MABOU-CHETICAMP, C. B., TELEGRAPH SYSTEM.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	Memo.
1	Mabou .....	Miles. 0	Mrs. M. McDonald .....	\$ cts. 50 00 or com'n.	April 1, 1887	N. B.—The commission is 25 p. c. of the Government line tariff receipts, and is guaranteed to amount to not less than \$50 per annum.
2	Broad Cove .....	20	Mrs. Annie McLellan .....	do	March 1, 1892	
3	Margaree Harbour .....	17	Mrs. M. A. McLellan .....	do	April 1, 1887	
4	N. E. Margaree (loop, 5 miles) Loop Line wire. ....	10	Miss B. M. Ross .....	do	Jan. 1, 1889	
5	Cheticamp .....	16	Mrs. M. Fiset .....	do	April 1, 1887	
	Totals .....	63				

CHATHAM-ESCUMINAC, N. B., TELEGRAPH SYSTEM.

1	Chatham .....	0	Great North-western Telegraph Co.	185 00	.....	This amount is paid for supervision of the line and office accommodation at Chatham.
2	Black Brook .....	5½	.....	50 00 or com'n.	.....	
3	Baie du Vin .....	15	Miss M. Williston .....	50 00 do	March 1, 1885	
4	Lower Hardwicke .....	6	Mrs. M. Brimmer .....	50 00 do	Aug. 1, 1891	
5	Escuminac .....	3½	Mrs. A. Lewis .....	50 00 do	Sept. 1, 1885	The commission is 25 per cent of the Government line tariff receipts, and is guaranteed to amount to not less than \$50 per annum.
6	Point Escuminac lighthouse.....	12	J. W. Philips, jun. ....	50 00 do	Feb. 1, 1885	
	Totals .....	42		435 00		

GOVERNMENT TELEGRAPH SERVICE—Continued.

BAY OF FUNDY, N.B., TELEGRAPH SYSTEM.

GRAND MANAN SECTION.

No.	STATIONS.	Inter- mediate Distance.	Operators.	Salaries per annum.	Date of Appointment.	MEMO.
	<i>Long Eddy Cable Hut, to</i>	Miles.		\$ cts.		
1	Flagg's Cove .....	3	{ Mrs. C. C. Seely (D. Supt.)	420 00	Nov 18, 1880	N. B.—The commission is 25 p.c. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum. \$25 per annum is allowance for repeating White-head br. Southern Head office closed 30th November, 1889.
2	Woodward's Cove .....	6	{ Miss J. S. Dagggett .....	50 00	do 1, 1889	
3	Grand Harbour .....	2	{ F. Cameron .....	50 00 or com'n.	April 1, 1885	
4	Seal Cove .....	4½	{ F. A. Newton .....	75 00 per annum	do 1, 1887	
5	Southern Head lighthouse .....	5½	{ P. Russell .....	50 00 do	May 1, 1891	
	<i>Branch Line.</i>		{ D. McKay, repairer .....	50 00 do	May 1, 1881	
6	Grand Harbour .....	0	{ W. Cheney .....	Commis'n, 25 p.c.	Feb. 1, 1891	
7	Cheney's Island (¼ mile cable) .....	4½	{ E. Carroll .....	50 00 or com'n.	Dec. 1, 1890	
	Whitehead Island (¾ do) .....	1½				
	Totals .....	27¼		805 00		

CAMPOBELLO SECTION.

	<i>Liberty Cove Cable Hut, to</i>					
1	Welchpool .....	7½	{ M. A. Batson .....	100 00 or com'n.	May 1, 1890	
2	Eastport, Maine, U.S.A. ....	¼	{ J. Cushing .....	100 00	Dec. 26, 1881	
	Totals .....	8		200 00		

Department of Public Works.

GOVERNMENT TELEGRAPH SERVICE—Continued.

GROSSE ISLE QUARANTINE TELEGRAPH SYSTEM.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1	Quebec.....	Miles. 0	Great North-western Telegraph Co.	\$ cts. 185 00	.....	This amount is paid for supervision of the line, and covers rent of pole line from Quebec to L'Ange Gardien, for which \$35 per annum is charged.
2	L'Ange (Gardien). St. Pierre (1/3 mile cable).....	13 4	C. Turcott.....	50 00 or com'n	Mar. 1, 1885	This commission is 25 per cent of the Government line tariff, and is guaranteed to amount to not less than \$50 per annum.
3	St. Pétronille.....	4 1/2	Mrs. Blais.....	50 00	Oct. 1, 1887	
4	St. Laurent.....	6 1/2	M. Gobeil.....	50 00	Sept. 15, 1888	
5	St. Jean.....	7	P. Foulhot.....	50 00	July 1, 1888	
6	St. François (including 4 miles cable).....	5 1/2	M. Emond.....	50 00	Mar. 1, 1885	
7	Grosse Isle quarantine office.....	9	M. Langlois.....	50 00	Sept. 1, 1885	
8	do hospital.....	14	(Telephone).....	.....	.....	
	Total.....	50 1/2		485 00		

GOVERNMENT TELEGRAPH SERVICE—Continued.

CHICOUTIMI AND NORTH SHORE OF ST. LAWRENCE TELEGRAPH SYSTEM.

CHICOUTIMI SECTION.

STATIONS.	Inter-mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
	Miles.		\$ cts.		
1 Bay St. Paul.....	0	F. Boivin.....	50 00 or com'n*	Previous to April 1, 1885	*The commission upon business is 25 per cent of the Government tolls of the line; the amount guaranteed to be not less than \$50 per annum.
2 St. Urbain.....	9	A. Boivin.....	50 00 do	do	
3 La. Cruche.....	37	A. Gauthier (repairer).....	420 do	do	
4 St. Alexis.....	31½	O. Pelletier.....	50 00 or com'n	May 15, 1887	
5 St. Alphonse de Bagotville.....	3	A. Simard.....	50 00 do	Jan. 1, 1885	
6 Chicoutimi.....	11½	D. Boly.....	50 00 do	April 28, 1886	
Total.....	92		720 00		

NORTH SHORE SECTION.

1 Murray Bay.....	0	Mrs. F. Vincent.....	50 00 or com'n*	Previous to April 1, 1885	Mr. Bouillenne at River Canard has acted as repeating operator for the St. Etienne branch since August, 1889.
2 Cap à l'Aigle.....	4	N. Duchesne.....	50 00 do	June 1, 1888	
3 Ste. Fidele.....	6	A. N. Parent.....	50 00 do	April 1, 1890	
4 Port au Persil.....	7	A. Brassard.....	50 00 do	May 1, 1889	
5 St. Siméon.....	4	D. Gaudin.....	50 00 do	Dec. 1, 1887	
6 Baie des Rochers.....	12	G. Savard.....	50 00 do	June 1, 1887	
7 Riv. aux Canards } Loop Line.	17	G. Bouillenne.....	100 00 do	Nov. 1, 1890	
8 St. Etienne.....	13	N. Caron (Repairer).....	420 00 or com'n.	Sept. 1, 1888	
9 Tadoussac (¼ mile cable).....	15	J. E. Caron.....	50 00 do	Nov. 1, 1885	
10 Bergeronnes.....	15	M. Savard.....	50 00 do	do	
11 Escourains.....	12	J. H. Topping.....	50 00 do	do	
12 Baie des Bacons.....	8	P. Bouchard.....	50 00 or com'n.	May 6, 1892	
13 Mille Vaches.....	8	J. A. Puise.....	50 00 do	April 1, 1885	
14 Portneuf Mills.....	11½		50 00 do	Portneuf Mills office closed June, 1889,	

# Department of Public Works.

15	Portneuf light	6	S. Bouchard	50 00 or com'n.	July	1, 1880
16	Sault au Cochon	7	E. Courbron (repairer)	420 00	April	1, 1888
17	Bétiarmitis	31	J. Forrest	50 00 or com'n*	Dec.	1, 1887
18	Pointe aux Outardes (cables)	12	R. H. Montgomery	50 00	Oct.	1, 1889
19	Pointe Paradis, Manicouagan	26	F. C. Ouillet	500 00 per annum.	Aug.	8, 1880
20	River Godbout (cable)	18	N. A. Comeau	50 00 or com'n.	Oct.	15, 1883
21	Pointe des Monts	18 <sup>3</sup>	L. F. Faffard	50 00	Dec.	28, 1883
22	Trinity Bay West	51	Z. Poulin	50 00	May	16, 1884
23	Trinity Bay East	21	A. Bilodeau	Accommodation of do	do	1, 1889
24	Caribou Islands	7	L. Comeau	do	Sept.	1, 1889
25	Penecost River	17	Dist. Supt.'s Office	180 00	July	1, 1888
26	Ste. Marguerite	47 <sup>3</sup>	A. Theriault	180 00	Jan.	2, 1884
27	Seven Islands	22 <sup>3</sup>	P. E. Vignault	50 00	May	1, 1885
28	River Moisie	15 <sup>1</sup>	D. Forlier	50 00 or com'n	Nov.	1, 1888
29	Sheldrake	72	P. Touzel	50 00	Feb.	1, 1889
30	Thunder River	61	H. LeBrun	50 00	do	1, 1889
31	Magpie	14	Geo. Molloy	50 00	Oct.	1, 1889
32	St. John's River	9	B. Chambers	50 00	do	1, 1889
33	Long Point	10	E. S. Vibert	180 00	Nov.	1, 1889
34	Mingan	7	M. J. Maloney	50 00	Oct.	1, 1889
35	Pointe aux Esquimaux	24	A. Lausier	420 00	do	1, 1889
	Total	496				

Long Point is the repeating office for the Anticosti cable, in operation since September 1, 1891. The agent's remuneration before that date was \$50 per annum or commission.

NOTE.—In the estimates the maintenance of the Chicoutimi and North Shore lines is provided for under head of North Shore Line. They are operated conjointly.

GOVERNMENT TELEGRAPH SERVICE—Continued.

ONTARIO: PELEE ISLAND TELEGRAPH SYSTEM.

No.	STATIONS.	Intermediate Distances.	Agents.	Salaries per Annum.	Date of Appointment	MEMO.
1	Leamington .....	.....	J. McE. Selkirk.....	\$50	Nov. 1, 1888	Accountant and general agent. The commission is upon the receipts for the Government line.
2	Club House.....	7	C. Harrison.....	Consn. 25 p. c.....	April 1, 1889	
3	Point Pelee.....	5	W. A. Grubb.....	do	Nov. 1, 1888	
	Cable to Island.....	8½			do	
4	North Point Lighthouse (½ mile loop).....	1	J. E. Quick.....	do	Dec. 1, 1890	
5	North dock.....	1½	C. B. Quick.....	do	Nov. 1, 1888	
6	West dock.....	5	A. M. McCormick.....	do	do 1, 1888	
7	South dock.....	4½	F. B. McCormick.....	do	do 1, 1888	
	Total.....	32½				

This line is operated with telephones.

Department of Public Works.

LINES IN THE NORTH-WEST TERRITORY.  
QU'APPELLE-EDMONTON SECTION.

No.	STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
		Miles.		\$ cts.		
1	Qu'Appelle.....	0	E. W. Warner.....	720 00	Jan. — 1883.	
2	Fort Qu'Appelle.....	17	Miss E. Johnston.....	600 00	Mar. 1, 1885.	
3	Touchwood.....	46	A. Von Lindeburg.....	600 00	Nov. 1, 1883.	
4	Humbolt.....	78	A. Guimont.....	600 00	May 1, 1884.	
5	Saskatoon (14 miles loop).....	69	C.P.R. Tel. Co's.....	300 00	Jan. 1, 1892.	
6	Henrietta do.....	52	J. Harrington, repairer.....	600 00	Jan. 1, 1898.	
7	Battleford.....	47	W. Salsbury, repairer.....	720 00	Oct. 1, 1886.	
8	Fort Pitt.....	89	L. P. O. Noel.....	600 00	Apr. 15, 1890.	
9	Moose.....	45½	H. Sikes, repairer.....	600 00	May 1, 1889.	
10	Saddle Lake.....	45	J. F. Lake, repairer.....	600 00	Augt. 1, 1891.	
11	Victoria.....	37	L. Picard, repairer.....	600 00	July 1, 1891.	
12	Fort Saskatchewan.....	49	N. Potvin.....	600 00	Augt. 1, 1891.	
13	Edmonton.....	24	W. C. Gillis, repairer.....	720 00	Jan. — 1887.	
	Branch Line—		W. G. Ross, agent.....	Com. 25 p. c	Dec. — 1886.	
	Edmonton.....	0	A. Taylor, agent.....	420 00	Prev. to 1892.	
14	St. Albert.....	9	W. McKay, repairer.....	720 00	May 1, 1886.	
	Total.....	607½				

The office at Edmonton has been operated jointly with the C.P.R. Tel. Co. since 1st January, 1892. Before that date the salary charge was \$720 per annum.

\* The St. Albert branch line is operated with tele-phones.

GOVERNMENT TELEGRAPH SERVICE—Continued.

NORTH-WEST TELEGRAPH LINES.—WOOD MOUNTAIN AND FORT MACLEOD SECTIONS.

No.	STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
		Miles.		\$ cts.		
	<i>Fort Macleod Line—</i>					
1	Galt Junction.....	0				
2	Lethbridge.....	107				
3	Macleod.....	28½				
4	Fort Macleod.....	½				
	<i>Wood Mountain Line—</i>					
1	Moose Jaw.....	0	J. M. Rutherford.....	240 00	June 1, 1885..	
2	Wood Mountain.....	90½	J. H. Thompson.....	180 00	do 1, 1880..	The Fort Macleod line has been leased to the Northwest Coal and Navigation Co.  The Wood Mountain line has been operated by telephone since May, 1890.
	Total.....	226½				



Department of Public Works.

GOVERNMENT TELEGRAPH SERVICE IN BRITISH COLUMBIA.

ASHCROFT—BARKERVILLE.

OFFICE.	Inter-mediate Distances.	Names.	Positions.	Salaries per Month.	Date of Appointment.	Memo.
	Miles.			\$ cts.		
Ashcroft Station.....	0	C. P. Ry. Telegraph.	Operator and repairer.	60 00	Feb. 16, 1885.	This line is now operated by the Canadian Pacific Railway Co. for the Government. The arrangement being terminable at any time.
Cache Creek.....	4	H. L. Good.....	do	50 00	do 1, 1880.	
Clinton.....	26	J. A. Le Bourdais.....	do	50 00	May 1, 1880.	
Bridge Creek.....	53	W. Walker.....	do	60 00	June 1, 1886.	
Soda Creek.....	78	H. Yeates.....	do	47 00	April 28, 1882.	
Queanelle.....	54½	Miss I. Barlow.....	Operator.			
Stanley.....	48	Jas. Stone.....	Operator and repairer.	83 33	Feb. 17, 1873.	
Barkerville.....	13					
<i>Branch.</i>	276½					
New Westminster.....	18					
Ladner's Landing (½ mile cable).....	18					
Total.....	294½					

VICTORIA—CAPE BEALE.

Victoria.....	0	C. P. Ry. Telegraph.	Operator.....	20 00	Nov. 1, 1891.	This line is operated by the Canadian Pacific Railway Co. for the Government. The arrangement being terminable at any time.
Otter Point.....	26	Ed. Gordon.....	Operator and repairer.	60 00	do	
Jordan River.....	10	L. Desbriens.....	do	55 00	do	
Port San Juan.....	30	F. S. Sharpnell.....	do	60 00	do	
		{ W. F. Daykin.....	Operator.	20 00	do	
		{ C. T. Daykin.....	Repairer, West.	45 00	do	
		{ E. B. Daykin.....	Repairer, East.	45 00	do	
		P. A. Cox.....	Operator.....	15 00	do	
Cape Beale.....	28					
Total.....	118			320 00		

[1892]



Department of Public Works.

APPENDIX No. 11.

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NATIONAL ART GALLERY

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CURATOR'S REPORT

FOR THE FISCAL YEAR ENDED 30<sup>TH</sup> JUNE, 1892.



Department of Public Works.

APPENDIX No. II.

NATIONAL ART GALLERY.

CHIEF ARCHITECT'S OFFICE,  
OTTAWA, 5th December, 1892.

*National Art Gallery.*

SIR,—I have the honour to report the following additions received during the fiscal year ended 30th June, 1892 :—

Oil painting "Twilight," by Miss M. A. Bell.

Oil painting "Marine," by Franklin Brownell.

The above pictures were purchased by the Government.

Life-size bust of L. R. O'Brien, R.C.A., by Hamilton McCarthy, R.C.A.

This bust was handed over to the Gallery by the Royal Canadian Academy, in compliance with Act of Incorporation of that Society, which requires each newly elected Academician to deposit his diploma work in the National Gallery.

20,026 visitors have registered their names during the fiscal year.

I have the honour to be, sir,

Your obedient servant,

JOHN W. H. WATTS.

E. F. E. Roy, Esq.,

Secretary, Department of Public Works.



Department of Public Works.

APPENDIX No. 12.

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NAMES OF THE CHIEF OFFICERS

OF THE

DEPARTMENT OF PUBLIC WORKS

WITH DATE OF APPOINTMENT, &c.

FROM

1841 to 1893.





# Department of Public Works.

## APPENDIX No. 12.

THE NAMES with the date of appointment, &c., of the principal Officials of the  
Department of Public Works, from 1841 to 1893.

Names.	Capacity or Office.	Date of Appointment Served.	
		From.	To
<i>Under Statute 4-5 Vic., Cap. 38.</i>			
CORPORATION BOARD OF WORKS.			
Killaly, Hon. H. H.	Chairman		
Daly, Hon. D.	Members	Dec. 29, 1841	Oct. 3, 1844
Harrison, S. B.			
Davidson, J., Esq.			
Begly, Thomas A.	Secretary	Aug. 17, 1841	
Keefe, Samuel	Chief Engineer	do 17, 1841	
Rubidge, F. B.	Architect and Assistant Chief Engineer	Dec. 15, 1841	
NEW BOARD OF WORKS.			
Killaly, Hon. H. H.	Chairman		
Daly, Hon. D.	Members	Oct. 5, 1844	June 8, 1846
Draper, Hon. W. H.			
Morris, Hon. W.			
Papineau, Hon. D. B.			
<i>Under Statute 9th Vic., Cap. 37, &amp;c.</i>			
Robinson, Hon. W. B.	Chief Commissioner	July 4, 1846	March 10, 1848
Taché, Hon. E. P.	do	March 11, 1848	Nov. 26, 1849
Chabot, Hon. J.	do	Dec. 15, 1849	March 31, 1850
Merritt, Hon. W. H.	do	April 20, 1850	Feb. 11, 1851
Bourret, Hon. J.	do	Feb. 15, 1851	Oct. 27, 1851
Young, Hon. John	do	Oct. 28, 1851	Sept. 22, 1852
Chabot, Hon. J.	do	Sept. 23, 1852	Jan. 26, 1855
Lemieux, Hon. F.	do	Jan. 27, 1855	Nov. 25, 1857
Alleyn, Hon. C.	do	Nov. 28, 1857	Aug. 1, 1858
Holton, Hon. L. H.	do	Aug. 2, 1858	do 6, 1858
Sicotte, Hon. L. V.	do	do 6, 1858	Jan. 10, 1859
Rose, Hon. John	do	Jan. 15, 1859	June 12, 1861
Cauchon, Hon. Jos.	Commissioner	June 15, 1861	May 23, 1862
Tessier, Hon. U. J.	do	May 24, 1863	May 27, 1863
Drummond, Hon. L. T.	do	do 28, 1863	July 23, 1863
Laframboise, Hon. M.	do	July 23, 1863	March 29, 1864
Chapais J. C.	do	March 30, 1864	June 30, 1867
Casgrain, Hon. Chas. Eus.	Second Commissioner	Aug. 1, 1846	
Cameron, Hon. M.	Assistant Commissioner	March 11, 1848	
Wetenhall, John	do	Feb. 2, 1850	
Bourret, Hon. Jos.	do	April 20, 1850	
Killaly, Hon. H. H.	do	Feb. 15, 1851	
Keefe, Samuel	Deputy Commissioner	May 6, 1859	
Trudeau, Toussaint	do	March 15, 1864	
Begly, Thomas A.	Secretary	Sept. 25, 1847	
Trudeau, Toussaint	do	Dec. 13, 1859	
Braun, Frederick	do	March 8, 1864	
Page, John	Chief Engineer	Oct. 31, 1853	July 2, 1890

APPENDIX No. 12.—The names with the date of appointment, &c., of the principal Officials of the Department of Public Works, from 1841 to 1893—*Concluded.*

Names.	Capacity or Office.	Date of Appointment Served.	
		From.	To.
<i>Under Statute 31 Vic., Cap. 12.</i>			
McDougall, Hon. Wm	Minister	July 1, 1867	Oct. —, 1869
Langevin, C. B., Hon. Hector L.	do	Dec. 8, 1869	Nov. 5, 1873
McKenzie, Hon. Alexander	do	Nov. 7, 1873	Oct. 16, 1878
Tupper, C. B., K.C.M.G., Sir Charles	do	Oct. 17, 1878	May 20, 1879
Langevin, C. B., K.C.M.G. Sir Hector L.	do	May 20, 1879	Sept. 8, 1891
Smith, Hon. Frank	Acting Minister	Aug. 14, 1891	Jan. 11, 1892
Ouimet, Hon. Joseph Aldric	Minister	Jan. 11, 1892	
Trudeau Toussaint	Deputy Minister	July 1, 1868	
Baillairgé, G. F.	do	Oct. 4, 1879	Dec. 18, 1891
Gobeil, A.	do	Dec. 18, 1891	
Chapleau, S.	Secretary	Oct. 4, 1879	
Ennis, F. H.	do	Nov. 4, 1880	
Gobeil, A.	do	Jan. 23, 1885	Dec. 18, 1891
Roy, E. F. E.	do	Dec. 18, 1891	
McPherson, D. A.	Assistant Secretary	do 18, 1891	
Perley, H. F.	Chief Engineer	Nov. 25, 1880	Oct. 21, 1891
Baillairgé, G. F.	Assistant Chief Engineer	July 5, 1871	do 4, 1879
Coste, Louis	Chief Engineer	do 26, 1892	
Scott, Thos. S.	Chief Architect	Feb. 7, 1872	
Fuller, Thomas	do	Oct. 31, 1881	

Department of Public Works.

APPENDIX No. 13.

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L I S T

OF

ENGINEERS, ENGINEMEN, FIREMEN AND CARETAKERS

EMPLOYED IN THE

PUBLIC BUILDINGS THROUGHOUT THE DOMINION

ON THE 30<sup>TH</sup> JUNE, 1892

GIVING

Date of Appointment, Salary Paid, &c.

APPENDIX No. 13.

STATEMENT showing the Engineers, Firemen, Caretakers, Hoist Attendants and Watchmen employed at the Dominion Public Buildings on 30th June, 1892.

Place.	Building.	Name.	Date of Birth.	Position.	Date of Appointment.	Salary per Month.	Time employed per Annum.	Total Salary per Annum.
						\$ cts.		\$ cts.
Amherst.	Post office.	James Morrison.	May 2, 1824	Caretaker.	Nov. 2, 1886	33 33	12 months.	400 00
Antigonish	Public building.	Angus McDonald.	March 7, 1820	do	Feb. 5, 1891	33 33	do	400 00
Arichat.	Building on P. O. site	John McAskill.	do	do	Sept. 16, 1887	33 33	do	15 00
Annapolis	Post office and C. house.	John McKay.	Oct. 26, 1847	do	April 1, 1891	33 33	do	400 00
Baddeck	Public building.	Alex. S. McDonald.	Dec. 11, 1855	do	Dec. 23, 1886	16 67	do	200 00
Halifax	Dominion building.	John Powell.	Aug. 21, 1836	Engineer.	Oct. 1, 1871	62 50	do	750 00
do	do	Richard Power.	do 15, 1834	Fireman	do 1, 1871	50 00	9	450 00
do	do	M. Sullivan.	Sept. 16, 1823	Caretaker	do 31, 1885	33 33	do	400 00
do	do	W. H. Gray.	Nov. 26, 1848	Watchman.	Sept. 10, 1891	39 00	do	468 00
New Glasgow	Examining warehouse.	Wm. Power.	Feb. 6, 1834	Caretaker.	Jan. 26, 1887	41 67	do	500 00
North Sydney	Post office.	Daniel McDonald.	Dec. 17, 1832	do	Oct. 1, 1889	33 33	do	400 00
Pictou.	Public building.	Angus McEachren	do 24, 1847	do	Jan. 20, 1890	33 33	do	400 00
Sydney, South.	Custom-house.	Geo. Robson.	do 22, 1822	do	do 31, 1888	33 33	do	400 00
Truro	Post office and C. house.	N. H. McNeil.	Dec. 25, 1845	do	Dec. 8, 1890	38 33	do	400 00
Windsor	Post office.	Hugh McCulloch.	June 2, 1826	do	Sept. 22, 1888	33 33	do	400 00
Yarmouth	do	Hugh H. Parsons	March 3, 1846	do	do 22, 1892	33 33	do	400 00
Charlottetown.	Public building.	Robert Speers.	Sept. 15, 1824	do	Dec. 23, 1886	33 33	do	400 00
do	Dominion building.	D. McLeod.	June 9, 1824	do	Sept. 12, 1872	33 33	do	400 00
do	do	J. S. McLeod.	Nov. 14, 1868	Fireman.	Dec. 13, 1887	28 00	do	336 00
do	do	Geo. Walker.	Aug. 28, 1826	Messenger.	Jan. 19, 1875	37 00	do	444 00
do	do	C. J. Mitchell.	June 18, 1873	do	Oct. 20, 1890	37 00	do	444 00
do	do	D. F. Macdonald.	do	Caretaker.	Dec. 1, 1890	33 33	do	400 00
Montague.	Public building.	Martin Lambert.	Nov. 12, 1845	do	Jan. 12, 1887	10 00	do	120 00
Summerside.	Dominion building.	James Brazil.	do 1816	do	Nov. 5, 1885	33 33	do	400 00
Bathurst.	Post office.	J. A. Melancon.	Jan. 20, 1825	do	April 13, 1887	33 33	do	400 00
Chatham.	do	R. B. Adams	do 13, 1854	do	May 16, 1889	10 83	do	130 00
Carleton, St. John.	do	Jas. R. Reid	Aug. 15, 1823	do	Oct. 1, 1889	8 33	do	100 00
Dalhousie.	do	Wm. Gould.	Jan. 1, 1853	do	Nov. 26, 1890	33 33	do	400 00
Fredericton	do	Jas. Perkins	Oct. 5, 1847	do	May 31, 1881	33 33	do	400 00
Moncton.	do	E. B. Hicks.	Jan. 11, 1832	do	Jan. 11, 1886	33 33	do	400 00
Newcastle.	do	Patrick Keating	March 13, 1840	do	Oct. 23, 1886	33 33	do	400 00

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St. Stephen.	do	Samuel Topping	April 2, 1839	25, 1887	33 33 12	do	400 00
Sussex	do	Thomas Astill	Feb. 18, 1826	19, 1883	33 33 12	do	400 00
St. John	Custom-house	G. H. Jones	June 2, 1856	17, 1880	60 00 12	do	720 00
do	do	Christopher White	Nov. 20, 1844	9, 1885	50 00 6	do	300 00
do	do	Jas. A. Paul	do	13, 1891	41 67 12	do	500 00
do	Post office	do	do	4, 1881	56 00 12	do	660 00
do	do	Henry Howe	May 1, 1853	27, 1882	50 00 12	do	600 00
do	do	Ed. Haney	Feb. 22, 1849	29, 1880	37 50 12	do	450 00
do	Penitentiary	Geo. Campbell	Feb. 23, 1817	1, 1890	33 33 12	do	400 00
do	Post office	Wm. Kennedy	May 2, 1825	8, 1889	8 33 12	do	100 00
Woodstock	do	J. R. Woods	March 18, 1817	27, 1889	38 33 12	do	400 00
Aylmer	Public building	Israel Baldwin	Nov. 16, 1839	do	do	do	do
Castrook	Post office, &c.	do	do	do	do	do	do
Hull	do	Chas. Guillaubert	Sept. 29, 1826	15, 1885	33 33 12	do	400 00
Joliette	do	do	Nov. 1, 1840	8, 1891	20 83 12	do	250 00
Lachine	do	Medard Robert	do	do	do	do	do
Montreal	Dominion buildings	Thos. Ryan	June 18, 1836	4, 1882	100 00 12	do	1,200 00
do	Examining warehouse	M. Boyer	Feb. 18, 1848	do	50 00 12	do	600 00
do	do	D. St. George	Oct. 8, 1844	1, 1890	45 00 12	do	540 00
do	Post office	John Watson	Feb. 21, 1820	18, 1876	66 00 12	do	780 00
do	do	L. D. Thibault	Jan. 28, 1861	1, 1885	60 00 12	do	720 00
do	do	do	do	do	do	do	do
do	Inland revenue	Alfred Filiatrault	do	1, 1892	33 00 12	do	400 00
do	do	F. Greene	Oct. 4, 1837	1, 1885	60 00 12	do	720 00
do	Custom-house	W. Wallace	Aug. 12, 1837	1, 1882	50 00 8	do	400 00
do	do	J. H. Marchand	Sept. 6, 1849	2, 1882	50 00 8	do	400 00
do	do	do	do	16, 1892	2,00 p.d.	do	720 00
do	Drill hall and armories	C. Daudelin	Sept. 17, 1832	21, 1888	45 00 12	do	540 00
do	Dominion buildings	Wm. McDonald	Feb. 2, 1839	18, 1890	45 00 12	do	600 00
do	Examining warehouse	Jas. Matthews	Sept. 25, 1836	4, 1885	55 00 12	do	600 00
Quebec	do	Thos. McLaughlin	do	27, 1892	40 00 8	do	320 00
do	Cuiller's office	John O'Neil	June 23, 1819	8, 1886	45 00 8	do	360 00
do	Custom-house	John R. Mountain	Nov. 1, 1848	10, 1888	45 00 12	do	540 00
do	Post office	Z. Boucher	do	2, 1892	33 33 12	do	400 00
Rivières du Loup	do	Thos. Rawson	May 20, 1841	12, 1884	33 33 12	do	400 00
Sherbrooke	do	P. St. Michel	Feb. 26, 1829	22, 1886	33 33 12	do	400 00
Sorel	do	Widow J. Forrant	Oct. 27, 1814	30, 1888	16 66 12	do	200 00
St. John's	do	Wm. Comper	May 20, 1826	28, 1881	12 50 12	do	150 00
do	Public building	Medard Grignon	June 25, 1828	11, 1890	33 33 12	do	400 00
do	do	Ph. Gravel	do	1, 1891	25 00 12	do	300 00
St. Jérôme	Custom-house	do	do	27, 1883	33 33 12	do	400 00
Three Rivers	Post office	Jos. Carboneau	do	3, 1828	25 00 12	do	300 00
do	Custom-house	Geo. McLeod	April 16, 1838	1, 1891	25 00 12	do	300 00
do	Post office	John Lovegrove	Dec. 19, 1836	5, 1885	33 33 12	do	400 00
do	do	do	do	30, 1891	33 33 12	do	400 00
Annerstburg	do	Wm. Moulton	March 23, 1839	6, 1888	33 33 12	do	400 00
Almonte	do	Wm. Shepherd	June 13, 1831	27, 1880	50 00 12	do	600 00
Brockville	do	John Squires	April 24, 1842	2, 1886	33 33 12	do	400 00
Brantford	do	Fred. Edwards	March 3, 1844	17, 1883	60 00 12	do	600 00
Barrie	do	J. P. Reeves	Nov. 27, 1820	29, 1887	33 33 12	do	400 00
Belleville	do	do	do	23, 1844	33 33 12	do	400 00
Berlin	do	Widow Aug. Meinke	do	5, 1840	33 33 12	do	400 00
Brampton	do	James McBride	Oct. 5, 1840	8, 1885	33 33 12	do	400 00
Clifton	do	Gilbert Campbell	Feb. 11, 1849	23, 1884	50 00 7	do	350 00
Chatham	do	Henry Dunn	May 23, 1841	23, 1884	50 00 7	do	350 00

194 STATEMENT showing the Engineers, Firemen, Caretakers, Hoist Attendants and Watchmen employed at the Dominion Public Buildings, &c.—Continued.

Place.	Building.	Name.	Date of Birth.	Position	Date of Appointment.	Salary per Month.	Time employed per Annum.	Total Salary per Annum.
						\$ cts.		\$ cts.
Chatham	Ont. Post office.	W. W. Mitchell	May 25, 1848	Caretaker.	Jan. 7, 1885	33 33	12 months.	400 00
Cornwall	do	Thos. Murphy	do 1, 1843	do	March 7, 1885	33 33	12 do	400 00
Cayuga	do	G. A. Gibson	do	do	Sept. 3, 1891	4 16	12 do	50 00
Cobourg	do	H. J. Payne	Jan. 31, 1854	do	April 24, 1890	33 33	12 do	400 00
Galt	do	Wm. Kilgour.	March 3, 1857	do	Sept. 23, 1886	33 33	12 do	400 00
Guelph	do	Robert Higham.	May 20, 1834	do	Oct. 29, 1889	33 33	12 do	400 00
Ganaroque	do	Thos. P. Richardson	Feb. 25, 1834	do	May 1, 1889	33 33	12 do	400 00
Goderich	do &c	Lewis Elliot	April 8, 1832	do	July 2, 1890	33 33	12 do	400 00
Hamilton	Dominion building	Wm. Hornby	Nov. 14, 1829	do	Oct. 9, 1886	50 00	12 do	600 00
do	do	Thos. Beatty	do	Fireman	Nov. 7, 1887	45 00	6 do	270 00
do	do	Thos. Nicholson	Dec. 17, 1857	Engineer.	March 2, 1887	50 00	12 do	600 00
do	Drill hall.	Wm. Harris	May 20, 1841	Fireman	Dec. 12, 1889	45 00	12 do	540 00
Kingston	Military college.	William Johnson	Sept. 12, 1842	Engineer	May 31, 1891	65 00	12 do	780 00
do	do	M. Maddon.	Dec. 22, 1838	Fireman	Oct. 12, 1878	55 00	6 do	330 00
do	Custom-house.	M. Mulkern.	Sept. 4, 1837	Fireman.	Oct. 12, 1884	50 00	12 do	600 00
London	Post office.	Wm. Greer.	Oct. 12, 1839	Caretaker.	March 16, 1894	33 00	12 do	400 00
do	do	John Price.	do 6, 1836	Engineer.	Jan. 14, 1894	50 00	12 do	600 00
do	Post office and C. house.	William McMann.	May 27, 1831	Caretaker.	March 15, 1889	33 33	12 do	400 00
Lindsay	do	John Hearn	March 28, 1853	do	June 22, 1889	33 33	12 do	400 00
Napanee	do	John Wilkins.	May 29, 1890	do	Sept. 15, 1896	33 33	12 do	400 00
Orangeville	Post office	John Irwin.	do 17, 1842	do	do 8, 1887	33 33	12 do	400 00
Peterborough	do	do	do	do	do	33 33	12 do	400 00
Port Colborne	do	Wm. Armstrong	Sept. 9, 1846	do	June 11, 1888	20 00	12 do	240 00
Port Hope	do	Levy Reynolds.	Feb. 15, 1839	do	Nov. 17, 1885	33 33	12 do	400 00
Pembroke	Public building	Samuel Hamilton.	June 14, 1834	do	Oct. 29, 1880	33 33	12 do	400 00
Prescott	Post office and C. house.	Rufus Henderson.	April 6, 1822	do	Dec. 23, 1890	33 33	12 do	400 00
do	do &c	J. H. Roberts.	May 1, 1847	Engineer.	Feb. 7, 1884	50 00	12 do	600 00
do	do	Wm. Bryson.	Feb. 4, 1843	Caretaker.	Aug. 5, 1883	33 33	12 do	400 00
St. Catharines	do &c	Jas. Russell	Sept. 15, 1832	do	Sept. 5, 1885	33 33	12 do	400 00
St. Thomas	do	Wm. J. Johnston	May 12, 1840	do	Oct. 25, 1890	33 33	12 do	400 00
Strathroy	Public building	J. A. Wills	Aug. 6, 1845	Fireman engineer	Aug. 23, 1873	125 00	12 do	1,500 00
Toronto	Dominion buildings.	Chs. H. Baillie	Sept. 22, 1851	Fireman	Jan. 13, 1891	50 00	6 do	300 00
do	Inland revenue building.	Fred Faragher.	Oct. 16, 1865	do	Nov. 1, 1889	65 00	12 do	780 00
do	Custom-house	Jas. Coegrave.	Feb. 10, 1844	Engineer	Dec. 28, 1874	50 00	12 do	600 00
do	Examining warehouse.	do	do	do	do	55 00	12 do	660 00
do	do	E. A. Appleton.	Sept. 26, 1864	Fireman	Sept. 23, 1886	55 00	12 do	660 00

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do	do	Alex. Dey	do	27, 1863	Hoist attendant	Dec.	1, 1887	50 00	12	do	600 00
do	do	Wm. Chenery	do	19, 1851	do	do	1, 1887	50 00	12	do	600 00
do	do	W. J. Stean	July	5, 1855	do	March	2, 1888	50 00	12	do	600 00
do	do	Jas. Richardson	Feb.	23, 1831	Watchman	Sept.	3, 1888	46 50	12	do	588 00
do	do	Henry L. Bell	Dec.	23, 1864	Engineer	May	9, 1885	50 00	6	do	300 00
do	do	Samuel Fitzgerald	do	26, 1859	Fireman	Nov.	1, 1889	50 00	6	do	300 00
do	do	John Somers	April	8, 1835	do	Dec.	1, 1889	50 00	6	do	300 00
Trenton	do	David Allan	May	13, 1844	Caretaker	Aug.	31, 1889	33 33	12	do	400 00
Windsor	do	F. Parker	Aug.	6, 1833	Engineman	Oct.	3, 1888	50 00	12	do	600 00
do	do	W. Courtis	March	6, 1844	Caretaker	Nov.	9, 1880	33 33	12	do	400 00
Walkerton	do	Andrew McLean	Nov.	24, 1825	do	July	18, 1891	33 33	12	do	400 00
Brandon	Man.	John Faucett	May	11, 1857	do	Aug.	18, 1890	70 00	12	do	400 00
Winnipeg	do	J. P. Alexander	Aug.	19, 1852	Engineman	June	1, 1889	45 00	6	do	840 00
do	do	Patrick Dillon	March	17, 1849	Fireman	Jan.	1, 1889	45 00	6	do	270 00
do	do	Jos. Coutu	May	10, 1843	Hoist attendant	March	16, 1887	45 00	12	do	540 00
do	do	Jos. Gagnier	do	do	Watchman	June	1, 1892	45 00	12	do	540 00
do	do	Jos. Cauchon	March	12, 1856	Caretaker	do	12, 1886	60 00	12	do	720 00
Moosomin	N. W. T.	A. G. Hamilton	May	14, 1848	do	Jan.	31, 1891	33 33	12	do	400 00
Prince Albert	do	George Northgraves	do	20, 1838	do	June	14, 1888	33 33	12	do	400 00
Regina	do	Jas. McKee	Dec.	11, 1859	Engineer	Oct.	27, 1890	70 00	12	do	840 00
do	do	Philip Thomas	March	4, 1834	Asst. engineer	Nov.	25, 1890	60 00	12	do	720 00
Nanaimo	B. C.	Ralph Johnson	do	do	Caretaker	Jan.	11, 1892	50 00	12	do	600 00
New Westminster	do	John McMurphy	Aug.	12, 1812	do	Oct.	1, 1884	50 00	12	do	600 00

R. STECKEL.





Department of Public Works.

APPENDIX No. 14.

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STATEMENT

SHOWING

NAMES, DATES OF APPOINTMENTS, SALARIES, &C.,

OF

PERSONS EMPLOYED

ON THE DIFFERENT

GRAVING DOCKS,

30TH JUNE, 1892.



Department of Public Works.

APPENDIX No. 14.

STATEMENT showing Names, Dates of Appointments, Salaries, &c., of persons employed on the different Graving Docks, 30th June, 1892.

Name.	Date of Birth.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
<i>Esquimaux Graving Dock, British Columbia.</i>						
John Devereux		Dockmaster.	Esquimaux	Sept. 17, 1887	\$166.66 per month	
A. C. Muir		Engineer	do	April 1, 1887	100.00 do	
J. W. Muir		Asst. engineer	do	Jan. 11, 1892	75.00 do	
A. D. Greeves		Carpenter	do	Dec. 1, 1887	80.00 do	
F. M. Jones		Stoker	do		60.00 do	
D. Magell		do	do		60.00 do	
John Stock		Watchman	do		50.00 do	
<i>Lévis Graving Dock.</i>						
Ulric Valiquette	30th June, 1856	Dockmaster.	Lévis	April 13, 1891	\$1,800.00 per annum.	Annual allowance of \$200 for house rent. First appointment, 9th May, 1873.
Honoré Lamontagne		Dock foreman.	do	do 9, 1891	83.33 per month	
Wm. Macdougall		Mech'l engineer	do	June 1, 1888	75.00 do	
Napoléon Lemelin		Asst. mech'l engr'r	do	do 1, 1888	45.00 do	
Narcisse Lemelin		Fireman	do	do 1, 1888	32.00 do	
Jos. Morin		do	do	April 9, 1891	32.00 do	
Theodore Chabot		Caretaker and watchman	do	do 9, 1891	45.00 do	\$45 per month, 1st April to 1st Dec.; \$1.25 per day, 1st Dec. to 1st April.

R. STECKEL.



# Department of Public Works.

## APPENDIX No. 15.

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### STATEMENTS.

1st.—STATEMENT OF CONTRACTS LET BY THE DEPARTMENT OF PUBLIC WORKS OF CANADA, FROM THE 30TH JUNE, 1891, TO THE 30TH JUNE, 1892.

2nd.—STATEMENT OF PROPERTY PURCHASED OR SOLD BY THE DEPARTMENT OF PUBLIC WORKS DURING THE FISCAL YEAR ENDED 30TH JUNE, 1892.

3rd.—STATEMENT OF PROPERTY LEASED TO AND BY THE DEPARTMENT OF PUBLIC WORKS DURING THE FISCAL YEAR ENDED 30TH JUNE, 1892.



# Department of Public Works.

## APPENDIX No. 15.

No. 1.—CONTRACTS let by the Department of Public Works of Canada, from the  
30th June, 1891, to the 30th June, 1892.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<b>PUBLIC BUILDINGS.</b>			
<i>Government House, and Parliament and Departmental Buildings.</i>			
Parliament and Departmental buildings—cleaning chimneys	G. E. Pouliot	Sept. 11, 1891	81 56
Parliament and Departmental buildings—removal of snow	W. Moore	Nov. 30, 1891	450 00
Parliament and Departmental buildings—ice	D. N. Charlebois	Feb. 25, 1892	06½ per block.
do do do coal	C. C. Ray & Co.	May 9, 1891	8,441 67
Rideau Hall—removal of snow	N. Cardiff	Nov. 28, 1891	450 00
do ice	D. N. Charlebois	Feb. 25, 1892	06½ per block.
<i>Nova Scotia.</i>			
Amherst post office building—supply of coal	Cumberland Railway & Coal Co	Sept. 16, 1891	243 75
Antigonish do do do	James Kenna	do 1, 1891	112 50
Aricat do do do	Gardner Coal Co.	do 2, 1891	78 75
Baddeck do do do	A. G. McDonald	do 2, 1891	105 00
Halifax public buildings—supply of coal	Acadia Coal Co.	Aug. 27, 1891	959 30
New Glasgow post office building—supply of coal	do	do 27, 1891	132 18
North Sydney do do do	Gardner Coal Co.	do 29, 1891	151 25
Pictou custom-house building	Acadia do	Sept. 22, 1891	228 32
Sydney post office building	Gardner do	Aug. 29, 1891	100 00
Truro do do do	Acadia do	do 27, 1891	140 00
Windsor do do do	F. W. Dimock	Sept. 10, 1891	164 67
<i>Prince Edward Island.</i>			
Charlottetown Dominion building—supply of coal	Gardner Coal Co.	Aug. 29, 1891	570 05
Montague post office do do do	do	do 29, 1891	62 26
Summerside do do do	Jos. Read & Co.	Sept. 5, 1891	331 89
<i>New Brunswick.</i>			
Bathurst post office building—supply of coal	Ed. Johnson	Sept. 10, 1891	409 12
Carleton do do do	Morrison & Lawlor	Aug. 29, 1891	53 03
Chatham do do do	Gillespie & Sadler	Sept. 10, 1891	120 19
Dalhousie do do do	do	do 10, 1891	215 00
Fredericton do do do	E. N. Allen	Aug. 31, 1891	262 00
Moncton do do do	Cumberland Railway & Coal Co.	Sept. 21, 1891	234 00
Newcastle do do do	Gillespie & Sadler	do 10, 1891	324 12
Portland do do do	R. P. & W. F. Starr	Aug. 31, 1891	29 94
St. John public buildings	Morrison & Lawlor	do 29, 1891	2,652 75
St. Stephan post office building	C. D. Hill & Co.	Sept. 3, 1891	162 00
Sussex do do do	R. P. & W. F. Starr	Aug. 31, 1891	199 55
Woodstock do do do	W. F. Dibblee & Son.	Sept. 1, 1891	229 47

No. 1.—CONTRACTS let by the Department of Public Works, &c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
<b>PUBLIC BUILDINGS—Continued.</b>			
<i>Quebec.</i>			
Aylmer post office building—supply of coal	C. C. Ray & Co.	Aug. 24, 1891	144 99
Coaticook do do do	B. J. Smith.	Sept. 12, 1891	184 50
do do do electric lighting	Coaticook Electric Light Co.	May 30, 1892	180 00
Hull do do supply of coal	McRae & Co.	Sept. 10, 1891	249 50
Lachine do do interior fittings	Jas. Fitzpatrick.	Oct. 30, 1891	1,135 00
do do do fencing, gates, woodshed.	do	May 19, 1892	655 00
Laprairie do do erection	O. Lefebvre.	Dec. 11, 1891	9,375 00
Montreal public buildings—supply of coal	P. McCrory	Sept. 17, 1891	1,249 96
do do do do	Evans Bros.	do 11, 1891	1,180 77
do do do do	F. Robertson	do 14, 1891	1,206 52
do custom-house—reconstruction of skylight	L. Cousineau	Feb. 23, 1892	6,146 46
Quebec public buildings—supply of coal	Madden & Ellis.	Sept. 10, 1891	3,080 80
do citadel (Gov. General's qtrs.)—supply of coal	do	do 10, 1891	130 00
do old Parliament building—removal of snow from grounds	Eugène Trudel	Dec. 4, 1891	175 00
do immigration building on Princess Louise embankment—alteration to verandah	F. Poitras	April 28, 1892	171 00
St. John's post office building—supply of coal	Bissett & Donaghy	Sept. 1, 1891	152 00
Sherbrooke do do do	Luckie & Mitchell	do 7, 1891	266 40
Sorel do do do	F. O. Lamarche	do 8, 1891	225 80
Three Rivers public buildings do	Z. Marchand	Aug. 31, 1891	548 49
Valleyfield post office—repairs, alterations, painting.	Bélanger & Préfontaine	Nov. 19, 1891	173 00
do do electric lighting	Valleyfield Electric Light Co.	do 24, 1891	50 00
<i>Ontario.</i>			
Almonte post office building—supply of coal	T. R. White	Sept. 7, 1891	218 75
Amherstburg do do do	J. G. Mullen	do 16, 1891	125 00
Barrie do do do	Johnston & Sergeant	do 2, 1891	240 00
do do do supply of water	The Barrie Water Wks. Co.	Oct. 22, 1891	50 00
Belleville do do supply of coal	The Rathbun Co.	Aug. 29, 1891	276 00
Berlin do do do	Kloepfer & Co.	Sept. 14, 1891	174 20
Brampton post office building—supply of coal	R. Blain.	do 19, 1891	143 75
Brantford do do do	T. Elliott.	Aug. 31, 1891	287 81
Brockville do do do	Geo. E. Shields.	do 25, 1891	275 00
Carleton Place do do heating apparatus.	N. Landry.	Dec. 7, 1891	994 50
do do do fittings.	R. Cameron	April 15, 1892	1,375 00
Cayuga do do supply of coal	T. Martindale.	Sept. 2, 1891	172 50
Chatham do do do	P. T. Barry.	do 5, 1891	231 82
do do do supply of water	Chatham Water Works Co.	do	40 00
Clifton do do supply of coal	Histrop & Thomas	June 10, 1892	per annum
do do do electric light (including installation and renewals)	Niagara Falls Electric Light and Power Co.	Sept. 3, 1891	178 80
Cobourg do do do supply of coal	Rooney & Co.	May 17, 1892	325 00
Cornwall do do do	Flack Bros.	Nov. 13, 1891	258 75
Galt do do do	Perry & Co.	Sept. 1, 1891	240 00
Gananoque public buildings do	W. H. Britton & Co.	do 2, 1891	171 00
Goderich post office building do	Wm. Lee.	do 3, 1891	173 84
Guelph do do do	Frank Frank.	do 1, 1891	196 00
Hamilton do do do	Æ. D. Mackays Sons.	do 10, 1891	244 20
do do do alterations, additions and fittings.	Thos. Myles & Sons	do 2, 1891	461 70
do do do painting	Donaldson & Patterson	do 2, 1891	492 48
Kingston public buildings—supply of coal	J. Clayton	Feb. 12, 1892	431 00
Lindsay post office building—do	W. B. & S. Anglin	do 12, 1892	650 00
London do do do	The Rathbun Co.	Aug. 26, 1891	312 00
London custom-house building—do	Hunt Bros.	do 29, 1891	125 85
do do do do	D. Daly & Son.	Sept. 12, 1891	514 26
do do do do	do	do 22, 1891	498 99



# Department of Public Works.

No. 1.—CONTRACTS let by the Department of Public Works, &c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
<i>PUBLIC BUILDINGS—Continued.</i>			\$ cts.
<i>Ontario—Continued.</i>			
London stabling and latrines at infantry barracks.....	Tambling & Jones.....	Feb. 17, 1892	2,286 00
Napanee post office building—supply of coal.....	The Rathbun Co. ....	Aug. 29, 1891	166 25
Orangeville do do do .....	James Morrison. ....	Sept. 2, 1891	133 00
Orillia public building—erection.....	J. R. Eaton, .....	April 5, 1892	10,216 00
Ottawa experimental farm—supply of coal.....	McRae & Co. ....	Sept. 10, 1891	427 00
do printing bureau—slab fire wood.....	John Heney.....	Oct. 14, 1891	1 75
do supreme court building—plumbing and gas fitting in new wing.....	Ormond Higman. ....	do 28, 1891	1,075 00
do supreme court building—alterations and repairs.....	Wm. Stuart.....	Nov. 16, 1891	1,991 91
do Langevin block, post office, geological and fisheries, museums, Cartier square, removal of snow.....	Wm. Moore .....	do 30, 1891	450 00
Pembroke post office building—supply of coal.....	Dunlop & Chapman...	Sept. 1, 1891	100 90
do do bracket clock (including covering, &c....	E. Chanteloup.....	April 28, 1892	1,540 00
Peterborough do supply of coal.....	The Rathbun Co. ....	Aug. 29, 1891	138 90
do public library—vaults.....	J. E. Askwith.....	Jan. 28, 1892	1,550 00
do custom-house—heating apparatus.....	McGuire & Bird .....	June 28, 1892	719 00
Petrolia post office building—erection.....	J. Garrett.....	Jan. 29, 1892	16,000 00
Port Arthur—post office inspector's office—supply of coal.....	The Weston Coal Co	Sept. 24, 1891	35 00
Port Arthur post office building—erection.....	Tobin & O'Keefe.....	Jan. 8, 1892	17,900 00
Port Hope do do supply of coal.....	Brown & Henning....	Aug. 31, 1891	443 00
Prescott public buildings do .....	Jas Buckley.....	Sept. 1, 1891	98 00
St. Catharines post office buildings—supply of coal..	D. Dittrick.....	do 18, 1891	246 58
St. Thomas do do do .....	Ellison & Lewis.....	do 9, 1891	388 50
Stratford do do do .....	A. C. Mowat.....	do 2, 1891	350 35
Strathroy do do do .....	W. J. Anderson.....	do 22, 1891	133 53
Toronto public buildings—supply of coal.....	P. Burns & Co. ....	Aug. 25, 1891	1,739 24
do drill hall—erection.....	J. Stewart.....	Nov. 10, 1891	240,000 00
do drill shed at infantry barracks.....	R. Dennis & Son .....	Jan. 22, 1892	3,177 00
do post office building—repairs to deck roofs.....	Douglas Bros.....	April 25, 1892	313 16
Trenton do do supply of coal.....	C. Crowe.....	Aug. 31, 1891	145 50
Walkerton do do .....	Traill Bros.....	do 29, 1891	191 38
do do fittings.....	J. C. Oppenheiser....	Dec. 8, 1891	878 00
do do heating apparatus.....	McGuire & Bird .....	do 22, 1891	1,320 00
do do plumbing work.....	W. M. Shannon.....	Mar. 7, 1892	236 00
do do supply of water .....	Corporation of Walkerton.....	do 16, 1892	25 00
Windsor do supply of coal.....	Scully & Bridges.....	Sept. 1, 1891	per annum. 360 15
<i>Manitoba.</i>			
Winnipeg—Fort Osborne—hospital for North-west Mounted Police.....	Brydon & Matheson...	July 14, 1891	2,993 97
Winnipeg—immigration building—supply of coal.....	Winnipeg Water Wks. Co.....	do 13, 1891	125 00
do post office building—supply of coal (Galt coal).....	Alberta Railway and Coal Co .....	Sept. 2, 1891	per annum. 2,472 77
do other public buildings—supply of coal .....	Dominion Coal, Coke & Transportation Co.	do 21, 1891	1,869 95
<i>North-west Territories.</i>			
Calgary—addition to guard-room.....	E. Watson.....	June 2, 1892	1,547 00
Prince Albert—immigration building .....	T. E. Baker.....	April 7, 1892	1,000 00
Red Deer—industrial school .....	J. Stewart.....	Sept. 11, 1891	14,343 00
Regina—court-house, post office and registry office buildings—supply of coal .....	The Smith & Ferguson Co.....	do 3, 1891	243 87
Regina—Government offices—heating apparatus.....	Dunlop & Chapman...	Dec. 10, 1891	925 00

## No. 1.—CONTRACTS let by the Department of Public Works, &amp;c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—Continued.			\$ cts.
<i>British Columbia.</i>			
Agrassiz—barn for experimental farm .....	Win. Rockett .....	Nov. 20, 1891	9,000 00
*Vancouver—public buildings—erection .....	Thos. Tompkins .....	Oct. 19, 1891	59,339 00
Victoria—drill hall—erection .....	Maurice Humber .....	May 23, 1892	33,916 00
HARBOURS, RIVERS AND BRIDGES.			
<i>Nova Scotia.</i>			
Devil's Island—breakwater .....	McDonald & Moffatt .....	April 19, 1892	1,600 00
Eatonville—extension of breakwater .....	F. R. Eaton .....	June 9, 1892	2,700 00
L'Ardoise—breakwater .....	J. Burns .....	Dec. 18, 1891	16,775 00
Louis Head do .....	H. Smith & J. Heney .....	Nov. 9, 1891	4,072 00
Round Hill—shear dam .....	W. J. Loughren .....	Dec. 30, 1891	4,750 00
West Chezzetcook—breakwater on the eastern side of the entrance to harbour .....	A. McKinnon .....	July 20, 1892	8,940 00
<i>Prince Edward Island.</i>			
St. Peter's Bay—reconstruction of breakwater protection .....	D. J. McDonald .....	May 23, 1892	862 00
<i>New Brunswick.</i>			
Campbellton—extension of ballast wharf .....	G. & J. Robertson .....	June 22, 1892	3,975 00
Lower Neguac—wharf .....	B. Flood .....	April 14, 1892	7,200 00
<i>Ontario.</i>			
Kaministiquia River—dredging at McKellar's Creek .....	T. Marks & N. McDonald .....	April 28, 1892	12 $\frac{1}{2}$ c. p. c. yd.
Kingston dry dock—engine-house and chimney .....	P. Navin .....	July 16, 1891	10,610 00
do do travelling crane for engine-house .....	The Can. Locomotive and Engine Co. ....	Dec. 4, 1891	325 00
Hamilton Harbour—dredging for removal of shoal .....	F. B. McNamee .....	May 3, 1892	10c. p. c. yd.
Southampton—additional length to landing pier .....	G. E. Smith .....	April 9, 1892	5,700 00
<i>British Columbia.</i>			
Fraser River—brush mattresses at mouth of .....	D. A. McDonald .....	Dec. 19, 1891	Sched. rates.
do do piles for improvements at mouth of .....	D. McLennan .....	Jan. 2, 1892	do
DREDGING, DREDGE VESSELS AND PLANT.			
St. Lawrence Ship Channel—coal for dredges .....	Sydney and Louisburg Coal and Ry. Co. ....	Oct. —, 1891	2,751 10
do do do .....	General Mining Assn. .....	do —, 1891	2,876 15
Dredge "St. Lawrence"—boiler for .....	Jas. Fleming .....	do 26, 1891	8,290 00
Steam elevator dredge—hull for .....	P. G. Waters .....	June 20, 1892	21,000 00
TELEGRAPH LINES SERVICE.			
Decked boat—for service in Gulf St. Lawrence .....	P. P. Pouliot .....	Mar. 19, 1892	450 00
Wellington to Comox, <i>vid</i> Courtney and Union Mines, B.C.—construction of line .....	D. J. McLachlan .....	April 19, 1892	*5,670 00

\* This contract takes the place of A. E. Carter's contract mentioned in last year's report, but since cancelled by Order in Council (No. 120742).

\* For 65 miles, and \$90 per mile for the remaining distance.

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,  
OTTAWA, 15th October, 1892.

## Department of Public Works.

No. 2.—STATEMENT of Property purchased or sold by the Department of Public Works during the Fiscal Year ended 30th June, 1892.

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.*	For what Purpose.	Area.	Price.
July 22, '91	The Corp'n of Orillia.....	Her Majesty.....	Northerly 75 feet of lot No. 6 on Peter St., Orillia, Ont.	Site for public building.....	75 x 105 ft.	1 00
Aug. 28, '91	do Laprairie.....	do.....	Lot No. 154, St. Joseph St., Village of Laprairie, Q.	do.....	6,080 square ft.	5 00
Sept. 4, '91	(Certificate of ownership).....	do.....	Lots 21, 22, 23, 24, 25 and 26, Block 94, Moose Jaw, Assa.	Site for court-house.....		
July 21, '91	do.....	do.....	Portion of lot No. 78.....	do.....		
Oct. 27, '91	W. S. Smith.....	Her Majesty.....	Use of piece of land and right of way.....	Water supply for post-office building.....		75 00
do 27, '91	N. M. Bateman.....	do.....	do.....	Approach to Grand River bridge.....		50 00
Dec. 31, '91	J. Stalker.....	do.....	Piece of land in Oneida Township.....		1 1/2 acres.	85 00
Feb. 25, '92	Provincial Government of British Columbia.....	Federal (govt.).....	do being part of Government Reserve, James Bay.....	Site for drill shed.....	About 36,900 sq. ft.	Transfer. 160 00
April 25, '92	(Certificate of ownership).....	do.....	River lot No. 80, block XXV., Prince Albert, Saskatchewan.....	do registry office.....	132 x 125 ft.	
do 19, '92	Hall & Price.....	Her Majesty.....	Parts of lots 8 and 9, block A, Pointe à la Magdelaine, River St. Maurice.....	St. Maurice River works.....	3 acres.	410 00
Oct. 1, '91	The Dartmouth Ferry Commission.....	do.....	Piece of land, south-west side of Water St., Dartmouth, N.S.....	Site for public building.....	78 x 59 ft.	4,500 00

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,  
OTTAWA, 15th October, 1892.

No. 3.—STATEMENT of Property leased, to and by the Department of Public Works during the Fiscal Year ended 30th June, 1892.

Date of Lease.	Lessor.	Lessee.	Property leased.	For what Purpose.	Duration of Lease.	Annual Rent Payable.
						\$ cts.
July 15, '91	Her Majesty	Colin Dewar	Piece of land south-west of south-west half of lot No. 4, Victoria Island.	Private enterprise.	During good pleasure.	5 00
Aug. 27, '91	do	D. W. Gordon	Water lots A, C, E, F and A, B, C, D, Nanaimo Harbour, B.C.	do	21 years	12 00
Sept. 7, '91	do	James Porter	Foreshore rights in front of lots 1, 2, 3, 4, 5 and 6, block M, Portage Inlet, Victoria Harbour, B.C.	do	During good pleasure.	5 00
do 14, '91	do	S. Williams	Water frontage on lot 7, block M, Victoria Harbour, B.C.	do	21 years	5 00
Dec. 18, '91	do	E. G. Laverdure	S. E. ½ lot No. 8, Sussex St., Ottawa.	do	During good pleasure.	1 00
April 14, '92	do	The Can. Pacific Ry. Co.	Portion of custom-house lot at New Westminster, B.C.	Railway purposes.	21 years	1 00
May 18, '92	Seybold & Gibson.	Her Majesty	Office in "Central Chambers," Ottawa	City post office rooms.	3 months and 12 days.	155 25

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,  
• OTTAWA, 15th October, 1892.

Department of Public Works.

APPENDIX No. 16

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# OFFICIAL CORRESPONDENCE

DEPARTMENT OF PUBLIC WORKS

FROM 1st JULY, 1867, TO 30th JUNE, 1892.



Department of Public Works.

APPENDIX No. 16.

OFFICIAL CORRESPONDENCE.

LETTERS Received and Sent from 1st July, 1867, to 30th June, 1892.

Years.				Received.	Sent.
1867	—From 1st July to 31st December . . . . .			2,075	1,511
1868	do	1st January to 31st December . . . . .		3,498	2,317
1869	do	do	do . . . . .	3,448	2,171
1870	do	do	do . . . . .	4,961	3,185
1871	do	do	do . . . . .	6,268	3,983
1872	do	do	do . . . . .	8,333	4,428
1873	do	do	do . . . . .	10,072	5,707
1874	do	do	do . . . . .	9,800	5,043
1875	do	do	do . . . . .	9,006	5,006
1876	do	do	do . . . . .	7,971	4,773
1877	do	do	do . . . . .	7,517	4,425
1878	do	do	do . . . . .	6,886	4,021
1879	do	do	to 6th October . . . . .	7,186	4,547
1879	do	7th October to 31st December . . . . .		2,033	810
1880	do	1st January do . . . . .		8,451	4,410
1881	do	do	do . . . . .	9,599	5,529
1882	do	do	do . . . . .	10,505	5,699
1883	do	do	do . . . . .	11,633	6,227
1884	do	do	do . . . . .	13,114	6,903
1885	do	do	do . . . . .	8,977	5,321
1886	do	do	do . . . . .	9,644	5,352
1887	do	do	to 30th June . . . . .	4,866	2,735
1887	do	1st July	do 1888 . . . . .	10,493	6,343
1888	do	do	do 1889 . . . . .	10,522	7,042
1889	do	do	do 1890 . . . . .	10,098	7,448
1890	do	do	do 1891 . . . . .	10,576	7,286
1891	do	do	do 1892 . . . . .	11,637	6,700

NUMBER of Cheques sent by Accountant's to Secretary's Branch and Mailed, from 1882 to 1892.

Year.			No.
1882	From 22nd September to 30th June, 1883 . . . . .		1,566
1883	do	1st July do 1884 . . . . .	3,366
1884	do	do do do 1885 . . . . .	3,298
1885	do	do do do 1886 . . . . .	3,466
1886	do	do do do 1887 . . . . .	4,198
1887	do	do do do 1888 . . . . .	4,692
1888	do	do do do 1889 . . . . .	1,960
1889	do	do do do 1890 . . . . .	4,819
1890	do	do do do 1891 . . . . .	5,376
1891	do	do do do 1892 . . . . .	5,400

## CHEQUES issued by Finance Department and Mailed from Secretary's Branch.

Year.		No.
1885.....	From 1st April to 30th June, 1885.....	245
1885.....	do 1st July do 1886.....	954
1886.....	do do do 1887.....	1,158
1887.....	do do do 1888.....	918
1888.....	do do do 1889.....	887
1889.....	do do do 1890.....	908
1890.....	do do do 1891.....	790
1891.....	do do do 1892.....	820

## LETTERS Received and Sent, Chief Architect's Office, from 1st January, 1880, to 30th June, 1892.

Years.	Received.	Sent.
1880—From 1st January to 30th June.....		1,273
1880 do 1st July do 1881.....		2,943
1881 do do do 1882.....		2,859
1882 do do do 1883.....	3,538	4,600
1883 do do do 1884.....	3,860	6,004
1884 do do do 1885.....	4,500	6,718
1885 do do do 1886.....	6,075	6,450
1886 do do do 1887.....	6,816	6,380
1887 do do do 1888.....	6,947	6,870
1888 do do do 1889.....	6,484	7,667
1889 do do do 1890.....	7,448	6,578
*1890 do do do 1891.....		7,751
1891 do do do 1892.....	6,113	4,260

\*The exact number of letters received cannot be accurately given, but would bear about the same proportion to letters sent as last year.

## LETTERS Sent from Chief Engineer's Office from January, 1880, to 30th June, 1892.

Year.		No.
1880.....	From 10th January to 30th June.....	418
1880.....	do 1st July do 1881.....	1,795
1881.....	do do do 1882.....	2,352
1882.....	do do do 1883.....	2,651
1883.....	do do do 1884.....	3,611
1884.....	do do do 1885.....	3,119
1885.....	do do do 1886.....	2,867
1886.....	do do do 1887.....	3,281
1887.....	do do do 1888.....	3,552
1888.....	do do do 1889.....	4,229
1889.....	do do do 1890.....	3,374
1890.....	do do do 1891.....	3,948
1891.....	do do do 1892.....	4,009

NOTE.—The letters, including returns, received in the Chief Engineer's Office may be estimated at the rate of two received to one sent.



Department of Public Works.

APPENDIX No. 17

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**TABULAR STATEMENT**

SHOWING THE DATES OF THE

**CLOSING AND OPENING OF NAVIGATION**

AT THE

**PRINCIPAL PORTS OF CANADA,**

ON THE SEABOARD, THE RIVER AND GULF OF ST. LAWRENCE, AND  
ON THE GREAT LAKES.

APPENDIX No. 17.

STATEMENT showing the Dates of the Closing and Opening of Navigation at the undermentioned Ports in Canada, in 1891 and 1892.

Ports.	Provinces.	Location.	Date of Closing, 1891-92.	Date of Opening, 1892.	Remarks.
Arichat, C. B.	Nova Scotia	Entrance, Gulf of St. Lawrence			
Bathurst	New Brunswick	Baie des Chaleurs	Dec. 18.	April 22.	
Belleville	Ontario	Lake Ontario	Nov. 28.	do 13.	
Campbellton	New Brunswick	Baie des Chaleurs	Jan. 8.	do 27.	
Charlottetown	P. E. Island	Gulf of St. Lawrence	do 25.	Mar. 20.	
Collingwood	Ontario	Georgian Bay	Nov. 30.	April 20.	
Gaspé	Quebec	Gulf of St. Lawrence	Jan. 20.	May 5.	
Georgetown	P. E. Island	do do	Feb. 11.	Mar. 27.	Navigation did not close at this port this season, in consequence of the unusually mild weather.
Goderich	Ontario	Lake Huron	Dec. 5.	April 4.	
Halifax	Nova Scotia	Atlantic Ocean			
Kincardine	Ontario	Lake Huron	Nov. 15.	April 5.	
Kingston	do	Lake Ontario	Jan. 16.	do 6.	
Louisburg, C. B.	Nova Scotia	Entrance, Gulf of St. Lawrence			Navigation closed unusually late at this port owing to the mildness of the season.
Montreal	Quebec	River St. Lawrence	Nov. 30.	April 13.	The ferry steamer ran this season until February 8th, on the 11th the harbour was frozen over, and on the 13th was again clear of ice, on the 20th sea ice blocked the entrance to the harbour but moved off on the 27th.
North Rustico	P. E. Island	Gulf of St. Lawrence	Dec. 31.	do 15.	Always open and clear of ice.
North Sydney, C. B.	Nova Scotia	Entrance, Gulf of St. Lawrence			No ice formed on this harbour last winter, sailing vessels were arriving and leaving this port every month.
Owen Sound	Ontario	Georgian Bay	Nov. 30.	May 2.	Vessels do not generally leave or enter this port much later than the 1st of December, nor earlier than the 1st of May, as the Gulf is generally full of drift ice previous to that date.
Pictou	Nova Scotia	Gulf of St. Lawrence	Jan. 21.	April 3.	There was no ice formed on this harbour this year.
Port Arthur	Ontario	Lake Superior	Dec. 28.	May 1.	During the winter of 1891-92, had much less ice than usual. The ferry boat ran on Pictou harbour and steamships "Northumberland"
Port Dover	do	Lake Erie	do 20.	April 4.	and "Stanley" plied between Prince Edward Island and Pictou till January 21st.
Port Hope	do	Lake Ontario	do 15.	do 8.	
Port Stanley	do	Lake Erie	do 14.	Feb. 26.	

# Department of Public Works.

Percé.....	Gulf of St. Lawrence.....	29.	April 11.	
Quebec.....	River St. Lawrence.....	do 5.	do 28.	
St. John's.....	River Richelieu.....	do 9.	do 9.	
St. John.....	Bay of Fundy.....	Jan. 23.	April 1.	Always open and clear of ice. No ice formed on St. Peter's Bay to prevent boats from running all winter.
St. Peter's, C. B.....	Atlantic Ocean.....			
Sarnia.....	Lake Huron.....	Dec. 3	do 5.	
Sault Ste. Marie.....	Lake Superior.....	do 4.	do 18.	Ice did not form between the Sault, Ontario, and the Sault, Michigan, until January 5th.
Shediac.....	Gulf of St. Lawrence.....	do 15.	do 7.	
Sorel.....	River Richelieu.....	Nov. 30	do 14.	
Sydney, C. B.....	Entrance, Gulf of St. Lawrence.....	Feb. 4.	do 6.	Part of the harbour was open all winter.
Tadoussac.....	River St. Lawrence.....	Dec. 2.	Mar. 25.	
Three Rivers.....	do.....	Nov. 26.	April 20.	
Toronto.....	Lake Ontario.....	Jan. 5.	Mar. 31.	The bay was not closed by ice until January 5th. Although navigation closed on December 28th, there was no ice formed until about the 20th January.
Warton.....	Georgian Bay.....	Dec. 28.	April 13.	Navigation did not close at this port. Ferry boats plied all winter between this port and Detroit.
Windsor.....	Detroit River.....			
Winnipeg.....	Red River.....	Nov. 15.	April 20.	
York Factory.....	Hudson's Bay.....	do 14.	May 24.	The river was fast on the date given, but had been full of ice for three weeks previous; on the coast the ice is still to be seen, July 6th, 1892.



Department of Public Works.

APPENDIX No. 18.

L I S T

OF SOME OF THE

ACTS OF PARLIAMENT PASSED AT THE SESSION OF 1892

AND HAVING REFERENCE TO THE

DEPARTMENT OF PUBLIC WORKS,

OR WORKS UNDER ITS CHARGE.



# Department of Public Works.

## APPENDIX No. 18.

List of some of the Acts passed at the Second Session of the Seventh Parliament of Canada, prorogued on the 9th day of July, 1892, and having reference to the Department of Public Works, or works under its charge (55-56 Victoria,

Subject.	Full Title of the Statute.	Chapter.	Sections.	Page in Statute Book.
Sums granted to Her Majesty for the financial year ended 30th June, 1892, and the purposes for which they are granted.	An Act for granting to Her Majesty certain sums of money required for defraying certain expenses of the public service, for the financial year ending the 30th June, 1892, and for other purposes relating to the public service. . . . .	1		3
do do ending 30th June, 1893.	An Act for granting to Her Majesty certain sums of money required for defraying certain expenses of the public service, for the financial year ending the 30th June, 1893, and for other purposes relating to the public service. . . . .	2		11
Borrowing powers given to the Harbour Commissioners of Three Rivers.	An Act respecting the Harbour Commissioners of Three Rivers. . . . .	10	5	60
Persons who may be appointed to positions in the public service without examination.	An Act to amend the Acts respecting the Civil Service. . . . .	14	All.	73
Regarding offences affecting the administration of law and justice as regards public works, &c., &c.	An Act respecting the Criminal Law. . . . .	29	117, 118 and Title III	137

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,  
OTTAWA, 18th October, 1892.





Department of Public Works.

APPENDIX No. 19.

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STATEMENT

SHOWING THE DIMENSIONS OF THE

GRAVING DOCKS

IN

CANADA, 1892



# Department of Public Works.

## APPENDIX No. 19.

### GRAVING DOCKS.

STATEMENT showing dimensions, &c., of the graving docks in Canada on the 30th day of June, 1892.

Names of Docks.	Length.	Width at Coping Level.	Width at Entrance.	Width at bottom.	Water on Sills at Ordinary Spring Tides.	Spring Tides rise.	Neap Tides rise.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
Esquimalt graving dock .....	430	90	65	41	26½	7 to 10	5 to 8
Halifax do .....	585	102	89¼	72	30	6	3
Kingston do .....	280	79	55	47	15½	*	.....
Lévis do .....	495	100	62	73	25½	18	13

\*Height of water varies 3½ feet.



Department of Public Works.

APPENDIX No. 20.

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STATEMENT

SHOWING

PUBLIC PROPERTY IN NEW WESTMINSTER, B.C.,

AND THE VALUE THEREOF,

ON THE 6TH DAY OF MAY, 1892,

BY

F. C. GAMBLE, Resident Engineer.



Department of Public Works,

APPENDIX No. 20.

STATEMENT OF PUBLIC PROPERTY.

HOUSE OF COMMONS,

OTTAWA, 5th April, 1892.

DEAR SIR,—I would be much obliged, if you would instruct your engineer in British Columbia (Mr. Gamble) to make a report on the following:—

1. What public buildings are there, belonging to the Dominion Government now occupied in the city of New Westminster?
2. The character, value and size of said buildings?
3. By whom occupied?
4. The number of lots owned by the Dominion Government in the city of New Westminster?
5. The value of each lot?

Yours truly,

GORDON E. CORBOULD.

The Hon. J. A. QUIMET,  
Minister of Public Works,  
Ottawa.

DEPARTMENT OF PUBLIC WORKS, CANADA,

RESIDENT ENGINEER'S OFFICE,

VICTORIA, B.C., 6th May, 1892.

*• Dominion Public Buildings, New Westminster, B.C.*

SIR,—Referring to your memos. of the 21st and 23rd instant, I herewith submit the required information regarding the several properties of the Dominion Government situated in the city of New Westminster, with the exception of that known as the Penitentiary Reserve.

The values of the properties given below were taken from the last assessment roll of the city. By some people these values are held to be much in excess of the selling prices at present obtainable, while on the other hand others contend that if placed on the market larger prices would be obtained.

1. Custom-house lot, situated below, or rather outside of low water mark on the south-east side of Columbia street. A portion of this lot is occupied by a wharf built for the use of the Government snag boat "Sampson;" the remainder, by a recent Order in Council, has been granted to the Canadian Pacific Railway. Size of lot, 100 feet deep by 260 feet frontage. Value, \$22,000.

2. Lots 1 and 3, block 13—Lot 1 is situated on the north-west side of Columbia street, at the corner of that street and Begbie street. Lot 3 is in the rear of lot 1, forming an L with it and extending from Begbie to Lorne street.

On these two lots are the old Custom-house and outhouses belonging thereto, now unoccupied. These buildings are in a dilapidated condition and should be pulled down, and the material taken away. No value can be placed upon the

[1892]

material. Thirty-three feet of lot 3 was recently granted to the city council for the purpose of extending Clarkson street through to Begbie street. The council subsequently asked for 10 feet more. I do not think this should be granted, as there does not appear to be any real necessity for such additional grant. If it were granted it would be detrimental to the sale of the remaining part of the lot.

Lot 1 is 66 feet on Columbia street by 132 feet on Begbie street; value, \$19,000. The remaining portion of lot 3 is 33 feet by 132 feet; value, \$5,000. It might be divided into two small lots 33 feet by 66 feet each, and sold to better advantage.

3. Lot 10, block 13—This lot is situated at the corner of Carnarvon and Mackenzie streets. On it is the drill shed 40 feet by 66 feet, still used by the militia. The building is in a most dilapidated and rotten condition. It should undoubtedly be pulled down. The material may be considered worthless. Size of the lot is 66 feet square; value of lot, \$9,000.

4. Lots 1 and 2, block 14—These lots are situated on the north-west corner of Columbia and Sixth streets (the latter street was originally called Mary street). At the rear is Clarkson street. The present Post Office building (brick) is on lot 1. The old Post Office building (frame) is on lot 2, while in the rear occupying portions of lots 1 and 2, is an old dilapidated rotten frame building occupied by Mr. A. Peele, who is, I believe, an officer of the Meteorological Service. He has, I hear, paid no rent for years. Both of these frame buildings should be pulled down and the material removed. With the exception of the bricks in the chimneys, the materials of which these buildings are composed are altogether worthless. Some one might be found to pull down the buildings and remove them for the material, but I doubt it. Value of lots 1 and 2, block 14, is \$50,000.

Tracings showing the lots above described, with the buildings thereon, are herewith inclosed.

Yours obediently,

F. C. GAMBLE,

*Resident Engineer.*

THOS. FULLER, Esq.,  
Chief Architect, Department of Public Works,  
Ottawa.



Department of Public Works.

APPENDIX No. 21.

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DETAILED STATEMENT OF EXPENDITURE

ON ACCOUNT OF

REPAIRS, ETC.

TO

PUBLIC BUILDINGS, CANADA

For the Fiscal Year ended 30th June, 1892

BY

O. DIONNE, Esq., ACCOUNTANT

APPENDIX No. 21.

DETAILED STATEMENT of Expenditure on account of "Public Buildings, Repairs," &c., for Fiscal Year ended 30th June, 1892.

No.	NAME OF BUILDING.	REPAIRS.										Total for repairs.	Wages.	Rent.	Furniture, carpets, &c.	Maintenance of buildings, &c.	Grand total.	No.			
		Hardware, plumbing, &c.	Repairing roofs and chimney tops, &c.	Lumber, &c.	Brick and stone-work, plastering, &c.	Painting, glazing, &c.	Extraordinary repairs, &c.	Sundries.	\$		cts.								\$		cts.
<i>Nova Scotia.</i>																					
1	Amherst post office . . . . .	7 90										4 55								12 45	1
2	Annapolis do . . . . .	31 10	14 70	9 30								12 02								71 12	2
3	Antigonish do . . . . .											35 58								37 33	3
4	Baddeck . . . . .											130 00								190 49	4
5	Halifax examining warehouse . . . . .	29 00										3 00								1,257 95	5
6	do penitentiary . . . . .																			0 24	6
7	New Glasgow post office . . . . .																			8 20	7
8	North Sydney do . . . . .																			75 00	8
9	Truro do . . . . .	29 00		8 70																40 55	9
10	Windsor do . . . . .																			40 00	10
11	Yarmouth do . . . . .	11 76																		31 96	11
<i>Prince Edward Island.</i>																					
12	Charlottetown Dom. building . . . . .	137 90																		500 00	12
13	Montague post office . . . . .																			5 97	13
14	Summerside do . . . . .																			10 50	14
<i>New Brunswick.</i>																					
15	Bathurst post office . . . . .	10 00																		2 00	15
16	Carleton, St. John, post office . . . . .	13 20	15 15																	28 35	16
17	Chatham post office . . . . .	8 70																		14 05	17
18	Dalhousie do . . . . .	0 75	25 00																	59 50	18
19	Fredericton do . . . . .	89 50																		333 50	19

[1892]

# Department of Public Works.

20) Moncton do	258 50			13 80	272 30				272 30
21) Newcastle do				14 00	380 80			16 00	386 80
22) Partridge Island quarantine station		237 50	c129 30						280 00
23) Portland post office.			d280 00						130 90
24) St. John civil service examination office.									1 50
25) St. John marine hospital.				47 90	47 90				1 50 24
26) do post office.	59 25	4 00		9 15	72 40			6 50	47 90 25
27) St. Martin's do				41 33	41 33				78 90 26
28) St. Stephen's do	5 50			3 75	9 25			75 00	41 33 27
29) Sussex do				12 94	12 94				84 25 28
30) Woodstock do	5 30	3 00		8 00	16 30		48 00		12 94 29
									64 30 30
<i>Quebec.</i>									
31) Aymer post office.	5 50				5 50				5 50 31
32) Chicoutimi marine hospital.			c250 00	49 42	299 42				299 42 32
33) Coaticook post office.	5 80			3 55	9 35				9 35 33
34) Hull do									12 85 34
35) Joliette do				9 72	9 72				5 85 35
36) Montreal custom-house.				4 70	4 70				59 35 36
37) do examining warehouse									4 70 37
38) do post office.									3,931 26 38
39) Quebec citadel buildings	52 85		f3,720 88	481 09	533 94		711 00		1,106 55 39
40) do clerk of works office.									711 00 40
41) Quebec custom-house.									6 00 41
42) do examining warehouse.	38 75				38 75				48 75 42
43) do old parliament grounds									10 00 43
44) do post office.									175 00 44
45) Sherbrooke post office.	64 05	27 00		58 11	386 42		30 00	7 00	114 20 44
46) Sorel do	12 00			8 50	20 50		50 00		549 70 45
47) St. Jérôme do	54 50	19 00		4 80	93 50				70 50 46
48) St. John's do	69 94				74 74				93 50 47
49) Ste. Therese inland rev. office									89 74 48
50) Valleyfield post office		173 00			173 00				27 20 49
							330 00		534 10 50
<i>Ontario.</i>									
51) Almonte post office.				2 00	2 00				2 00 51
52) Amherstburg post office.		2 55			2 55				2 55 52
53) Barrie do	154 75			20 13	174 88				174 88 53
54) Belleville do	51 88	9 25		101 82	162 95			1 50	175 20 54
Carried forward.....	1,202 08	162 15	4,977 15	1,182 79	8,658 23	869 00	1,678 64	441 42	13,284 44

*d* Repairing buildings and fence, as per agreement.

*e* Construction of a pathway.

*f* Amount paid for special repairs.

*a* Taxes included, \$217 50.

*b* Commission paid to architects on expenditure for repairs.

*c* Digging artesian well.

APPENDIX No. 21.—Expenditure on account "Public Buildings, Repairs," &c.—Concluded.

No.	NAME OF BUILDING.	REPAIRS.										Total for repairs.	Wages.	Rent.	Furniture, carpets, &c.	Maintenance of buildings, &c.	No.
		Hard ware, plumbing, &c.	Repairing roofs and chimney tops, &c.	Lumber, &c.	Brick and stone work, plastering, &c.	Painting, glazing, &c.	Extraordinary repairs.	Sundries.	\$	cts.	\$						
	Brought forward	1,202 08	162 15	88 10	255 00	790 96	4,977 15	1,182 79	8,658 23	869 00	1,078 64	441 42	1,637 15	13,284 44			
	Ontario—Continued.																
[1892]	1 Berlin post office							15 00	15 00				31 78	46 78	1		
	2 Brantford post office					3 00		14 14	17 14					17 14	2		
	3 Brantford do	1 87				5 50		34 78	42 15					234 65	3		
	4 Brockville do		31 00					22 00	53 00					53 00	4		
	5 Cayuga do	21 12			68 26			67 01	156 30				0 80	157 19	5		
	6 Chatham do	1 50				6 30		69 47	77 27				17 50	94 77	6		
	7 Cobourg do							13 62	13 62				6 00	19 62	7		
	8 Cornwall do							11 86	11 86					11 86	8		
	9 Dundas do													504 20	9		
	10 Galt do	17 57						63 66	81 23					312 00	10		
	11 Gananoque custom-house								198 00					4 00	11		
	12 Goderich post office													4 00	12		
	13 Guelph do					6 52			6 52					75 42	13		
	14 Hamilton do	1 55				704 20			705 75					705 75	14		
	15 Kingston civil service ex. office													9 45	15		
	16 do custom-house	21 67						17 08	715 12					715 12	16		
	17 do post office	15 74						44 04	59 78					107 63	17		
	18 Lindsay do							5 00	7 96					26 46	18		
	19 London custom-house	115 47				2 96			136 57					136 57	19		
	20 do post office	12 01				3 25			87 60					92 60	20		
	21 Napanee do							10 00	10 00					87 74	21		
	22 Niagara Falls post office		6 00	12 40				6 75	28 40					28 40	22		
	23 Orangeville do	16 65		20 30				40 81	87 71					116 41	23		
	24 Ottawa geological museum	39 11						3 392 80	494 41					704 91	24		
	25 do post office							22 77	32 63					510 63	25		
	26 do printing bureau	81 96	118 53					131 39	343 88					463 11	26		
	27 do public buildings	8,831 85	2,503 07	5,177 37	1,418 52	8,034 96	1,465 58	1,463 95	28,895 30	79,168 42	1,830 00	6,673 46	14 50	110,567 18	27		

# Department of Public Works.

28	Peterborough post office.....					3 65						3 65									81 33	51																		
29	Port Colborne do .....					62 95						62 95									22 98	52																		
30	Port Hope do .....					9 69						9 69									51 00	53																		
31	Prescott do .....				4 85		8 00						31 50								522 42	54																		
32	Rideau Hall do .....				485 81		15 15					178 44									6 00	55																		
33	Strafford post office.....				9 50		406 15														108 00	56																		
34	Strathroy do .....						1 50														2 90	57																		
35	St. Catharines post office.....					7 65																																		
36	St. Thomas do .....					105 73		3 00				2 50																												
37	Toronto civil service ex. office.										2 00																													
38	do custom-house.....					5 25																																		
39	do examining warehouse.....					22 38																																		
40	do inland revenue office.....					54 68																																		
41	do post office.....					48 80																																		
42	Trenton do .....																																							
43	Walkerton do .....					4 30																																		
44	Windsor do .....					95 52		40 00				99 20																												
<i>Manitoba.</i>																																								
45	Winnipeg clerk of works office																																							
46	do custom-house.....																																							
47	do dom. lands office.....					4 32						2 50																												
48	do examining warehouse.....					10 83																																		
49	do Indian office.....																																							
50	do post office.....					60 75						7 00																												
<i>North-west Territories.</i>																																								
51	Fort McLeod custom-house.....																																							
52	Mooseomin court-house.....																																							
53	Prince Albert do .....																																							
54	Regina clerk of works office.....																																							
55	do court-house.....																																							
56	do jail and lunatic asylum																																							
57	do post office.....																																							
																					Carried forward.....	11,286 72	2,834 25	5,719 34	1,784 78	9,659 43	7,709 90	3,857 87	42,852 29	88,907 77	4,331 24	8,729 50	5,196 13	150,016 93						

g Repairing damages by fire.

h Balance of granolithic pavement and commission on repairs, January, 1888, to March, 1891.

j Granolithic pavement.

k Reconstruction of tower clock

APPENDIX No. 21.—Expenditure on account "Public Buildings, Repairs, &c."—*Concluded.*

NAME OF BUILDING.	REPAIRS.											Grand total.	No.	
	Hardware, plumbing, &c.	Repairing roofs, and chimney tops, &c.	Lumber, &c.	Brick and stone work, plastering, &c.	Painting, glazing, &c.	Extraordinary repairs.	Sundries.	Total for repairs.	Wages.	Rent.	Furniture, carpets, &c.			Maintenance of Buildings, &c.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
Brought forward . . . . .	11,286 72	2,834 25	5,719 34	1,784 78	9,659 43	7,709 90	3,837 87	42,852 29	88,907 77	4,331 24	8,729 50	5,196 13	150,016 93	1
<i>England.</i>														
1 London High Commissioner's office . . . . .												30 66	30 66	1
<i>Generally.</i>														
2 Public buildings generally . . . . .							37 13	37 13					37 13	2
Totals . . . . .	11,286 72	2,834 25	5,719 34	1,784 78	9,659 43	7,709 90	3,895 00	42,889 42	88,907 77	4,331 24	8,729 50	5,226 79	150,064 72	

O. DIONNÉ,  
*Accountant.*

PUBLIC WORKS DEPARTMENT,  
OTTAWA, 26th December, 1892.

DOMINION OF CANADA

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ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

FOR THE PAST

FISCAL YEAR FROM 1st JULY, 1891, TO 30th JUNE, 1892

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE REVISED STATUTES  
OF CANADA, CHAPTER, 37, SECTION 28

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

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

1893





*To His Excellency the Lord Stanley of Preston, P.C., G.C.B., &c., &c.,  
Governor-General of Canada, &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Railways and Canals of the Dominion of Canada, for the past fiscal year from the 1st of July, 1891, to the 30th of June, 1892.

All of which is respectfully submitted,

JOHN HAGGART,  
*Minister of Railways and Canals.*

OTTAWA, February, 1893.



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# REPORT.

1891-92.

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TO HIS EXCELLENCY

THE LORD STANLEY OF PRESTON,  
Governor-General.

MAY IT PLEASE YOUR EXCELLENCY,—I have the honour to submit the Annual Report of the Department of Railways and Canals for the fiscal year ended 30th June, 1892.

The annual reports of the engineers, together with general and special reports from superintendents, both of railways and canals, and from other officers of the Department, are given in Appendices.

Attached hereto (Appendices Nos. 1, 2 and 3) will be found statements showing the amounts expended during the past fiscal year in construction, repairs and maintenance of the several works under the department; also statements showing total expenditure on each canal since its construction, on each of the Government railways, and on the Canadian Pacific Railway so far as the Government is concerned; also a statement showing the payments made, year by year, to subsidized railways, with the aggregates of such payments.

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## RAILWAYS.

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The present report deals with those railways of the Dominion directly controlled by the Federal Government, and others towards the construction of which subsidies have been authorized.\*

There is prepared by this department, and laid before Parliament annually, a special statistical report, embodying returns made by Canadian railway companies, as required by statute. This report gives information as to railroad operations in Canada, including the Government roads.

The following general facts gathered from this compilation, being returns made for the fiscal year ended on the 30th of June, 1891, the last issued, will be of interest.

The number of railways, including the Government roads, in actual operation (embracing under one head all amalgamated lines), was 76. The number of miles

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\*It should be observed that while the usual reports furnished by the superintending officers, and to be found in the appendices hereto, deal with the fiscal year only, the Chief Engineer of Government Railways has reported dealing with certain matters under his charge up to the 30th of September, 1892, and the General Report contains information on points of interest relating to subsidized lines of railway up to the end of December, 1892.

## Department of Railways and Canals.

of railway completed was 14,633 (besides 1,665 miles of sidings), of which 13,869 were laid with steel rails. There were 14,009 miles of railway in actual operation. The paid up capital amounted to \$816,622,758. The gross earnings of all these railways amounted to \$48,192,099, and their working expenses to \$34,960,449, leaving the amount of the net earnings \$13,231,649. The number of passengers carried was 13,222,568, and 21,753,290 tons of freight were conveyed over these roads. The total number of miles run by trains was 43,399,178.

The following list shows the total amount, charged to Capital Account, expended by the Government for construction of Railway Works, embracing the period prior to Confederation and extending down to the 30th of June, 1892:

Intercolonial Railway.....	\$47,156,132 63
(a) Eastern Extension Railway.....	1,324,042 81
(a) Oxford and New Glasgow Railway.....	1,825,192 14
(a) Montreal and European Short Line Railway	333,924 73
(a) Cape Breton Railway.....	3,641,131 19
(b) Carleton Branch Railway.....	88,410 48
Prince Edward Island Railway.....	3,750,565 38
Canadian Pacific Railway—Works built by the Government and transferred to the Canadian Pacific Railway Company .....	30,404,577 65
Canadian Pacific Railway—Other expenditure on surveys, explorations, telegraph lines, Dawson Route, Fort Frances Lock, &c.....	6,639,581 43
Annapolis and Digby Railway.. .....	614,789 27
	\$95,778,347 71

### SUBSIDIES TO RAILWAYS.

Canadian Pacific Railway.....	\$25,000,000 00
(c) Canadian Pacific Railway Extension to Quebec	1,500,000 00
(d) Canada Central Railway.....	1,525,250 00
(e) Other Railways .....	9,695,108 27
	\$133,498,705 98

This amount does not include the annual subsidy of \$186,600 payable for 20 years to the Atlantic and North-west Railway Company; nor the annual payment of \$119,700 to the Provincial Government of Quebec, being 5 per cent on the sum of \$2,394,000 granted by 47 Vic., ch. 8 (1884), for the line between Ottawa and Quebec. Both these items are dealt with by the Finance Department.

### CANADIAN TRANSCONTINENTAL RAILWAY COMMUNICATION.

#### HALIFAX OR ST. JOHN TO MONTREAL.

The routes available between Halifax and Montreal are four in number; in all of which the Intercolonial is used, either in whole or in part, as follows: (The names adopted are those of the dominating roads):—

- (a) Now included in the Intercolonial Railway system.
- (b) To be transferred to the Corporation of St. John, N.B.
- (c) Of this, \$970,000 was expended in the purchase of bonds of the road, which were subsequently cancelled under the Act 54-55 Vic., ch. 11.
- (d) Including \$85,250 refunded to the Town of Pembroke.
- (e) Including value of old rails transferred, \$152,305.20

## Intercolonial Railway Route—

	Miles.
By Intercolonial Railway to Point Lévis.....	675
Grand Trunk Railway to Montreal.....	173
	<hr/> 848

(Or by ferry across the St. Lawrence to Quebec, thence by North Shore Railway, C.P.R., also 173 miles).

## Canadian Pacific Railway Route—

	Miles.
By Intercolonial Railway to St. John, N.B.....	275
New Brunswick Railway and Maine Central Railway to Mattawamkeag.....	146
Canadian Pacific Railway to Montreal.....	334
	<hr/> 755

## Grand Trunk Railway Route—

	Miles.
By Intercolonial Railway to St. John, N.B.....	275
New Brunswick Railway.....	90
Maine Central Railway.....	224
	<hr/> 589
Total up to Danville Junction.....	589
By Grand Trunk Railway to Montreal.....	270
	<hr/> 859

## Témiscouata Railway Route—

	Miles.
By Intercolonial Railway to St. John.....	275
New Brunswick Railway to Edmundston.....	170
Témiscouata Railway to Rivière du Loup.....	81
Intercolonial Railway to Lévis.....	115
Grand Trunk Railway to Montreal.....	173
	<hr/> 814

## MONTREAL TO THE PACIFIC COAST.

## CANADIAN PACIFIC RAILWAY.

NOTE.—A somewhat detailed statement of the Government transactions with this company will be found in the Annual Report of this department for the year 1887.

*Trunk Line.*

	Miles.
Quebec to St. Martin's Junction (13 miles north of Montreal) .....	159
	<hr/>
Montreal (at the head of Atlantic Ocean navigation) to St. Martin's Junction.....	13
St. Martin's Junction to Callander.....	331
Callander to Port Arthur.....	649
Port Arthur to Red River (opposite Winnipeg)...	428
Red River to Savona's Ferry.....	1,257
Savona's Ferry to the waters of the Pacific Ocean at Port Moody.....	213
	<hr/> 2,547
Port Moody to Vancouver on Burrard Inlet.....	15
	<hr/>
Total, Montreal to Vancouver, Burrard Inlet.....	<u>2,906</u>

For this portion the Company were subsidized direct by the Govt. under their contract.

## Department of Railways and Canals.

This railway was opened for through traffic on the 28th of June, 1886.

By the Act 51 Vic., c. 32, approval and ratification were given to a certain agreement dated the 18th of April, 1888, provisionally made between the Government and the company, whereby the restrictions contained in Article 15 of the original agreement for the construction of the road, barring the Dominion Parliament for twenty years from authorizing the construction of railways south of the Canadian Pacific Railway from any point at or near that road, except those running south-west, were removed. By this agreement, the Government undertook to guarantee the payment of interest at  $3\frac{1}{2}$  per cent on an issue of the company's bonds to the extent of fifteen million dollars, running for a term not exceeding fifty years; the unsold lands of the company's subsidy, estimated at nearly fifteen million acres, to form the security for such bonds. The arrangements contemplated by this agreement are being carried out by the Department of Finance. A deed of mortgage in favour of special trustees, one of whom is the Minister of Finance, has been executed under date the 2nd of June, 1888, having previously been approved by an Order in Council of the 1st of that month, being a mortgage of the said unsold lands of the company's subsidy, amounting to 14,934,238 acres, and constitutes the said security.

By the Act passed in 1891, 54-55 Vic., ch. 11, respecting the North Shore section of the Canadian Pacific Railway, authority was given, subject to certain provisions, for the cancellation of the mortgage bonds of the North Shore Railway, which, to the value of \$1,108,626, had been purchased by the Government for the sum of \$970,000 (part of a sum of \$1,500,000 voted by Parliament in the years 1884 and 1885 to secure to the port of Quebec free access for the trains and traffic of the Canadian Pacific Railway) and for discharging that company from all liability in respect of such bonds. The conditions under which this action might be taken were, as stated in the Act, that the company should execute a deed of agreement binding itself to complete and provide, with all due diligence, the following works and improvements, namely:—

“ Rolling stock, including sleeping cars, day coaches, baggage, mail and express cars, locomotives and freight cars, of a standard equal to that used on other portions of the company's railway system, involving an outlay of about three hundred and fifty thousand dollars.

“ Improvements over the whole line between St. Martin's Junction and the city of Quebec, of such a character as to bring that section up to the highest standard of the other Canadian Pacific sections, including additional accommodation for passengers at nearly every station, and increased space for the handling of freight, the lengthening of platforms and sidings, the furnishing of new sidings for the development of stone, lumber and other traffic, the substitution of iron for wooden bridges on the line of the North Shore Railway, and the construction of the following specific works, that is to say:—

- (1.) In the City of Quebec:
  - (a.) One grain elevator;
  - (b.) One flour shed;
  - (c.) Such local improvements and facilities as are necessary for the handling of the traffic of that city;

(2.) In Three Rivers :

(a.) One grain elevator ;

(b.) Improvements over the loop line ;

(c.) Improvements on the Piles Branch ;

“ The said improvements over the whole line involving an outlay of about three hundred thousand dollars, in addition to the said outlay on rolling stock ;

“ The whole to be completed to the satisfaction of the Minister of Railways and Canals.”

In pursuance of this Act, and on application by the company, an Order in Council was passed on the 14th of December, 1891, reciting the facts of the case, and approving of the execution of a draft agreement, by which the company binds itself to carry out the improvements called for by the Act, expending the moneys thereon as follows :—

“ At least two hundred thousand dollars (\$200,000) during the year ending on the first day of April, A.D. 1893, an aggregate of at least three hundred and fifty thousand dollars (\$350,000) to the end of the year ending on the first day of April, A.D. 1894, and an aggregate of at least five hundred thousand dollars (\$500,000) to the end of the year ending on the first day of April, A.D. 1895, and an aggregate of at least six hundred and fifty thousand dollars (\$650,000) to the end of the year ending on the first day of April, A.D. 1896, subject to such extension in respect of any repairs or renewals for which the necessity has not arisen as may be granted by His Excellency the Governor in Council.”

On the 22nd of December, 1891, the agreement so authorized was duly signed.

In the agreement dated the 20th of November, 1886, and executed under an Order in Council of the 2nd of that month, which constituted the basis of the final settlement of matters between the Government and the company prior to the transfer of the road to them, a special provision was inserted, in view of dispute as to the condition in which the work in British Columbia executed by the Government should be handed over ; the company accepted the same, “ subject to the adjustment and correction by the Government of any defects or deficiencies in the construction thereof, if any, according to the specifications and conditions of the contracts therefor, except in so far as the same were modified by the Government prior to 21st October, 1880.”\*

For the determination of the questions covered by the foregoing, a special arbitration was authorized by an Order in Council of the 5th January, 1888. The arbitrators made their award, and it was furnished to the Government in October, 1891, the amount fixed thereby as payable by the Government to the company being \$579,255.20, the amount claimed by the company having been \$12,000,000. This award, in effect, represents the value of work which the arbitrators find the Government should have performed on the sections of the road in British Columbia constructed by it. The amount so awarded was to be expended under the supervision of an officer of the Government, for the improvement of the railway in certain specified directions.

There remain still to be dealt with by the arbitrators two unimportant claims in respect of steel rails.

\* The date of the company's contract.

## Department of Railways and Canals.

The award included the sum of \$202,675.20 for works executed during the progress of the arbitration, leaving the balance, \$376,580, to cover work remaining to be done.

The total value of the work so executed up to the 31st of August last, as returned by the Government officer in charge, is \$319,757.74, leaving the sum of \$259,497.46 still to be expended.

The company, in addition to the above, are making heavy permanent improvements throughout in the substitution of solid embankments and steel structures for wooden trestle bridges, the construction of retaining walls, the reduction of grades and the laying of heavier steel rails.

It should be noted that for the year ended on the 30th of June, 1892, the company had under traffic 5,767 miles of railway, and that its gross receipts were \$21,032,120.13 as against \$18,672,174 the previous year. The total for working expenses was \$12,654,498.42, making the net earnings \$8,377,621.71.

### GOVERNMENT RAILWAYS IN OPERATION.

During the fiscal year 1891 certain new railway works built by the Government were first operated for traffic, and by a special Act, 54-55 Vic., ch. 50, were, together with the "Eastern Extension" section, embodied in the Intercolonial system. These additions were as follows:—

Oxford Junction to Brown's Point Junction and Pugwash, 72½ miles, opened on the 15th of July, 1890; (constructed as a part of the Intercolonial Railway under the Act 50-51 Vic., ch. 27), and the Cape Breton Railway, of which the portion from Point Tupper to Grand Narrows, 46 miles, was put under traffic on the 1st of January, 1891, and the portion from Grand Narrows to Sydney and North Sydney, and a connection with the International Coal Company's Railway at Sydney, 52½ miles, was opened on the 24th of November, 1890.

The several lines maintained by the Government during the past fiscal year, ended the 30th June, 1892, were:—

	Miles.
The Intercolonial.....	1,142
do wharf branches.....	12½
	1,154½
Windsor Branch (maintained only).....	32
Prince Edward Island Railway.....	211
	1,397½
Total mileage length.....	1,397½

The through ocean mail line from Point Lévis, opposite Quebec, to Halifax, is 675 miles in length.

Details respecting these railways and their operations will be found in Appendices Nos. 4 and 4a, containing reports from the Chief Engineer and General Manager, and from the Chief Superintendents and other officials of these roads:—



The general revenue accounts for 1891-92 show the following as the financial position of these roads for the past fiscal year and the average mileage :—

	Average mileage of the year.	Working expenses.	Earnings.	Profit.	Loss.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Intercolonial, including the Eastern Extension the Oxford and New Glasgow and the Cape Breton Railways.....	1,142	3,439,377 00	2,945,441 97	.....	493,935 03
Windsor Branch (earnings, one-third of entire receipts; expenditure on maintenance.)	32	19,514 37	33,508 85	13,994 48	
Prince Edward Island..	211	289,706 38	157,442 69	.....	132,263 69
				13,994 48	626,198 72
					13,994 48
<b>Total average mileage..</b>	<b>1,375</b>	<b>.....</b>	<b>Net loss</b>	<b>.....</b>	<b>612,204 24</b>

INTERCOLONIAL RAILWAY.

The Intercolonial Railway touches six Atlantic Ocean ports, namely, Pointe du Chêne, Pictou, Halifax, St. John, Sydney and North Sydney. The following list shows its through lines and branches, in sequence—commencing from the west. Connection is made with the Grand Trunk Railway at Chaudière Junction and with the Canadian Pacific Railway at Quebec (by ferry from Lévis).

The total length of the road (including wharf and freight branches) is 1,154½ miles.

	Miles.
Chaudière Junction to Lévis.....	8
Lévis to St. Charles Junction.....	14
Chaudière Junction to St. Charles Junction.....	17
St. Charles Junction to Dalhousie Junction..	299
Dalhousie Junction to Dalhousie (Dalhousie Branch).....	7
Dalhousie Junction to Derby Junction.....	101
Derby Junction to Indiantown (Indiantown Branch).....	14
Derby Junction to Moncton.....	75
Moncton to ST. JOHN.....	89
Moncton to Painsec Junction.....	7
Painsec Junction to Pointe du Chêne (Shediac Branch).....	11
Painsec Junction to Oxford Junction.....	71
Oxford Junction to Pugwash Junction)	15
Pugwash Junction to Pugwash.....	5
Pugwash Junction to Brown's Point.)	52
Brown's Point to Pictou .....	2

## Department of Railways and Canals.

Oxford Junction to Truro.....	46
Truro to Richmond.....	61
Richmond to Dartmouth (Dartmouth Branch).....	5
Richmond to HALIFAX.....	1
Truro to Stellarton Junction.....	41
Stellarton Junction to Brown's Point.....	12
Stellarton to New Glasgow.....	2
New Glasgow to Pictou Landing.....	8
New Glasgow to Port Mulgrave.....	80
Ferry to Point Tupper.....	1
Point Tupper to North Sydney Junction.....	79
North Sydney Junction to { NORTH SYDNEY .....	5
{ SYDNEY.....	13

### *Wharf and Freight Branches.*

	Miles.
Rimouski to wharf.....	2
Newcastle, N.B., to deep water wharf.....	2
Dorchester to shipping wharf.....	1
Sackville to shipping wharf.....	0·5
Stewiacke to wharf.....	1
Rivière du Loup town to wharf.....	4
Courtney Bay to wharf.....	1
Branch to Halifax cotton factory.....	1
	12·5

The following are the through distances :—

	Miles.
Lévis (opposite Quebec) <i>viâ</i> St. Joseph & St. Charles Junction (14 miles) to Halifax.....	675
Lévis (opposite Quebec) <i>viâ</i> St. Joseph & St. Charles Junction (14 miles) to St. John.....	578
Lévis (opposite Quebec) <i>viâ</i> Truro { to Sydney.....	827
{ to North Sydney.....	820

NOTE.—At Lévis, passengers make connection with the Canadian Pacific Railway and with the Grand Trunk Railway. Freight is carried direct along the old main line between Chaudière Junction and St. Charles Junction (17 miles), instead of round by Lévis to St. Charles Junction, a total distance of 24 miles.

Traffic connection is made with other railways, as follows :—

At Lévis.....	with the Canadian Pacific Ry.
Lévis.....	do Grand Trunk Ry.
Lévis.....	do Quebec Central Ry.
Chaudière Junction.....	do Grand Trunk Ry.
St. Henri.....	do Quebec Central Ry.
Rivière du Loup.....	do Temiscouata Ry.
Metapediac.....	do Baie des Chaleurs Ry.
Gloucester Junction....	do Caraquet Ry.
Indiantown.....	do Canada Eastern Ry.
Chatham Junction.....	do Canada Eastern Ry.
Kent Junction.....	do Kent Northern Ry.

Salisbury .....	with the	Salisbury and Harvey Ry.
Petticodiac .....	do	Elgin, Havelock Ry.
Norton .....	do	Central Ry. of New Brunswick.
Hampton .....	do	Central Ry. of New Brunswick.
St. John.....	do	Canadian Pacific Ry.
Buctouche Junction....	do	Buctouche and Moncton Ry.
Sackville.....	do	New Brunswick and Prince Edward Ry.
Maccan.....	do	Joggins Ry.
Spring Hill Junction...	do	Cumberland Coal and Ry. Co.
Salt Springs Junction..	do	Spring Hill and Oxford Ry.
Windsor Junction. ....	do	Windsor and Annapolis Ry.
Ferona Junction.....	do	New Glasgow Iron, Coal and Ry. Co.
Sydney .....	do	International Coal Company's Ry.

*Capital Account.*

The total cost of the whole road as amalgamated under the Act 54-55 Vic., ch. 50 (1891), up to the 30th June, 1891, was.....	\$53,629,714 81
The additions during the fiscal year ended 30th June, 1892, details and explanations of which will be found in the report of the Chief Superintendent(Appendix 4a, p. 44)amounted to.....	320,218 84
Making the total expenditure chargeable to "capital" up to the 30th June, 1892.....	<u>\$53,949,933 65</u>

The additions of the year included \$10,297.65 for the train ferry between the mainland and Cape Breton; \$48,745.23 expended on construction account of the Oxford and New Glasgow Railway; \$89,639.31 similarly expended on the Cape Breton line; \$79,960.42 in the acquisition of property at St. John for increased accommodation; \$45,171.27 for the settlement of land claims on the St. Charles Branch, and \$22,026.25 in fitting the automatic air brake to freight cars and locomotives and in supplying steam heating apparatus to rolling stock.

*Revenue Account.*

The gross expenditure for the year was.....	\$ 3,439,377 00
The earnings were .....	2,945,441 97
Excess of expenditure over earnings.	<u>\$ 493,935 03</u>

Compared with the previous year, 1890-91, the earnings were as follows:—

Passenger traffic, 1890-91.....	\$ 962,316 88
do 1891-92.....	961,427 94
Decrease.....	<u>\$ 888 94</u>
Freight traffic, 1890-91.....	\$ 1,854,629 88
do 1891-92.....	1,803,529 03
Decrease.....	<u>\$ 51,100 85</u>

## Department of Railways and Canals.

Mails and sundries, 1891-92.....	\$	180,485 00
do 1890-91.....		160,448 62
Increase .....	\$	20,036 38
Gross earnings, 1890-91.....	\$	2,977,395 38
do 1891-92.....		2,945,441 97
Decrease.....	\$	31,953 41

The number of passengers carried compares with the previous year as follows:—

1890-91.....		1,298,304
1891-92 .....		1,297,732
Decrease.....		572

The quantity of freight carried compares with the previous year as follows:—

	Tons.	
1890-91.....		1,304,534
1891-92.....		1,264,575
Decrease..		39,959

The value of stores, including fuel and steel rails, on hand at the end of the fiscal year 1891-92, was \$723,864.62. Of this amount, old material to the value of \$131,482.03 was for sale.

In the subjoined reports of the Chief Engineer and General Manager of Government Railways, the Chief Superintendent of the Intercolonial Railway, the Accountant of the railway and the head officers of the several departments which compose it, will be found statistical and other detailed information.

The following will show certain of the more important features of operation compared with the previous year:—

	1890-91.	1891-92.
The average number of miles in operation was.....	1,094	1,142
The number of miles run by engines.....	6,080,791	5,641,888
do do trains.....	5,027,791	4,703,151
do do cars.....	56,492,801	51,940,141

The percentages earned by the several classes of traffic were as follows, compared with the previous year:—

	1890-91.	1891-92.
Passenger traffic percentage.....	32·32	32·64
Freight do do .....	62·29	61·23
Mails and sundries.....	5·39	6·13
	100	100

	1890-91.	1891-92.
The expenses as per mile run by engines amounted to.....	60·23 cts.	60·96 cts.
The expenses as per mile run by trains amounted to .....	72·84 cts.	73·13 cts.
The expenses as per mile of railway amounted to.....	<u>\$3,347 66</u>	<u>\$3,011 71</u>

## GENERAL OBSERVATIONS.

Compared with the traffic of the previous year, the following are the results in specific features: The number of passengers carried was 1,297,732, a decrease of 572. Of barrels of flour there were carried 904,015, a decrease of 59,114; of grain, 3,776,677 bushels, an increase of 885,756. Of this quantity 1,265,497 bushels were carried to Halifax for shipment, an increase of 1,047,160 bushels; of lumber, 175,474,340 feet, a decrease of 8,713,984; of live stock, 87,889 head, a decrease of 7,640; of coal from the Nova Scotia collieries the total quantity carried was 433,806 tons, a decrease of 64,232 tons. Of this, 392,441 tons were carried to local stations, the balance, 41,365 tons, going west; of sugar, raw, 21,637 tons, an increase of 3,664 tons; refined, 32,721 tons, an increase of 16,127 tons; of fresh fish, 3,660 tons, a decrease of 3,005 tons; salt fish, 4,763 tons, a decrease of 2,343 tons.

The grain traffic showed a great increase during the past year, but the rate charged,  $\frac{1}{10}$  of a cent per ton per mile, does not pay the cost of transportation, especially in the winter season. The increase was in the items, oats, barley, and peas for shipment at Halifax. The present facilities for storage are inadequate to meet the requirements of the rapidly growing trade.

The application of the system of steam heating for passenger trains, direct from the locomotive, has been further extended, as also the application to freight trains of the Westinghouse automatic air brake.

The substitution of 67 lb. steel rails for the lighter rail has been carried out during the year over 43 miles of this railway.

A severe storm carried away about 1,000 feet of the trestle bridge which crosses the "Narrows," at Halifax harbour, stopping railway communication with Dartmouth. The work has been rebuilt at a cost of \$32,000. The trestle work on the deep water wharf, at Halifax, was also destroyed by the same storm.

In consequence of the mildness of the winter, the cost of snow clearing was considerably less than usual, and the traffic was seldom delayed.

The road and its equipment have been maintained in an efficient manner.

By a thorough revision of the operations of the railway and its staff, it has been found practicable to make a considerable reduction in its expenditure without detriment to its effective working. The measures adopted in this view have been satisfactory, and the loss on the year's operations, instead of being greater than last year, is less by \$155,170.93, notwithstanding the reduction in the earnings of the road.

Details and statements relating to maintenance, operation and traffic will be found in the appendices, which contain the reports of the chief engineer, the chief

## Department of Railways and Canals.

superintendent and other officers. (See Appendix No. 4a, p. 32, and following pages.)

### WINDSOR BRANCH.

This road is 32 miles in length. It extends from Windsor Junction, on the Intercolonial Railway, to Windsor.

The Windsor and Annapolis Railway Company operate this line. The company pay all charges in connection with the working of the traffic, two-thirds of the gross earnings being allowed them for such purpose; the Government taking the remaining one-third, and assuming all costs of maintenance of the road and works.

The agreement, dated the 21st of September, 1871, as to traffic arrangements and running powers over the trunk line between Windsor Junction and Halifax, and the use of the Windsor Branch, contained the following provisions as to time of enjoyment, and renewal of same:

“21. This agreement shall take effect on the first day of January, 1872, and continue for 21 years, and be then renewed on the same conditions, or such other conditions as may be mutually agreed to.”

Under date the 19th of November, 1892, an Order in Council was passed authorizing, for a further term of 21 years, arrangements with the company which are practically the same as those now existing, and the agreement has been signed accordingly, under date the 13th of December, 1892.

All charges for superintendence and supervision of maintenance of works are borne by the Government, the duty of supervision being performed by the chief officers of the Intercolonial Railway.

The earnings and expenditure for the year ended the 30th June, 1892, were as follows:—

Proportion of one-third gross earnings credited to the branch .....	\$ 33,508 85
Expenditure for maintenance of way and works.....	19,514 37
Government profit.....	<u>\$ 13,994 48</u>

Government earnings, in comparison with those of the previous year:—

1891-92.....	\$ 33,508 85
1890-91.....	30,235 13
Increase.....	<u>\$ 3,273 72</u>

Expenditure in comparison with that of the previous year:—

1890-91.....	\$ 28,931 71
1891-92.....	19,514 37
Decrease.....	<u>\$ 9,417 34</u>

This road has been maintained in good order. Details will be found in the appendices. (See Appendix 4a.)

## CARLETON BRANCH RAILWAY.

The road extends from Fairville, where it joins the line of the New Brunswick Railway Company, to Carleton, on the south side of the harbour of St. John, N.B., a distance of  $3\frac{68}{100}$  miles.

By the Act 54-55 Vic., chap. 15, authority was given for the sale of this railway to the corporation of the city of St. John for the sum of \$40,000, under date the 20th of May, 1891, an Order in Council was passed authorizing the completion of the arrangements for the transfer. The road will be leased to the Canadian Pacific Railway for a term of 999 years. The deed of transfer has not yet been executed.

## DIGBY AND ANNAPOLIS RAILWAY.

This link of the Western Counties Railway, forming part of that line, was completed by the Government and handed over to the company for operation on the 27th of July, 1891. By means of it, and of an arrangement made with the Windsor and Annapolis Railway Company, through communication can now be had between Yarmouth and Halifax without change of cars. The final statement of the cost of the work has not yet been issued, but the expenditure up to the 31st of August, 1892, was \$614,789.27.

The construction of this section by the Government has been carried on under the authority of the special Act 52 Vic., chap. 8 (1889), an appropriation of \$500,000 contingently granted by the Act 50-51 Vic., chap. 25, as a subsidy, having by such special Act been made available, and funds for further payments having been provided by special votes. The cost over and above the \$500,000 granted is a liability of the company towards the Government.

Further information on this matter will be found in the statements in this report respecting subsidized railways under the head of "Western Counties Railway Company."

## PRINCE EDWARD ISLAND RAILWAY.

## LENGTH OF LINE.

	Miles.
Souris to Tignish.....	168
Mount Stewart to Georgetown.....	24
Charlottetown to Royalty Junction.....	5
Emerald Junction to Cape Traverse.....	13
Alberton to Cascumpec Wharf.....	1
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 211

This railway was first opened for traffic on the 12th of May, 1875.

*Capital Account.*

The total cost of the road and equipment chargeable to capital account at the close of the fiscal year 1890-91 was .....	\$3,741,780 89
Expenditure during the fiscal year 1891-92.....	8,300 49
Total.....	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> \$3,750,081 38

## Department of Railways and Canals.

### Revenue Account.

The working expenses and receipts for the year ended 30th of June, 1892, were :—

Gross expenditure.....	\$ 289,706 38
Gross earnings.....	157,442 69
Excess of expenditure over earnings.....	\$ 132,263 69

The gross earnings, compared with those of the previous year, were :—

1890-91.....	\$ 174,258 05
1891-92.....	157,442 69
Decrease.....	\$ 16,815 36

The gross expenditure, compared with that of the previous year, was :—

1891-92.....	\$ 289,706 38
1890-91.....	257,990 08
Increase .....	\$ 31,716 30

The engine mileage was :—

	Miles.
1890-91.....	335,202
1891-92.....	307,421
Decrease.....	27,781

The train mileage was :—

1890-91.....	272,475
1891-92.....	245,102
Decrease.....	27,373

The car mileage was :—

1890-91.....	1,420,428
1891-92.....	1,304,659
Decrease.....	115,766

The value of the stores on hand on the 30th June, 1892, including general stores, fuel, rails and old material, was \$98,358.49.

The number of passengers carried was 139,389, a decrease, compared with the previous year, of 6,119 ; and 51,065 tons of freight were carried, being a decrease of 8,446 tons.

The expenditure on capital account was incurred in connection with the removal of Summerside station and freight shed to another site, and the extension of the railway track to the Steam Navigation Co.'s wharf, at Charlottetown.

The falling off in the receipts is, in part, due to a reduced demand for farm produce, and to competition by steamers.



The increase of expenditure for the year is in part due to the fact that a cargo of steel rails which should have been laid in 1890-91 was lost by wreck, and consequently, the rails provided for that year were not laid until the year 1891-92, which, therefore, is charged with the new rail account of both years amounting to \$36,175.19.

Details of operations will be found in Appendix 4a.

Communication between the Prince Edward Island Railway and the Intercolonial is afforded in summer by steamer between Summerside and Pointe du Chêne, between Charlottetown and Pictou, and between Georgetown and Pictou, and in winter by the specially-built steamer "Stanley" between Georgetown and Pictou, and between Charlottetown and Pictou; there is, also, further provision made for communication by ice-boats from Cape Traverse. These cross the Strait to Cape Tormentine, on the mainland, a distance of about 9 miles. Here, by the line of the New Brunswick and Prince Edward Railway, about 40 miles in length, connection is made with the Intercolonial Railway at Sackville. This winter service is conducted by the Marine Department, the mails being taken to and met at Cape Traverse by, if necessary, special trains.

#### GOVERNMENT ACTION AS TO SUBSIDIZED LINES.

NOTE.—The numbers within brackets after the title of the company refer to the list of railways subsidized by Parliament. Appendix 20, p. 178.

With regard to the several lines of railway subsidized by the Dominion, the following represents the action taken and the progress made in so far as the Dominion Government is concerned; only those lines and companies being mentioned as to which definite steps, other than merely preliminary, have been taken towards securing the subsidy. Information has been brought down to the 31st of December, 1892.

Since the system of subsidy of railway enterprise was commenced, the following are the sums paid over, namely:—

For the fiscal year 1883-84, ended on June 30, 1884	\$	208,000	00
do 1884-85	do	1885	403,245 00
do 1885-86	do	1886	2,171,249 00
do 1886-87	do	1887	1,406,533 00
do 1887-88	do	1888	1,027,041 92
do 1888-89	do	1889	846,721 83
do 1889-90	do	1890	1,491,595 72
do 1890-91	do	1891	1,079,105 87
do 1891-92	do	1892	1,061,615 93

\$9,695,108 27

Add to the above for the six months that have elapsed since, namely, from the 30th of June, 1892, to the

31st December, 1892..... 262,561 07

Total payments to the 31st December, 1892.....\$9,957,669 34

## Department of Railways and Canals.

The Canadian Pacific Railway is not included in the above, nor is the payment to the Canada Central, nor that to the Quebec Government for the line from Ottawa to Quebec, nor advances made on mortgage to the St. John Bridge Company, to the Albert Railway Company, and to the Fredericton and St. Mary's Bridge Company, nor the annual subsidy to the Atlantic and North-west Railway Company payable for 20 years. These matters are dealt with by the Finance Department.

The total number of companies to whom payments have been made on subsidy account up to the 31st December, 1892 (with the above exceptions), is 65.

The following pages show, in alphabetical sequence, the position of those companies whose dealings with the Government in respect of subsidies are not yet closed. Reports of previous years give information as to companies whose subsidies have been earned and paid prior to the 1st of July, 1891.

A tabulated statement of payments will be found in Appendix 3, page 20.

### **Albert Southern Railway Company.**

(See Nos. 36 and 157.)

By the Act 47 Vic., chap. 8 (1884), a subsidy not exceeding \$51,200 was authorized towards the construction of a line from Hopewell (now called Albert) to Alma, N.B.

Under the authority of an Order in Council of the 8th of May, 1885, a contract for this work, namely, from Albert to the mouth of Salmon River, in the parish of Alma, was made with the Albert Southern Railway Company on the 23rd of that month, the line to be completed by the 1st of July, 1887. By an Order in Council of the 4th of April, 1887, the company were permitted to change their location, a route *via* Derry's Corner being adopted.

The balance of the subsidy, \$31,771.43, unpaid in 1889, lapsed, but was revived by the Act 52 Vic., ch. 3.

During the fiscal year 1891-92 the sum of \$18,960 was paid, making the total payments to the end of the fiscal year \$50,460, covering the whole distance from the junction with the Harvey Branch to the public wharf at Alma,  $16\frac{23}{100}$  miles.

### **Baie des Chaleurs Railway Company.**

(See Nos. 6, 42 and 158.)

This company was incorporated by the Provincial Act 45 Vic., ch. 53.

The Dominion Act 47 Vic., ch. 8, authorized the expenditure of \$300,000 (revoted in the year 1885) for the construction of a branch of the Intercolonial Railway, to extend for a distance of 20 miles eastward, from Metapediac towards Paspebiac.

Tenders for the work were received, but none of them coming within the limit of expenditure authorized by Parliament, an offer made by the Baie des Chaleurs Railway Company to build and operate this section as a part of their own road from Metapediac to Paspebiac for the amount, was accepted by an Order in Council of the 18th of September, 1885, and a provisional contract was entered into with them on the 7th of November, the section to be finished by the 1st of July, 1888, plans being furnished and the work supervised by the department.

By the Act 46 Vic., ch. 25 (1883) a subsidy had been authorized in favour of this company towards the construction of their said road; the limit fixed by the Act being \$3,200 a mile, for 100 miles, or a total of \$320,000.

Provision, however, having been made, as above stated, for the building of the first 20 miles of this distance, the contract entered into with the company, also on the 8th of November, 1885, as authorized by an Order in Council, also dated the 18th of September, for the work under this subsidy, dealt with the construction of the last 80 miles only. It contained a clause under which, subject to authorization from Parliament to that end, the portion, namely, \$3,200 a mile, applicable to the first 20-mile section of the road under the 100-mile subsidy of 1883, should be transferred to the second 20-mile section as an additional subsidy therefor, making the grant for such section \$6,400 a mile.

To this arrangement approval of Parliament was given, the two agreements above mentioned being ratified and confirmed by the special Act 49 Vic., ch. 17; the date for the completion of the road being fixed by the Act as the 1st of December, 1888, in place of the 25th of May, 1887, as contemplated by their agreement.

By the Railway Subsidy Act of 1889, 52 Vic., ch. 3, the balance, \$244,500, remaining unpaid of the subsidy mentioned in the Act 49 Vic., ch. 17, was granted to the company.

By authority of the same Act the subsidy applicable to the 30 miles between the 70th and the 100th mile was transferred to the section between the 40th and the 70th, making the grant for this section also \$6,400 a mile. The company undertook to construct the section from the 70th to the 100th mile without subsidy, and have deposited bonds to the value of £83,000 stg. as security to that effect.

For subsidy purposes the time for completion was extended by an Order in Council of the 14th of June, 1888, to the 1st of January, 1890.

Under date the 1st of June, 1891, an Order in Council was passed approving of the location of the section between the 60th and the 80th miles, and under date the 26th of October, 1891, a copy was furnished to the department of a contract made by the company for the construction of this section of road.

By the Act 54-55 Vic., ch. 97 (1891), the company was declared to be a corporation under the Parliament of Canada, and the time for completion of its railway was extended for charter purposes, namely, up to Paspebiac, to the 30th of September, 1893, and up to Gaspé Basin to the 30th of September, 1895.

The following shows the position of this subsidy:—

Original subsidy, granted in 1883, \$3,200 per mile,	
for 100 miles.....	\$320,000
Special vote, 1885 .....	300,000
	<u>\$620,000</u>

Actual present position :

Miles.		
0 to 20—20 miles (special vote).....		\$300,000
20 do 40—20	\$6,400 per mile.....	128,000
40 do 70—30	\$6,400 do .....	192,000
70 do 100—30	Nil.....	
		<u>\$620,000</u>

## Department of Railways and Canals.

Total payments up to the close of the fiscal year 1889-90 covering the distance, 60 miles, up to the River Grand Cascapedia .. .. .	524,175
Balance.....	\$ 95,825

Under date the 20th of November, 1892, the company have given notification that the portion of the railway between the 60th and 80th miles, is ready for inspection

No further payments have been made up to the 31st of December, 1892.

### • Beauharnois Junction Railway Company.

(See No. 102.)

By the Railway Subsidy Act, 50-51 Vic., ch. 25, the grant of a subsidy not exceeding \$96,000 was authorized in favour of the Beauharnois Junction Railway Company from St. Martin towards St. Anicet, the estimated distance being 30 miles.

On the 21st of November, 1887, and under the authority of Orders in Council of the 1st of October and 2nd of November, a contract for the work was made with the company, namely, from St. Martin to Valleyfield, towards St. Anicet, the road to be completed by the 1st December, 1888. By the Order first named, approval was also given to the location of the road from its junction with the Montreal and Champlain Junction Railway, at St. Martin, to Valleyfield, 19 $\frac{6}{10}$  miles. Up to the close of the fiscal year 1889-90 the total payments amounted to \$58,900. No further payment has been made up to the 31st of December, 1892.

### Brockville, Westport and Sault Ste. Marie Railway Company.

(See Nos. 48, 181, 193, 240 and 267.)

By the Act 48-49 Vic., chap. 59 (1885), aid was granted to an extent not exceeding \$128,000 towards the construction of the portion between Brockville and Westport, about 40 miles, of the line of the Brockville, Westport and Sault Ste. Marie Railway.

Under the authority of an Order in Council of the 28th of April, 1886, a contract was made with the company on the 16th of July, 1886, the subsidized road to be finished by the 1st of August, 1889.

Under an Order in Council of the 26th of November, 1888, the sum of \$45,000 was paid. The balance of the subsidy lapsed on the 1st of August, 1889, but was revoked by the Act 53 Vic., ch. 2 (1890).

By the Act 53 Vic., ch. 2 (1890), the grant of a subsidy to the extent of \$64,000 was authorized for 20 miles of railway from Newboro' towards Palmer's Rapids. For this subsidy there was substituted, by the Act 54-55 Vic., ch. 8, one for the same amount, and for the same distance, 20 miles, but from a point "at or near Newboro' towards Palmer's Rapids," payment to be made on completion of each section of the railway as follows :—from, at or near Newboro' to Westport, 4 miles, and from Westport towards Palmer's Rapids, 16 miles.

By the Subsidy Act 55-56 Vic., chap. 5 (1892), the unpaid balances granted by 52 Vic. and 53 Vic., were revoked.

During the past fiscal year payment has been made to the extent of \$12,800 on the 4-mile section between Newboro' and Westport, making the total up to the 31st of December, 1892, \$105,200.

**Brantford, Waterloo and Lake Erie Railway Company.**

(See No. 104.)

By the Act 50-51 Vic., ch. 24, authority was given for the grant of a subsidy of \$57,600 to the above company for 18 miles of their railway from Brantford to Hagersville or Waterford, or some intermediate point on the Canada Southern Railway.

Under an Order in Council of the 4th of August, 1888, a contract was made with the company, on the 31st, for a line from Brantford to Waterford. An Order of the same date approved of the location, the actual distance being 16½ miles. During the fiscal year 1890-91 the sum of \$16,100 was paid, making the total payments up to the 31st December, 1892, \$52,810, the amount of subsidy applicable being \$53,600. This company has now become amalgamated with the Toronto, Hamilton and Buffalo Railway Company.

**Buctouche and Moncton Railway Company.**

(See Nos. 65, 101 and 248.)

By the Act 49 Vic., ch. 10 (1886), assistance was authorized for the construction of a railway about 30 miles long, to connect Buctouche, N. B., with the Intercolonial Railway at or near Moncton, the subsidy not to exceed \$96,000.

By the Act 50-51 Vic., chap. 24, an additional subsidy of \$6,400 was granted for 2 miles additional, the distance between the points named being actually 32 miles, making the total subsidy \$102,400.

Under an Order in Council of the 10th September, 1886, an agreement, dated the 14th of that month, was entered into with the Buctouche and Moncton Railway Company for the execution of this work. During the fiscal year 1890-91, there was paid the sum of \$1,600.43, making the total payments \$67,020. No further payments have been made up to the 31st of December, 1892.

By the Subsidy Act of 1892, the unpaid balance of the foregoing subsidies were revoked.

**Central Railway Company of New Brunswick.**

(See Nos. 40, 143, 156 and 205.)

By the Act of 1884, 47 Vic., chap. 8, a subsidy not exceeding \$128,000 was granted in aid of the construction of about 40 miles of the Central Railway, from the head of Grand Lake to a point on the Intercolonial Railway between Sussex and St. John, N.B.

Under the authority of an Order in Council of the 5th of June, 1886, a contract was made with the Central Railway Company, on the 7th July, 1886, for a line from Salmon River, at the head of Grand Lake, to Norton, on the Intercolonial Railway, the work to be completed by the 1st of July, 1888. Certain work has been executed, but the contract obligations had not been carried out, and no portion of the subsidy was paid. The subsidy lapsed, but was revived by the Subsidy Act 52 Vic., ch. 3 (1889). In November, 1889, the company applied for inspection of the road as a completed work, but no portion of the subsidy was paid.

## Department of Railways and Canals.

On the 1st of December, 1890, a new contract was made with the company for this work under the Subsidy Act of 1889, the limit of subsidy being \$128,000; this contract covering also a subsidy for  $4\frac{1}{2}$  miles, the limit of which was \$14,400, authorized by the Act 53 Vic., ch. 2, making a total subsidy of \$142,400; the total length of road subsidized being  $44\frac{1}{2}$  miles. The date for completion was fixed as the 1st of December, 1891. During the fiscal year 1890-91 there was paid the sum of \$75,639, no further payments on this account have been made up to the 31st of December, 1892.

By the Act 51 Vic., ch. 3, a grant as a subsidy to this company was authorized of certain used iron rails to the value of \$83,612.54, loaned to the St. Martin's and Upham Railway Company (which railway has been acquired by the Central Railway Company; the sale being approved by an Order in Council of the 15th of November, 1887), the condition of the grant being that such rails should first be replaced by new steel rails. The new steel rails were substituted, and an Order in Council of the 18th of October, 1889, authorized the transfer of the old rails to the company.

### **Chignecto Marine Transport Company.**

(See No. 5.)

On the 3rd of February, 1882, this company (which received incorporation the same year, by Act 45 Vic., chap. 76) made a proposal to the Government for the construction of a line of railway for the transport of ships overland across the Isthmus of Chignecto from Tidnish, on Baie Verte, in the Gulf of St. Lawrence, to a point at or near the mouth of the River La Planche, in the Bay of Fundy, and by the Act 45 Vic., ch. 55, authority was given for the grant of a subsidy of \$150,000 a year, for 25 years, in aid of the work.

No definite action was, however, taken until the 6th of October, 1885, when an Order in Council was passed authorizing entry into agreement with the company, subject to the approval of Parliament; and such agreement was executed on the 4th of March, 1886. Under its terms, the subsidy payable is to be \$170,602 a year for 20 years, or such portion thereof as may be required to bring the net earnings to 7 per cent per annum on the authorized share and bond capital of the company, \$5,500,000, and to be granted only during the satisfactory performance of the services contemplated, such services comprising the raising, transport and lowering of vessels of 1,000 tons burden, registered, with full cargo. Should the earnings exceed 7 per cent per annum, one-half of such surplus is to be paid to the Government until repayment of the whole amount received by said company under their subsidy.

By a special Act, 49 Vic., ch. 18 (1886), this agreement was confirmed and ratified.

By a further special Act, 51 Vic., ch. 4 (1888), the time for the completion of the work, for subsidy purposes, was extended to the 1st of July, 1890, with, if required, a further extension for 24 months, but under penalty.

The company duly submitted plans, and these have been approved by Order in Council. Good progress was, for a time, made, and it was expected that the works would have been completed early in 1892. They have been, however, suspended, owing, it is understood, to financial causes.

By the Act 54-55 Vic., ch. 12 (1891), the date for completion for subsidy purposes has been extended to 1st of July, 1893, the penal cause in this regard contained in the Act 51 Vic., ch. 4, being repealed.

By the Act 55-56 Vic., ch. 37 (1892), authority was given to the company to issue new mortgage bonds to the value of £350,000 sterling, and by an Order in Council passed on the 9th of July, 1892, a recommendation to Parliament to extend the time, further, to the 6th of July, 1894, has been promised.

**Columbia and Kootenay Railway and Navigation Company.**

*(Leased to the Canadian Pacific Railway Company.)*

(See No. 222.)

This company was incorporated by an Act of the Province of British Columbia, but its proposed works were, by the Dominion Act 53 Vic., ch. 87 (1890), declared to be for the general advantage of Canada.

It has powers to construct a railway from the outlet of Kootenay Lake, B.C., through the Selkirk Range, to a point on the Columbia River near to the point of junction of the Rivers Kootenay and Columbia; also to operate a line of steamers in this connection. Power was also given for the leasing of the said works to the Canadian Pacific Railway Company, the lease to be first sanctioned by the Governor in Council.

By the Subsidy Act of 1890, 53 Vic., ch. 2, a subsidy, limited to \$112,000, was authorized for the 35 miles of railway above described, and under date the 8th of October, 1890, the company were admitted to contract for this work, the date for completion being fixed as the 1st of December, 1891.

By an Order in Council of the 20th of August, 1890, in pursuance of the Act 53 Vic., ch. 87, sanction has been given to the lease of this railway for a term of 999 years to the Canadian Pacific Railway Company, who thereby undertake the construction of the road.

During the fiscal year, the road being completed, there has been paid the sum of \$88,800, this being the total amount applicable. The actual distance is 27½ miles.

**Cornwallis Valley Railway Company.**

(See Nos. 128 and 168.)

By the Act 50-51 Vic., ch. 24 (1887), the grant of a subsidy to this company to the extent of \$41,600 was authorized for 13 miles of their railway from Kentville to Kingsport.

Under an Order in Council of the 29th of March, 1888, they were admitted to contract on the 28th of May.

By the Act 52 Vic., ch. 3, an additional subsidy for one mile, \$3,200, was authorized, and a contract, under date the 30th of September, 1889, was entered into for the building of such extra mile to the harbour of Kingsport. The time for the completion of the whole work was extended to the 1st of October, 1890, by which date the road was ready for traffic.

During the past fiscal year the sum of \$2,130 was paid, making a total of \$44,800, the whole amount of the subsidy.

## Department of Railways and Canals.

### **Cumberland Railway and Coal Company.**

(See No. 124.)

By the Act 50-51 Vic., ch. 24 (1887), the grant to this company of subsidy to the extent of \$44,800 was authorized for 14 miles of their railway, from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the Oxford and New Glasgow Railway, near Oxford.

The company having applied, they were admitted to contract on the 12th of April, 1888, under an Order in Council of the 12th March, the work to be completed by the 1st August, 1891. During the fiscal year 1890-91, the sum of \$10,450 was paid to this company, making, with previous payments, \$39,850. No further payments have been made since, up to the 31st of December, 1892.

### **Drummond County Railway Company.**

(See Nos. 99, 175 and 214.)

By the Railway Subsidy Act of 1888, 50-51 Vic., ch. 24, the grant of aid to an extent not exceeding \$96,000 was authorized to the Drummond County Railway Company for 30 miles of their railway from Drummondville towards Nicolet, Que.

Under the authority of an Order in Council of the 12th of November, 1887, a contract was made with the company on the 1st of December, 1887, covering a line from the South-eastern Railway, at the village of Drummondville, to the south-west branch of the River Nicolet; the road to be completed by the 1st of August, 1891.

On the 2nd of May, 1889, the company were admitted to contract for the balance, 17½ miles, of the 30 miles subsidized.

By the Subsidy Act of 1889, 52 Vic., ch. 3, the company were further subsidized for 4½ miles from the end of the line already subsidized, to Ball's wharf, on the River St. Lawrence, to the extent of \$14,400, and were admitted to contract on the 21st of January, 1890.

By the Subsidy Act 53 Vic., ch. 2 (1890), authority was given for the grant of a subsidy, the limit of which was \$76,800, for 24 miles of the railway of the company from Drummondville to Ste. Rosalie. Under date 2nd of February, 1891, the company were admitted to contract for this work.

During the fiscal year there was paid to the company the sum of \$5,105, making the total payments up to the 31st of December, 1892, \$182,405.

### **Great Eastern Railway Company.**

(See Nos. 88, 114, 174, 213 and 235.)

By the Act 49 Vic., ch. 10, authority was given for the grant of a subsidy to an extent not exceeding \$32,000, on an estimated distance of 10 miles, towards the construction of a line from Yamaska to the River St. Francis, Que.; and the Great Eastern Railway Company having applied, a contract was made with them on the 12th of October, 1886, under the authority of an Order in Council of the 9th of that month, the time of completion being fixed as the 1st of October, 1887.

The road having been completed and inspected, the whole of the subsidy due for its actual distance, 6 miles, namely, \$19,200, was paid under an Order in Council of the 27th of March, 1887.



By the Act 50-51 Vic., ch. 24, authority was given for the grant of a subsidy to the company to an extent not exceeding \$96,000 for 30 miles of their railway from the River St. Francis to the Arthabaska (Grand Trunk) Railway at St. Grégoire, and under an Order in Council an agreement was entered into with them for the work, the date being 16th March, 1888. During the fiscal year 1890-91 the sum of \$16,300 was paid from this subsidy for 6.66 miles from the east bank of the River Nicolet to the Grand Trunk Railway at St. Grégoire.

By the Act 52 Vic., ch. 3, a subsidy was authorized to the extent of \$64,000 for a further distance of 20 miles from St. Grégoire. No contract has yet been signed for this work.

By the Act 53 Vic., ch. 2 (1890), a subsidy of 15 per cent on the value of two bridges, one over the River Nicolet, the other over the River St. Francis, not exceeding \$37,500, was authorized. On the 20th of June, 1891, a contract was entered into with the company for the work. During the past fiscal year there has been paid the sum of \$4,845 for work on the Nicolet bridge.

By the subsidy Act 54-55 Vic., ch. 8, there was revoked the balance unpaid, \$79,700, of the subsidy granted by the Act 50-51 Vic., ch. 26, which had lapsed.

**Great Northern Railway Company.**

(See Nos. 33, 37, 72, 79, 154, 215 and 231.)

By the Act 47 Vic., ch. 8 (1884), a subsidy not exceeding \$32,000 was granted to this company for the construction of a line from St. Jérôme to New Glasgow, Que.; the estimated length being 10 miles.

Under the authority of an Order in Council of the 3rd February, 1885, a contract for the work was entered into with the company on the 14th of that month, the road to be completed by the 1st of July, 1885.

The line was duly completed and inspected. Under an Order in Council of the 2nd of March, 1885, payment was made therefor, namely, for 7.84 miles, \$25,088.

By the Act 49 Vic., ch. 10 (1886), a subsidy not exceeding \$57,600 was authorized for a line from New Glasgow to Montcalm, a distance of about 18 miles. The Great Northern Railway Company having applied for it, it was granted to them by an Order in Council of the 18th July, 1887, which also approved of the location. The contract was made on the 19th of August, 1887, the road to be completed by the 1st of August, 1890.

By the Act 49 Vic., ch. 10, a subsidy not exceeding \$22,400 was granted for a line from St. Andrews to Lachute, Que., 7 miles. For this subsidy the above named company applied, but no contract was made. The same subsidy was again voted by the Act of 1889, 52 Vic., ch. 3, and under date the 8th of October, 1890, a contract was entered into with them for the work, calling for completion by the 1st of August, 1891. The road was built and allowed to be opened for public traffic in January, 1892.

By the Act 53 Vic., ch. 2 (1890), the grant of a subsidy for a line from Montcalm to the Canadian Pacific Railway between Joliette and St. Félix de Valois was authorized.

## Department of Railways and Canals.

By the Act 54-55 Vic., ch. 8 (1891), the unpaid balance, \$28,100, of the subsidy granted in 1886 was revoked.

During the past fiscal year payments have been made to the company aggregating \$24,100. The total payments made for the section between New Glasgow and Montcalm amount to \$32,000, and for the section between St. Andrews and Lachute, \$21,600.

### **Hereford Railway Company (formerly Hereford Branch Railway Company.)**

(See Nos. 73 and 179.)

By the Act 49 Vic., ch. 10 (1886), authority was given for the grant of a subsidy to the extent of \$108,800 for a railway from Hereford to the International Railway, in the Township of Eaton, an estimated distance of 34 miles.

The Hereford Branch Railway Company having applied, an Order in Council of the 30th December, 1887, authorized entry into contract with them for the work, and a contract was made accordingly, dated the 31st March, 1888.

By the subsidy Act of 1889, 52 Vic., ch. 3, a subsidy of \$48,000 was authorized for a line from Cookshire to Dudswell, on the Quebec Central Railway, 15 miles, and the company were admitted to contract on the 3rd of August, 1889. The whole of the road has been built, and up to the close of the fiscal year 1889-90 the company had been paid \$155,200 out of their total subsidies, \$156,800, the difference, \$1,600, representing some minor work remaining to be finished. No further payment has been made to the 31st of December, 1892.

On the 4th of October, 1890, the company were allowed, after inspection, to open their road for public traffic from Dudswell Junction to the International boundary, 48.43 miles.

By an Order in Council of the 12th of June, 1890, sanction was given to the purchase of the Dominion Lime Company's railway by this company, in conformity with the Act 51 Vic., ch. 81.

### **Irondale, Bancroft and Ottawa Railway Company.**

(See Nos. 24 and 159.)

By the Act 47 Vic., ch. 8 (1884), the Irondale, Bancroft and Ottawa Railway Company were subsidized, to an extent not exceeding \$160,000, for a line, about 50 miles long, to connect the Victoria Branch of the Midland Railway with the village of Bancroft.

With the sanction of an Order in Council of the 10th July, 1886, a contract was made with the company on the 19th August, 1886.

Under the authority of an Order in Council of the 14th of February, 1887, \$15,000 has been paid. The unpaid balance of subsidy, \$145,000, which had lapsed, was revoked by the Act 52 Vic., ch. 3 (1889). No further payment of subsidy has been made up to the 31st of December, 1892. Under an Order in Council of the 3rd of August, 1891, the time for completion has been extended to the 1st of August, 1893.

**Joggins Railway Company.**

(See Nos. 76 and 100.)

By the Act 49 Vic., ch. 18 (1886), authority was given for the grant of aid to an extent not exceeding \$38,400, towards the construction of a railway, the estimated length of which is 12 miles, from a point at or near McCann station, on the Intercolonial Railway to the Joggins, on Cumberland Basin, N.S.

The Joggins Railway Company having applied for this subsidy, and the application being satisfactory, a contract was made with them on the 30th of November, 1886, under the authority of an Order in Council of the 5th of October, the line to be completed by the 1st of November, 1887.

A further subsidy to this company, not exceeding \$4,000, having been authorized by the Act 50-51 Vic., ch. 24 (1887), towards the construction of an extension of the line,  $1\frac{1}{2}$  mile long, to the wharves on Cumberland Basin, a contract was made with them for the work on the 13th of October, 1887.

During the fiscal year 1890-91, the company were paid the sum of \$1,600, making the total payments up to the 31st of December, 1892, \$37,500.

**Lake Temiscamingue Colonization Railway Company.**

(See Nos. 55, 84, 119, 122, 169, 216, 278 and 282.)

By the Act, 48-49 Vic., ch. 59, a subsidy was authorized in aid of the construction of a line of railway from Long Sault to the foot of Lake Temiscamingue, surmounting certain rapids on the Ottawa River. The limit of the amount was \$25,600, covering a total distance of 8 miles. A contract was entered into on the 25th of November, 1885, for the construction of 6 miles, to be completed by the 1st of January, 1887.

In conformity with an express provision to that effect in clause 2 of the Act 49 Vic., ch. 10, letters patent were issued under an Order in Council of the 20th of July, 1886, published in the *Canada Gazette* of the 24th, granting a charter for the construction of this railway to the "Lake Temiscamingue Colonization Railway Company."

By the Subsidy Act 49 Vic., ch. 10, a further subsidy of \$6,000 was authorized for the building of wharves and landing stages in connection with this line. This was subsequently cancelled, and by the Act 50-51 Vic., ch. 24 (1887), the definition of portions of the road to which the preceding Acts had granted subsidies was corrected, the amount of the subsidy, however, remaining the same, namely, a total of \$31,600.

By the Act 50-51 Vic., ch. 24, the grant of a subsidy to the extent of \$33,600 was authorized for  $10\frac{1}{2}$  miles of this company's line from Long Sault to Lake Kippewa. The contract for this subsidy was entered into on the 27th of June, 1888.

By the Act 52 Vic., ch. 3 (1889), a subsidy was authorized not exceeding \$48,000 for 15 miles, from Mattawa station, C.P.R., towards the Long Sault, or *vice versa*.

By the Act 53 Vic., ch. 2 (1890), a subsidy was authorized, not exceeding \$64,000 for 20 miles from the northern end of the line subsidized by 52 Vic., ch. 3.

By the Act 55-56 Vic., ch. 5 (1892), in lieu of the above named subsidies of 1889 and 1890, a subsidy was authorized to this company not exceeding \$112,000 for 35 miles of their railway from Mattawa to the Long Sault.

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By the same Act a subsidy was granted to the company, namely, for 15 miles of their railway from the Long Sault to the crossing of the Kippewa River, and 15 per cent on the value of a wooden truss bridge over the River Ottawa, near Mattawa, not exceeding \$15,000 and not exceeding in all \$63,000.

During the fiscal year 1888-89 the sum of \$26,360 was paid, making a total of \$52,760 paid to this company. No further payment has been made up to the 31st of December, 1892.

By the special Act 54-55 Vic., ch. 94 (1891), the company were empowered to convey or lease their road to the Canadian Pacific Railway Company, and also to extend the railway to the head of Lake Temiscamingue; the company's works to be completed by the 10th of July, 1896.

### **Montreal and Champlain Junction Railway Company.**

(See Nos. 51, 125, 136 and 247.)

By the Act 48-49 Vic., ch. 59, a subsidy was authorized to be granted to this company for a line from Brosseau's to Dundee, not exceeding \$30,000. The work was completed and the subsidy was paid in the year 1885-86.

By the Act 50-51 Vic., ch. 24 (1887), a further subsidy, not exceeding \$64,000, was authorized to be granted to this company, and the contract was signed on the 25th of January, 1888, for a line from Fort Covington to Massena Springs.

By the Act 51 Vic., ch. 3 (1888), a further subsidy of \$9,600 was authorized for 3 miles additional, making a total of \$73,600.

By the Act 55-56 Vic., ch. 5 (1892), the balance of \$15,100, remaining unpaid of the subsidies voted in 1887 and 1888, was revoked.

Nothing has been paid to the company during the past fiscal year, and the total payments up to the 31st of December, 1892, amount to \$88,500.

### **Montreal and Sorel Railway Company.**

(See Nos. 47 and 210.)

By the Act 48-49 Vic., ch. 59, a subsidy not exceeding \$72,000 was authorized to be granted to this company for a line from St. Lambert to Sorel. Under an Order in Council of the 2nd of October, 1885, a contract was made with the company on the 14th, and under the authority of Orders in Council, the last dated the 10th of November, 1886, payments have been made, amounting in all to \$69,922, the road, 44.67 miles long, having been completed, with the exception of a small quantity of work, to secure the finishing of which \$1,550 was retained. No further payment was made, and the said balance lapsed on the 1st of August, 1889.

By the Act 53 Vic., ch. 2 (1890), the sum of \$40,000 was granted for the repair of this road. The work was undertaken by the Great Eastern Railway Company, and is being carried out under requirements laid down by this department, and the inspection of its engineers. During the fiscal year 1890-91 there was paid from this subsidy the sum of \$17,116.07, making the total payments on that account \$23,835.57, and the total payments to the company \$93,757.57. No further payments have been made up to the 31st December, 1892.

**Montreal and Western Railway Company.**

(See Nos. 78 and 206.)

By the Subsidy Act of 1886, 49 Vic., ch. 10, authority was given for the grant of a subsidy in lieu of previous subsidies to the Montreal and Western Railway Company for 70 miles of their railway from St. Jérôme north-westerly towards Le Désert, Que., the amount being \$5,151 per mile, not exceeding in the whole \$361,270.

For this subsidy another for the same amount was substituted by the Act 53 Vic., ch. 2 (1890), special authority being given for payment in named sections less than 10 miles in length.

Under authorization of an Order in Council dated the 4th of June, 1888, a contract was made with the company for the work on the 6th. During the past fiscal year there was paid to the company the sum of \$32,253, and subsequently to that date the further sum of \$77,635, making the total payments up to the 31st of December, 1892, \$186,051. These payments apply to the distance between St. Jérôme and Ste. Agathe, 30½ miles, which is completed and open for traffic. On the 30th of December, the Chief Engineer reported the completion of a further section, to St. Faustin, a distance from St. Jérôme of 44½ miles.

**Montreal and Ottawa Railway Company.**

(Formerly the Vaudreuil and Prescott Railway Company.)

*(Name changed by 53 Vic., ch. 58.)*

(See Nos. 97, 186 and 237.)

By the Railway Subsidy Act of 1887, 50-51 Victoria, ch. 24, the grant of a subsidy to the above company was authorized for 30 miles of their railway from Vaudreuil towards Hawkesbury, the extent of such subsidy being \$96,000.

A contract was made with the company on the 11th of February, 1889, for the distance named, starting from the Grand Trunk Railway at Vaudreuil. The date for completion is fixed as the 1st of August, 1891.

The company, on the 4th of October, 1890, were authorized to open the portion of their road between Vaudreuil and Rigaud, 16 miles, for public traffic.

By the Act 53 Vic., ch. 2 (1890), a subsidy for a further distance of 30 miles towards Ottawa, \$96,000, was authorized. A draft contract covering this subsidy was approved by an Order in Council on the 21st of September, 1891, but has not yet been signed.

By the Act 54-55 Vic., ch. 8 (1891), the unpaid balance, \$46,040, of the subsidy granted in 1887, was revoked. During the fiscal year 1890-91 there was paid the sum of \$49,960; nothing further has been paid up to the 31st of December, 1892.

In September, 1892, after inspection, permission was given to open for traffic the portion of the road between Vaudreuil and Pointe Fortune, 23½ miles.

**Napanee, Tamworth and Quebec Railway Company.***(Name changed to the Kingston, Napanee and Western Railway Company by the Act 53 Vic., ch. 62.)*

(See Nos. 13, 27, 57, 94, 107, 166, 256 and 273.)

In 1883 Parliament authorized a subsidy of \$89,600 to this company, covering their road from Napanee to Tamworth.

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A contract, dated the 31st of December, 1883, was entered into with the company for this work, and upon completion, inspection and approval of the road the subsidy was all paid under Orders in Council, the last dated the 28th of July, 1884.

In the session of that year Parliament authorized the grant of a further subsidy, not exceeding \$3,200 a mile, or a total of \$70,406, for an extension of this company's road from Tamworth to Bogart and Bridgewater. In 1885, however, in substitution for this subsidy, Parliament authorized the grant to the company of a subsidy of \$70,000 for a line "from Tamworth towards Bogart and Bridgewater, 16 miles." This, again, was cancelled by the Act 49 Vic., ch. 10 (1886), a subsidy of \$70,000 being granted to the company for 18 miles of their railway from Tamworth to Tweed.

By the Act 50-51 Vic., ch. 24 (1887), a further subsidy to this company, not exceeding \$12,800, was authorized for 4 miles of their road to Tweed.

Under date of the 25th July, 1888, an Order in Council authorized entry into contract, and approved the location plans from Tamworth to Tweed, 20 miles. The contract was signed on the 31st of July, 1888, covering both subsidies. The road is to be completed by the 1st of August, 1890.

By the Act 52 Vic., ch. 3 (1889), the grant of a further subsidy to this company was authorized for 7 miles of their railway from Yarker to Harrowsmith, and also a grant to a company for 3 miles of railway from Harrowsmith to Sydenham, the total being \$32,000. Under date the 4th of September, 1889, the company were admitted to contract for 3 miles, to be completed by the 1st of August, 1893, and, under date the 26th of December, for the distance of  $6\frac{3}{4}$  miles, from a point near Yarker to or near Harrowsmith, to be completed by the 1st of August, 1891.

By the Act 55-56 Vic., ch. 5 (1892), in lieu of the subsidy granted by the above Act for 3 miles, a subsidy not exceeding \$9,600 was granted for 3 miles from a point at or near Harrowsmith to a point at or near Sydenham.

By the Act 55-56 Vic., ch. 5 (1892), a subsidy not exceeding \$64,000 was granted to this company for 20 miles of their railway, being for branches to be built to certain iron deposits.

The total subsidies available under the contracts covering the distance between Tamworth and Tweed, Yarker, Harrowsmith and Sydenham, amount to \$114,800. Under date the 30th of November, 1889, the company were allowed to open for traffic between Tamworth and Tweed, and between Yarker and Harrowsmith.

No payments were made to the company during the past fiscal year, but subsequently there has been paid the sum of \$1,856, making the total payments up to the 31st of December, 1892, \$194,800.

### **New Glasgow Iron, Coal and Railway Company.**

(See No. 268.)

By the Subsidy Act 55-56 Vic., ch. 5, the grant of assistance to the above company for  $12\frac{1}{2}$  miles of railway from Eureka Junction on the Intercolonial Railway, to a point at or near Sunnybrae, including a branch line to the charcoal iron furnace at Bridgeville was authorized, the limit of aid being \$40,000.

Under date the 23rd of November, 1892, the company were admitted to contract for this work under subsidy, the date for completion being fixed as the 1st of December, 1894.

No portion of the subsidy has been paid during the past fiscal year, but subsequently the sum of \$32,945.84 was paid, up to the 31st of December, 1892.

**Nova Scotia Central Railway Company.**

(See Nos. 129 and 135.)

By the Subsidy Act of 1887, 50-51 Vic., ch. 24, the Nova Scotia Central Railway Company were subsidized for 34 miles of their railway, to an extent not exceeding \$108,800. Under an Order in Council of the 16th September, 1887, the company were admitted to contract on the 17th of October, 1887, the works to be executed being a line of railway from Lunenburg, on the east coast of Nova Scotia, westward, to a point in the district of New Germany, together with a spur, about  $\frac{3}{4}$  mile long, to Bridgewater railway wharf, the whole to be completed by the 31st of December, 1889.

By the Act 51 Vic., ch. 3 (1888), the grant of a further subsidy, not exceeding \$147,200, was authorized for 46 miles of the company's railway, and under an Order in Council of the 9th October, 1888, a contract, dated the 15th of October, 1888, was executed covering a line of railway  $39\frac{1}{2}$  miles, starting from a point  $33\frac{1}{2}$  miles from Lunenburg, and running to Middleton, on the Windsor and Annapolis Railway; the work to be completed by the 31st of December, 1890.

During the past fiscal year payments were made to the extent of \$8,300, bringing the total payments to this company up to the sum of \$230,700 at date, 31st December, 1892, covering the distance from Lunenburg to Middleton and the spur to Bridgewater, a total of  $76\frac{1}{2}$  miles.

**Ontario and Pacific Railway Company.**

(See Nos. 31, 115, 150 and 288.)

By the Act 47 Vic., ch. 8 (1884), the grant of a subsidy to the Ontario and Pacific Railway Company was authorized, namely, to the extent of \$262,400, on an estimated distance of 82 miles, for a line from Cornwall to Perth, and on the 27th of July, 1886, a contract was made with the company, under the authority of an Order in Council of the first day of that month, for the construction of such line, *via* Newington, Chrysler, Manotic and Franktown, the road to be completed by the 1st July, 1888. This subsidy lapsed on the 1st July, 1888.

By the Act 50-51 Vic., chap. 24, a further subsidy of \$19,200 for a further distance of 6 miles was granted.

By the Act 52 Vic., chap. 3 (1889), a subsidy not exceeding \$172,400 was authorized to this company for a line from Cornwall to Ottawa, but no contract was entered into for the work.

By the Subsidy Act of 1892, 55-56 Vic., ch. 5, the subsidy granted in 1889 was revoked, the length being set down as  $53\frac{87}{100}$  miles.

No portion of these subsidies has been paid up to the 31st of December, 1892.

**Ontario and Quebec Railway Company.**

(See West Ontario Pacific Railway Company.)

**Orford Mountain Railway Company.**

(See No. 228.)

By the Subsidy Act 53 Vic., ch. 2, the grant of a subsidy limited to \$99,200 was authorized in favour of the above company, for 31 miles of their railway between

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Eastman and Kingsbury, Que., and on the 16th of December, 1891, the company were admitted to contract for the work for a distance of 10 miles, namely, from Eastman to Lawrenceville; the road for this distance to be completed by the 1st of December, 1893.

The work was completed, and during the past fiscal year there has been paid the sum of \$32,000.

By an Order in Council dated the 20th of June, 1892, authority was given for entry into contract with the company for the balance of the work, 16½ miles, between Lawrenceville and Kingsbury, and such contract was signed on the 10th of September, 1892.

The second 10-mile section has been inspected, but no further payments have been made up to the 31st of December, 1892.

### **Ottawa, Arnprior and Parry Sound Railway Company.**

(See Nos. 92, 134, 199, 242, 276 and 277.)

This company was formed by the amalgamation, under the Act 54-55 Vic., ch. 93, of the Ottawa and Parry Sound Railway Company, incorporated by the Acts 51 Vic., ch. 65, and the Ottawa, Arnprior and Renfrew Railway Company, incorporated by the Act 51 Vic., ch. 71. The company has powers to build a line of railway from the city of Ottawa through Arnprior, Renfrew, Eganville and Killaloe, to a point on the Georgian Bay at or near the Village of Parry Sound.

By the Subsidy Act 55-56 Vic., ch. 5 (1892), there were granted to this company the following subsidies (in lieu of subsidies previously granted, but not utilized) :—

- (a.) For 22 miles of railway from a point on the Canadian Pacific Railway to Eganville, a subsidy limited to \$70,400.
- (b.) For 30 miles of railway from Eganville to Barry's Bay, a subsidy limited to \$96,000.
- (c.) For 55 miles of railway from Barry's Bay towards the Northern Pacific Junction Railway, a subsidy limited to \$6,400 a mile on the first half of that division and to \$3,200 a mile on the second half, not exceeding in the whole \$264,000.

The first two subsidies have been covered by a contract dated the 29th of September, 1892. The starting point on the Canadian Pacific Railway, named, being Renfrew, and the date for completion being fixed as the 1st of August, 1896.

The third subsidy, from Barry's Bay towards the Northern Pacific Junction Railway, has been covered by a contract with the company dated the 8th of November, 1892. The date for completion is fixed as the 1st of November, 1894.

The location plans have been approved for the whole distance covered by the three subsidies.

No portion of the subsidies has been paid up to the 31st of December, 1892.

### **Ottawa and Gatineau Valley Railway Company.**

(See Nos. 8, 26, 58 and 151.)

By the Act 48-49 Vic., chap. 29 (1885), the grant of a subsidy to this company was authorized (in lieu of subsidies granted in previous years), namely, for a line of



railway from Hull station towards the village of Le Désert, 62 miles, the amount being \$320,000. This subsidy having lapsed, it was revoked by the Act 52 Vic., chap. 3 (1889).

Under authority of an Order in Council of the 10th of July, 1889, a contract with the company for the work in question, 62 miles, was signed on the 19th of August, the date for completion being fixed as the 1st of August, 1893.

The location plans of the first 50 miles have been approved.

During the past fiscal year, there has been paid to the company the sum of \$38,790, and subsequently the sum of \$49,820, making the total payments up to the 31st December, 1892, \$176,192. The opening of the first 20 miles for traffic was sanctioned in December, 1891, and the opening of a further section of 10 miles was similarly allowed in July, 1892.

**Oshawa Railway and Navigation Company.**

(Name changed to "The Oshawa Railway Company," by 54-55 Vic., ch. 91.)

(See Nos. 112 and 233.)

By the Act 50-51 Vic., ch. 24 (1887), the grant of a subsidy to the extent of \$22,400 was authorized for seven miles of this company's railway, extending from Port Oshawa towards Raglan; they were admitted to contract on the 20th July, 1889. This subsidy was renewed by the Act 54-55 Vic., ch. 8. No portion has been paid up to the 31st of December, 1892.

By the special Act 54-55 Vic., ch. 91, the corporate powers of the company were revived, and its name was changed as above.

**Parry Sound Colonization Railway Company.**

(See No. 153.)

By the Subsidy Act of 1889, 52 Vic., ch. 3, authority was given for the grant of a subsidy to this company, not exceeding \$128,000, for 40 miles of railway from the village of Parry Sound to the village of Sundridge, or some other point on the line of the Northern and Pacific Junction Railway.

On the 21st of July, 1890, the company was admitted to contract accordingly, the line to run from the village of Parry Sound through the townships of Foley, Christie, Monteith, McMurrick and Parry, joining the line of the Northern and Pacific Railway at Scotia, or a point about two miles from Elmsdale station. The date for completion has been extended to the 1st of August, 1893. The location of the first 30 miles has been approved by an Order in Council of the 11th of July, 1890.

The first two ten-mile sections have been inspected, and during the past fiscal year there has been paid the sum of \$30,400. No further payment has been made up to the 31st December, 1892.

**Port Arthur, Duluth and Western Railway Company.**

(Formerly the "Thunder Bay Colonization Railway Company.")

(See Nos. 139, 195 and 291.)

This company was originally incorporated as the "Thunder Bay Colonization Railway Company." It was declared to be a body corporate under its present name by the Dominion Act 51 Vic., ch. 84, which authorized it to receive all grants voted to the previous company.

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By the Subsidy Act 51 Vic., ch. 3 (1888), the grant of a subsidy to the extent of \$271,200 was authorized in favour of the above company, for  $8\frac{3}{4}$  miles of their railway from Port Arthur towards Gun Flint Lake, a point on the International boundary line; this being in place of subsidies previously granted for the construction of a railway from Murillo station to Crooked Lake.

A contract was entered into with the company on the 24th of December, 1889. The location of the entire line has been approved.

By the Act 53 Vic., ch. 2 (1890), a subsidy limited to \$16,000 was authorized for a branch, 5 miles long, to the KakabeKa Falls.

During the past fiscal year payment was made to the extent of \$70,075, making the total payments up to the 31st of December, 1892, \$157,075.

By the Subsidy Act 55-56 Vic., ch. 5 (1892), the unpaid balance, \$114,125 of the subsidy voted in 1888, was revoked.

In December, 1892, the company asked for an inspection of the balance of their road to the boundary line as completed.

### **Pontiac Pacific Junction Railway Company.**

(See Nos. 25, 137 and 211.)

This line was subsidized by Parliament in 1884, 49 Vic., ch. 8, to the extent of \$3 200 a mile, not exceeding \$272,000.

Under authority of an Order in Council dated the 12th of December, 1884, a contract, dated the 22nd of that month, was made with this company for the building of the line subsidized, namely, from Aylmer, Que., to Pembroke, crossing the River Ottawa at a point "not east of Lapasse;" the first twenty-seven miles to be completed by the 1st September, 1885 (extended to 15th of December by Order in Council of the 13th of August, 1885), the second twenty-seven miles by the 1st of July, 1886, and the whole road, estimated at 85 miles west of Aylmer, by the 1st of July, 1887.

By the Act 51 Vic., ch. 3 (1888), a subsidy to this company of \$31,500 was authorized for the bridging of the River Ottawa at Culbute; also a subsidy of \$9,600 for 3 miles of their railway from a point 3 miles east of Pembroke to Pembroke, provided that the entire work subsidized on this railway be completed within four years from the 22nd of May, 1888. No contract has been entered into for the work contemplated by this Act.

By the 5th clause of the Act 52 Vic., ch. 3, it was specially provided that the several subsidies in aid of this railway should be extended to the 22nd of May, 1892.

By the Act 53 Vic., ch. 2 (1890), a subsidy limited to \$24,000 was authorized for  $7\frac{1}{2}$  miles of this railway, between Hull and Aylmer.

By the Act 53 Vic., ch. 68 (1890), the time for completion of the railway to the town of Pembroke, and of the bridge over the River Ottawa, at or near the city of Ottawa, which the company were empowered to construct by the Act 45 Vic., ch. 69, was extended to the 22nd of May, 1892. The same Act gave the company power to extend their line from the said bridge to the canal basin in the city of Ottawa.

The Act 53 Vic., ch. 69 (1890), gave to this company power to purchase from the Canadian Pacific Railway Company the section between Hull and Aylmer, or any part thereof.

By the Subsidy Act 55-56 Vic., ch. 5, clause 4 (1892), the balance unpaid of the subsidy voted in 1884 was revoked.

The road is open from Ottawa to Fort Coulonge, 68 miles.

Up to the close of the fiscal year 1887-88 a total of \$174,828 had been paid out of the subsidy voted in 1884. No further payments have been made up to the 31st of December, 1892.

**Quebec Central Railway Company.**

(See Nos. 22, 142 and 219.)

This company was subsidized in 1884 to the extent of \$211,200, in aid of the construction of 66 miles of their railway from Beauce Junction to the International boundary.

Under the authority of an Order in Council, dated the 2nd of August, 1884, a contract was made with the company on that date for the construction of a line from Beauce Junction on their trunk line, thence up the valley of the River Chaudière to the frontier, the line to be completed by the 2nd of February, 1888.

The location of the first 23 miles was approved of by an Order in Council of the 8th of May, 1885. The amount of the subsidy paid up to the end of the fiscal year 1885-86, under an Order in Council of the 14th of August, 1885, was \$60,342, covering 15½ miles of road inspected, starting from Beauce Junction.

In lieu of the balance of this subsidy, which lapsed on the 1st of July, 1888, authority was given by the Act 51 Vic., ch. 3 (1888), for the grant of a subsidy to this company of \$21,191.54 a year, for 20 years, equivalent to a cash grant of \$288,000 for a line of railway from St. Francis station to a point on the Atlantic and North-west Railway, near Moose River, 90 miles. No contract was made for this work.

By the Act 53 Vic., ch. 2 (1890), in lieu of the subsidy so granted, the company may receive the same amount for a similar term of years, or a guarantee of interest on bonds for a like sum, for 90 miles of their railway from St. Francis station on their line to a point on the Atlantic and North-western Railway near Moose River, or from a point on their line between the Chaudière River and Tring station to a point on the International Railway at or near Lake Megantic; the first annual payment to be made at the end of twelve months from the date of the certificate of completion. A draft contract was prepared, but has not yet been entered into, for this subsidy, and no further payments have been made up to the 31st of December, 1892.

By an Order in Council of the 18th July, 1892, the time for completion of the Tring and Megantic Branch has been extended to the 1st of July, 1894, the actual length being 58¾ miles, in place of the estimated length 90 miles.

**Quebec and Lake St. John Railway Company.**

(See Nos. 2, 14, 49, 82, 126, 140, 177, 220 and 232.)

By the Subsidy Act of 1882 a subsidy of \$384,000 was granted for a line from St. Raymond to Lake St. John. By the Act of 1883 the Quebec and Lake St. John

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Railway Company, engaged in the work of constructing this line, were permitted to receive a further subsidy of \$80,000. By the Act of 1885 a subsidy of \$96,000 was authorized for a line extending from the point of their junction with the North Shore Railway (4 miles from Quebec) up to St. Raymond (36 miles from Quebec), conditionally upon the construction of their line to a point 50 miles north of St. Raymond; and by the Act of 1886 a subsidy was authorized, not exceeding \$186,295, for the portion, 95 miles, extending from the point 50 miles north of St. Raymond to Lake St. John.

By the Act 50-51 Vic., ch. 24 (1887), an additional subsidy not exceeding \$28,800 was authorized for a distance of 9 miles, the distance which previous subsidies granted were short of covering from the city of Quebec to Lake St. John. By this Act authority was given for payment up to the 23rd of June, 1888 (under the usual conditions) of balances available from the subsidies granted in 1882 and 1883. The aggregate of the subsidies granted to this company for the whole distance from Quebec to Lake St. John is \$775,095, the number of miles subsidized being 186.

An agreement was duly entered into on the 4th of September, 1883, in respect of the two subsidies first named, under which this line was to be completed by the 25th of May, 1887, the portion up to Lake Edward to be completed by the 31st of December, 1885; and on the 10th of February, 1886, an agreement was signed covering the third subsidy, namely, that of 1885. For the subsidies granted in 1886 and 1887 no further contracts are required, these subsidies being applicable to works embraced in the previous contracts.

The road is in operation up to Roberval, on Lake St. John, 190 miles from Quebec.

By the Act 51 Vic., ch. 3, a subsidy to the extent of \$96,000, previously granted to the Saguenay and Lake St. John Railway Company for 30 miles of their railway from Lake St. John towards Chicoutimi, was transferred to this company, and under authority of an Order in Council of the 17th of November, 1888, a contract was made with them on the 5th of December for this work, which starts from Chambord Junction, near Lake St. John, on their main line; the work to be completed by the 1st of August, 1890. The location for these 30 miles has been approved by an Order in Council of the 17th of November, 1888.

By the Act 52 Vic., ch. 3 (1889), a further subsidy of \$64,000 was granted for an additional 20 miles, making the total subsidy for this branch \$160,000. Under date the 17th October, 1892, a contract has been entered into with the company for this work.

By the Act 53 Vic., ch. 2 (1890), a subsidy to this company, to an extent not exceeding \$30,000, was authorized for a railway bridge over the River St. Charles; also a subsidy, limited to \$38,400, for 12 miles of railway from Lorette *via* Charlesbourg to Quebec. Under date the 2nd of December, 1890, both these subsidies were covered by one contract, the work to be completed by the 1st of October, 1891.

By the Act 54-55 Vic., ch. 8, there was expressly voted the difference, \$5,250, between the \$30,000 mentioned in the above subsidy for the St. Charles bridge and the amount actually paid the company.

By the Act 55-56 Vic., ch. 5, clause 5 (1892) authority was given for the payment of the unpaid balance of the subsidy granted in 1889, and also for the payment of the unpaid balance, \$12,800, of the subsidy granted in 1887. This last, representing 4 miles of railway built towards Roberval, was covered by a contract made on the 17th of October, 1892.

During the fiscal year there has been paid the sum of \$26,222.73, making the total payments up to the 30th of June, 1892, for both main line and branches, \$844,927.73. Since that date there has been paid the further sum of \$13,031.77, making the total payments to the company up to the 31st of December, 1892, \$857,959.50.

**Quebec, Montmorency and Charlevoix Railway Company.**

(See No. 164.)

By the Subsidy Act 52 Vic., ch. 3 (1889), the grant of a subsidy to the extent of \$96,000 to the above company was authorized for 30 miles of their railway from the east bank of the River St. Charles to or near to Cape Tormente, Que.

A contract was entered into with the company on the 14th of November, 1889, for this work, from Hedleyville to St. Joachim.

During the fiscal year 1889-90 the sum of \$65,600 was paid from this subsidy, the distance covered being  $20\frac{1}{2}$  miles, viz., from Quebec (the east side of the River St. Charles) to Ste. Anne. No further payments have been made up to the 31st of December, 1892.

In December, 1892, plans showing the location of the road for the balance of the 30 miles subsidized were submitted for approval.

**Shuswap and Okanagan Railway Company.**

(See No. 167.)

This company was incorporated by the Act 49 Vic., ch. 82 (1886), for the construction of a line of railway from a point on the Canadian Pacific Railway, at Sicamous Narrows, B.C., running up the left bank of the Shuswap River to a point near the north end of Lake Okanagan.

By 51 Vic., ch. 88 (1888), this Act was amended, and the company were allowed two years to commence and five to complete their main line.

By the Subsidy Act of 1889, a subsidy to the extent of \$163,200 was authorized for the said railway, the estimated distance being 51 miles.

The contract for this work was signed on the 11th of February, 1890, the date for completion being fixed as the 4th May, 1893. The road is completed, the actual distance being  $50\frac{8}{10}$  miles.

The subsidy applicable for this distance was \$162,560. During the fiscal year the sum of \$162,260 has been paid to the company, leaving a balance of \$300 unpaid.

Permission to open the road for traffic was given on the 9th of June, 1892.

By the special Act 54-55 Vic., ch. 72 (1891), an agreement for the lease of the road to the Canadian Pacific Railway Company, when completed, for a term of 25 years, was approved and ratified, and powers were given to extend the line to a point on the International boundary at or near Lake Osooyos.

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### **St. Catharines and Niagara Central Railway Company.**

(See Nos. 96, 176, 190 and 265.)

By the Act 50-51 Vic., ch. 24 (1887), the grant of a subsidy to the extent of \$38,400 to the above company was authorized for 12 miles of their railway from St. Catharines to the bridge over the River Niagara.

The company were admitted to contract on the 5th of March, 1888, under an Order in Council of the 12th of April, the location being approved by an Order of the same date.

On the 20th of December, 1888, the road having been built and inspected, the company were permitted to open it for traffic. The sum of \$26,640 was paid to the company in the fiscal year 1888-89.

By the Act 52 Vic., ch. 3 (1889), a subsidy for 20 miles of this road was authorized, limited to \$64,000, and on the 1st of August, 1890, the contract was signed, the extension being from their present terminus at St. Catharines towards Hamilton.

By the Act 54-56 Vic., ch. 2 (1890), a subsidy limited to \$44,800 was authorized for a further distance of 14 miles.

By the Act 55-56 Vic., ch. 5 (1892), in lieu of the subsidies granted in 1889 and 1890, there was granted an annual subsidy for 20 years calculated on the basis of 3½ per cent of the amount, not to exceed \$108,000, granted for the 34 miles in question; payment of the first half-yearly instalment to be made 6 months after the date of the Chief Engineer's certificate of completion.

During the fiscal year 1890-91, the sum of \$11,760 was paid to this company, covering the distance, 12 miles, between St. Catharines and Niagara River. No further payments have been made up to the 31st December, 1892.

The payments made to this company aggregate \$38,400.

### **St. Clair Frontier Tunnel Company.**

(See No. 162.)

In the year 1884 a company, "The St. Clair Frontier Tunnel Company," was incorporated by the Dominion Act 47 Vic., ch. 82, for the purpose of building a tunnel for railway passage under the River St. Clair, from a point in or near the town of Sarnia, Ontario, to the city of Port Huron, Michigan, U.S., the Act providing that the plans of the tunnel and its works should be approved by the Governor in Council prior to commencement.

Plans of this work were submitted by the company and approved by an Order in Council dated the 24th of November, 1886, which also approved of the site. Certain changes were subsequently found necessary, and amended plans were approved by an Order in Council dated the 7th of October, 1889.

This work gives connection between the Grand Trunk Railway and the Chicago and Grand Trunk Railway.

By the Subsidy Act, 52 Vic., ch. 3 (1889), a subsidy to the extent of 15 per cent of the value of the work, but not exceeding \$375,000, was authorized.

Under authority of an Order in Council dated the 2nd of October, 1889, a contract was entered into with the company on the 30th of that month for the work in question, which was to be completed by the 1st of August, 1893.

The tunnel proper was formed throughout by the 30th of August, 1890, the shields from either end meeting on that day. On the 15th of October, 1891, the company notified the department that the work was completed, and ready for inspection and traffic.

During the past fiscal year the company were paid the sum of \$58,600, making a total of \$375,000 paid, this being the total amount of the subsidy granted.

In the annual report of last year a full description of the work, as completed, was given.

**St. John Valley and Rivière du Loup Railway Company.**

(See Nos. 90, 118, 225 and 274.)

By the Act 49 Vic., chap. 10 (1886), a subsidy of \$70,400 was authorized for 22 miles of railway, from Fredericton to Prince William, New Brunswick, and by the Act 50-51 Vic., chap. 24, a subsidy of \$70,400 was authorized, in favour of the St. John Valley and Rivière du Loup Railway Company, for 22 miles of railway from Prince William towards Woodstock.

The company having applied for both subsidies, they were admitted to contract on the 26th of June, 1888, under an Order in Council of the 21st of May, the time for completion being fixed as the 31st of July, 1890. This covers both subsidies, aggregating \$140,800. The location plans were approved by an Order in Council of the 23rd May, 1888, covering the distance, 44 miles, from Fredericton to Woodstock.

By the Act 53 Vic., chap. 2 (1890), both the above subsidies were, in effect, revoked.

By the Act 55-56 Vic., ch. 5, a subsidy limited to \$48,000 was authorized for 15 miles of railway extending from the north end of the line subsidized by 53 Vic., ch. 2.

Up to the 31st of December, 1892, no payments have been made.

**Stewiacke Valley and Lansdowne Railway Company.**

(See Nos. 87, 232, 254 and 258.)

By the Act 49 Vic., ch. 18 (1886), a subsidy was authorized for a railway from a point on the Intercolonial Railway through the Stewiacke Valley, affording communication with the Iron Mines, Spring Side, Upper Stewiacke and Musquodoboit settlements, 25 miles, the extent of aid not exceeding \$80,000. The Stewiacke Valley and Lansdowne Railway Company having applied for this subsidy, a contract was made with them on the 17th of December, 1886, the line to be completed by the 1st of December, 1889.

By the Act 53 Vic., ch. 2 (1890), the above subsidy was in effect revoked, and the old contract having been cancelled, a new contract with this company was entered into on the 30th of August, 1890. Completion is called for by the 1st of September, 1892.

By the Act 55-56 Vic., ch. 5 (1892), the same subsidy was in effect revoked.

By the Act 52 Vic., ch. 3 (1889), a subsidy was granted for a railway from Truro or a point between Truro and Stewiacke to Newport or Windsor, 49 miles, the limit being \$156,800. A contract was made with this company on the 30th of August, 1890, for the work; the line to run from Brockville station, on the Intercolonial, to New-

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port station, on the Windsor Branch Railway; the line to be completed by the 1st of September, 1893.

By the Act 55-56 Vic., ch. 5 (1892), this subsidy was in effect revoked.

The location plans have been approved for this distance.

No portion of any of the above subsidies has been paid up to the 31st of December, 1892.

### **St. Lawrence and Adirondack Railway Company.**

(See No. 218 and 293.)

By the Subsidy Act 53 Vic., ch. 2 (1890), a subsidy not exceeding \$57,600 was granted to the above company for 18 miles of their railway from Valleyfield to Huntingdon, on the Montreal and Champlain Junction Railway.

On the 29th of April, 1891, a contract was entered into with the company for this work, the time for completion being fixed as the 1st of July, 1893.

In December, 1891, the road was inspected and reported as complete—the actual distance being 12.58 miles. During the past fiscal year there has been paid to the company the sum of \$40,256, being the amount applicable to the actual distance of the road.

By the Subsidy Act 55-56 Vic., ch. 5, a subsidy not exceeding \$25,024 was granted to the company for  $5\frac{4}{10}$  miles, from Huntingdon towards the International boundary, and for a further distance of  $2\frac{4}{10}$  miles. Since the close of the fiscal year there has been paid to the company the sum of \$24,448, making the total payments up to the 31st of December, 1892, \$64,704.

This road connects the Canada Atlantic Railway at Valleyfield with the Montreal and Champlain Junction Railway at Huntingdon.

### **St. Lawrence, Lower Laurentian and Saguenay Railway Company.**

(Name changed to "*The Laurentian Railway Company*" by Provincial Act 51-52 Vic., ch. 108.)

(See Nos. 38, 59, 117 and 234.)

By the Act 48-49 Vic., ch. 49 (1885), a bulk sum subsidy of \$217,600 was granted for a line of railway from the Grand Piles, on the River St. Maurice, Que., to a point of junction with the Lake St. John Railway (being in lieu of a subsidy of the previous year).

By the Act 50-51 Vic., chap. 24, this subsidy was repeated in favour of the company named below.

The St. Lawrence, Lower Laurentian and Saguenay Railway Company having applied for the subsidy, and being approved, a contract was entered into with them on the 20th of February, 1886, under authority of an Order in Council of the 6th of that month, which also approved of the location plans, the said location being subsequently amended under an Order in Council of the 25th of August, 1887.

By the Subsidy Act of 1891 54-55 Vic., ch. 8, the unpaid balance, \$92,784, of the company's subsidy was revoked.

During the past fiscal year there has been paid the sum of \$92,784, making the total payments up to the 31st December, 1892, \$217,600, this being the total amount of the company's subsidy.



The distance from Grand Piles to the Rivière à Pierre station of the Quebec and Lake St. John Railway is nearly 39 miles.

**Témiscouata Railway Company—Rivière du Loup to Edmundston.**

(See Nos. 3, 62, 127, 141, 226 and 279.)

Towards the construction of a line from Rivière du Loup or Rivière Ouelle, or from some point between them, to Edmundston, Parliament, in 1882, voted a subsidy of \$240,000, and by the Act 48-49 Vic., ch. 58, a further subsidy, not exceeding \$258,000, was voted for the same work, making a total subsidy of \$498,000.

Under express provisions of this Act a charter was granted by Orders in Council of the 3rd and 7th of October, 1885, to certain persons constituting "The Témiscouata Railway Company," their object being to build the said road; and such charter, being published in the *Canada Gazette* of the 10th of that month, has force and effect as if an Act of Parliament. This charter was subsequently confirmed and amended by the special Act 50-51 Vic., ch. 71 (1887). Under the said charter the company have power to construct a road from the Intercolonial Railway at Rivière du Loup to Edmundston. On the 21st June, 1886, a contract was duly entered into with the company for the work subsidized, the whole to be completed by the 1st of August, 1889. The location of the road, 80½ miles *via* Lake Témiscouata and the River Madawaska, was approved of by an Order in Council of the 30th of September, 1886.

On the 22nd of November, 1888, the company were permitted to open the road for traffic.

By the Act 51 Vic., ch. 3 (1888), a subsidy of \$100,000 was granted to this company for 20 miles of their branch railway from Edmundston towards the River St. Francis, in lieu of a subsidy granted the previous year.

The company having applied to be admitted to contract, authority was given by an Order in Council passed on the 31st of December, 1888, which also approved of the location; and the contract was signed on the 22nd of January, 1889.

By the Act of 1890, 53 Vic., ch. 2, a subsidy to the limit of \$51,200 was authorized for a further distance of 16 miles. A contract under this subsidy was made with the company on the 20th of October, 1891, covering the distance, 12 miles, between Clair's siding and Connor's station. The branch up to this point, 31¾ miles, has been completed.

By the Act 55-56 Vic., ch. 5 (1892), an additional subsidy of \$1,800 a mile, limited to \$21,600, was granted for the first 12 miles of the section subsidized by the Act 53 Vic., ch. 2.

During the past fiscal year payments have been made to the extent of \$54,830, and subsequently the further sum of \$21,150, making the total payments up to the 31st of December, 1892, \$645,950.

**Tobique Valley Railway Company.**

(See Nos. 130, 227, 235 and 244.)

By the Act 50-51 Vic., ch. 24 (1887), authority was given for the grant of a subsidy of the extent of \$89,600 for 14 miles of the railway of the above company from Perth Centre station, on the New Brunswick Railway, towards Plaister Rock Island,

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in lieu of a subsidy previously granted. A contract was made with the company for the work on the 4th of September, 1888. By the Act 54-55 Vic., ch. 8 (1891), this subsidy was, in effect, revoked, having lapsed.

By the Act 53 Vic., ch. 2 (1890), a subsidy limited to \$35,200 was authorized for a further distance of 11 miles.

By the Act 55-56 Vic., ch. 5 (1892), a subsidy limited to \$9,600 was granted for a further distance of 3 miles from the north end of the 11 miles subsidized in 1890.

Under date the 30th of November, 1892, a contract was entered into with the company for the work covered by these two subsidies. The date for completion was fixed as the 1st of December, 1893.

The first section of 14 miles was completed in December, 1891.

During the past fiscal year there was paid the sum of \$73,000, and subsequently the further sum of \$41,674.46, making the total payments to the company up to the 31st of December, 1892, \$114,674.46.

### **Thousand Islands Railway Company.**

(See No. 182 and 269.)

By the Subsidy Act 52 Vic., ch. 3 (1889), the grant of a subsidy to the extent of \$54,400 to the above company, for 4 miles of their railway from a point near the River St. Lawrence, in the village of Gananoque Junction, on the Grand Trunk Railway, and for thirteen miles of their railway from Gananoque Junction to a point of junction with the Brockville, Westport and Sault Ste. Marie Railway, was authorized.

A contract was made with the company for this work on the 24th of October, 1889, the 4-mile section to be built by the 1st of July, 1890, and the 13-mile section by the 1st of August, 1893. In the fiscal year 1889-90, the sum of \$10,400 was paid for the section, 3½ miles, from Gananoque to the Grand Trunk Railway, completed.

By the Act 55-56 Vic., ch. 5 (1892), in lieu of the unpaid balance, \$44,000, of the above subsidy, there were granted railway subsidies for the extension of the railway, one, the northern, to connect with the Brockville, Newport and Sault Ste. Marie Railway, the Kingston, Napanee and Western Railway, the Kingston, Smith Falls and Ottawa Railway, or the waters of the Rideau Canal, for which the limit is \$30,000; the other, the southern, and across the mouth of Gananoque River, for which the limit is \$14,000.

Under date the 30th of November, 1892, a contract has been made with the company for this work; the date for completion being fixed as the 1st of August, 1896.

No further payments have been made up to the 31st of December, 1892.

### **Vaudreuil and Prescott Railway Company.**

(See *Montreal and Ottawa Railway Company.*)

### **Waterloo Junction Railway Company.**

(See No. 187.)

By the Subsidy Act 53 Vic., ch. 2 (1890), a subsidy not exceeding \$35,200 was granted to this company for 11 miles of their railway from Waterloo to Elmira.

Under date the 17th of February, 1891, a contract was made with the company for the work in question; the date for completion being fixed as the 1st of November, 1891.

During the fiscal year, there was paid the sum of \$32,800, the road being completed. The actual distance is 10½ miles.

**Western Counties Railway Company.**

By the Act 50-51 Vic., ch. 25 (1887), assented to on the 23rd of June, 1887, confirmation was given to an agreement made by the Government with the Western Counties Railway Company on the 31st of January, 1887, contingent on such confirmation, the agreement itself being thereby, in some respects, modified, as expressed in a subsidiary agreement. Under the provisions of the said Act and agreements, covenants have been entered into which may be summarized as follows:—

The company agreed to withdraw a suit pending against the Crown in respect of the Windsor Branch Railway, releasing the Government from all claims, and also releasing to the Government all right and title to the branch. They also undertook to build and complete the railway between Annapolis and Digby, N.S., and to complete, equip and put in first class order the whole of the line from Yarmouth to Annapolis; also to settle all liens on their property, and their indebtedness. In order to the fulfilment of the above, they undertook to deposit with the Government the total proceeds of the sale of their debentures, &c., the issue of which was limited to \$4,200,000. The Government, on its side, in consideration of these premises, undertook to pay to the company the sum of \$500,000, this amount to be credited to the company and added to the proceeds of the sale of the debentures, which proceeds the Government agreed to hold for the purpose, the whole to be applied, under certificate of the Government Chief Engineer and Order in Council, to the payment of interest on the debentures, &c., to be issued, to the building and completion of the railway above mentioned, and to the satisfaction of the company's existing obligations; the balance, if any, to be paid to the company. The dates to which the company were bound, as modified by terms of the Act, were as follows:—

Work to be commenced by the 13th of July, 1887, and the railway between Annapolis and Digby to be completed by the 12th of September, 1888, the company to complete to the satisfaction of the Government, by the 12th of September, 1887, all arrangements for the settlement of its indebtedness. Provision was made, also, for the completion of the line between Annapolis and Digby by the Government, at its option, from the funds in its hands, in the event of failure on the part of the company to make commencement of work, to progress with the same, or to satisfy the Government as to the arrangement of the settlement of its indebtedness by the dates so fixed.

The company did not make deposit of moneys; nor did they take any practical steps to carry out the work contemplated. Under these circumstances, and in view of representations urging that the Government should itself undertake the work, a survey was made of the country between Digby and Annapolis, under instructions given in October, 1888.

By the special Act 52 Vic., ch. 8 (1889), authority was given for the construction of this link of railway out of the appropriation of \$500,000 granted by the Act 50-51 Vic., ch. 25. The work was, accordingly, taken in hand by the department,

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and was completed, and the company placed in possession for operating purposes on the 27th of July, 1891. The total Government expenditure up to the 30th of June, 1892, is \$614,789.27.

### **West Ontario Pacific Railway Company.**

*(Leased to the Ontario and Quebec Railway Company—C.P.R.)*

(See Annual Report of 1891.)

### **Woodstock and Centreville Railway Company.**

(See Nos. 131, 203, 266 and 281.)

By the Act 50-51 Vic., ch. 24 (1887), the grant of a subsidy to the extent of \$64,000 was authorized for a railway from Woodstock towards Centreville, 20 miles.

The above railway company having applied and being approved, a contract was made with them on the 6th of May, 1889, for the distance named, the line to start from Upper Woodstock station, on the New Brunswick Railway, the work to be completed by the 1st October, 1890.

By the Act 53 Vic., ch. 2 (1890), a subsidy limited to \$19,200 was authorized for a further distance of 6 miles to the International boundary.

By the Act 55-56 Vic., ch. 5 (1892), the subsidy granted in 1887 was in effect revoked.

By the same Act the subsidy granted in 1890 for the further distance to the boundary was in effect revoked.

Under an Order in Council of the 29th of August, 1892, a contract dated the 16th of September, 1892, has been made with the company, to construct the 26 miles so subsidized, the date for completion being fixed as the 1st of January, 1894.

No portion of the company's subsidy has been paid up to the 31st of December, 1892.

## LAND SUBSIDIES.

The following companies have been aided by subsidies in land, duly authorized by Parliament and granted by the Department of the Interior:—

They are enumerated here because the engineering details have been dealt with by this department, the certificate of whose officer is required prior to handing over to the company concerned any part of the subsidy. (The numbers given refer to the special "land subsidies" list, Appendices, p. 207.)

### **Alberta and Athabasca Railway Company.**

*(Name changed by 52 Vic., ch. 65, to the North-western Railway Company of Canada," which see.)*

### **Alberta Railway and Coal Company.**

*(See Annual Report for 1890-91.)*

### **Brandon and South-Western Railway Company.**

(See No. 19.)

By an Order in Council dated the 23rd of November, 1889, but subject to the approval of Parliament, and contingent on their obtaining an Act of incorporation from the Dominion, this company has been granted a subsidy of 6,400 acres per mile in aid of a railway from a point in Township 1, in either Range 23 or 24, west of the

1st Principal Meridian, to Deloraine, Manitoba, about 17 miles. This subsidy was confirmed by the Act 53 Vic., ch. 4. The company was incorporated under a provincial Act, but received a Dominion charter by the Act 53 Vic., ch. 86 (1890), and under said Order in Council the subsidized section was to be completed and running by the 1st of May, 1891. Location plans and profiles have been approved by an Order in Council dated the 19th of February, 1892, showing the proposed line from a point of junction with the Souris Branch of the Canadian Pacific Railway to the Turtle Mountain coal fields.

**Calgary and Edmonton Railway Company.**

*(Leased to the Canadian Pacific Railway Company.)*

This company was incorporated by the Act 53 Vic., ch. 84 (1890), for the construction of a railway from the Canadian Pacific Railway at Calgary northward to Edmonton, and southward to the International boundary, also northerly to Peace River.

By the Act 53 Vic., ch. 5, authority was given for entry into a contract with this company for the conveyance of men, supplies, materials, and mails, for 20 years; a payment to be made annually of the sum of \$80,000 therefor, computation to be made from the date of the completion of the road between Calgary and a point on the North Saskatchewan River near Edmonton. The Act further gave power to the company to lease the said railway to the Canadian Pacific Railway Company.

On the 21st of June, 1890, a contract for transport service was made, accordingly, with the Government, this contract calling for completion of the first 100 miles by the 1st of November, 1891, and of the whole road by the 1st of November, 1893.

By the Land Subsidy Act of 1890, 53 Vic., ch. 4, a grant of land to the extent of 6,400 acres per mile was made for the line from Calgary north to Edmonton, about 190 miles, and also for a line south from Calgary to the International boundary, about 150 miles.

On the 26th of December, 1890, the company entered into a definite contract for the work of constructing, under this subsidy, both the northern line to Edmonton and the southern line to the boundary, the dates for completion being as follows:—

From Calgary northward, 100 miles, by the 1st of November, 1891; the balance to Edmonton within two years thereafter.

From Calgary southward, 50 miles, by the 1st of November, 1892, and to a point on the Old Man's River, by the 1st of November, 1893; the balance to the International boundary by a date to be fixed by the Governor in Council.

On the 6th July, 1891, permission was given to open the first 100 miles north from Calgary for traffic; and on the 10th of August, 1891, the whole road from Calgary to Edmonton, 192 miles, was officially reported as fit to be opened. The 25th of July, 1891, has been formally fixed as the date at which the whole road was completed.

On the 7th of December, 1891, the first 50 miles southward from Calgary was officially reported as fit to be opened for public traffic, and on the 3rd of November, 1892, the Government Chief Engineer reported that the section from Calgary southwards to the north bank of Old Man's River, 104 $\frac{10}{100}$  miles, was completed according to contract.

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An agreement has been entered into for the lease of this railway to the Canadian Pacific Railway Company.

### Canadian Pacific Railway Company.

(See Nos. 17, 18 and 29.)

By an Order in Council of the 18th of May, 1889, but subject to approval by Parliament, a grant of lands, to the extent of 6,400 acres per mile, in favour of the Canadian Pacific Railway Company, was authorized in aid of the construction of a branch from a point at or near Brandon, on their main line, south-westerly to or near Township 3, Range 27, west of the 1st Principal Meridian, and thence westerly, a total distance of 100 miles—this they term their "Souris Branch;" also, for a line, 25 miles, running from such point in Township 3, easterly to Deloraine, the western terminus of the existing line of the Manitoba South-western Colonization Railway, making in all 125 miles subsidized, and the total grant 800,000 acres. A further Order of the 18th of June, 1889, authorized the conveyance of the subsidy on completion of each 20-mile section.

By the Land Subsidy Act 53 Vic., ch. 4, this grant was confirmed.

By the Land Subsidy Act of 1891, 54-55 Vic., ch. 10, a subsidy of 6,400 acres per mile, for a further distance of about 60 miles, to La Roche Percée, was granted.

The company duly filed plans showing the location of this branch from Kemnay, a station on their main line, 8 miles west of Brandon, to Melita, in Township 3, Range 26, west; and from Melita east to Deloraine. On the 30th January, 1891, the portion between Kemnay and Airdrie was officially reported to be fit for traffic, and on the 26th of October, 1891, the company asked for inspection between Hartney and Melita.

On the 30th of August, 1892, the company asked for an inspection of the further portion between Melita and Estevan.

On the 7th of November, 1892, permission was given for the opening for public traffic of the section between Hartney and Melita, 26 $\frac{7}{10}$  miles.

On the 22nd of November, 1892, the practical completion of the section from Deloraine to Napinka, 18.01 miles, was officially reported. This forms part of the company's "Winnipeg, Gretna and Deloraine Branch;" the distance from Winnipeg to Napinka being 220 miles under traffic.

By an Order in Council of the 14th of June, 1889, but also subject to approval by Parliament, the grant of a subsidy to the Canadian Pacific Railway Company of land to the extent of 6,400 acres per mile was authorized for a branch starting from a point on the above mentioned south-westerly or "Souris" branch, and running to Glenboro', the length of railway so subsidized being stated to be about 60 miles, the subsidy to be conveyed on the completion of each 20-mile section.

By the Land Subsidy Act, 53 Vic., ch. 4, this grant was confirmed.

On the 26th of October, 1891, the company applied for inspection of the extension from Glenboro' to Nesbitt, this latter being 131 miles from Winnipeg. This railway from Winnipeg constitutes the company's "South-western Branch;" and at the close of the calendar year 1891, the whole distance from Nesbitt to Winnipeg was under traffic. It should be observed that the portion of their road between Winnipeg and

Glenboro' was formerly the Manitoba and South-western Colonization Railway, of which\*the Canadian Pacific Company became lessees.

**Great North-west Central Railway Company.**

(See No. 7.)

The construction of a line of railway to extend from Brandon, on the Canadian Pacific Railway, to Battleford, in the provisional district of Saskatchewan, a distance of about 450 miles, was contemplated by the North-west Central Railway Company (formerly the Souris and Rocky Mountain Railway Company); and under an Order in Council of the 29th of July, 1885, the privilege of purchasing land at the rate of \$1.06 per acre, to the extent of 6,400 acres per mile, previously accorded, was converted into a free grant of such land (subject to a charge of 10 cents per acre for survey), the grant being contingent on the due completion of their work in stated sections.

This concession did not result in the construction of any section of the road; and difficulties arising, and other applications being put forward for the work, the Act 49 Vic., ch. 11 (1886), granting aid to the extent of 6,400 acres per mile for the same, was made applicable either to the company named or to such other company as might undertake the construction of the road. The Great North-west Central Railway Company was incorporated by an Order in Council of the 22nd of July, 1889, in conformity with the provisions of the Act; a second Order, of the 3rd of August, amending such charter, and the whole being confirmed and ratified by the Act 51 Vic., ch. 85 (1888). A section of such charter giving running powers to the Canadian Pacific Railway was repealed by 52 Vic., ch. 67 (1889).

By an Order in Council, also of the 22nd July, 1886, the subsidy referred to was granted to this company, the contract itself being signed on the 12th of September, 1887. Under an Order in Council of the 1st of July, 1889, the contract time for completion was extended as follows:—

By the 1st of December, 1889,	50 miles.
do 30th do 1890,	100 do
do do do 1891,	150 do
do do do 1892,	150 do
—	
450 miles.	

A further Order in Council of the 16th of November, 1889, extended to the 31st of May, 1890, the time for the completion of the first 50 miles; and on the 3rd of September, 1890, an Order in Council was passed accepting this section as completed.

By an Order in Council, dated the 7th of December, 1891, extension of time has been accorded—subject to the condition that the first 50 miles would be effectively operated and maintained on and after the 15th of that month, as follows: 100 miles from the end of the first 50 miles by the 30th November, 1892, and 300 miles further (or whatever distance may be required to complete the road to Battleford) by the 30th of November, 1893.

The company reported the first 50 miles as having been opened for traffic on the 16th of December, 1891.

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On the 20th of June, 1892, an Order in Council was passed approving of the proposed location for the second 50-mile section.

### **Lac Seul Railway Company.**

(See No. 20.)

Under date the 13th of November, 1889, there was granted to the above company by an Order in Council, subject to the approval of Parliament, a subsidy in land to the extent of 6,400 acres per mile, towards the construction of a railway from a point near Shelley station, on the Canadian Pacific Railway, to a point near Mud Lake, on the Winnipeg River, about 18 miles; the road to be completed by the 1st November, 1891.

This grant was confirmed by the Land Subsidy Act, 53 Vic., chap. 4 (1890.)

No further action appears to have been taken.

### **Manitoba and North-western Railway Company.**

(See Nos. 4 and 6.)

By the Act 48-49 Vic., ch. 60, authority was given for the grant of aid for a line from Portage la Prairie to the crossing of the south branch of the River Saskatchewan, 20 miles from Prince Albert, about 430 miles, 6,400 acres per mile.

A grant was made to the company by Order in Council of the 4th October, 1884, cancelling previous Orders. The time for completion was fixed by Order in Council of the 6th of May, 1885, as at the rate of 50 miles a year.

By the 1st of December, 1885, the company had built and equipped 131 miles of road.

By the Act 49 Vic., ch. 11 (1886), authority was given for the grant of aid for a branch of this railway from a point on the main line at or near Todburn to the River Assiniboine, near Shellmouth, about 26 miles, 6,400 acres per mile.

This grant was made to the company by Order in Council of the 24th of May, 1886. Under Orders in Council of the 10th and 21st of September, 1886, the line was permitted to start from Binscarth, the Order first named approving the location to Russell, up to which point the road has been built. This branch, 11½ miles long, is in operation.

By the Act 50 Vic., ch. 78 (1890), relative to this railway, the company were bound to complete 17 miles in the calendar year 1890, and 20 miles a year thereafter.

By the Act 55-56 Vic., ch. 45 (1892), disabilities arising under the foregoing act in consequence of non-completion of 20 miles during the then current year were removed.

The main line is in operation for traffic purposes from Portage la Prairie to Yorkton, 223 miles, permission to open the line from Saltcoats to Yorkton, 17½ miles, for traffic, having been given, after inspection, on the 18th December, 1891.

### **Manitoba and South-eastern Railway Company.**

(See No. 24.)

This company was subsidized in lands by the Act 53 Vic., ch. 4 (1890), for a line from Winnipeg southerly or south-easterly to a point, on the west side of the Lake of the Woods, about 110 miles. A formal contract has been made with the company



under date the 3rd of June, 1892. Under this contract, the first 30 miles are to be completed by the 1st of September, 1892, 60 miles further by the 1st of September, 1893, and the whole road by the 1st of September, 1894. Plans of location of the first 30 miles starting from Winnipeg have been approved by an Order in Council passed on the 18th of March, 1892.

**Manitoba South-western Colonization Railway Company.**

*(Leased to the Canadian Pacific Railway Company.)*

(See annual report of 1891.)

**Medicine Hat Railway and Coal Company.**

(See No. 12.)

By the Act 50-51 Vic., chap. 23 (1887), authority was given for the grant to the above company of Dominion lands to the extent of 6,400 acres per mile for a railway from a point at or near Medicine Hat, on the line of the Canadian Pacific Railway, to the coal fields in or near Townships Nos. 12 and 13, Range 6, west of the 4th Principal Meridian, a distance of about 8 miles.

By an Order in Council of the 6th of July, 1887, the grant was made to the company accordingly, it being provided that the road should be completed and in operation by the 31st December, 1888.

By an Order in Council of the 24th of January, 1889, approval was given to a draft of a formal contract with the company, and an extension of time to the 2nd of June, 1890, was granted for completion of the road. A contract was signed on the 14th of February, 1889, for this work.

By the special Act 54-55 Vic., ch. 79 (1891), the charter of the company was revived and its powers were extended.

**North-western Coal and Navigation Company.**

*(Leased to the Alberta Railway & Coal Company.)*

(See Nos. 2, 9 and 13.)

By 48-49 Vic., ch. 60 (1885), aid was granted to this company for a line from Medicine Hat to the coal banks on the Belly River, about 10 miles, 3,800 acres per mile. This was amended by 50-51 Vic., ch. 22—the extent of land being increased to 3,840 acres per mile.

By an Order in Council of the 16th of March, 1885, approval was given to the location of the company's line, and on inspection, in October, 1885, of the road from Dunmore station, on the Canadian Pacific Railway, to Lethbridge, 109 miles, an Order in Council of the 19th of October, 1885, accepted the road as completed.

It should be observed that by the Land Subsidy Act of 1889 a grant of 6,400 acres per mile for 50 miles, the distance between Lethbridge and the International boundary, was made under the name of this company. An Order in Council of the 14th of October, 1889, corrected the grant, as being intended for the "Alberta Railway and Coal Company," and the Act 53 Vic., ch. 3, made the necessary ratification.

By the Land Subsidy Act 53 Vic., ch. 4, (1890), a grant of 3,840 acres per mile for the distance between Lethbridge and the Crow's Nest Pass, about 100 miles, was

## Department of Railways and Canals.

authorized in favour of the North-western Coal and Navigation Company, and an Order in Council of the 25th June, 1890, provided that on the completion of the first 50 miles from Lethbridge (by the 1st August, 1892) the lands applicable to this distance should be conveyed; conveyance to be made on the completion of each 10-mile section for the remainder of the distance (to be completed by the 1st of December, 1894.)

On the 25th June, 1890, a definite contract was made with this department by the company for the work between Lethbridge and Crow's Nest Pass, the dates for completion being those named above.

On the 15th of December, 1890, the road from Lethbridge to the International boundary,  $64\frac{62}{100}$  miles was, after inspection, officially reported as completed and fit for traffic.

By the Act 53 Vic., ch. 85 (1890), powers were given for the lease of this railway to the Alberta Railway and Coal Company, and on the 1st of January, 1890, the railway property and assets were transferred, accordingly, by lease.

### **North-western Railway Company of Canada.**

*(Formerly the Alberta and Athabasca Railway Company.)*

(See No. 15).

By an Order in Council dated the 21st of May, 1887, a grant of land was made, subject to the approval of Parliament to the Alberta and Athabasca Railway Company (the name of which was changed, as above, by the Act 52 Vic., ch. 65) from some point on the Bow River or Canadian Pacific Railway at or between Calgary and Crow Foot Creek, running northerly to a point on the River Athabasca, and crossing the North Saskatchewan at a point near the town plot of Edmonton, a distance of 300 miles, the subsidy being at the rate of 6,400 acres per mile. The first 50 miles, commencing at the southern terminus, were to be completed by the 20th of July, 1888, 100 miles in each of the two years following, and the whole road by the 20th of July, 1891.

By the Act 50-51 Vic., ch. 23, the above grant was confirmed.

By the Land Subsidy Act of 1889 (52 Vic., ch. 4), a subsidy was authorized in favour of the North-western Railway Company of Canada to the extent of 10,000 acres per mile, for a railway from Calgary, on the Canadian Pacific Railway, northerly to a point on the North Saskatchewan River, at or near Edmonton, a distance of about 210 miles; also to the extent of 10,000 acres per mile for a railway from Calgary southerly to Lethbridge, a distance of about 120 miles.

The Act 52 Vic., ch. 65 (1880), by which the change of name was authorized, gave power for further railway construction. This Act called for completion of 100 miles northwards from the Canadian Pacific Railway towards Edmonton by the 1st of December, 1890, and the remainder to Edmonton by the 1st December, 1891; also of the line south to Lethbridge or to a point on the International boundary by the 1st of December, 1892.

Nothing appears to have been done in connection with this railway.

**Qu'Appelle Long Lake and Saskatchewan Railroad and Steamboat Company.***(Leased to the Canadian Pacific Railway Company).*

(See annual report for 1891).

**Red Deer Valley Railway and Coal Company.**

(See Nos. 14 and 26.)

This company was incorporated by the Act 52 Vic., ch., 52, for the construction of a railway from a point near Calgary, N.W.T., to a point on the Red Deer River, in Township 32, Range 21, west of the 4th Principal Meridian, the route being defined; also from a point at or near Cheadle station, on the Canadian Pacific Railway, northerly to a point of junction with the line from Calgary, in or near Township 26, Range 25, west of the 4th Principal Meridian, with other branches indicated.

On the 28th of November, 1888, an Order in Council authorized the grant, subject to approval by Parliament, of a subsidy in land to the extent of 6,400 acres per mile for the line from Cheadle station to a point in or near Township 29, Range 23, west of the 4th Meridian, a distance of about 55 miles. This was confirmed by the Land Subsidy Act, 52 Vic., ch. 4 (1889).

By the Act 54-55 Vic., ch. 9, the above subsidy was cancelled, and in lieu thereof there was granted a subsidy, not exceeding 6,400 acres per mile, for the company's railway from Calgary to a point in or near Township 29, Range 23, west of the 4th Meridian, a distance of about 55 miles.

**Winnipeg and Hudson's Bay Railway and Steamship Company.***(See No. 1, and special Act 54-55 Vic., ch. 81.)*

By 47 Vic., ch. 25, clause 7 (1884), authority was given for the grant of aid for a line from some point on the Canadian Pacific Railway to Hudson's Bay, viz., for each mile in Manitoba 6,400 acres, and in the North-west Territories 12,800 acres.

In the year 1880, by Act 43 Vic., ch. 59, there was incorporated the "Winnipeg and Hudson's Bay Railway and Steamship Company," with powers for the construction of a line from Winnipeg to or near Port Nelson, Hudson's Bay.

In 1884 this Act was amended (by chapter 70), and the company were authorized to commence their line either from Winnipeg or from some point between Selkirk and Portage la Prairie, extending to Port Nelson and Churchill, or some other point on Hudson's Bay; also to construct a branch from any point on their main line to the Canadian Pacific Railway, west of Lake Winnipegosis, construction to be carried on at the rate of at least 50 miles a year.

By the same Act, a previous Act authorizing the amalgamation of this company with the Nelson Valley Railway and Transportation Company was repealed, and authorization was given for the winding up of the company last named and the transfer to the Winnipeg and Hudson's Bay Company of all its property and interests.

By an Act passed in 1886 (59 Vic., ch. 73), the date for completion was fixed as the 2nd of June, 1890.

By an Order in Council of the 11th of May, 1885, all previous Orders in this connection were cancelled, and there was granted to the Winnipeg and Hudson's Bay Railway and Steamship Company a subsidy in land, as follows:—

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Division A.—From the Canadian Pacific Railway to the northern boundary of Manitoba—estimated distance, 225 miles.....	1,440,000
Division B.—From the boundary to the terminus near the mouth of the Nelson River, Hudson's Bay—estimated distance, 425 miles.....	5,440,000
Division C.—The Branch, from a point on the main line, near the northern extremity of Lake Winnipeg, to intersection with the Manitoba and North-western Railway—estimated distance not to exceed 250 miles (grant to be subject to approval by Parliament).....	1,600,000

The time for completion was fixed by this Order as 50 miles on division A or B by the 19th of April, 1887, and 50 miles a year thereafter until completion of main line; but if the main line was not completed by the 11th of May, 1890, they were to forfeit their right to a grant for their branch line, which must itself be completed by the 11th May, 1893.

In April, 1888, the Chief Engineer of Government Railways reported, showing that 40 miles of road were completed, with the exception of certain station buildings, &c.

By an Order in Council dated the 16th of September, 1891, the dates for the completion of the company's road have been extended as follows:—

From the end of the 40 miles already built to a point on the south shore of the River Saskatchewan, near the western end of Cedar Lake, or between Cedar Lake and Grand Rapids, a distance of about 250 miles, by the 21st of June, 1894 (the limit allowed by their charter as amended by 53 Vic., ch. 80). This Order in Council approved of the draft of a definite agreement to be made with the company for the work, and this agreement was duly signed on the 18th of September, 1891.

By the special Act 54-55 Vic., ch. 81, the entry into a contract with this company was authorized for the conveyance of men, supplies, materials and mails over the portion of this line between Winnipeg and the River Saskatchewan, for an annual payment of \$80,000 a year, for 20 years. Under authority of an Order in Council, an agreement was made with the company accordingly on the 18th of September, 1891.

### Wood Mountain and Qu'Appelle Railway Company.

(See No. 8.)

By the Act 49 Vic., ch. 11, (1886), the grant of aid was authorized for a railway from a point in Township 4, Range 30, west of the 2nd Meridian, passing through Fort Qu'Appelle, to the Manitoba and North-western Railway, about 240 miles, 6,400 acres per mile.

A grant was made to the company by Order in Council of the 24th May, 1886, for the portion between Fort Qu'Appelle and the Canadian Pacific Railway, to be completed by the 1st November, 1887, and 50 miles a year thereafter.

This Order was amended by an Order of the 7th of July, 1887, the company being allowed one year from the 1st of January, 1887, for the completion of the first 50-mile section (after completion by the 1st of November, 1887, of the portion be-

tween the Canadian Pacific Railway and Fort Qu'Appelle,) the rate of construction to be 50 miles each year, subsequently, until completion of the road.

By a further amending Order in Council of the 22nd of November, 1887, the company were granted an extension of time for the completion of the portion between Fort Qu'Appelle and the Canadian Pacific Railway, namely, up to the 31st of July, 1888; 100 miles of the road to be completed and in operation by the 31st of December, 1888, as required by the preceding Order.

By the special Act 52 Vic., ch. 66 (1889), the section of a previous Act giving this company power to construct a railway on the route above indicated was repealed, and they were empowered to construct a line from a point on the International boundary line, at or near Range 16, west of the 2nd Principal Meridian, in a northerly direction by Qu'Appelle station to Fort Qu'Appelle, thence in a north-easterly direction to a point at or near the north-west corner of Lake Winnipegosis; the portion between the point of intersection with the Canadian Pacific Railway and Fort Qu'Appelle to be completed by the 1st August, 1890, and the whole road by the 16th of April, 1896.

By the Land Subsidy Act of 1889, 52 Vic., ch. 4, the subsidy provided by the Act 49 Vic., ch. 11, was made available for this new line.

By the Act 53 Vic., ch. 83 (1890), the statutory time for the construction of the portion of this railway between the Canadian Pacific Railway and Fort Qu'Appelle was extended to the 1st of August, 1892—the balance of the road to be completed at the rate of 50 miles a year thereafter.

This Act was repealed by the Act 55-56 Vic., ch. 63 (1892), and the time for the completion of the railway between the point of intersection with the Canadian Pacific Railway and Fort Qu'Appelle was extended to the 30th of October, 1894, the railway to be completed at the rate of 20 miles each year thereafter.

Powers were given to convey or lease the road to the Canadian Pacific Railway Company, the Manitoba and North-western Railway Company, the Great North-west Central Railway Company, or the Winnipeg and Hudson Bay Railway Company.

## RAILWAY LEGISLATION OF THE SESSION OF PARLIAMENT.

55-56 VICTORIA, (1892.)

### CHAP.

- 5 An Act to authorize the granting of subsidies in aid of the construction of the lines of railway therein mentioned.
- 27 An Act further to amend the Railway Act.
- 30 An Act respecting the Alberta Railway and Coal Company.
- 31 An Act respecting the Belleville and Lake Nipissing Railway Company.
- 32 An Act to incorporate the Buckingham and Lièvre River Railway Company.
- 33 An Act respecting the Canada Atlantic Railway Company.
- 34 An Act respecting the Canada Southern Railway Company.
- 35 An Act respecting the Canadian Pacific Railway Company.
- 36 An Act to incorporate the Canso and Louisbourg Railway Company.
- 37 An Act respecting the Chignecto Marine Transport Railway Company, Limited.
- 38 An Act respecting the Cobourg, Northumberland and Pacific Railway Company.

## Department of Railways and Canals.

- 39 An Act respecting the Grand Trunk Railway Company of Canada.
- 40 An Act respecting the Great Northern Railway Company.
- 41 An Act respecting the Lake Manitoba Railway and Canal Company.
- 42 An Act to revive and amend the Act to incorporate the Lindsay, Bobcaygeon and Pontypool Railway Company.
- 43 An Act respecting the London and Port Stanley Railway Company.
- 44 An Act to amend an Act to incorporate the Manitoba and Assiniboia Grand Junction Railway Company.
- 45 An Act respecting the Manitoba and North-western Railway Company of Canada.
- 46 An Act respecting the Manitoba and South-eastern Railway Company.
- 47 An Act respecting the Midland Railway of Canada.
- 48 An Act respecting the Montreal and Lake Maskinongé Railway Company.
- 49 An Act respecting the Montreal and Western Railway Company.
- 50 An Act respecting the Nicola Valley Railway Company.
- 51 An Act respecting the Nipissing and James' Bay Railway Company.
- 52 An Act respecting the Ontario Pacific Railway Company.
- 53 An Act respecting the Ottawa City Passenger Railway Company.
- 54 An Act to incorporate the Ottawa Valley Railway Company.
- 55 An Act to revive and amend the Acts respecting the Ottawa, Waddington and New York Railway and Bridge Company.
- 56 An Act respecting the Pontiac Pacific Junction Railway Company.
- 57 An Act respecting the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company.
- 58 An Act respecting the St. Catharines and Niagara Central Railway Company.
- 59 An Act respecting the St. John and Maine Railway Company and the New Brunswick Railway Company.
- 60 An Act to confirm an agreement between the Tobique Valley Railway Company and the Canadian Pacific Railway Company.
- 61 An Act respecting certain railway works in the City of Toronto.
- 62 An Act to incorporate the Winnipeg and Atlantic Railway Company.
- 63 An Act respecting the Wood Mountain and Qu'Appelle Railway Company.
- 64 An Act to revive and amend the Act to incorporate the Brockville and New York Bridge Company.
- 65 An Act to incorporate the Burrard Inlet Tunnel and Bridge Company.

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### THE RAILWAY COMMITTEE OF THE PRIVY COUNCIL.

The Minister of Railways being Chairman of the Railway Committee of the Privy Council, on which certain extensive duties are imposed by the Railway Act, it seems proper that a brief record should here be made of the several cases heard before this committee during the year, and the decisions arrived at.

The following cases have been heard during the period from January to December, 1892:—

Changes in positions of tracks of the Canadian Pacific and Grand Trunk Railway Companies at the eastern entrance of their railways into the city of Toronto—crossings of Mills, Parliament and Berkeley streets, and deviation of Berkeley street. Authorized.

Widening of the Queen street subway in the city of Toronto, the opening up of Dufferin street into the same, and the building of a subway under the Grand Trunk and Canadian Pacific Railways on the line of Dufferin street, and apportionment of the cost between the city and the railway companies. Decision—Committee has no jurisdiction under terms of application.

Application of the Ontario Express and Transportation Company for certain express facilities over the Grand Trunk Railway system. Not granted.

Apportionment between the city of Toronto and the county and township of York of the cost of certain protection ordered by the Committee at the crossings by the Canadian Pacific Railway of Dufferin and Bathurst streets in said city. Pending.

Change of angle, as authorized, of the crossing by the Port Arthur and Neebing Electric Street Railway of the Port Arthur, Duluth and Western Railway, in the town of Port Arthur. Change approved.

Interlocking switch at the crossing of the Buctouche & Moncton and Intercolonial Railways. Approved. Trains allowed to pass without stopping.

Reduction of number of tracks of the Canada Atlantic Railway Company crossing Elgin, Metcalfe and O'Connor streets, in the city of Ottawa, to one track. Adjourned to enable the city to submit an alternative scheme, and name the amount of compensation they are prepared to make to the company for the removal of their tracks.

Extension of Royce Avenue, in the city of Toronto, across the Grand Trunk (Northern) Railway. Authorized.

Culvert under Central Vermont Railway and ditch through lands of same.—As to whether the railway company or the municipality should pay cost of enlargement:—Question as to the culvert to be dealt with by the Department of Railways and Canals. As to the ditch, to await further representations from the municipality.

Crossing by Ottawa Electric Street Railway of Canadian Pacific Railway near St. Patrick's Street Bridge, in the city of Ottawa, protection at. Attention of the companies ordered to be called to this matter.

Overhead crossing of the Grand Trunk Railway by Notre Dame Street at St. Henri, in the city of Montreal. For approval of the plan of a proposed new bridge. Not sanctioned.

Substitution of a double draw for a single draw on the Stanstead, Shefford and Chambly Railway Bridge crossing the Richelieu River. Approved.

Introduction of interlocking apparatus at the crossing by the Beauharnois Junction Railway of the Canada Atlantic Railway. Ordered that trains be allowed to pass without stopping, on the usual conditions.

Introduction of interlocking apparatus at the crossing by the Toronto Belt Line Railway of the Canadian Pacific Railway at Lambton, near Toronto. Canadian Pacific trains, &c., authorized to pass without stopping, on the usual conditions.

Crossing at rail level by the Davenport Street Railway of the Grand Trunk Railway on the Davenport Road, in the township of York, and of the Grand Trunk and Canadian Pacific Railways on the St. Claire Avenue, in the town of Toronto Junction. Places of crossing, and mode of protection recommended by Government Chief Engineer approved.

## Department of Railways and Canals.

Introduction of interlocking apparatus at the crossing by the Toronto Belt Line Railway of the Canadian Pacific Railway at Lambton, near Toronto. Engines and trains of the Toronto Belt Line Railway, coming from the south, authorized to pass without stopping, on the usual conditions.

Crossing at rail level by the Yarmouth Street Railway of the Western Counties Railway on Main street, in the town of Yarmouth, N. S. Place of crossing and a certain mode of protection approved.

Branch line of the Erie and Huron Railway to the Government Wharf at Rondeau Harbour. New plans approved, and new order authorizing construction of the branch issued, a previous order having been rescinded.

Overhead crossing by Queen Street and Street Railway of the Don River and the Canadian Pacific and Toronto Belt Line Railways in the city of Toronto—and apportionment of cost. Adjourned.

Protection at crossing at rail level by the Canadian Pacific Railway of Adelaide street, in the City of London. Pending.

Street crossings of the Canadian Pacific Railway, in the village of Mégantic. Pending.

Crossings at rail level by the Westminster and Vancouver Tramway Company's track of the Canadian Pacific Railway on Columbia street, in the city of New Westminster. Discharged.

Interlocking apparatus at crossing of the Canada Southern and London and Port Stanley Branch.—Apportionment of cost of. Previous order varied.

Protection at crossing of the Burlington Channel, near Hamilton, by the Grand Trunk Railway. Pending.

Wonham street crossing of the Grand Trunk Railway, in the town of Ingersoll. Level crossing ordered.

Crossing at rail level by the Grand Trunk Railway of the Canadian Pacific Railway, near Glencoe. Place of crossing and mode of protection approved.

Keele Street North Subway under the Grand Trunk and Canadian Pacific Railways—Application for extension of time for completion of. Pending.

Crossing at rail level by the Ottawa, Arnprior and Parry Sound Railway of the Canadian Pacific Railway on lot 15, in the 2d Con., O. F., township of Nepean. An overhead crossing approved.

Branch line to connect the Atlantic and North-west Railway with the Stanstead, Shefford and Chambly Railway at Iberville, P. Q. Sanctioned.

Davenport Street Railway crossing of the Grand Trunk Railway on the Davenport Road, and of the Grand Trunk and Canadian Pacific Railways on St. Claire Avenue, near Toronto. Application from the Street Railway Company for an amendment of the order issued.

Protection at crossing by the Port Arthur and Neebing Electric Street Railway of the Port Arthur Duluth and Western Railway. Application for amendment of order that the street Railway should pay cost. Judgment reserved.

Running powers by the Fredericton and St. Mary's Railway Bridge Company over the track of the Canada Eastern Railway at Gibson, and junction of the former



company's road with the latter. Running powers granted, and place of junction and mode of protection approved.

Overhead crossing by the Ottawa, Arnprior and Parry Sound Railway of the Canadian Pacific Railway in the city of Ottawa. Approved.

Location of the Thousand Island Railway along certain streets in the town of Gananoque. Approved.

Thousand Islands Railway Bridge across the mouth of the Gananoque River—Application for approval of site and plan of—Approved.

Protection at crossings, at rail level, of certain divisions of the Grand Trunk Railway which intersect each other, where trains were reported to pass without stopping, no interlocking apparatus being provided. Company communicated with, and orders given that trains are to stop at these points, as required by the Statute.

Interlocking apparatus at crossing by the Canada Southern Railway of the Montrose Drawbridge over the Chippawa Creek, Welland Canal. Approved. Trains and engines allowed to pass without stopping.

Branch line of the Canadian Pacific Railway from Orangeville to the Nottawasaga Stone Quarries in the township of Mono, Ont. Sanctioned.

Diversions of highways by the Montreal and Western Railway Company in the parish of St. Faustin, county of Terrebonne, P. Q. Approved

Branch line of the Canadian Pacific (Ontario and Quebec) Railway from the Ayr Station to Goldie's Mills. Sanctioned.

Canada Southern Railway Company's application to be allowed to dispense with packing between wing rails and railway frogs during certain periods of the year. Pending.

Crossing at rail level by the Kingston, Napanee, and Western Railway of the Kingston and Pembroke Railway near Harrowsmith. Postponed at request.

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## CANALS.

The canal systems of the Dominion, under Government control, in connection with lakes and navigable rivers, are as follows:—

1. The River St. Lawrence and lakes.
2. The Richelieu navigation, from the St. Lawrence to Lake Champlain.
3. The River Ottawa.
4. The Rideau navigation, from Ottawa to Kingston.
5. The Trent navigation.
6. St. Peter's Canal, Bras d'Or Lake, Nova Scotia.

The following list shows the total amount charged to capital account, expended by the Government for construction and enlargement of each of the canals of the Dominion; embracing the period prior to Confederation and extending down to the 30th June, 1892:—

## Department of Railways and Canals.

Lachine Canal.....	\$ 9,240,701 30
Beauharnois Canal.....	1,611,690 26
Soulanges Canal (under construction).....	54,235 76
Williamsburg Canals (being enlarged).....	2,568,357 84
Cornwall Canal (being enlarged).....	4,297,038 22
St. Lawrence River and Canals, surveys, &c.....	890,534 97
Murray Canal.....	1,216,631 47
Welland Canal.....	23,754,034 67
Sault Ste. Marie Canal (under construction).....	885,543 20
Ste. Anne Canal.....	1,170,215 63
Carillon and Grenville Canals. ....	4,025,346 00
Culbute Canal.....	379,494 46
Rideau Canal, (including the Perth branch).....	4,560,285 60
Trent Canal.....	1,082,521 40
St. Ours Lock.....	121,537 65
Chambly Canal.....	637,206 76
St. Peter's Canal.....	645,183 35
Total.....	\$57,140,558 54

In addition to the above there has been expended as follows, chargeable to Income:—

Renewals .....	1,740,012 29
Repairs... ..	4,346,042 58
Staff and maintenance.....	5,317,072 55
Making the total expenditure.....	\$68,548,685 96

NOTE.—Details as to the above will be found in Appendix No. 2, p. 2.

The collection of the revenue derivable from the canals of the Dominion, formerly in the hands of the Department of Inland Revenue, was assumed by this Department, under an Order in Council of the 4th of June, 1889, as authorized by the Act 52 Victoria, chapter 19. Details relating to the Canals Revenue will be found in the appendix. "Canals Revenue and Statistics."

### TOTAL EXPENDITURE AND RECEIPTS FOR THE YEAR.

The total expenditure on the several canals for the fiscal year ended 30th June, 1892, was as follows:—

Construction.....	\$1,637,819 40
Repairs.....	239,800 68
Staff and maintenance .....	349,478 51

The total gross receipts for the year amounted to the sum of \$379,423.67, including tolls, \$326,469.83, of which there was refunded \$54,948.43, making the net revenue \$324,475.24. (See appendix 1, p. 1.)

In appendix 1, pages 2 to 13, will be found statements showing the yearly expenditures, and the total cost on each canal, since Confederation.

The following statement shows the amount collected on each canal for Canal Revenue proper, and hydraulic rents, &c., during the Fiscal Year ended 30th June, 1892.

Name of Canal.	Tolls.		Wharfage and Storage.		Fines and Damages.		Other Receipts.		Hydraulic Rents, &c.		Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
Welland .....	193,808	45			594	70		177	69	7,162	40	201,743	24
St. Lawrence .....	65,604	51	4,643	33	161	10	14,644	91	23,837	80	108,891	65	
Chambly .....	19,249	94			13	00		75	30	220	00	19,558	24
Ottawa .....	38,546	95			10	00		8	00	25	00	38,589	95
Rideau .....	5,617	10	131	18	20	00		314	70	749	45	6,832	43
Trent Valley .....	688	84						72	00	90	00	850	84
St. Peters .....	2,317	03						3	28			2,320	31
Murray .....	637	01										637	01
Total .....	326,469	83	4,774	51	798	80	15,295	88	32,084	65		379,423	67
LESS—Refunds of tolls .....												54,948	43
Net Revenue .....												324,475	24

It seems proper here to record, briefly, certain facts relative to the tolls charged for the passage of wheat and other food products through the Welland and the St. Lawrence Canals.

In the year 1882, tolls on the Erie Canal were abolished.

In the year 1884, on urgent representations from shippers and others interested in the grain trade, Orders in Council were passed with a view to meeting this abolition of Erie Canal tolls. They reduced for the then current season, by one half, the tolls for passage through the Welland and the St. Lawrence Canals on wheat and certain other food products shipped for Montreal or other Canadian ports east of Montreal.

In the following year, 1885, tolls were further reduced on such products to 2 cents a ton, and thenceforward, year by year, up to and including 1891, this concession has been made by special Orders in Council.

In the year 1892 the reduction was conditioned by the provision that it should be applicable only to products actually exported.

In August, 1892, the United States adopted a system of tolls on the Sault Ste. Marie Canal, levying 20 cents per ton on all freight carried "to any port in the Dominion of Canada." It may be noted that the Sault Ste. Marie Canal was transferred from the control of the State of Michigan to that of the Federal Government with the distinct proviso that it should be, forever, free from toll, and that such transfer took place subsequently to the Treaty of Washington and the undertaking of the State, conformably thereto, that British subjects should have the use of the Canal on terms of equality with the inhabitants of the United States.

#### RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence, with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, affords a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,260

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statute miles. The distance to Duluth is 2,384 miles. (A table giving the intermediate distances will be found in Appendix 14, p. 148.)

The difference in level between the point on the St. Lawrence near to Three Rivers, where tidal influence ceases, and Lake Superior, is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Erie, are the Lachine, Beauharnois, Cornwall, Farran's Point, Rapide Plat, Gallops and Welland. Their aggregate length is  $70\frac{1}{2}$  miles; total lockage (or height directly overcome by locks) is  $533\frac{1}{4}$  feet; number of locks, 53.

Communications between Lakes Huron and Superior is obtained by means of the Sault Ste. Marie Canal, situated on the United States side of the river.

This canal is a little over a mile in length, with a bottom width of 100 feet, and has one lock, the dimensions being:—length 515 feet, width 80 feet, gate openings 60 feet wide, with 16 feet of water on the sills, and a lift of about 18 feet. By it there is afforded a 16 feet navigation between the two lakes.\*

Steps have been taken by the Dominion Government for the construction of a lock and canal on the Canadian side, a general description of which will be found further on in the present report. (See appendix 12, p. 142).

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\* From the report of the Chief of Engineers, U. S. army, dated the 23rd of September, 1891, for the fiscal year ended the 30th June, 1891, *the last available*, it appears that the construction of the proposed new and larger lock is in progress, taking the site occupied by the two old locks built in 1855, the canal itself being deepened to correspond, so as to give a navigable depth of 20 feet. The dimensions of the new lock will be—length 800 feet between gates, width 100 feet throughout, with 21 feet of water on the sills, with a single lift, approximating 18 feet. The estimated cost of this new lock and work of canal deepening is set down at \$4,738,865. For this work an appropriation of \$250,000 was made by Congress in August, 1886. The total expenditure up to the 30th of June, 1891, was \$587,676.74. On the 1st of July, 1891, there was an unexpected balance of appropriations amounting to \$2,187,335.44. For the fiscal year ending on the 30th June, 1893, an additional sum of \$2,000,000 can, it is stated, be profitably expended, in view of the importance of completing the work at the earliest possible date, the enormous traffic being now dependent on a single lock.

From the same report and its appendices it appears that during the fiscal year ended the 30th of June, 1891, the canal now in operation was closed on the 3rd December, 1890, and opened on the 27th April, 1891: being opened for 221 days; that 9,541 vessels, etc., passed through, carrying 8,338,981 tons of freight and 26,226 passengers, the number of lockages being 4,614. The cost of operation and care of the canal during the fiscal year 1890-91 was \$45,417.66, which includes in repairs \$13,046.29.

A special report deals with the operation of the canal during the *season of navigation* of the calendar year 1890. From this it appears that during the season the canal was opened for 228 days, that 10,557 vessels passed through in 4,970 lockages, carrying 9,041,213 tons of freight and 24,856 passengers, the total value of freight being \$102,214,948.70.

The total number of registered craft using the canal during the season was 598, of which 369 were steam and 229 sailing vessels. The largest single cargo carried by a steamer was 2,946 tons, and the largest by any vessel was 3,021 tons, carried by a barge. There were 90 steamers carrying 2,000 tons and upwards, and 21 sail vessels carrying 2,000 tons and upwards.

The total amount of freight paid was \$9,472,214.90; the total mile-tons (the number of miles run multiplied by the freight tonnage) was 7,207,299,415; the cost per mile per ton was 1.3 mills. The average distance freight was carried was 797.2 miles. The principal items of freight were as follows:—Wheat, 16,217,370 bushels; corn, 1,870,406 bushels; flour, 3,239,104 barrels; coal, 2,176,925 tons; iron ore, 4,774,768 tons (the ton is the net ton of 2,000 lbs.) The report states that the average cost of transportation per ton per mile, including terminal charges, was, for the year 1890, 1.3 mills, as against 1.5 mills in the years 1889 and 1888, and as against 2.3 mills in the year 1887.

Compared with the previous season of 1889, there was an increase in all classes of freight except wheat, grain other than wheat, pig iron, and silver ore and bullion, in which items there was a slight decrease.

The total valuation of all the vessels using the canal in the season of 1890 is set down at \$29,635,500, against a total valuation in 1887 of \$19,773,950.

In connection with the enlargement of this canal there has been undertaken, and is in progress, the work of improving the southern channel of the river below the falls, known as the Hay Lake channel in American waters. It is proposed to make a channel 300 feet wide, and of a navigable depth of 20 feet. The improved route will leave the present navigable channel of the river at a point, Sugar Island rapids, about  $2\frac{1}{2}$  miles below the canal; will pass through these into Hay Lake; then by way of Middle Neebish: rejoining the present navigable channel at the foot of Sugar Island; saving a distance of 11 miles (16 miles in place of 27), and giving a route which can be so marked by lights as to be navigable at night, an advantage which is not to be afforded by the present channel, except by the use of many lights. The estimated cost of the work is set down in the report of the U. S. engineers, quoted, at \$2,659,115. The total expenditure up to the 30th June, 1891, amounted to \$828,823.08.

The following is a brief summary of the chief points in connection with the scheme of canal enlargement on the through line of navigation between tide water and Lake Superior now being carried on.

The general enlargement scheme comprises locks of the following dimensions :— Length, 270 feet between the gates ; width, 45 feet ; with a navigable depth of 14 feet of water over the sills.

*Lachine Canal.*—On the Lachine Canal the foundations of the permanent structures were put down to the full depth for vessels drawing 14 feet, but for about  $6\frac{1}{2}$  miles the canal itself has yet to be lowered 2 feet to obtain this depth. The bottom is chiefly rock.

*Lake St. Louis.*—For about four miles above the head of the Lachine Canal Lake St. Louis is obstructed by numerous shoals, consisting principally of hard material, the removal of which is necessary to form a channel suitable to the enlarged 14 feet navigation.

*Soulanges Canal.*—Between Lakes St. Louis and St. Francis there is a rise of about 83 feet in the river, which is at present surmounted by the Beauharnois Canal, on the south shore of the St. Lawrence. The enlarged scale canal (the Soulanges) is being constructed on the north shore of the river.

*Lake St. Francis.*—In Lake St. Francis the obstructions to a 14 feet navigation are of minor importance, and are found chiefly near its upper or western end, where there are some shoals to be removed.

*Cornwall Canal.*—The works of the Cornwall Canal are all under contract. The two lower locks, &c., were completed in 1882. The four other locks, weirs, &c., are now practically completed. The excavation of the canal proper is in progress.

*Farran's Point Canal.*—Nothing has been done towards the enlargement of the canal at Farran's Point, but the necessary surveys have been completed.

*Rapide Plat Canal.*—At the Rapide Plat the guard lock is finished and in use ; the works remaining to be done to complete the enlargement are in progress.

Between the Cornwall Canal and the Galops Canal the river reaches require to be deepened or improved at certain points.

*Galops Canal.*—The Galops Canal is  $7\frac{3}{8}$  miles in length ; it is composed of two, originally separate, canals, the Iroquois 3 miles long, and the Galops  $2\frac{1}{4}$  miles long, which were afterwards united, it being found that there was not sufficient depth of water in the Iroquois Canal without the supply from the head water so afforded.

The rapids thereby avoided are the Iroquois, the Cardinal and the Galops. Of these, the Iroquois and the Cardinal are very strong currents rather than rapids.

This canal is being enlarged for a distance of about 4,000 feet from the upper entrance to a point below the Galops Rapids, where a new lock will give access from the river. With the exception of preliminary surveys, nothing has yet been done towards the enlargement of the remainder of the canal.

From the upper entrance of this canal to the Prescott reach, a distance of about three miles, the present circuitous and, in parts, shallow channel lies across what is known as "Flat Rock" shoal, and runs through American waters. The improvement and utilization of the north or Canadian channel of the river is a part of the general scheme of enlargement.

*Welland Canal.*—The enlargement of this canal is completed.

*Sault Ste. Marie Canal.*—Work is in progress on this canal.

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## LACHINE CANAL.

	Old Line.	New Line.
Length of canal.....	8½ statute miles.	8½ statute miles.
Number of locks.....	5	5
Dimensions of lock.....	200 feet by 45 feet.	270 feet by 45 feet.
Total rise, or lockage..	45 "	45 "
Depth of water { at two locks..	16 "	18 "
{ at three locks 9 "		14 "
Mean width of new canal.....		150 "

The depth of the canal between locks is at present adapted to vessels of only 12 feet draught.

The canal now consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two entrances at each end.

This channel extends from the city of Montreal to the town of Lachine, overcoming the St. Louis Rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle-Isle.

The scheme for the enlargement of this, in common with the other canals of the St. Lawrence, contemplated the affording a navigable depth of 15 feet throughout. The improvement immediately in view, however, was only intended to furnish a navigable depth of 12 feet in the canal proper, and accordingly, on the following reaches, namely, between Lachine and Côte St. Paul, Côte St. Paul and St. Gabriel, and between St. Gabriel and Wellington Basin, the channel has been adapted to navigation by vessels of 12 feet draught only. All permanent works on the canal, such as locks, bridges, side walls and culverts, have been built to afford a navigable depth of 14 feet. Through Lake St. Louis down to the Lachine Canal—a distance of about 15 miles—the existing channel, which is wide and deep, would be available for about 11 miles. Over the lower four miles, however, the channel will require to be deepened and widened at a number of places. Some experimental dredging has been carried on in order to determine the nature of the material to be removed, and the best way of dealing with it.

The canal was closed on the 30th of November, 1891, and opened on the 1st of May, 1892.

Two accidents to the works occurred during the year. On the 20th of October, 1891, the barge "Maggie" ran into Brewster's Bridge, displacing it and causing breakages. On the 30th of the same month the lower gates of old lock No. 1, were carried away.

The navigation of the canal was not affected by either accident.

The water level was satisfactorily maintained throughout the year.

The report of the Superintending Engineer gives details of the repairs and new works executed, and shows generally the condition of the canal. (App.5, p. 101.)

The expenditure on this canal during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$ 87,852 35
Renewals, chargeable to income.....	27,480 80
Repairs .....	67,499 62
Staff and maintenance.....	52,729 37

Total..... \$235,561 14

## BEAUHARNOIS CANAL.

Length of canal.....	11½ statute miles.
Number of locks.....	9
Dimensions of locks.....	200 feet by 45 feet.
Total rise or lockage.....	82½ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	80 "
Breadth of canal at water surface.....	120 "

This canal commences on the south side of the St. Lawrence, 15¼ miles from the head of the Lachine Canal. It connects Lakes St. Louis and St. Francis, and passes the three rapids known, respectively, as the Cascades, the Cedars and the Coteau.

The canal was closed on the 1st of December, 1891, and was reopened for traffic on the 30th of April, 1892.

No accident or interruption to navigation occurred during the year.

Details of repairs will be found in Appendix 5, p. 101.

The expenditure on this canal for the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$ Nil.
Renewals, chargeable to income.....	1,696 23
Repairs.....	14,999 80
Staff and maintenance.....	20,050 01
Total..	\$ 36,746 04

## CORNWALL CANAL.

Length of canal.....	11½ statute miles.
Number of locks..	6.
Dimensions of locks (three).....	200 feet by 55 feet.
“ of two lower entrance locks and the guard lock.....	270 by 45.
Total rise or lockage. ....	48 feet.
Depth of water on sills.....	9 "
“ at the two lower entrance locks	14 "
Breadth of canal at bottom (except at three culverts).....*	100 "
Breadth of canal at water surface.....	150 "

From the head of the Beauharnois to the foot of the Cornwall Canal there is a stretch through Lake St. Francis of 32½ miles, which is navigable for vessels of the size at present in use.

The Cornwall Canal extends past the Long Sault Rapids.

This canal was closed on the 5th of December, 1891, and reopened on the 1st of May, 1892.

\*NOTE.—Though the bottom breadth is, as stated, 100 feet, it must be observed that this is the bottom breadth of the old, or 9 feet navigation canal.

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All necessary repairs were carried out. No accident occurred during the fiscal year affecting navigation, but on the 3rd of August, 1892, the barge "Toronto," in tow, carried away the gates of lock No. 19, causing a delay of 28 hours.

Navigation was satisfactorily maintained notwithstanding a low stage of water during the early part of the season. (See Appendix 6, page 115.)

### NEW WORKS.

The two locks at the new lower entrance (taking the place of three on the old line) were completed in 1882. Their dimensions are those of the general enlargement scheme, namely: length, 270 feet; breadth, 45 feet; depth of water, 14 feet. The basin between these two locks is 825 feet long. The guard-lock also is completed and in use.

The remaining three locks are all practically completed. The work of deepening and enlarging the prism of the canal is approaching completion.

The works in progress are described in detail in the appendices to the present report. (See Appendix 6, page 116.)

The expenditure on this canal for the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$398,555 25
Renewals, chargeable to income.....	2,345 26
Repairs.....	9,864 36
Staff and maintenance.....	15,596 66
Total.....	<u>\$426,361 53</u>

### WILLIAMSBURGH CANALS.

The Farran's Point, Rapide Plat, and Galops Canals are collectively known as the Williamsburgh Canals.

These canals were closed on the 12th of December, 1891, and reopened on the 20th of April, 1892.

No accidents of importance are reported, and navigation is stated to have been fairly well maintained.

Slight breaks and leakages occurred in January and February last in the embankment on the portion known as the Junction. These were repaired and the embankment was strengthened.

Tables showing the highest and lowest water on the lock sills of these canals from the year 1849 will be found in the appendices (See Appendix 6, page 126.)

The expenditure on these canals during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$376,545 32
Renewals, chargeable to income.....	797 83
Repairs.....	8,551 32
Staff and maintenance.....	9,458 33
Total.....	<u>\$395,352 80</u>



## FARRAN'S POINT CANAL.

Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	1 "
Dimensions of lock.....	200 feet by 45 feet.
Total rise, or lockage.....	4 feet.
Depth of water on sills at ordinary water level..	9 "
Breadth of canal at bottom.....	50 "
Breadth of canal on water surface.....	90 "

From the head of the Cornwall Canal to the foot of Farran's Point Canal the distance on the River St. Lawrence is 5 miles. The latter canal enables vessels ascending the river to avoid, if necessary, the Farran's Point Rapid. Descending vessels run the rapid with ease and safety.

The enlargement of this canal has not been commenced, but surveys have been made and plans prepared. (See Appendix 6, page 119.)

## RAPIDE PLAT CANAL.

Length of canal.....	4 miles.
Number of locks.....	2
Dimensions of locks.....	200 feet by 45 feet.
Total rise, or lockage.....	11 $\frac{1}{2}$ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	50 "
Breadth of canal at surface of water.....	90 "

From the head of Farran's Point Canal to the foot of Rapide Plat Canal there is a navigable stretch of 10 $\frac{1}{2}$  miles. This canal was formed to enable vessels ascending the river to pass the rapid at that place. Descending vessels run the rapid safely.

## NEW WORKS.

The enlargement of this canal in conformity with the proportions of the general scheme is in progress. The works consist of the enlargement of the channel way above, and for some distance below, the present guard-lock at the head of the canal, and the construction of a new guard-lock and a supply weir in connection with the old lock. The bottom of the channel, for a distance of about 1,000 feet below, and out into deep water, above the lock, about 700 feet, has been excavated to an extent sufficient to afford a navigable depth of 14 feet. The new lock was completed in 1888, and is in operation; the other works in that connection are also finished. Contracts for the enlargement of the remaining portion of the canal, including the lock at the lower outlet, were entered into in the month of January, 1891. The works are in progress. (See Appendix 6, page 119.)

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### GALOPS CANAL.

Length of canal .....	7 $\frac{5}{8}$ miles.
Number of locks.....	3
Dimensions of locks.....	200 feet by 45 feet.
Total rise, or lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	9 “
Breadth of canal at bottom.....	50 “
Breadth of canal at surface of water.....	90 “

From the head of Rapide Plat Canal to Iroquois, at the foot of the Galops Canal, the St. Lawrence is navigable for 4 $\frac{1}{2}$  miles. This canal enables vessels to overcome the rapids at Pointe aux Iroquois, Pointe Cardinal and the Galops.

### NEW WORKS.

The works for the widening and deepening of the upper entrance, and for the construction of a lift-lock from the river below the Galops Rapids, about 4,000 feet from the upper entrance, together with a guard-lock and supply weir to the canal adjacent to that point were placed under contract in November, 1888. The guard-lock and lift-lock are both completed in readiness to receive their gates, and the other works are in progress.

It is proposed that, by the use of this new lift-lock, vessels qualified to stem the current of the Iroquois and Cardinal Rapids should dispense with about 7 miles of canal passage, traversing only the 4,000 feet between the lock and the upper entrance in order to pass the Galops Rapids. The late Chief Engineer, who designed this lock, did so with the idea of affording a route which should relieve much of the traffic of the canal.

No steps have, so far, been taken towards the enlargement of the 7 miles of the canal east of this lock, beyond the preliminary surveys.

In the river opposite the canal the formation of a new channel through the Galops Rapids was commenced in 1880 and was reported as completed in 1888. The channel so improved is about 3,300 feet in length and 200 feet wide. The intention of the Department was to afford a safe passage at a low stage of the river water (9 feet on the mitre sills of the lock at the upper entrance of the old Galops Canal) for vessels drawing 14 feet. It was considered advisable to allow a clear margin of 3 feet below the keel of a vessel of this draught, the depth to be, consequently, 17 feet. The engineer in charge of this work has reported the depth of this channel to be sufficient for the passage of vessels drawing 14 feet at the low stage of water (9 feet on the sills of the upper entrance lock).

On further examination it was found that, at certain points, the depth is less than 17 feet and during the past season a very close examination and survey has been made under the supervision of Mr. Kennedy, the Chief Engineer to the Montreal Harbour Commissioners, as an independent authority, which, it is expected will afford most accurate information as to the present width and depth of the channel. Mr. Kennedy's report has not yet been made.

The new channel is navigated by many of the large propellers and other vessels drawing over 9 feet of water.

To fully carry out the design, some minor work will be necessary in order to obviate certain cross currents, the action of which required to be ascertained by actual experience after the excavation of the channel.

During the past season the course of the channel has been indicated by buoys.

During the past season a location survey has been completed of what is known as the "north channel," from the head of the Galops canal to the head of Spencer's Island, a channel which, if improved, would afford a course shorter by  $\frac{2}{3}$  of a mile than the southern channel in American waters now in use. (See Appendix 6, page 121).

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### MURRAY CANAL.

Length between eastern and western pier heads.....	5 $\frac{1}{2}$ miles.
Breadth at bottom.....	80 feet.
Depth below lowest known lake level.....	11 "
No locks.	

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinté and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

The works on this canal comprise a cut through the isthmus 4 $\frac{1}{2}$  miles long, and improvements in the way of dredging and other work to the entrance channels at either end, covering a total distance of 9 $\frac{1}{2}$  miles in all. There are no locks. The canal is crossed by four swing bridges.

Its western terminus is near the village of Brighton, in the harbour of Presqu'île, from which point to Port Dalhousie, the entrance of the Welland Canal, the distance is less than 120 miles.

The canal is 80 feet wide at the bottom, the depth being, at low water, 12 $\frac{1}{2}$  feet.

The entrance from the lake to Presqu'île harbour has a width varying from 1,000 feet outside the main light to 200 feet at the entrance of the channel. The maximum depth at the entrance is 16 feet at low water.

The canal was closed on the 16th of December, 1891, and reopened on the 6th of April, 1892.

The navigation of this canal was maintained satisfactorily and without accident, notwithstanding the continued lowness of the water level in Lake Ontario.

Advantage of this canal is taken by a large number of vessels. (App. 6, p. 123.)

The expenditure on this canal during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$5,964 22
Renewals, chargeable to income.....	Nil
Repairs.....	3,505 15
Staff and maintenance.....	5,803 48

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Total..... \$15,272 85

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## WELLAND CANAL.

MAIN LINE, FROM PORT DALHOUSIE, LAKE ONTARIO, TO PORT COLBORNE,  
LAKE ERIE.

	Old Line.	Enlarged or New Line.
Length of canal.....	27½ miles.	26¾ miles.
Pairs of guard-gates (formerly 3).....		2
Number of locks { lift.....	26	} lift 25 guard 1
{ guard.....	1	
Dimensions.....	1 lock 200 x 45 1 " 200 x 45 1 (tidal) 230 x 45 24 locks 150 x 45	} 270 feet x 45 feet.
Total rise, or lockage.....	326¾ feet.	326¾ feet.
Depth of water on sills.....	10¼ "	14 "

### WELLAND RIVER BRANCHES.

Length of Canal—Port Robinson Cut to River Welland.....	2,622 feet.
“ From the canal at Welland to the river, <i>via</i> lock at aqueduct .....	300 "
“ Chippawa Cut to River Niagara.....	1,020 "
Number of locks—One at aqueduct and one at Port Robinson.....	2
Dimensions of locks.....	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland.....	10 feet.
Depth of water on sills.....	9 " 10 inches.

### GRAND RIVER FEEDER.

Length of canal.....	21 miles.
Number of locks.....	2
Dimensions of locks.....	{ 1 of 150 by 26½ feet. 1 of 200 by 45 "
Total rise, or lockage.....	7 to 8 feet.
Depth of water on sills.....	9 feet.

### PORT MAITLAND BRANCH.

Length of canal.....	1¾ miles.
Number of locks.....	1
Dimensions of locks.....	185 by 45 feet.
Total rise or lockage.....	7½ feet.
Depth of water on sills.....	11 "

The Welland Canal has two entrances from Lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburgh, 11½ miles, there are two distinct lines of canals in operation, the old line and the enlarged or new line.

From Allanburgh to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

The canal was opened in 1883 for vessels drawing 12 feet of water, and in May, 1887, for vessels drawing 14 feet.

The canal was closed to navigation on the 17th of December, 1891, and reopened on the 19th of April, 1892.

The operations of the year were conducted without any interruption to traffic of moment.

Tables will be found on page 136 showing the highest and lowest depth of water at the new entrance locks at Port Dalhousie and at Port Colborne, for each month throughout the past fiscal year.

The intermediate months between August, 1891, and May, 1892, show a continuance of the low water of the previous year.

Details as to repairs executed will be found in the appendix. (See Appendix 9, p. 134.)

The expenditure on this canal during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$29,541 21
Renewals, chargeable to income.....	9,008 80
Repairs.....	73,771 87
Staff and maintenance.....	104,673 73
Total.....	<u>\$216,995 61</u>

From the head of the Welland Canal there is a deep water navigation through Lake Erie, the Detroit River, Lake St. Clair, the St. Clair River, Lake Huron and the River St. Mary to within a short distance of the Sault Canal, a distance of about 394 miles. From the Sault the distance, through Lake Superior to Port Arthur, is 266 miles, and to Duluth 390 miles.

#### SAULT STE. MARIE CANAL.

This canal is being constructed through St. Mary's Island, on the north side of the rapids of the River St. Mary, and, with that river, will give communication between Lakes Huron and Superior.

At ordinary stages of the river water there is a difference of 18 feet in the levels of the water above and below this island. The length of the canal across the island is 3,500 feet. A considerable amount of excavation is required to form channels of approach both at the upper and at the lower entrances. The total length of this canal and its approaches will be about 18,100 feet.

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For contract purposes, the work was divided into three sections, and contracts were entered into as follows:—For the lower entrance, on the 30th of January, 1889; for the upper entrance, on the 26th March, 1889, and for the canal and lift-lock on the 20th of November, 1888.

The scheme, as covered by these contracts, contemplated a lock chamber 600 feet long and 85 feet wide, with a depth of water on the sills of  $16\frac{1}{4}$  feet at the lowest known water level; the width of the gate entrances to the lock to be 60 feet. This lock was designed to pass two vessels at one lockage.

This scheme was subsequently modified, and the lock is being constructed on the following dimensions adopted by an Order in Council of the 1st of April, 1892:—Length of chamber, 900 feet; width of chamber, 60 feet; gate width, 60 feet; depth of water on the sills, 19 feet at the lowest recorded water level. This depth, though calculated on a different basis (extreme low instead of “mean” water level), is intended to be the equivalent of the depth of the new American lock now under construction.

By the scheme, as so modified, accommodation will be afforded to three vessels lying in the lock one behind the other, one of the lake type, 320 feet long, and two of the Welland Canal type, 255 feet long, with ready means of entrance and exit on a course through the gates and lock straight with the line of the canal.

Under date the 8th of November, 1892, an agreement has been made whereby the work is to be so expedited as to enable the canal to be completed in readiness for use by the 1st of July, 1894.

The canal proper will have a width at low water level of 152 feet, and a bottom width of 145 feet. The depth will be made suitable to navigation at mean water level by vessels drawing 20 feet.

Details of the works will be found in the appendices. (See Appendix 12, page 142.)\*

The expenditure on this work during the past fiscal year amounted to \$341,474.31, making the total expenditure up to the 30th of June, 1892, \$886,492.55. Since that date and up to the 31st of December, 1892, there has been expended the further sum of \$296,274.88, making the total expenditure of \$1,182,767.43.

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### MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine Canal, the navigation section of the lower River Ottawa, and the Ottawa River Canals, to the city of Ottawa; thence by the River Rideau and the Rideau Canal to Kingston, on Lake Ontario—a total distance of 245½ miles.

After leaving the Lachine Canal the works constructed to overcome difficulties of navigation are:—

The St. Anne's Lock;	} Ottawa River canals.
Carillon Canal;	
Grenville Canal;	
Rideau Canal;	

\* For information respecting the new American canal, see page 74 of the present Report.

The total lockage (not including that of the Lachine Canal) is 509 feet—(345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Intermediate Distance.	Total Distance from Montreal.
	Miles.	Miles.
The Lachine Canal.....	8½	
From Lachine to Ste. Anne's Lock.....	15	23½
Ste. Anne's Lock and piers.....	⅓	23⅝
From Ste. Anne's Lock to Carillon Canal.....	27	50⅝
The Carillon Canal.....	⅜	51⅜
From Carillon Canal to Grenville Canal.....	6¼	57⅝
The Grenville Canal.....	⅜	63⅜
From the Grenville Canal to entrance Rideau navigation.....	56	119⅜
Rideau navigation, ending at Kingston.....	126¼	245⅝

#### STE. ANNE'S LOCK.

	Old Lock.	New Lock
Length of canal.....	⅓ mile.	⅓ mile.
Number of locks.....	1 “	1 “
Dimensions of lock.....	190 x 45 feet.	200 x 45 feet.
Total rise, or lockage.....	3 feet.	3 feet.
Depth of water on sills.....	6 “	9 “

This work, with guide piers above and below, surmounts the Ste. Anne's Rapids between Ile Perrot and the head of the island of Montreal, at the outlet of that portion of the Ottawa River which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

This lock was closed to navigation on the 26th of November, 1891, and reopened on the 27th of April, 1892.

Navigation has been conducted without interruption during the year.

The work of strengthening the old Grand Trunk Railway pier at this point has been completed.

Both the old the new locks are available. (See App. 7, p. 127.)

The expenditure on this canal during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$ Nil.
Renewals, chargeable to income.....	25,471 61
Repairs.....	1,666 21
Staff and maintenance.....	2,571 28

Total.....\$ 29,709 10

# Department of Railways and Canals.

## THE CARILLON CANAL.

Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	2
Dimensions of locks.....	200 by 45 feet.
Total rise, or lockage.....	16 feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	110 "

This canal overcomes the Carillon Rapids.

From Ste. Anne's Lock to the foot of the Carillon Canal there is a navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

The canal was closed on the 28th of November, 1891, and reopened on the 30th of April, 1892. (See App. 7, p. 128.)

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river to be used for navigation above.

During the past year steps have been taken to repair and strengthen this important work, for which an appropriation of \$15,000 was made by Parliament last session.

From the head of the Carillon Canal to the foot of the Grenville Canal there is a navigable stretch of  $5\frac{1}{2}$  miles.

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## GRENVILLE CANAL.

Length of canal.....	$5\frac{1}{2}$ miles.
Number of locks.....	5
Dimensions of locks.....	200 by 45 feet.
Total rise, or lockage.....	$43\frac{3}{4}$ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	40 to 50 feet.
Breadth of canal at surface of water.....	50 to 80 "

This canal, by which the Long Sault Rapids are avoided, is about 56 miles below the city of Ottawa.

The canal was closed on the 28th of November, 1891, and reopened on the 30th of April, 1892. (See Appendix 7, page 128.)

The expenditure on these two canals, the Carillon and the Grenville, during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$34,585 64
Renewals, chargeable to income.....	15,036 48
Repairs.....	8,620 15
Staff and maintenance.....	17,458 69

Total..... \$75,700 96



## UPPER OTTAWA RIVER.

## CULBUTE LOCKS AND DAMS.

Number of locks.....	2
Dimensions of locks.....	200 by 45 feet.
Total rise, or lockage.....	18 to 20 "
Depth of water on sills. ....	5 "
Aggregate length of dams.....	625 "

From the Grenville Canal to the city of Ottawa, a distance of about 56 miles, the river is navigable. Beyond the city, for a distance of 107 miles, to L'Islet or Culbute, continuous navigation is rendered impracticable by the undermentioned rapids:—

The Chaudière, the DesChênes, the Chats, the Chenaux, the Portage du Fort and the Grand Calumet.

The Culbute works, situated at L'Islet, surmount the Culbute and L'Islet Rapids on the north channel of the Ottawa.

These works comprise two locks and three continuous dams, all built of wood. The dams reduce the rapids to smooth water, enabling the river to be navigated from the head of the locks to Des Joachims, a distance of 37 miles.

There is a navigation route of 80 miles, with a minimum depth of 7 feet at extreme low water, between Des Joachims and Bryson; making a total above and below Culbute of 117 miles.

In view of the fact that the locks on this canal were built of wood, and are much decayed, and that in order to make these works permanently effective considerable cost would be entailed, while, on the other hand, the traffic is of but insignificant extent, the presence of railway facilities having greatly lessened the anticipated usefulness of the work, it has been decided to abandon the idea of maintaining the water at an abnormal height, and an Order in Council was passed on the 24th October, 1889, to the effect that the river should be allowed to resume its natural level, one which, save at special seasons, admits of navigation. The dams have not yet been removed. (See Appendix 7, page 128.)

The expenditure on this canal during the fiscal year was as follows:—

Construction, chargeable to capital .....	Nil.
Renewals, chargeable to income .....	\$1,546 25
Repairs .....	Nil.
Staff and maintenance.....	736 00
• Total.....	<u>\$2,282 25</u>

Tables showing the depth of water at the several locks on the River Ottawa will be found in Appendix 7, page 129.

# Department of Railways and Canals.

## RIDEAU NAVIGATION.

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigable waters.....	126½ miles.
Number of locks going from Ottawa to Kingston	{ 35 ascending. 14 descending.
Total lockage..... 446½	{ 282½ rise and 164 fall. } at high water.
Dimensions of locks.....	134 by 33 feet.
Depth of water on sills, 5 feet ; navigable depth through the several reaches.....	4½ feet.
Breadth of canal reaches at bottom.....	{ 60 " in earth. 54 " in rock.
Breadth at surface of water.....	80 " in earth.

### *Perth Branch.*

Length of canal.....	6 miles.
Number of locks.....	2 "
Dimensions of locks.....	134 feet by 32 feet.
Total rise or lockage.....	26 "
Depth of water on sills.....	5 " 6 inches.
Length of dam.....	200 "
Breadth of canal at bottom.....	40 "
Breadth of canal at surface of water.....	{ 40 " in rock. 64 " in clay.

The Perth branch of the Rideau Canal affords communication between Beveridge's Bay, on Lake Rideau, and the town of Perth.

By an Order in Council dated the 27th of September, 1890, it was declared to be a part of the Rideau Canal.

The summit level of this system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply :—

From the summit, the route towards Ottawa follows the River Rideau, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz :—

1. The summit level, supplied by the Wolfe Lake system ;
2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau ;
3. The south-west descending level to Kingston, supplied by the Mud Lake system, formerly known as the Devil Lake system, discharging into Lake Opinicon.

Lake Opinicon receives the waters of Buck Lake and Rock Lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow into Cranberry Lake, which, discharging through Round Tail outlet, forms the River Cataraqui. This river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

The navigation stopped at Ottawa on the 28th, and at Kingston Mills on the 30th of November, 1891, and recommenced at Ottawa on the 2nd of May, and at Kingston Mills on the 1st of May, 1892.

The full depth of water required for navigation was maintained throughout the season of navigation.

There was no interruption to navigation.

Details of repairs and other works will be found in the appendices. (See Appendix 10, p. 137.)

The expenditure on this canal for the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$29,771 65
Renewals, chargeable to income.....	31,363 23
Repairs .....	21,507 16
Staff and maintenance.....	35,500 82
Total.....	\$118,142 86

**RICHELIEU AND LAKE CHAMPLAIN.**

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through the St. Ours Lock to the basin of Chambly, thence by the Chambly Canal to St. Johns and the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain, the Champlain Canal is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York, the distance is 330 miles.

The following table shows the distance between Sorel and New York:—

Sections of Navigation.	Intermediate Distances in Miles.	Total Distances.
Sorel to St. Ours Lock.....	14	14
St. Ours Lock to Chambly Canal.....	32	46
Chambly Canal.....	12	58
Chambly Canal to Boundary line.....	23	81
Boundary line to Champlain Canal.....	111	192
Champlain Canal to junction with Erie Canal.....	66	258
Erie Canal, from junction to Albany.....	7	265
Albany to New York.....	146	411

**ST. OURS LOCK AND DAM.**

Length.....	½ mile.
Number of locks.....	1
Dimensions of lock.....	200 feet by 45 feet.
Total rise, or lockage. ....	5 “
Depth of water on sills.....	7 “ at low water.
Length of dam in eastern channel.....	300 “
“ “ western channel.....	690 “

## Department of Railways and Canals.

At St. Ours, fourteen miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours Lock is the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours Lock and Chambly Basin, a distance of thirty-two miles.

Navigation closed on the 30th of November, 1891, and reopened on the 11th of April, 1892.

The operations of the season were conducted without either accident or delay. (See Appendix 5, p. 104.)

The expenditure on this lock during the past fiscal year was as follows:—

Construction, chargeable to capital:.....	\$ Nil.
Renewals, chargeable to income.....	3,585 34
Repairs .....	1,944 33
Staff and maintenance.....	2,168 44
	\$ 7,698 11

### CHAMBLY CANAL.

Length of canal.....	12 miles.
Number of locks.....	9

Dimensions of locks:—

Guard Lock, No. 1, at St. Johns.....	122 feet	}	From 22½ to 24 feet wide.
Lift " 2.....	124 "		
" " 3, 4, 5, 6.....	118 "		
" " 7, 8, 9 combined.....	125 "		
Total rise, or lockage.....	74 "		
Depth of water on sills.....	7 "		
Breadth of canal at bottom.....	36 "		
" surface of water.....	60 "		

This canal succeeds the 32 miles of navigable water between St. Ours Lock and Chambly Basin. The canal overcomes the rapids between Chambly and St. Johns.

The canal was closed to navigation on the 30th of November, 1891, and was reopened on the 2nd of May, 1892,

A delay of about half a day occurred on the 2nd of May, being due to the necessity for stopping two small leaks. With this exception there were no accidents, and navigation was uninterrupted.

A description of the several works of repairs and improvement executed during the year will be found in the appendices. (See Appendix 5, p. 102.)

These include the continuance of the work of reconstructing certain locks and the further installation of electric light appliances.

The expenditure on this canal during the past fiscal year was as follows:—

Construction, chargeable to capital.....	\$ Nil.
Renewals, chargeable to income.....	38,353 99
Repairs .....	12,976 48
Staff and maintenance.....	19,665 22
	Total.....\$ 70,995 69

## TRENT RIVER NAVIGATION.

The term "Trent River Navigation" is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course in contemplation was as follows :—

Through the River Trent, Rice Lake, the River Otonabee and Lakes Clear, Buckhorn, Chemong; Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian Bay, Lake Huron, the total distance being about 235 miles.

The execution of this scheme, commenced in 1837, was subsequently deferred. By certain works, however, below specified, sections of these waters were made practicable for navigation and for the passage of timber. A branch of the main route, extending from Sturgeon Lake south, affords communication with the town of Lindsay; and through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches :—

	Navigable Miles.	Unnavigable Miles.
From Trenton, Bay of Quinté, to Nine Miles Rapids .		9
“ Nine Mile Rapids to Percy Landing.....	19½	
“ Percy Landing to Heeley's Fall dam.....		14½
“ Heeley's Fall dam to Peterboro'.....	51½	
“ Peterboro' to Lakefield.....		9½
“ Lakefield to a point across Balsam Lake.....	61	
	132½	32½
Total distance, Bay of Quinté to Balsam Lake. ....		165
From Sturgeon Point on Sturgeon Lake, 48½ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog.....		27½

The following is a list of the works :—

## MAIN LINE FROM TRENTON TO BALSAM LAKE.

*Chisholm's Rapids.*

The works here consist of a canal and lock, a dam and slide	Distance from Trenton in miles. 15½
---	---

*Percy Landing.*

A retaining boom for saw logs.—Controlled by Dept. of Public Works.....	28½
--	-----

## Department of Railways and Canals.

### *Campbellford.*

Guide booms.—Controlled by Dept. of Public Works..... 34 $\frac{3}{4}$

### *Middle Falls.*

The works consists of 2 dams and slide.—Controlled by Dept. of Public Works ..... 37 $\frac{3}{4}$

### *Crow Bay.*

A retaining boom.—Controlled by Dept. of Public Works... 38

### *Heely's Falls.*

A dam and slide.—Controlled by Dept. of Public Works.... 42 $\frac{3}{4}$

### *Crook's Rapids, Hastings.*

The works consist of 1 lock, 1 dam and slide for timber.... 56 $\frac{1}{2}$

### *Whitlas' Rapids.*

The works, situated below Peterboro,' consist of a lock, dam and canal..... 92 $\frac{7}{8}$

### *Peterboro'.*

The works consist of 3 piers and 1 boom..... 94

### *Lakefield.*

The works consist of a dam and wharf.. ..... 103 $\frac{1}{2}$

### *Katchawannoe Lake.*

A boom, 4 miles in length, separating navigable and timber channels—(under control Dept. of Public Works).

### *Young's Point.*

One lock (a Provincial Government work) and dam..... 108 $\frac{1}{2}$

### *Burleigh.*

Timber slides, 3 dams, 2 locks (new)..... 118

### *Lovesick Rapids.*

One lock and 4 dams..... 119 $\frac{1}{2}$

### *Buckhorn Rapids.*

There is a dam at this point, which is important as keeping up the level of the water of the lake west of it, as far as Bobcaygeon, including Lakes Pigeon, Buckhorn, (Ball) and Chemong, 1 lock, 1 slide..... 125

### *Bobcaygeon.*

There are 2 dams here, with canal, lock and slide. These dams retain the waters of the reach as far as Fenelon Falls and Lindsay lock..... 140 $\frac{3}{4}$

### *Fenelon Falls.*

A large dam, slide and booms, 2 combined locks (new)..... 154 $\frac{3}{4}$

*Rosedale.*

A lock, maintained by the Ontario Government, giving entrance from Cameron's Lake to Balsam Lake..... 162½

BRANCH FROM STURGEON LAKE TO LAKE SCUGOG.

*Lindsay.*

One lock, rebuilt by the Government of the province of Ontario in 1879. Its dimensions are 134 x 33 feet, with 5 feet of water on the sills..... 161½

The navigation is, by this work, extended to Port Perry, Lake Scugog ..... 190

The new works completed for the improvement of the Trent Valley navigation are at the following places:—Canals, with locks and bridges at Burleigh Rapids, Buckhorn Rapids and Fenelon Falls; also dams at Lakefield and Young's Point. By these works there is afforded communication between Lakefield, 9½ miles from Peterboro', and Balsam Lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterboro', the new dam, at the head of the Nine Mile Rapids of the River Otonabee, which maintains navigation on Lake Katchewanoe up to Young's Point, was completed during the fiscal year 1886-87.

At Young's Point, 5 miles from Lakefield, the new dam between Lake Katchewanoe and Clear Lake controls the water level through Clear and Stony Lakes up to the foot of the Burleigh Canal. The lock here, it should be observed, is controlled by the Provincial Government.

At Burleigh Rapids, 10 miles from Young's Point, a canal, about 2½ miles in length, passes the Burleigh and Lovesick Rapids, and gives communication between Stony Lake and Deer Bay; it comprises three lift-locks and certain dams.

At Buckhorn Rapids, 7 miles from Burleigh Rapids, there is a canal about one-fourth of a mile long, having one lift-lock.

At Bobcaygeon, 15½ miles from Buckhorn Rapids, the new dam, 553 feet long, takes the place of two old ones. By this work the water level is controlled up to Fenelon Falls.

At Fenelon Falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length, with two lift-locks, was constructed in 1885, connecting Sturgeon Lake with Cameron Lake.

In all the above named works the locks are of the following dimensions:—

Length.....	134 feet.
Breadth.....	33 "
Depth of water on the mitre sills.....	5 "

Owing to the abandonment of dams constructed by lumbermen whose operations in the northern section have ceased, the water which should be stored in the upper reservoirs, escapes; and, last season, a very dry one, the water level fell much below the nominal stage.

The traffic shows a continued increase. Navigation closed on the 20th of November, 1891, and reopened on the 21st of April, 1892.

## Department of Railways and Canals.

Details of the several repairs executed will be found in the appendices. (App. 11, p. 140.)

The expenditure on this canal system during the past fiscal year was as follows :—

Construction, chargeable to Capital.....	\$4,457 28
Renewals, chargeable to Income.....	6,506 97
Repairs.....	4,721 85
Staff and maintenance.....	3,695 85
Total.....	\$19,381 95

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### ST. PETER'S CANAL, CAPE BRETON.

Length of canal.....	About 2,400 feet.
Breadth at water line.....	55 feet.
Lock .....	One tidal lock, 4 pairs of gates.
Dimensions.....	200 feet by 48 feet.
Depth of water on sills.....	18 " at lowest water.
Depth through canal.....	19 "
Extreme rise and fall of tide in St. Peter's Bay.....	4 "

This canal connects St. Peter's Bay, on the southern side of Cape Breton, Nova Scotia, with the Bras d'Or Lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

Navigation was closed on the 20th of January, and reopened on the 1st of April, 1892.

The repairs and improvements carried out are described in the appendices. (See Appendix 13, page 147.)

The expenditure on this canal during the past fiscal year was as follows :—

Construction, chargeable to Capital.....	\$ 14,387 00
Renewals, chargeable to Income.....	30,936 82
Repairs.....	1,461 24
Staff and maintenance.....	3,007 70
Total.....	\$ 49,792 76

---

### SOULANGES CANAL.

The question of the means to be adopted for affording between Lakes St. Louis and St. Francis the increased canal accommodation for traffic required to carry out the scheme of canal enlargement is one which has received consideration since the year 1872, decision having to be made between the enlargement of the existing Beauharnois Canal on the south side of the River St. Lawrence by which the intervening rapids are now surmounted, the construction of a new canal on the south side, or the construction of a canal on the north side of the river. A Return to the House,



made in 1891, contains the several reports of engineers and others dealing with the various schemes suggested.

Finally, it was decided by an Order in Council dated the 7th of February, 1891, to construct the new work on the north side of the river, and to adopt a line extending upwards from Cascades Point to Macdonald's Point, near Coteau Landing. This scheme contemplates a canal on a practically straight line, 14 miles long, comprising five lift-locks, overcoming a total rise of  $82\frac{1}{2}$  feet. The number of locks on the Beauharnois Canal, including the guard-lock, is nine. The dimensions of the locks will be those of the enlarged system, namely, length 270 feet, width 45 feet, depth of water on sills 14 feet. The estimated cost of the work is \$4,750,000. The latest and most approved systems of construction and operation will be adopted in order to ensure rapid transit and the minimum of cost for maintenance.

Of the 13 sections into which the work has been divided, contracts have been awarded for eight, comprising the most important of the structures required, with the exception of one lock, and representing about 75 per cent of the total estimated cost of the canal. The works are in progress. (See Appendix 8, page 131.)

The expenditure on this work for the past fiscal year was \$54,235.76. There has since been paid, up to the 31st of December, 1892, the further sum of \$64,425.67 making the aggregate payments, \$118,661.43.

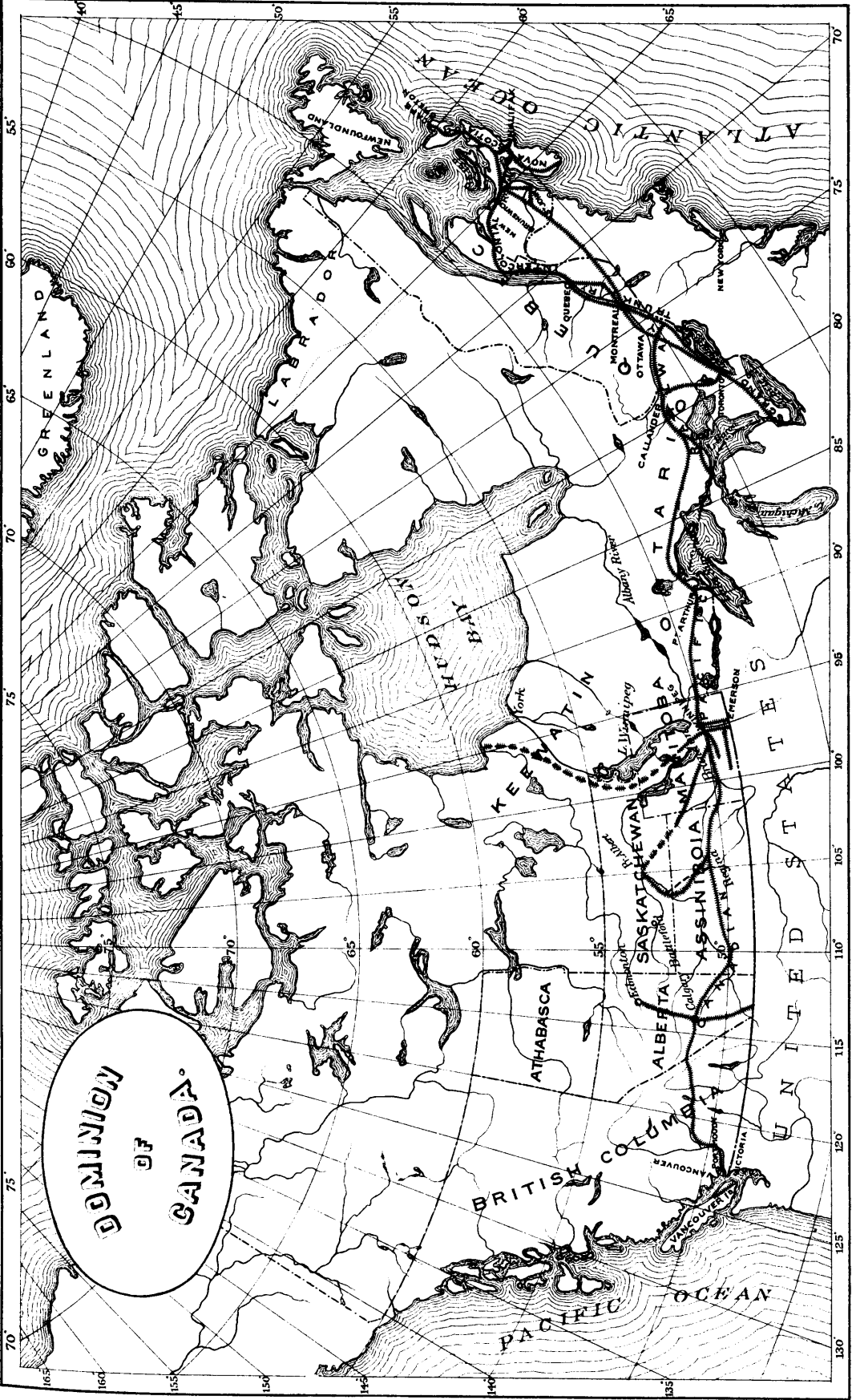
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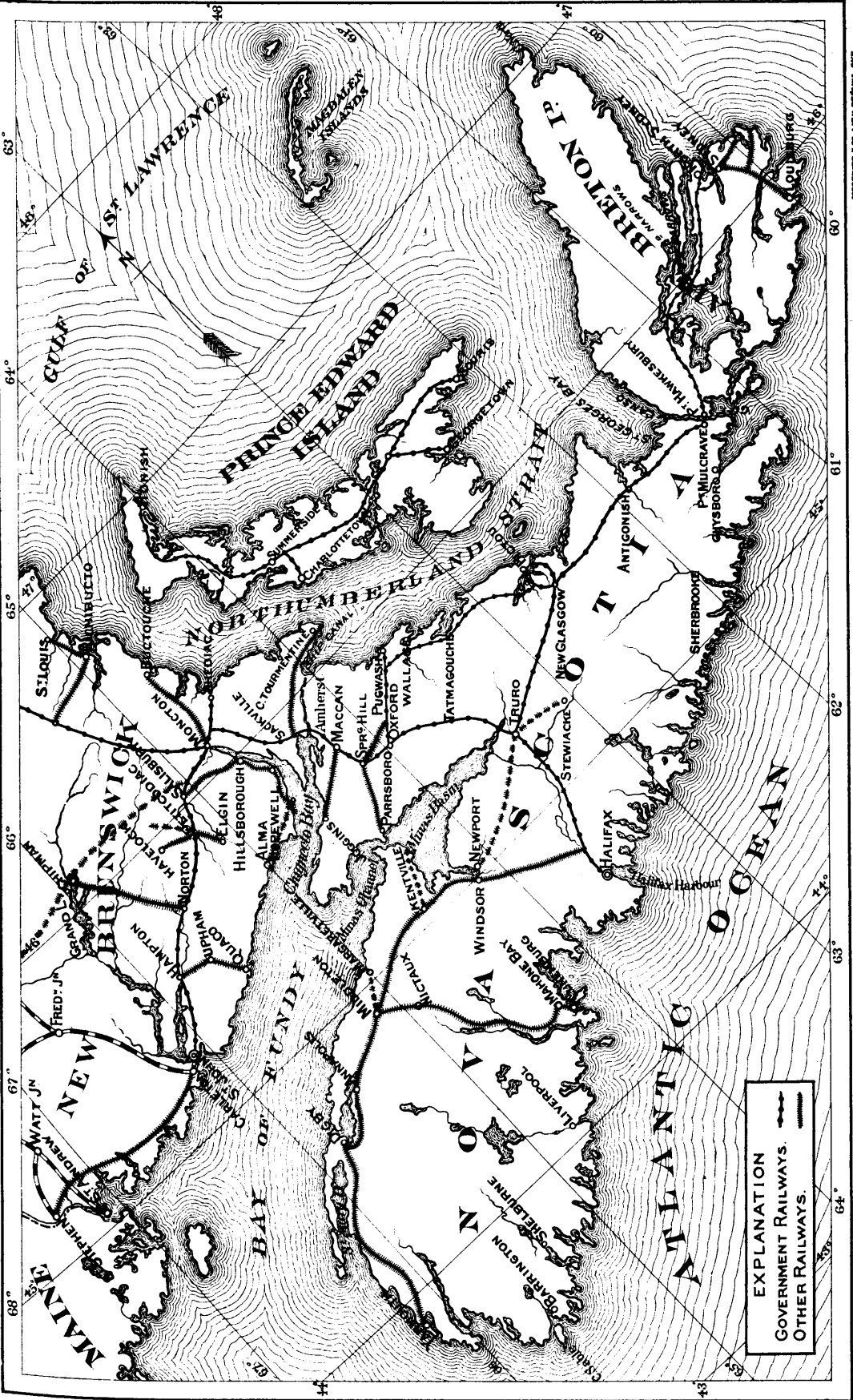
Your Excellency's most obedient servant,

JOHN HAGGART,

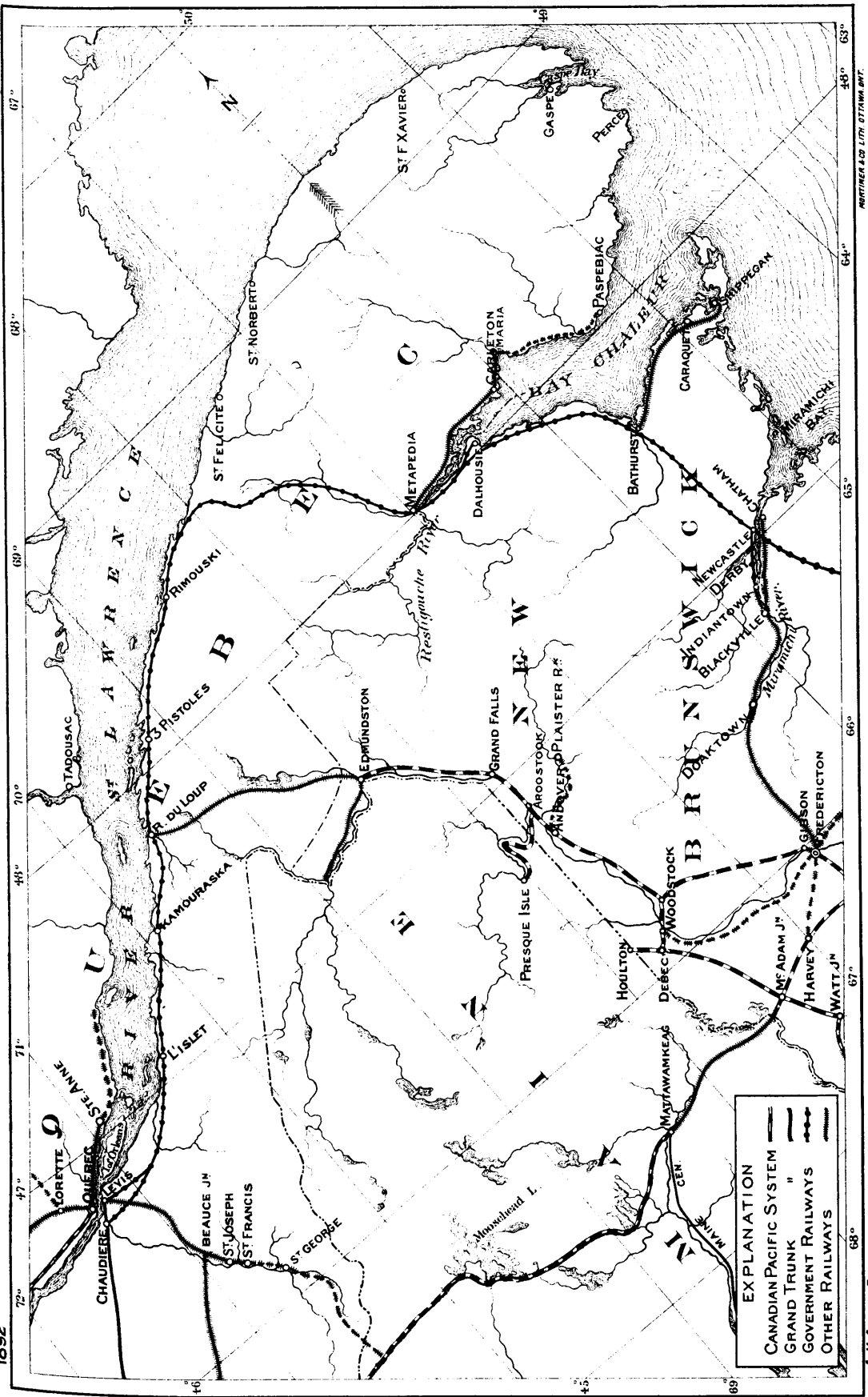
*Minister of Railways and Canals.*

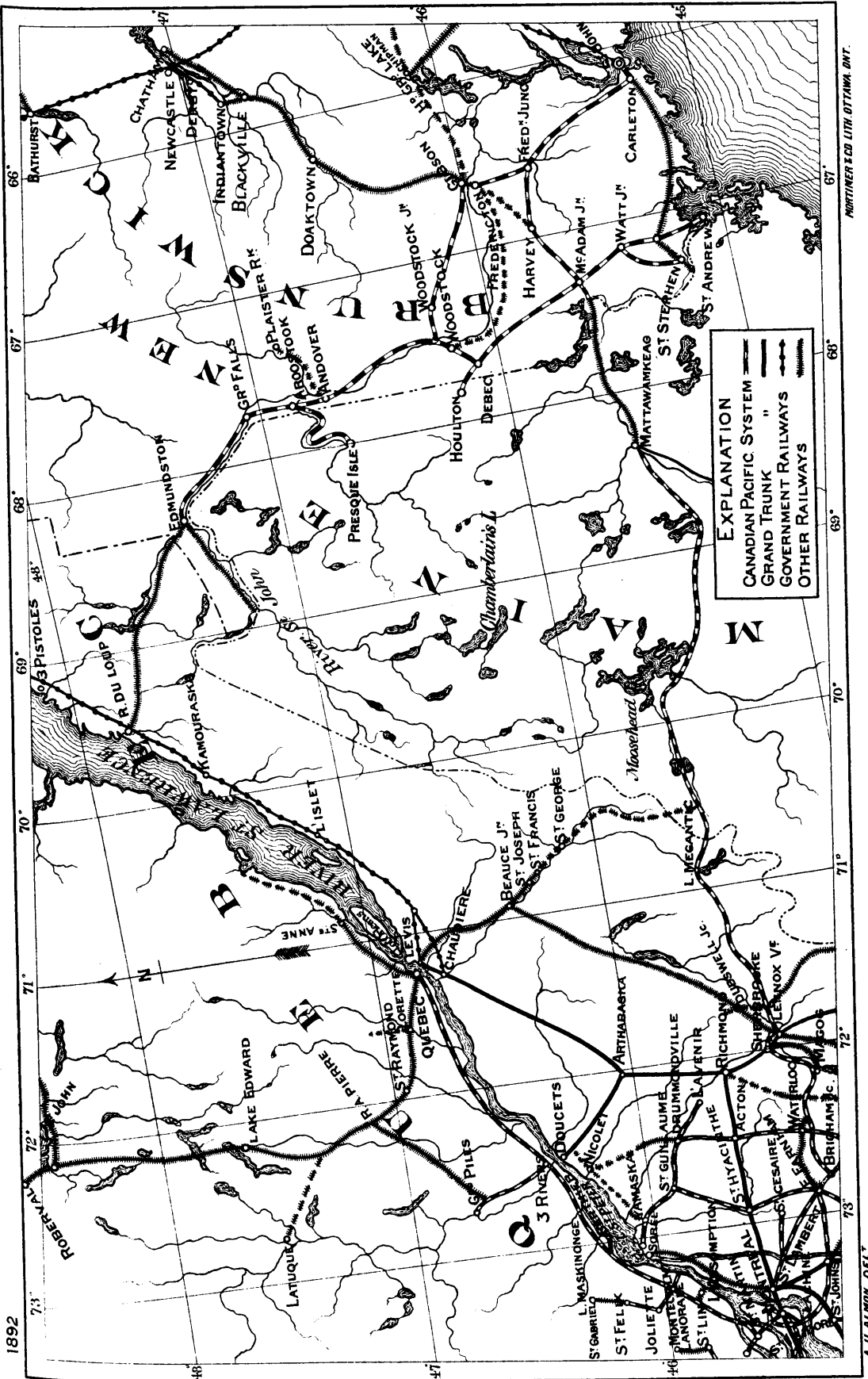
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**EXPLANATION**  
 --- GOVERNMENT RAILWAYS.  
 ——— OTHER RAILWAYS.

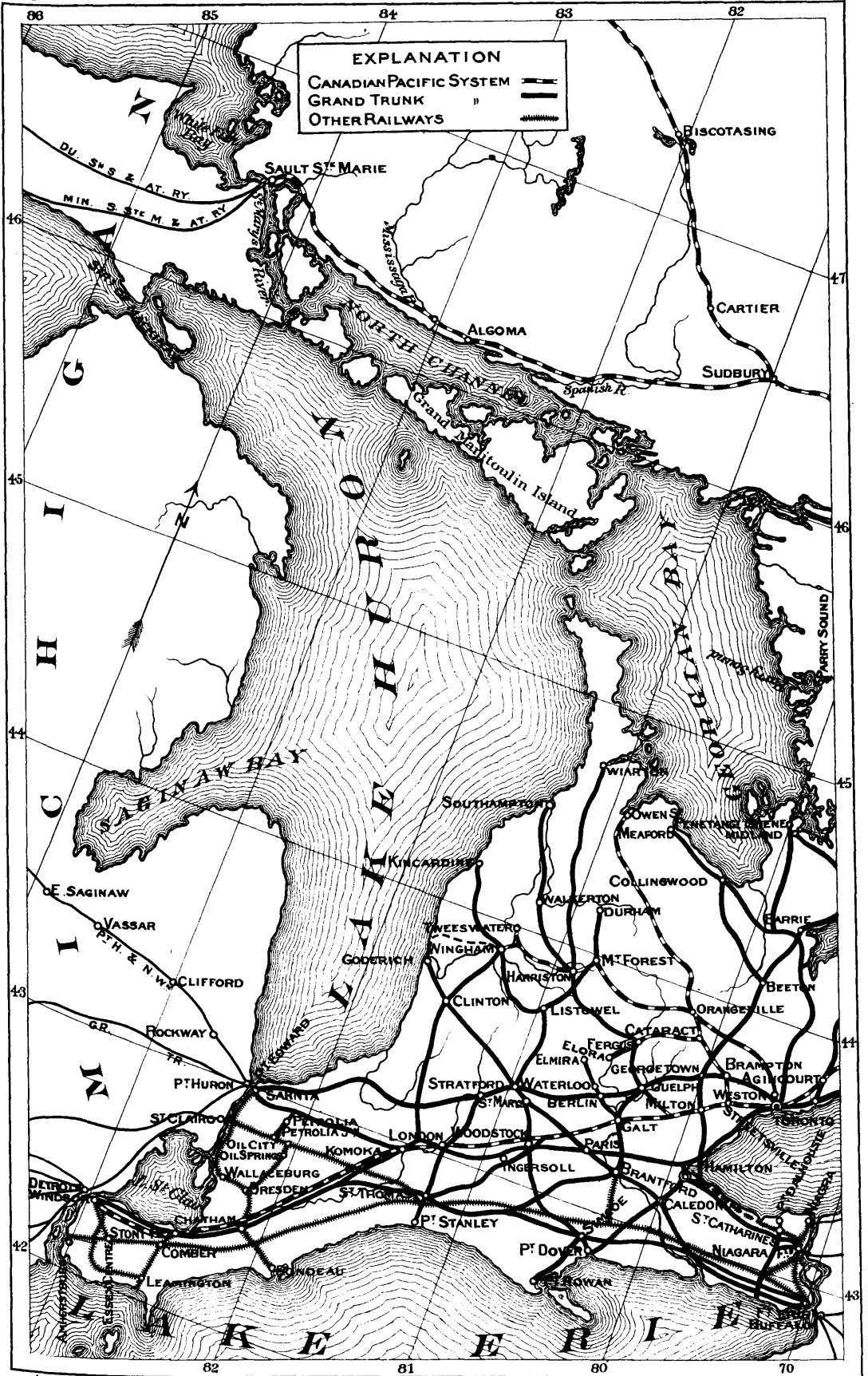


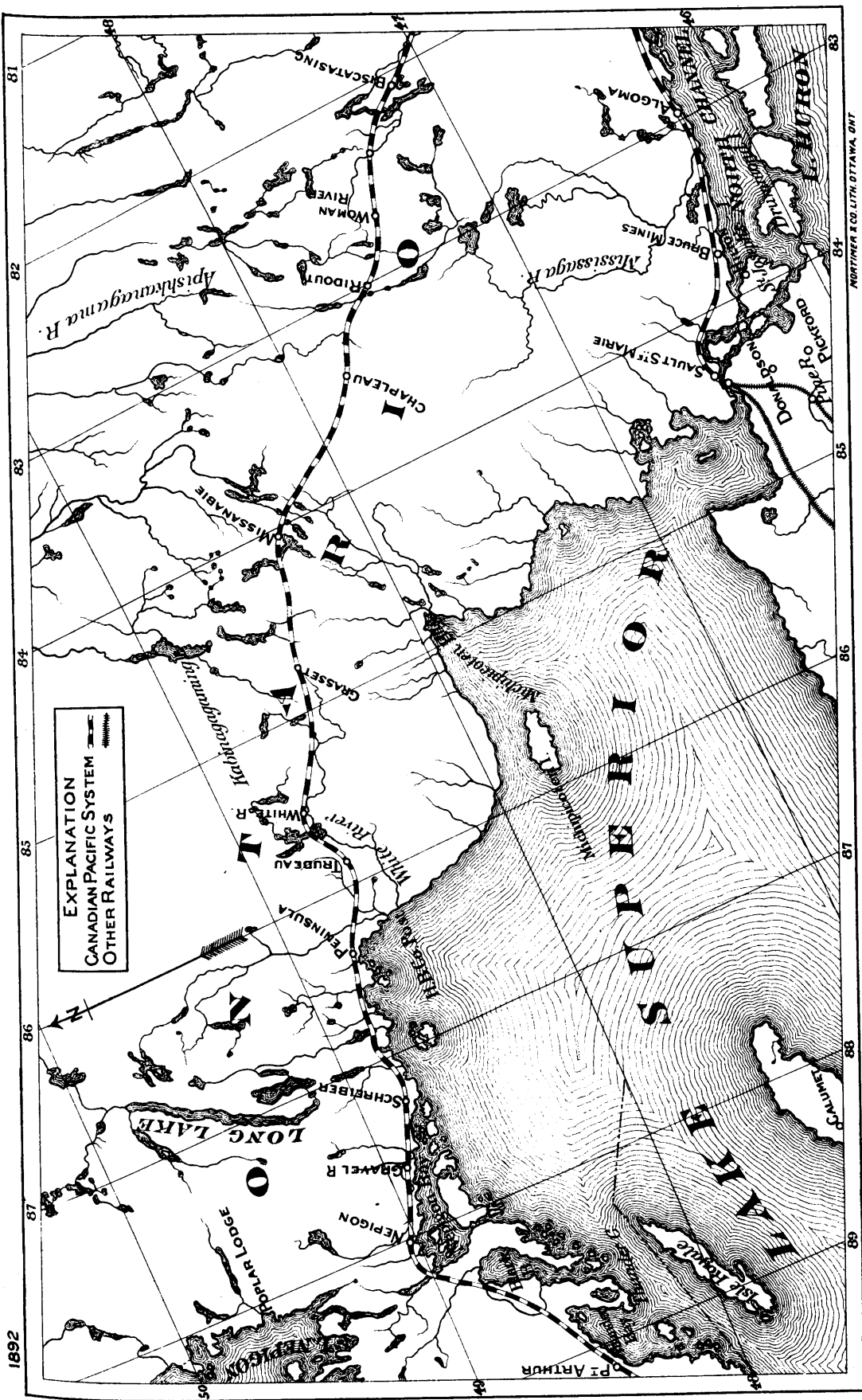


**EXPLANATION**

- CANADIAN PACIFIC SYSTEM
- - - GRAND TRUNK
- + - GOVERNMENT RAILWAYS
- | - OTHER RAILWAYS

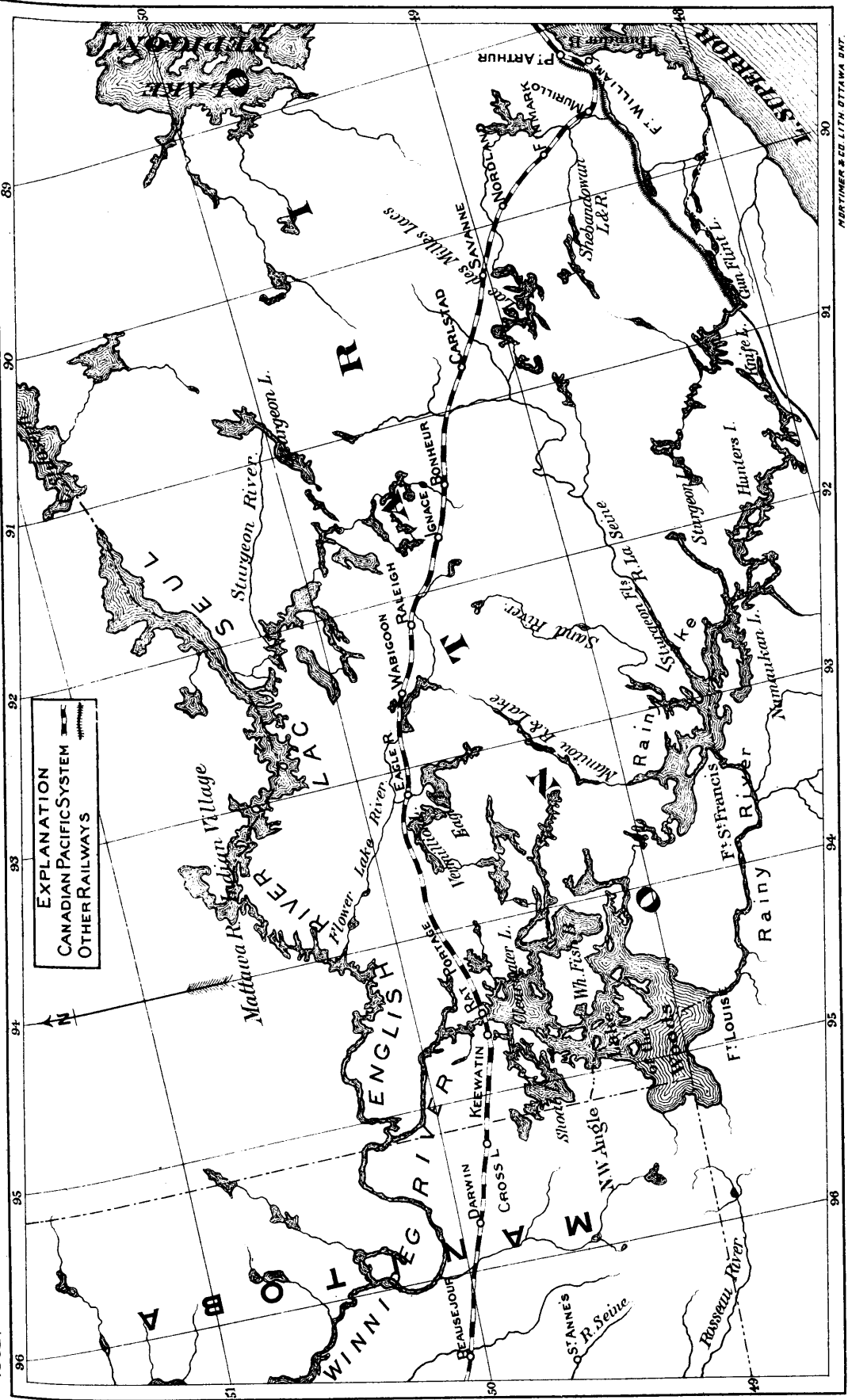




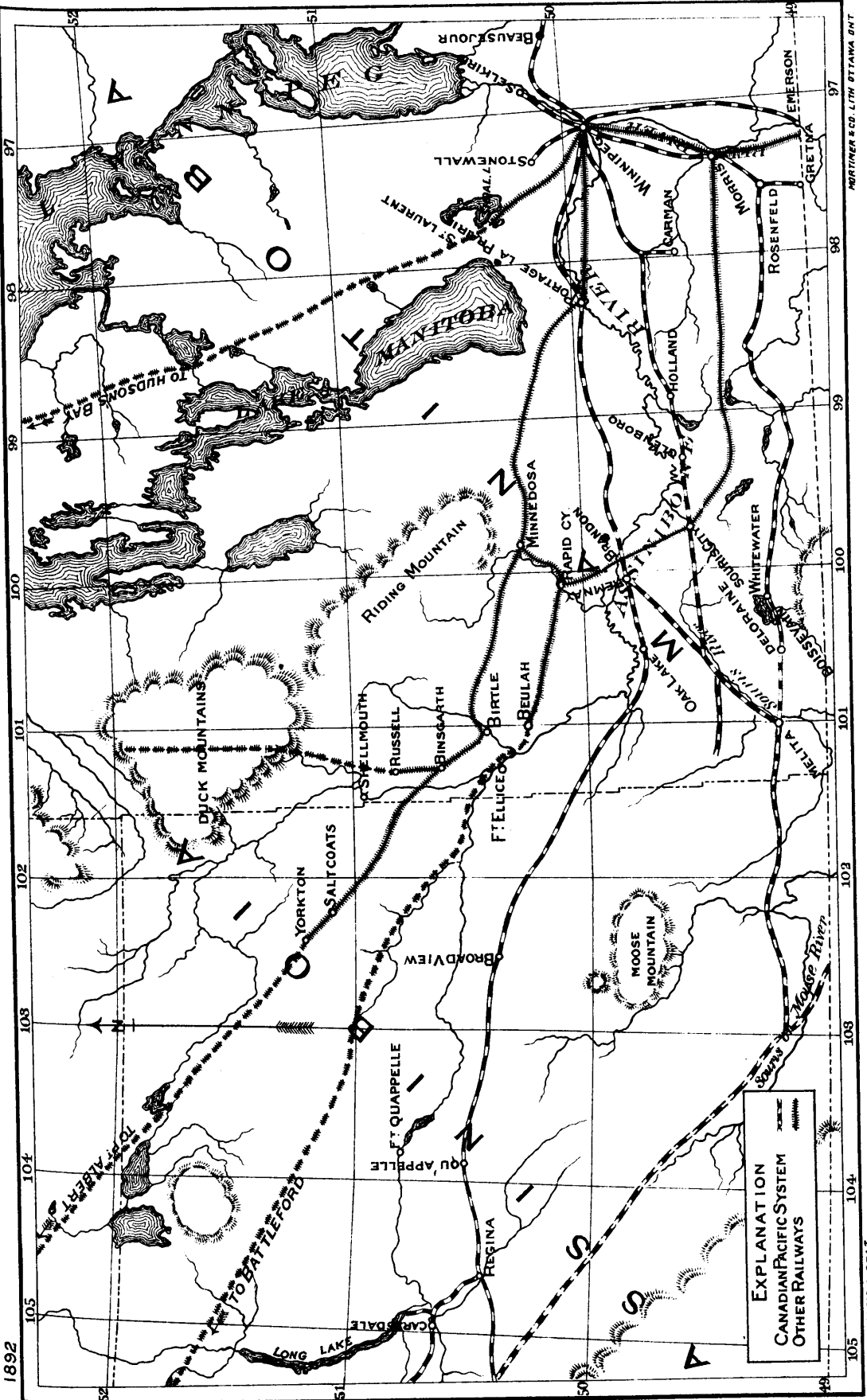


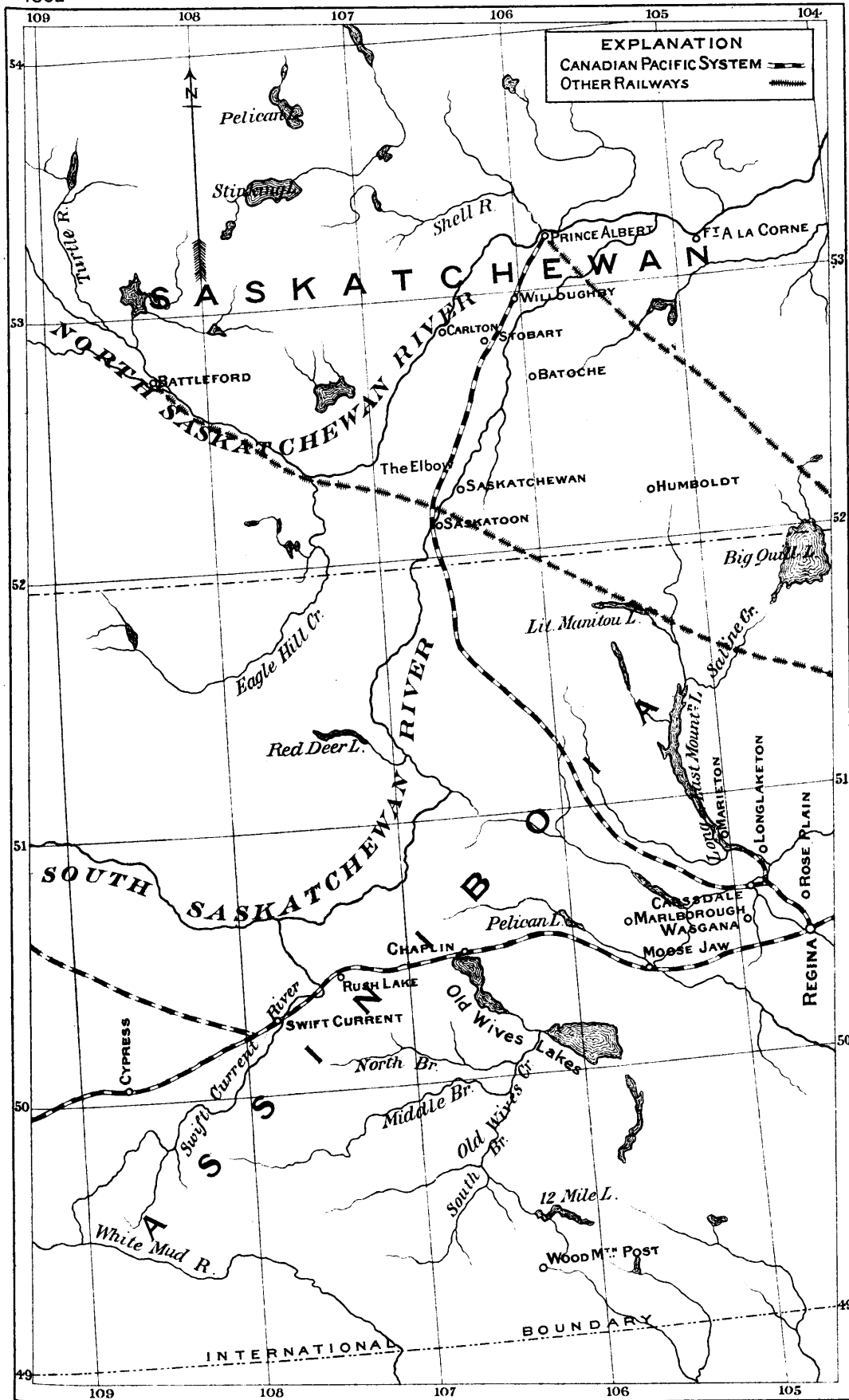
EXPLANATION  
 CANADIAN PACIFIC SYSTEM  
 OTHER RAILWAYS





**EXPLANATION**  
 CANADIAN PACIFIC SYSTEM  
 OTHER RAILWAYS





**EXPLANATION**  
 CANADIAN PACIFIC SYSTEM ———  
 OTHER RAILWAYS ———

**SASKATCHEWAN**

**NORTH SASKATCHEWAN RIVER**

**SOUTH SASKATCHEWAN RIVER**

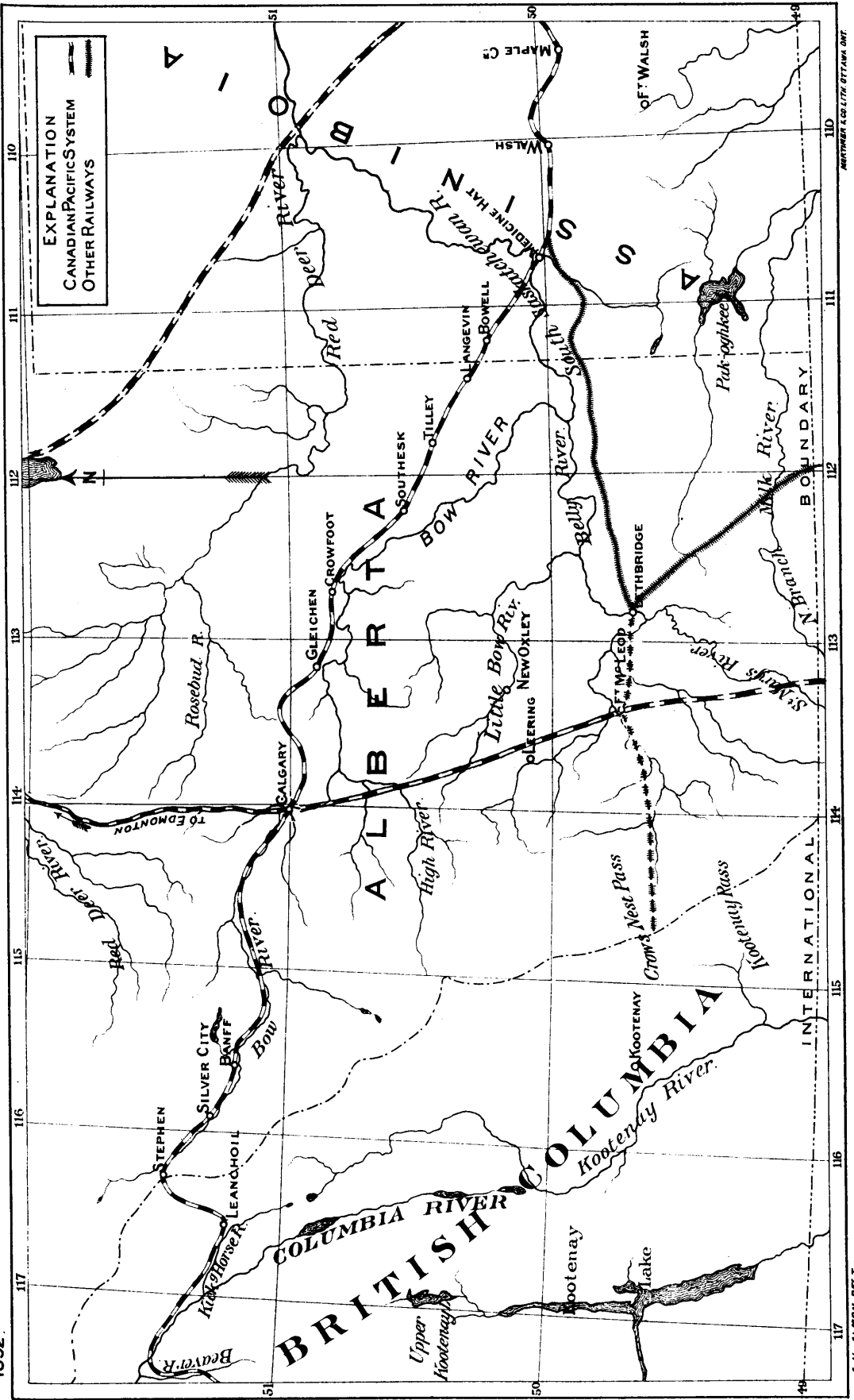
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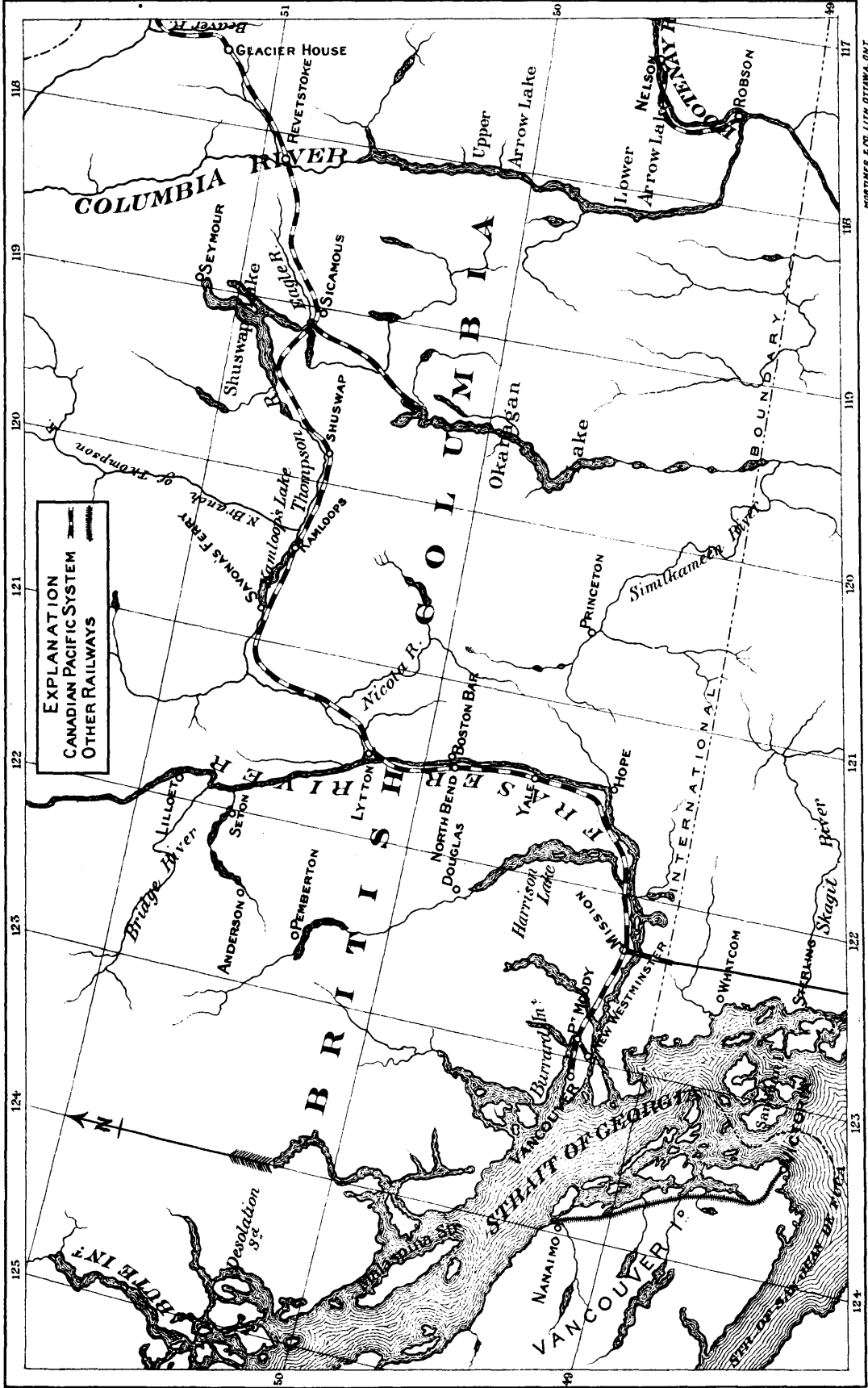
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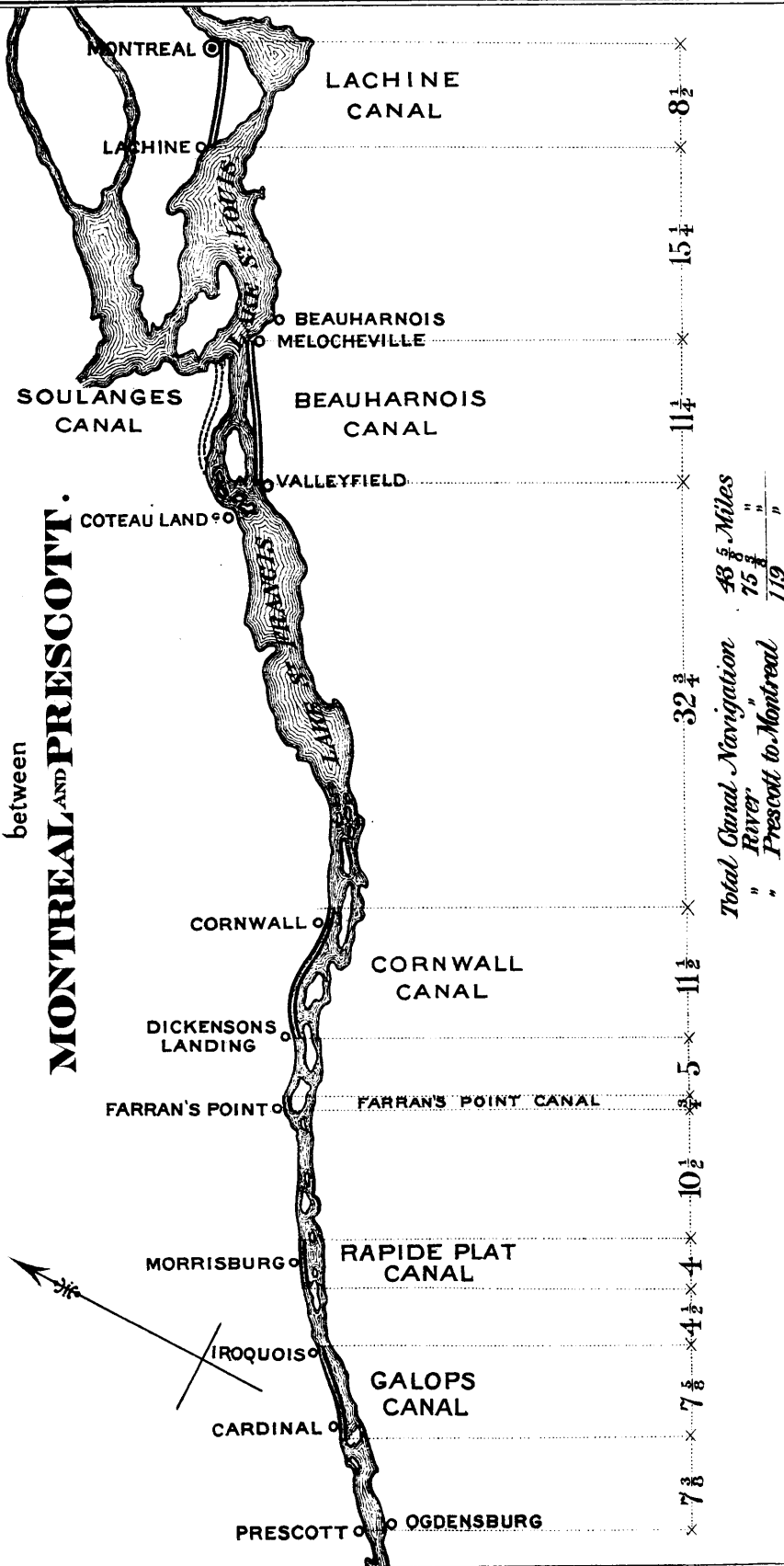


# DIAGRAM

Shewing the Canals on the  
**S<sup>T</sup> LAWRENCE RIVER.**

between

**MONTREAL AND PRESCOTT.**



*Total Canal Navigation* 43 <sup>5</sup>/<sub>8</sub> Miles  
*" River* 75 <sup>3</sup>/<sub>8</sub> " "  
*" Prescott to Montreal* 119 <sup>5</sup>/<sub>8</sub> " "

# Department of Railways and Canals.

## APPENDIX No. I.

STATEMENT showing the amount expended by the Department of Railways and Canals, Dominion of Canada, during the Fiscal Year ended 30th June, 1892.

Name of Work.	Construction.		Repairs.		Staff and Maintenance.	
CANALS.	\$	cts.	\$	cts.	\$	cts.
Beauharnois—Income.....	1,696	23	14,999	80	20,050	01
Carillon—Income.....	15,001	48				
Grenville—Capital.....	34,585	64				
Carillon and Grenville—Income.....	35	00	8,620	15	17,458	69
Chambly—Income.....	38,353	99	12,976	48	19,665	22
Cornwall—Capital.....	398,555	25	9,864	36	15,596	66
do —Income.....	2,345	26				
Culbute—Income.....	1,546	25			736	00
Lachine—Capital.....	87,852	35	67,499	62	52,729	37
do —Income.....	27,480	80				
Murray—Capital.....	5,964	22	3,505	15	5,803	48
Rideau—Income.....	31,363	23	21,507	16	35,500	82
Ste. Anne's—Income.....	25,471	61	1,666	21	2,571	28
St. Lawrence—Capital.....	59,779	31				
St. Ours—Income.....	3,585	34	1,944	33	2,168	44
St. Peter's—Capital.....	14,387	00	1,461	24	3,007	70
do —Income.....	30,936	82				
Sault Ste. Marie—Capital.....	341,474	31				
Soulanges—Capital.....	54,235	76				
Tay—Capital.....	29,771	65				
Trent—Capital.....	4,457	28	4,721	85	3,695	85
do —Income.....	6,506	97				
Welland—Capital.....	29,541	21	73,771	87	104,673	73
do —Income.....	9,008	80				
Williamsburg—Capital.....	376,545	32	8,551	32	9,458	33
do —Income.....	797	83				
Arbitrations and awards—Income.....	105	20				
Surveys—Income.....	6,359	29				
Gratuity as voted to Philip Stafford.....	76	00				
Miscellaneous staff.....					2,539	42
Dredge vessels.....			3,399	43		
do "Rideau", working.....			5,311	71		
Sunday labour.....					11,604	30
Salaries and contingencies, canal officers.....					42,219	21
<b>Total on Canals.....</b>	<b>1,637,819</b>	<b>40</b>	<b>239,800</b>	<b>68</b>	<b>349,478</b>	<b>51</b>
<b>RAILWAYS.</b>						
Canadian Pacific.....	66,211	39				
Intercolonial.....	171,536	65			3,439,377	02
Prince Edward Island.....	8,300	49			289,706	38
Cape Breton.....	99,936	96				
Oxford and New Glasgow.....	48,745	23				
Annapolis and Digby.....	26,129	89				
Surveys—Income.....	15,191	11				
do To provide estimate of cost of tunnel, Prince Edward Island.....	1,650	28				
Subsidies.....	1,061,615	93				
Statistics—Income.....	2,221	12				
Windsor Branch.....					19,514	37
<b>Total on Railways.....</b>	<b>1,501,539</b>	<b>05</b>			<b>3,748,597</b>	<b>77</b>
<b>Total on Railways and Canals.....</b>	<b>3,139,358</b>	<b>45</b>	<b>239,800</b>	<b>68</b>	<b>4,098,076</b>	<b>28</b>
<b>Total amount expended.....</b>					<b>\$.7,477,235 41</b>	

**LEONARD SHANNON,**  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

APPENDIX No. 2.

STATEMENTS showing the amounts expended on Construction, Renewals, Ordinary Repairs and Working Staff of the Canals of the Dominion of Canada, up to the 30th June, 1892.

ST. PETER'S CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation	.....	156,523 32			
do since do	1868	21,519 72			
do do do	1869	70,719 80			
do do do	1870		46,193 57		
do do do	1871			225 36	555 78
do do do	1872			280 00	6,122 07
do do do	1873			343 32	6,539 58
do do do	1874			725 93	1,558 57
do do do	1875	20 97		560 00	889 35
do do do	1876	11,125 00		641 55	
do do do	1877	63,330 18		600 00	17 45
do do do	1878	26,511 51		600 00	
do do do	1879	107,337 75		631 50	
do do do	1880	80,120 54		400 00	
do do do	1881	69,434 76		959 58	
do do do	1882	484 00		1,920 54	200 63
do do do	1883			2,089 19	232 42
do do do	1884	2,471 40		2,601 47	367 85
do do do	1885	16,820 15		1,929 11	183 11
do do do	1886	2,316 85		2,360 67	297 81
do do do	1887	1,087 75	750 00	2,777 13	343 23
do do do	1888			3,217 77	1,588 40
do do do	1889		500 00	3,085 29	353 38
do do do	1890			3,110 15	255 34
do do do	1891	972 65	510 53	3,255 30	312 02
do do do	1892	14,387 00	30,936 82	3,007 70	1,461 24
Total	.....	645,183 35	78,890 92	35,321 56	21,278 23

LEONARD SHANNON,  
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.



# Department of Railways and Canals.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

## BAIE VERTE CANAL—SURVEY.

	Year ending 30th June.	Capital.	Income.
		\$ cts.	\$ cts.
Government expenditure prior to Confederation.....			
do since do .....	1868		
do do do .....	1869		
do do do .....	1870		
do do do .....	1871		17,929 34
do do do .....	1872		6,399 41
do do do .....	1873		14,943 83
do do do .....	1874		4,018 90
do do do .....	1875		443 00
do do do .....	1876		110 75
do do do .....	1877		22 30
do do do .....	1878		
do do do .....	1879		
do do do .....	1880		
do do do .....	1881		520 00
do do do .....	1882		
do do do .....	1883		
do do do .....	1884		
do do do .....	1885		
do do do .....	1886		
do do do .....	1887		
do do do .....	1888		
do do do .....	1889		
do do do .....	1890		
do do do .....	1891		
do do do .....	1892		
Total.....			44,387 53

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

## LACHINE CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Expenditure by Imperial Government.....		40,000 00			
Government expenditure prior to Confederation.....		2,547,532 85			
do since do .....	1868		1,852 70	13,742 05	10,431 51
do do do .....	1869	2,000 00		14,209 02	12,085 84
do do do .....	1870			15,834 49	13,302 39
do do do .....	1871		12,231 40	17,478 52	15,093 25
do do do .....	1872	36,708 15		16,076 93	12,334 69
do do do .....	1873	7,824 28	35,158 21	23,601 03	34,300 60
do do do .....	1874	158,618 35		25,811 07	22,828 66
do do do .....	1875	197,420 52		28,592 01	30,057 34
do do do .....	1876	327,769 39		33,797 73	29,103 65
do do do .....	1877	1,439,375 73		33,148 86	19,824 33
do do do .....	1878	1,484,619 63		39,062 97	13,646 41
do do do .....	1879	958,053 30		42,338 84	12,400 78
do do do .....	1880	369,566 74		38,950 90	10,223 62
do do do .....	1881	292,165 51		39,027 99	19,888 33
do do do .....	1882	252,821 33	2,978 66	41,158 90	17,116 46
do do do .....	1883	396,496 96	1,859 68	45,554 91	18,199 59
do do do .....	1884	188,266 18		48,624 51	19,683 24
do do do .....	1885	111,215 23		49,004 85	20,199 78
do do do .....	1886	210,509 42		50,969 10	19,199 18
do do do .....	1887	28,772 52	12,981 59	53,113 97	22,567 81
do do do .....	1888	19,414 34	7,996 38	52,229 61	19,999 64
do do do .....	1889	76,032 96	972 71	54,110 67	22,957 71
do do do .....	1890	7,448 03	8,238 46	53,114 34	22,999 38
do do do .....	1891	217 53	16,555 75	50,721 69	36,292 98
do do do .....	1892	87,852 35	27,480 80	52,729 37	67,499 62
Total.....		9,240,701 30	127,906 34	853,004 33	542,236 79

## BEAUHARNOIS CANAL.

Government expenditure prior to Confederation.....		1,611,424 11			
do since do .....	1868		63,193 75	9,349 99	6,216 98
do do do .....	1869		55 00	9,626 99	6,498 57
do do do .....	1870		27 50	10,117 57	6,384 81
do do do .....	1871			12,316 53	5,722 36
do do do .....	1872		27 50	11,792 46	15,733 38
do do do .....	1873		5,122 50	12,210 73	9,882 06
do do do .....	1874		26 00	15,392 51	10,990 56
do do do .....	1875		36 00	14,999 32	12,253 01
do do do .....	1876			14,465 86	17,170 83
do do do .....	1877			14,377 63	15,207 36
do do do .....	1878			14,383 37	9,861 05
do do do .....	1879			15,015 86	10,370 71
do do do .....	1880	266 15		15,362 61	8,997 34
do do do .....	1881			17,659 93	10,770 67
do do do .....	1882			18,804 53	20,813 86
do do do .....	1883		6,727 44	18,287 77	15,826 71
do do do .....	1884		3,277 98	19,107 38	16,232 61
do do do .....	1885		7,999 79	18,960 40	14,637 70
do do do .....	1886		8,491 80	19,228 90	14,356 00
do do do .....	1887		3,633 57	18,867 45	14,999 88
do do do .....	1888		14,411 97	19,325 05	14,285 98
do do do .....	1889		10,993 52	20,019 11	14,982 54
do do do .....	1890			19,847 42	14,999 20
do do do .....	1891		17,085 68	18,886 86	12,537 39
do do do .....	1892		1,696 23	20,050 01	14,999 80
Total.....		1,611,690 26	142,806 23	397,856 24	314,731 36

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.LEONARD SHANNON,  
Accountant.

## Department of Railways and Canals.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

### CORNWALL CANAL.

	Year ending 30th June.	Capital.	Renewals. Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		1,933,152 69			
do since do	1868		2,786 00	11,244 47	3,774 18
do do do	1869	10,692 04		10,347 91	3,859 14
do do do	1870		17,780 05	10,368 16	7,145 42
do do do	1871		7 50	11,848 39	8,891 61
do do do	1872		10,000 21	10,594 30	8,163 70
do do do	1873		1,011 75	13,042 25	12,467 65
do do do	1874			13,405 20	7,610 70
do do do	1875	1,780 00		13,351 91	7,097 34
do do do	1876			13,320 61	6,423 67
do do do	1877	49,211 37		13,375 70	6,440 54
do do do	1878	145,015 45		13,825 50	4,935 21
do do do	1879	143,092 05		13,817 96	4,983 15
do do do	1880	109,454 95		14,440 33	9,735 76
do do do	1881	53,948 14		15,173 60	5,524 10
do do do	1882	44,587 61		15,052 20	6,634 62
do do do	1883	21,728 93		18,283 67	8,361 71
do do do	1884	23,018 13		18,475 48	9,007 73
do do do	1885	62,034 90	16,298 96	15,988 96	12,368 51
do do do	1886	57,820 83	6,960 95	15,994 80	11,832 83
do do do	1887	46,966 43		17,520 54	12,100 29
do do do	1888	67,945 74		16,938 54	13,942 64
do do do	1889	163,993 85		17,890 55	58,205 26
do do do	1890	365,038 01	2,000 00	17,063 49	12,758 18
do do do	1891	599,001 85	1,459 98	16,077 72	9,830 05
do do do	1892	398,555 25	2,345 26	15,596 66	9,864 36
Total.....		4,297,038 22	60,650 66	363,038 90	261,958 35

### WILLIAMSBURG CANALS.

Government expenditure prior to Confederation		1,320,655 54			
do since do	1868			5,745 97	6,442 41
do do do	1869			5,769 81	5,670 88
do do do	1870			5,573 13	6,546 16
do do do	1871			6,382 17	5,308 41
do do do	1872		1,077 00	5,542 94	3,230 07
do do do	1873			6,424 49	7,347 75
do do do	1874			6,857 19	7,395 92
do do do	1875			6,547 62	4,110 29
do do do	1876			7,418 39	11,690 98
do do do	1877			7,388 08	10,053 61
do do do	1878			7,430 11	4,449 78
do do do	1879			7,517 20	3,549 71
do do do	1880			7,590 15	3,909 77
do do do	1881			7,572 35	5,020 73
do do do	1882			7,589 44	7,447 69
do do do	1883	13 19		7,423 48	7,299 39
do do do	1884	2,473 44		7,757 04	7,349 37
do do do	1885	103,237 12		7,696 67	8,198 03
do do do	1886	149,835 71		7,671 54	7,847 05
do do do	1887	115,853 00		7,635 54	7,904 76
do do do	1888	70,128 29	1,613 67	7,646 79	8,190 13
do do do	1889	59,867 26		7,485 28	8,794 61
do do do	1890	139,078 37		8,954 53	8,191 69
do do do	1891	230,670 60		8,678 25	7,987 40
do do do	1892	376,545 32	797 83	9,458 33	8,551 32
Total.....		2,568,357 84	3,488 50	181,756 49	172,577 91

LEONARD SHANNON,

*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

## ST. LAWRENCE RIVER AND CANALS, SURVEYS, &amp;c.

	Year ending 30th June.	Chargeable to Capital.	Chargeable to Income.
		\$ cts.	\$ cts.
Government expenditure prior to Confederation.....		18,442 85	98,378 46
do since do.....	1868		
do do do.....	1869		
do do do.....	1870		
do do do.....	1871		
do do do.....	1872		
do do do.....	1873	33,241 69	
do do do.....	1874	26,541 30	
do do do.....	1875	20,611 36	
do do do.....	1876	50,215 47	
do do do.....	1877	47,377 31	
do do do.....	1878	5,570 46	
do do do.....	1879	9,265 77	
do do do.....	1880	9,214 56	
do do do.....	1881	6,927 96	
do do do.....	1882	28,933 45	
do do do.....	1883	44,874 31	
do do do.....	1884	89,846 03	
do do do.....	1885	115,110 17	
do do do.....	1886	116,051 73	
do do do.....	1887	74,437 31	
do do do.....	1888	56,482 85	
do do do.....	1889	18,493 92	
do do do.....	1890	23,979 91	
do do do.....	1891	35,137 25	
do do do.....	1892	59,779 31	
Total.....		890,534 97	98,378 46

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS.  
OTTAWA, 30th November, 1892.

## Department of Railways and Canals.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

### WELLAND CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Imperial Government.....		222,220 00			
Government expenditure prior to Confederation.....		7,416,019 83			
do since do .....	1868	12,097 84		37,679 05	38,852 96
do do do .....	1869	43,486 36		39,060 61	50,773 03
do do do .....	1870		22,173 72	40,340 45	65,099 19
do do do .....	1871		48,569 10	42,383 33	53,381 02
do do do .....	1872	53,680 32	6,022 44	37,085 37	50,276 90
do do do .....	1873	82,282 20	47,876 27	45,382 99	66,550 73
do do do .....	1874	746,420 61		50,966 48	103,666 99
do do do .....	1875	1,047,119 91		52,595 00	88,539 99
do do do .....	1876	1,569,478 19	700 00	57,623 31	81,376 12
do do do .....	1877	2,199,962 61		59,963 47	49,783 93
do do do .....	1878	2,138,302 99		60,138 59	66,393 53
do do do .....	1879	1,552,697 41		59,942 23	56,755 57
do do do .....	1880	1,252,924 75		63,198 10	76,535 25
do do do .....	1881	1,242,943 37	6,593 19	56,398 04	69,249 53
do do do .....	1882	603,402 17	13,664 80	74,641 51	84,374 97
do do do .....	1883	549,433 29	5,979 03	109,207 21	72,707 62
do do do .....	1884	432,336 21		113,276 87	90,926 97
do do do .....	1885	463,505 38	6,150 21	112,670 00	91,534 66
do do do .....	1886	215,380 75	1,359 00	111,660 22	69,507 48
do do do .....	1887	1,071,073 87	3,828 67	109,371 69	77,440 80
do do do .....	1888	429,720 94	10,740 86	110,806 01	86,518 97
do do do .....	1889	225,910 21	43,803 80	113,587 05	77,547 77
do do do .....	1890	117,633 22	51,648 28	109,202 02	72,686 19
do do do .....	1891	36,371 03	19,767 73	107,662 63	82,548 30
do do do .....	1892	29,541 21	9,008 80	104,673 73	73,771 87
Total.....		23,754,034 67	297,885 90	1,879,515 96	1,796,710 34

### STE. ANNE'S LOCK AND CANAL.

Government expenditure prior to Confederation.....		134,456 51			
do since do .....	1868			778 16	432 47
do do do .....	1869			1,062 96	1,873 51
do do do .....	1870			1,136 54	1,280 36
do do do .....	1871			1,285 84	1,539 02
do do do .....	1872		1,939 46	1,106 80	1,393 63
do do do .....	1873		540 11	2,199 64	1,264 40
do do do .....	1874	12,753 27		2,614 90	7,208 63
do do do .....	1875	32,627 71		1,859 20	4,506 68
do do do .....	1876	24,935 85		1,952 14	4,033 72
do do do .....	1877	30,003 08		1,982 65	1,756 93
do do do .....	1878	14,618 85		2,057 32	541 95
do do do .....	1879	22,113 02		2,202 03	3,259 70
do do do .....	1880	3,054 68		2,152 57	1,704 71
do do do .....	1881	69,042 76		2,553 02	3,257 92
do do do .....	1882	193,158 36		2,611 30	2,343 99
do do do .....	1883	172,959 95		2,569 86	3,448 83
do do do .....	1884	142,006 25		2,775 32	2,725 49
do do do .....	1885	93,679 57		2,618 60	4,042 04
do do do .....	1886	129,681 67		2,611 90	5,803 01
do do do .....	1887	45,276 08	6,054 10	2,537 41	1,499 96
do do do .....	1888	18,910 55	1,372 59	2,505 61	1,380 75
do do do .....	1889	24,786 33		2,569 22	1,730 79
do do do .....	1890	6,151 14		2,571 04	1,525 51
do do do .....	1891		8,173 69	2,505 69	1,503 56
do do do .....	1892		25,471 61	2,571 28	1,666 21
Total.....		1,170,215 63	43,551 56	53,391 00	61,723 77

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

STATEMENTS showing the amounts expended on Construction, Renewals, &c. - *Con.*

## CARILLON AND GRENVILLE CANALS.

			Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
				\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation				63,053 64			
do	since	do	1868		19,817 22	6,301 88	8,911 28
do	do	do	1869			6,549 88	10,157 42
do	do	do	1870		4,167 96	6,617 81	9,852 09
do	do	do	1871		23,119 37	8,676 90	8,218 24
do	do	do	1872	165,257 28		8,324 51	17,235 31
do	do	do	1873	133,199 10	3,051 38	10,068 28	8,781 50
do	do	do	1874	245,258 38		10,710 88	10,605 82
do	do	do	1875	339,864 76		10,378 57	18,520 44
do	do	do	1876	326,203 16		10,764 38	11,475 96
do	do	do	1877	245,738 04		11,050 27	10,304 06
do	do	do	1878	22,676 20		11,401 30	5,082 72
do	do	do	1879	243,141 24		11,501 22	7,629 98
do	do	do	1880	281,514 27		11,959 14	7,625 54
do	do	do	1881	336,707 53		13,059 18	8,076 91
do	do	do	1882	433,084 39		14,387 49	7,582 68
do	do	do	1883	433,575 10		17,479 58	8,310 02
do	do	do	1884	399,267 16		17,393 91	7,918 42
do	do	do	1885	157,187 72		19,702 30	10,429 26
do	do	do	1886	104,973 24	75 00	20,597 82	9,303 31
do	do	do	1887	20,747 11		20,011 36	10,554 41
do	do	do	1888	38,996 29		21,531 12	10,036 62
do	do	do	1889	298 17		22,098 88	10,135 66
do	do	do	1890	17 58	4,526 61	15,896 16	7,582 38
do	do	do	1891		4,395 25	21,230 22	10,796 68
do	do	do	1892	34,585 64	15,036 48	17,458 69	8,620 15
Total				4,025,346 00	74,189 27	345,151 23	243,746 86

## CULBUTE LOCK AND DAM.

Government expenditure since Confederation			1868				
do	do	do	1869				
do	do	do	1870				
do	do	do	1871				
do	do	do	1872				
do	do	do	1873		835 53		
do	do	do	1874		38,388 99		
do	do	do	1875	63,659 29			
do	do	do	1876	76,842 44			
do	do	do	1877	56,081 87			
do	do	do	1878	5,933 53			
do	do	do	1879	20,694 19			
do	do	do	1880	16,688 20		202 50	259 31
do	do	do	1881	4,721 62		962 85	
do	do	do	1882	29,567 15		790 00	162 33
do	do	do	1883	14,249 60		695 00	288 99
do	do	do	1884	8,151 16		733 50	
do	do	do	1885	19,071 76		730 00	572 75
do	do	do	1886	26,385 27		730 00	2,396 14
do	do	do	1887	7,760 88		730 00	967 33
do	do	do	1888	7,573 99		739 50	730 60
do	do	do	1889	17,112 01		1,050 00	116 53
do	do	do	1890	2,818 35		747 83	
do	do	do	1891	2,183 15	9,122 05	745 25	499 91
do	do	do	1892		1,546 25	736 00	
Total				379,494 46	49,892 82	9,592 43	5,993 89

LEONARD SHANNON,  
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

# Department of Railways and Canals.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*  
RIDEAU CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Imperial Government.....		3,911,701 47			
Government expenditure prior to Confederation		153,062 60			
do since do .....	1868		7,298 12	18,397 28	16,475 21
do do do .....	1869			19,250 71	13,140 77
do do do .....	1870		13 16	20,022 37	19,469 33
do do do .....	1871		11,732 98	22,314 58	18,120 52
do do do .....	1872		4,967 50	22,139 48	14,005 32
do do do .....	1873		18,070 97	22,841 51	26,074 49
do do do .....	1874		5,793 13	26,815 44	22,957 40
do do do .....	1875	9,310 85		26,553 37	19,699 81
do do do .....	1876	2,163 96		26,430 77	14,428 25
do do do .....	1877	214 11		25,959 56	14,198 18
do do do .....	1878			26,651 51	11,034 22
do do do .....	1879	7,703 88		26,042 52	7,134 55
do do do .....	1880			26,463 88	11,434 05
do do do .....	1881		133 50	26,024 71	8,627 00
do do do .....	1882			26,915 29	13,860 28
do do do .....	1883		70 65	27,322 81	23,524 84
do do do .....	1884		4,507 50	26,938 95	19,245 02
do do do .....	1885		2,098 76	26,971 32	18,189 55
do do do .....	1886		550 00	27,045 95	35,648 04
do do do .....	1887		20,823 96	29,440 46	18,565 34
do do do .....	1888		18,889 48	33,458 83	25,478 87
do do do .....	1889		6,665 22	33,801 77	18,106 36
do do do .....	1890		21,124 10	34,270 57	18,025 21
do do do .....	1891		20,967 25	34,641 98	21,537 56
do do do .....	1892		31,363 23	35,500 82	21,507 16
Total .....		4,084,156 87	175,159 54	672,716 44	450,487 33

## ST. OURS LOCK.

Government expenditure prior to Confederation		121,537 65			
do since do .....	1868			1,532 75	753 74
do do do .....	1869			1,755 15	1,399 18
do do do .....	1870			1,458 09	1,006 22
do do do .....	1871			1,414 48	1,210 98
do do do .....	1872			1,565 80	1,263 19
do do do .....	1873			2,076 50	1,575 10
do do do .....	1874			2,219 13	2,363 42
do do do .....	1875			1,362 22	1,245 69
do do do .....	1876			1,403 92	1,601 71
do do do .....	1877			1,533 40	750 80
do do do .....	1878			1,556 65	283 77
do do do .....	1879			1,581 55	456 07
do do do .....	1880			1,614 01	705 54
do do do .....	1881			1,741 97	1,299 77
do do do .....	1882			2,002 71	1,902 41
do do do .....	1883		17,230 32	2,361 65	2,188 08
do do do .....	1884		5,279 17	2,315 37	1,494 99
do do do .....	1885		4,700 64	2,271 57	3,652 63
do do do .....	1886			2,311 70	4,143 47
do do do .....	1887			2,175 37	5,864 78
do do do .....	1888			2,216 04	2,801 17
do do do .....	1889		17,964 45	2,421 14	2,002 63
do do do .....	1890		24,571 96	2,138 40	1,935 44
do do do .....	1891		21,696 74	2,011 08	4,460 16
do do do .....	1892		3,585 34	2,168 44	1,944 33
Total .....		121,537 65	95,028 62	47,209 09	48,305 27

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

## CHAMBLY CANAL.

			Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
				\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation				634,711 76			
do	since	do	1868			8,312 90	9,355 70
do	do	do	1869			8,437 22	13,120 97
do	do	do	1870			8,934 41	20,180 73
do	do	do	1871		2,839 85	10,214 71	22,426 33
do	do	do	1872		1,906 40	9,628 50	22,327 99
do	do	do	1873		759 00	10,390 44	11,789 27
do	do	do	1874		2,810 00	11,675 67	16,427 19
do	do	do	1875	2,415 00		12,201 99	16,306 91
do	do	do	1876			10,593 14	13,273 56
do	do	do	1877	80 00		10,281 78	10,111 32
do	do	do	1878			10,413 99	6,022 96
do	do	do	1879			11,301 53	8,809 77
do	do	do	1880			11,516 22	12,377 17
do	do	do	1881			13,950 47	20,705 17
do	do	do	1882		31,796 41	16,686 78	16,843 60
do	do	do	1883		21,332 36	15,904 38	15,182 24
do	do	do	1884		41,640 77	18,448 85	12,003 34
do	do	do	1885		21,049 23	18,378 55	13,046 95
do	do	do	1886		14,547 27	19,501 28	11,999 77
do	do	do	1887		17,911 17	19,053 62	20,071 37
do	do	do	1888		65,536 64	20,073 60	11,823 74
do	do	do	1889		51,437 87	19,679 22	19,392 18
do	do	do	1890		23,221 48	19,655 38	14,399 93
do	do	do	1891		43,344 41	19,204 76	11,399 93
do	do	do	1892		38,353 99	19,665 22	12,976 48
Total				637,206 76	378,486 85	354,104 61	362,375 14

## MURRAY CANAL.

Government expenditure prior to Confederation							
do	since	do	1868		400 00		
do	do	do	1869				
do	do	do	1870				
do	do	do	1871				
do	do	do	1872				
do	do	do	1873				
do	do	do	1874				
do	do	do	1875				
do	do	do	1876				
do	do	do	1877				
do	do	do	1878				
do	do	do	1879				
do	do	do	1880				
do	do	do	1881				
do	do	do	1882	7,135 63			
do	do	do	1883	84,071 68			
do	do	do	1884	118,187 43			
do	do	do	1885	148,902 66			
do	do	do	1886	179,704 52			
do	do	do	1887	142,563 66			
do	do	do	1888	146,754 37			
do	do	do	1889	215,326 46			
do	do	do	1890	106,760 35		494 31	
do	do	do	1891	61,260 49		5,137 03	173 53
do	do	do	1892	5,964 22		5,803 48	3,505 15
Total				1,216,631 47	400 00	11,434 82	3,678 68

LEONARD SHANNON,

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

Accountant.



## Department of Railways and Canals.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

### TRENT CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation	1868	309,371 31			
do do do	1869				
do do do	1870				
do do do	1871				
do do do	1872				
do do do	1873				
do do do	1874				
do do do	1875				
do do do	1876				
do do do	1877				
do do do	1878				
do do do	1879				
do do do	1880	561 50		1,188 92	3,568 89
do do do	1881			2 489 93	2,233 50
do do do	1882		5,836 51	2,011 92	8,115 50
do do do	1883	40,767 16	9,303 66	2,235 50	3,047 42
do do do	1884	120,393 91	6,198 57	2,208 64	5,264 35
do do do	1885	121,382 84		3,303 87	4,653 50
do do do	1886	75,103 30		1,639 75	5,917 88
do do do	1887	179,541 63		1,938 08	6,008 88
do do do	1888	114,879 35		1,770 29	5,151 42
do do do	1889	47,592 13	29,677 92	3,242 05	5,935 94
do do do	1890	58,644 50	11,522 65	3,450 99	730 55
do do do	1891	9,826 49	3,164 81	3,803 66	4,888 98
do do do	1892	4,457 28	6,506 97	3,695 85	4,721 85
Total		1,082,521 40	72,211 09	32,979 45	60,238 66

### TAY CANAL.

Government expenditure since Confederation	1868				
do do do	1869				
do do do	1870				
do do do	1871				
do do do	1872				
do do do	1873				
do do do	1874				
do do do	1875				
do do do	1876				
do do do	1877				
do do do	1878				
do do do	1879				
do do do	1880				
do do do	1881				
do do do	1882		748 65		
do do do	1883	4,831 80			
do do do	1884	50,878 12			
do do do	1885	92,473 97			
do do do	1886	65,561 51			
do do do	1887	49,617 92			
do do do	1888	54,166 57			
do do do	1889	89,486 18			
do do do	1890	22,226 23			
do do do	1891	17,114 78			
do do do	1892	29,771 65			
Total		476,128 73	748 65		

LEONARD SHANNON,

*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—*Con.*

SAULT STE. MARIE CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure since Confederation.	1868				
do do do	1869				
do do do	1870				
do do do	1871				
do do do	1872		949 35		
do do do	1873				
do do do	1874				
do do do	1875				
do do do	1876				
do do do	1877				
do do do	1878				
do do do	1879				
do do do	1880				
do do do	1881				
do do do	1882				
do do do	1883				
do do do	1884				
do do do	1885				
do do do	1886				
do do do	1887				
do do do	1888	8,145 06			
do do do	1889	34,018 95			
do do do	1890	176,568 55			
do do do	1891	325,336 33			
do do do	1892	341,474 31			
Total.....		885,543 20	949 35		

SOULANGES CANAL.

	Year ending 30th June.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation	1868				
do since do	1869				
do do do	1870				
do do do	1871				
do do do	1872				
do do do	1873				
do do do	1874				
do do do	1875				
do do do	1876				
do do do	1877				
do do do	1878				
do do do	1879				
do do do	1880				
do do do	1881				
do do do	1882				
do do do	1883				
do do do	1884				
do do do	1885				
do do do	1886				
do do do	1887				
do do do	1888				
do do do	1889				
do do do	1890				
do do do	1891				
do do do	1892	54,235 76			
Total.....		54,235 76			

LEONARD SHANNON,

*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

# Department of Railways and Canals.

## RECAPITULATION—EXPENDITURE ON CANALS.

	Year ending 30th June.	Capital.	Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation, including Imperial Government		20,593,866 13	98,378 46		
Government expenditure since Confederation	1868	33,617 56	95,347 79	113,084 50	101,646 44
do do	1869	126,898 20	55 00	116,069 76	118,579 31
do do	1870		90,355 96	120,403 02	150,176 70
do do	1871		116,429 54	135,040 81	140,467 52
do do	1872	255,645 75	33,289 27	124,137 09	152,086 25
do do	1873	256,547 27	127,369 55	148,581 18	186,573 13
do do	1874	1,189,591 91	51,037 05	167,194 40	213,613 86
do do	1875	1,714,830 37	479 00	168,401 21	203,226 85
do do	1876	2,388,733 46	810 75	178,411 80	190,578 45
do do	1877	4,131,374 30	22 30	179,661 40	138,448 51
do do	1878	3,843,338 62		187,521 31	122,251 60
do do	1879	3,064,098 61		191,892 44	115,349 99
do do	1880	2,123,366 34		195,039 33	147,167 52
do do	1881	2,075,891 65	7,246 69	197,573 62	154,653 63
do do	1882	1,593,174 09	55,025 03	224,572 61	187,399 02
do do	1883	1,763,001 97	62,503 14	269,415 01	178,617 86
do do	1884	1,577,295 42	60,993 99	280,657 29	192,219 38
do do	1885	1,504,621 47	58,297 59	280,226 20	201,708 47
do do	1886	1,333,324 80	31,984 02	282,323 63	198,251 97
do do	1887	1,783,698 16	65,983 06	285,172 62	198,888 84
do do	1888	1,033,118 34	120,561 59	292,458 76	201,928 93
do do	1889	972,918 43	162,015 49	301,040 23	240,261 36
do do	1890	1,026,364 24	146,853 54	290,516 63	176,089 00
do do	1891	1,318,092 15	165,843 87	294,562 12	204,768 45
do do	1892	1,437,149 30	194,129 61	293,115 58	231,089 54
Total		57,140,558 54	1,745,012 29	5,317,072 55	4,346,042 58

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

## INTERCOLONIAL RAILWAY.

(Including amounts paid to Nova Scotia Railway and European and North American Railway, N.B.)

	Year.	Construction.		Working Ex- penses, includ- ing Windsor Branch Railway.	
		\$	cts.	\$	cts.
Expenditure prior to Confederation.....		10,766	725 54		
do since do.....	1868	483,353	65	359,961	08
do do do.....	1869	282,615	18	387,548	47
do do do.....	1870	1,729,381	49	445,208	75
do do do.....	1871	2,916,782	13	442,993	31
do do do.....	1872	5,131,141	51	595,076	22
do do do.....	1873	5,201,450	37	1,011,892	60
do do do.....	1874	3,614,898	81	1,847,175	24
do do do.....	1875	3,426,099	55	1,532,589	62
do do do.....	1876	1,108,321	59	1,277,197	79
do do do.....	1877	1,318,352	19	1,661,673	55
do do do.....	1878	408,816	74	1,811,273	56
do do do.....	1879	226,639	19	2,010,183	22
do do do.....	1880	2,048,014	60	1,607,956	70
do do do.....	1881	608,732	80	1,780,353	53
do do do.....	1882	585,568	79	2,080,592	37
do do do.....	1883	1,616,632	96	2,383,477	20
do do do.....	1884	1,405,377	52	2,366,719	95
do do do.....	1885	1,195,363	08	2,460,229	87
do do do.....	1886	544,958	17	2,508,473	10
do do do.....	1887	823,070	86	2,854,158	91
do do do.....	1888	742,203	09	3,300,481	94
do do do.....	1889	655,228	13	3,174,785	19
do do do.....	1890	365,246	48	3,500,455	80
do do do.....	1891	79,929	34	3,691,273	65
do do do.....	1892	*168,101	77	3,439,377	02
Total.....		+47,453,005	53	48,531,108	64

\*Expenditure, for year 1891-92.....\$171,536 65

Less refunds of previous year's expenditure.....3,434 88

\$168,101 77

,† Including \$296,872.90 charged to "Consolidated Fund."

Total cost of construction as above.....\$ 47,453,005 53

Less amounts transferred from Capital to Consolidated Fund as follows:—

	Nova Scotia Ry.	European and North American Ry.
1868.....	\$ 16,800 99	\$ 11,302 89
1870.....	34,403 45	1,749 21
1871.....	50,405 69	
1873.....	106,899 59	75,311 08
	<u>\$ 208,509 72</u>	<u>\$ 83,363 18</u>
		208,509 72
		296,872 90

Agreeing with balance sheet, Public Accounts, 1891-92, page XIV.....\$ 47,156,132 63

LEONARD SHANNON,  
DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892. Accountant.

# Department of Railways and Canals.

## EASTERN EXTENSION RAILWAY.

	Year.	Capital.	Working Expenses.
		\$	cts.
		\$	cts.
Government expenditure prior to Confederation.....			
do since do .....	1868		
do do do .....	1869		
do do do .....	1870		
do do do .....	1871		
do do do .....	1872		
do do do .....	1873		
do do do .....	1874		
do do do .....	1875		
do do do .....	1876		
do do do .....	1877		
do do do .....	1878		
do do do .....	1879		
do do do .....	1880		
do do do .....	1881		
do do do .....	1882		
do do do .....	1883		
do do do .....	1884	1,284,311 97	10,033 77
do do do .....	1885	2,055 92	78,273 65
do do do .....	1886	183 79	94,756 06
do do do .....	1887		94,254 04
do do do .....	1888		90,954 73
do do do .....	1889	34,235 73	90,719 04
do do do .....	1890		79,102 77
do do do .....	1891	3,255 40	*
do do do .....	1892		*
Total .....		1,324,042 81	538,094 06

\*Included in Intercolonial Railway working expenses.

## CARLETON BRANCH RAILWAY.

Government expenditure prior to Confederation.....			
do since do .....	1868		
do do do .....	1869		
do do do .....	1870		
do do do .....	1871		
do do do .....	1872		
do do do .....	1873		
do do do .....	1874		
do do do .....	1875		
do do do .....	1876		
do do do .....	1877		
do do do .....	1878		
do do do .....	1879		
do do do .....	1880		
do do do .....	1881		
do do do .....	1882		
do do do .....	1883		
do do do .....	1884		
do do do .....	1885		
do do do .....	1886	85,610 69	
do do do .....	1887	2,299 62	
do do do .....	1888	500 17	
do do do .....	1889		
do do do .....	1890		
do do do .....	1891		
do do do .....	1892		
Total .....		88,410 48	

LEONARD SHANNON,

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

*Accountant.*

CAPE BRETON RAILWAY.

	Year.	Capital.		Working Expenses.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.....	1868				
do since do .....	1869				
do do do .....	1870				
do do do .....	1871				
do do do .....	1872				
do do do .....	1873				
do do do .....	1874				
do do do .....	1875				
do do do .....	1876				
do do do .....	1877				
do do do .....	1878				
do do do .....	1879				
do do do .....	1880				
do do do .....	1881				
do do do .....	1882				
do do do .....	1883				
do do do .....	1884				
do do do .....	1885				
do do do .....	1886				
do do do .....	1887		76,501 89		
do do do .....	1888		689,450 50		
do do do .....	1889		1,083,276 60		
do do do .....	1890		1,170,523 62		
do do do .....	1891		521,441 62		
do do do .....	1892		99,936 96		*
<b>Total .....</b>			<b>3,641,131 19</b>		

\* Included in Intercolonial Railway working expenses.

OXFORD AND NEW GLASGOW RAILWAY.

Government expenditure prior to Confederation.....	1868				
do since do .....	1869				
do do do .....	1870				
do do do .....	1871				
do do do .....	1872				
do do do .....	1873				
do do do .....	1874				
do do do .....	1875				
do do do .....	1876				
do do do .....	1877				
do do do .....	1878				
do do do .....	1879				
do do do .....	1880				
do do do .....	1881				
do do do .....	1882				
do do do .....	1883				
do do do .....	1884				
do do do .....	1885				
do do do .....	1886				
do do do .....	1887				
do do do .....	1888		280,932 35		
do do do .....	1889		840,553 57		
do do do .....	1890		434,074 60		
do do do .....	1891		220,886 39		
do do do .....	1892		48,745 23		*
<b>Total .....</b>			<b>1,825,192 14</b>		

\* Included in Intercolonial Railway working expenses.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

LEONARD SHANNON,  
*Accountant.*

# Department of Railways and Canals.

## MONTREAL AND EUROPEAN SHORT LINE RAILWAY.

	Year.	Construction.	Working Expenses.
		\$	cts.
		\$	cts.
Government expenditure prior to Confederation .....	1868		
do since do .....	1869		
do do do .....	1870		
do do do .....	1871		
do do do .....	1872		
do do do .....	1873		
do do do .....	1874		
do do do .....	1875		
do do do .....	1876		
do do do .....	1877		
do do do .....	1878		
do do do .....	1879		
do do do .....	1880		
do do do .....	1881		
do do do .....	1882		
do do do .....	1883		
do do do .....	1884		
do do do .....	1885	49,587	45
do do do .....	1886	135,214	38
do do do .....	1887	24,157	32
do do do .....	1888	397	35
do do do .....	1889		
do do do .....	1890		
do do do .....	1891	124,568	23
do do do .....	1892		
<b>Total .....</b>		<b>333,924</b>	<b>73</b>

## PRINCE EDWARD ISLAND RAILWAY.

Government expenditure prior to Confederation .....		3,114,735	11	
do since do .....	1874			750 00
do do do .....	1875	46,086	63	49,344 62
do do do .....	1876	42,546	10	219,930 43
do do do .....	1877	200,000	00	228,595 25
do do do .....	1878	6,551	86	221,599 49
do do do .....	1879	40,129	05	223,313 12
do do do .....	1880	16,539	82	164,640 55
do do do .....	1881			203,122 88
do do do .....	1882	402	03	228,259 97
do do do .....	1883	57,186	02	252,808 41
do do do .....	1884	130,663	38	236,428 13
do do do .....	1885	76,956	56	211,207 01
do do do .....	1886	4,668	33	216,744 34
do do do .....	1887	5,800	00	204,237 45
do do do .....	1888			229,639 95
do do do .....	1889			247,559 44
do do do .....	1890			266,485 85
do do do .....	1891			257,990 08
do do do .....	1892	8,300	49	289,706 38
<b>Total .....</b>		<b>*3,750,565</b>	<b>38</b>	<b>3,952,363 35</b>

\*Agrees with Public Accounts balance sheet, 1891-92, page xiv.

Total expenditure as above .....	\$3,750,565 38
do per Chief Engineer's report, page 31 .....	3,750,081 38
Difference to be adjusted in next report .....	\$ 484 00

LEONARD SHANNON,  
DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

*Accountant.*

## CANADIAN PACIFIC RAILWAY.

	Year.	Construction, including Subsidy of \$25,000,000.	Working Expenses.
		\$ cts.	\$ cts.
Government expenditure prior to Confederation.....			
do since do .....	1868		
do do do .....	1869		
do do do .....	1870		
do do do .....	1871	30,148 32	
do do do .....	1872	489,428 16	
do do do .....	1873	561,818 44	
do do do .....	1874	310,224 88	
do do do .....	1875	1,546,241 67	
do do do .....	1876	3,346,567 06	
do do do .....	1877	1,691,149 97	
do do do .....	1878	2,228,373 13	
do do do .....	1879	2,240,285 47	
do do do .....	1880	4,044,522 72	78,892 01
do do do .....	1881	4,968,503 93	236,944 98
do do do .....	1882	(1) 4,589,075 79	1,786 20
do do do .....	1883	(2) 10,033,800 04	266 09
do do do .....	1884	(3) 11,192,722 02	327 02
do do do .....	1885	(4) 9,000,281 53	
do do do .....	1886	(5) 3,672,584 81	
do do do .....	1887	(6) 915,057 49	
do do do .....	1888	52,098 65	
do do do .....	1889	86,716 07	
do do do .....	1890	40,980 54	
do do do .....	1891	37,367 00	
do do do .....	1892	66,211 39	
Total .....		*62,044,159 08	318,216 30

\*Agrees with Public Accounts balance sheet, 1891-92, page xiv.

(1) Including .....	\$ 2,210,000 00	on account subsidy
(2) do .....	5,323,076 60	do
(3) do .....	7,254,208 27	do
(4) do .....	6,862,201 00	do
(5) do .....	2,890,427 00	do
(6) do .....	460,087 13	do
	<u>\$ 25,000,000 00</u>	

LEONARD SHANNON,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.



# Department of Railways and Canals.

## ANNAPOLIS AND DIGBY RAILWAY.

	Year.	Capital.	Working Expenses.
		\$ cts.	\$ cts.
Government expenditure prior to Confederation.....			
do since do .....	1868		
do do do .....	1869		
do do do .....	1870		
do do do .....	1871		
do do do .....	1872		
do do do .....	1873		
do do do .....	1874		
do do do .....	1875		
do do do .....	1876		
do do do .....	1877		
do do do .....	1878		
do do do .....	1879		
do do do .....	1880		
do do do .....	1881		
do do do .....	1882		
do do do .....	1883		
do do do .....	1884		
do do do .....	1885		
do do do .....	1886		
do do do .....	1887		
do do do .....	1888		
do do do .....	1889	9,847 27	
do do do .....	1890	381,942 75	
do do do .....	1891	196,869 36	
do do do .....	1892	26,129 39	
Total.....		614,789 27	

### RECAPITULATION—RAILWAYS.

	Year.	Construction.	Working Expenses.
		\$ cts.	\$ cts.
Government expenditure prior to Confederation.....		13,881,460 65	
do since do .....	1868	483,353 65	359,961 08
do do do .....	1869	282,615 18	387,548 47
do do do .....	1870	1,729,381 49	445,208 75
do do do .....	1871	2,946,930 45	442,993 31
do do do .....	1872	5,620,569 67	595,076 22
do do do .....	1873	5,763,268 81	1,011,892 60
do do do .....	1874	3,925,123 69	1,847,925 24
do do do .....	1875	5,018,427 85	1,581,934 24
do do do .....	1876	4,497,434 75	1,497,128 22
do do do .....	1877	3,209,502 16	1,890,268 80
do do do .....	1878	2,643,741 73	2,032,873 05
do do do .....	1879	2,507,053 71	2,233,496 34
do do do .....	1880	6,109,077 14	1,851,489 26
do do do .....	1881	5,577,236 73	2,220,421 39
do do do .....	1882	5,175,046 61	2,310,638 54
do do do .....	1883	11,707,619 02	2,636,551 70
do do do .....	1884	14,013,074 89	2,613,508 87
do do do .....	1885	11,224,244 54	2,749,710 53
do do do .....	1886	4,443,220 17	2,819,973 50
do do do .....	1887	1,846,887 18	3,152,650 40
do do do .....	1888	1,765,582 11	3,621,076 62
do do do .....	1889	2,709,857 37	3,513,063 67
do do do .....	1890	2,392,767 99	3,846,044 42
do do do .....	1891	1,184,317 34	3,949,263 73
do do do .....	1892	417,425 73	3,748,597 77
Total.....		121,075,220 61	53,359,296 72

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

LEONARD SHANNON,  
Accountant.



## Department of Railways and Canals.

47	do	8	Quebec Central Ry., Que.	60,342 00						60,342 00
51	do	3	Quebec Central Ry., Que.							
53	do	2	288,000 00							
48-9	do	59	Montreal and Sorel Rail- way, Quebec.	64,972	4,950	6,719 50	17,116 07			93,757 57
53	do	2	40,000 00							
48-9	do	59	Montreal and Champlain Junction Railway, Que.	30,000		16,400 00	36,700 00			88,500 00
50-1	do	24	64,000 00							
51	do	3	9,600 00							
46	do	25	Elgin, Peticoctiac & Havelock Railway, N. B.	38,400				44,252 82		82,652 82
51	do	3	38,400 00							
47	do	8	St. Louis and Richibucto Railway, N. B.	22,400						22,400 00
48-9	do	59	96,000 00							
49	do	10	38,400 00							
50-1	do	24	180,000 00							
47	do	6	750,000 00	48,480	44,384	149,812 00	30,188 00			282,355 20
47	do	8	96,000 00	422,520	327,480					750,000 00
46	do	25	320,000 00							96,000 00
47	do	8	300,000 00							
52	do	3		250,000		148,675 00				524,175-00
48-9	do	59	118,400 00							
50-1	do	24	217,600 00							
49	do	10	11,200 00							
49	do	10	32,000 00							
47	do	8	96,000 00							
52	do	3		15,000						15,000 00
49	do	10	96,000 00							
50-1	do	24	6,400 00							
47	do	8	51,200 00							
52	do	3		40,480		4,386 00	1,600 43			67,020 00
48-9	do	59	65,200 00							
50-1	do	24	38,400 00							
49	do	10	4,000 00							
60-1	do	24	240,000 00							
45	do	14	258,000 00							
48-9	do	58	100,000 00							
51	do	3	51,200 00							
53	do	2	44,800 00							
48-9	do	59	16,000 00							
50-1	do	24	22,400 00							
49	do	10	256,000 00							
50-1	do	24	256,000 00							
49	do	10								
53	do	2								

APPENDIX No. 3.—Statement showing Subsidies voted for Railways as to which contracts have been entered into, &c.—*Con.*

Subsidies voted.		Railways.										Payments.										Total to 30th June, 1892.																			
Authority.		Amount.												1883-84		1884-85		1885-86		1886-87.		1887-88.		1888-89.		1889-90.		1890-91.		1891-92.		\$ cts.									
		\$ cts.												\$		\$		\$		\$		\$		\$		\$		\$		\$		\$ cts.									
50-1	Vic, c. 24	96,000	00	Drummond County Rail-																																					
52	do 3	14,400	00	way, Quebec.																																					
53	do 2	76,800	00	Brockville, Westport and																																					
48-9	do 59	128,000	00	Sault Ste. Marie Ry., Ont.																																					
53	do 2	32,000	00	Montreal and Lake Maski-																																					
49	do 10	10,200	00	ongé Railway, Quebec.																																					
53	do 2	54,400	00	South Norfolk Railway, Ont.																																					
50-1	do 24	51,200	00	Guelph Junction Ry., Ont.																																					
48-9	do 24	22,400	00	Belleville and North Hast-																																					
49	do 10	108,800	00	ings Railway, Ontario.																																					
52	do 3	48,000	00	Hereford Railway, Quebec.																																					
50-1	do 24	118,400	00	Lake Erie, Essex and Detroit																																					
50-1	do 24	96,000	00	River Railway, Ontario.																																					
50-1	do 24	38,400	00	Beatharnois Junction Rail-																																					
52	do 3	64,000	00	way, Quebec.																																					
52	do 3	30,000	00	St. Catharines and Niagara																																					
50-1	do 24	9,600	00	Central Railway, Ont.																																					
51	do 3	147,200	00	Fredericton and St. Mary's																																					
50-1	do 24	44,800	00	Ry. Bridge Co., N.B.																																					
50-1	do 24	108,800	00	Harvey Branch Ry. Co., N.B.																																					
50-1	do 24	147,200	00	Nova Scotia Central Rail-																																					
50-1	do 24	44,800	00	way Co., N.S.																																					
52	do 3	19,200	00	Cumberland Ry. and Coal																																					
52	do 3	54,400	00	Co., N.S.																																					
52	do 3	96,000	00	Pontiac and Kenfrew Rail-																																					
52	do 3	375,000	00	way Co., Ont.																																					
50-1	do 24	57,600	00	Thousand Islands Railway																																					
52	do 3	96,000	00	Co., Ontario.																																					
52	do 3	375,000	00	Quebec, Montmorency and																																					
50-1	do 24	57,600	00	Charlevoix Ry., Quebec.																																					
52	do 3	375,000	00	St. Clair Frontier Tunnel Co.,																																					
50-1	do 24	57,600	00	Ontario.																																					
52	do 3	96,000	00	Brantford, Waterloo & Lake																																					
50-1	do 24	57,600	00	Eric Railway, Ontario.																																					

# Department of Railways and Canals.

51	do	31	287,200 00	{ Port Arthur, Duluth and Western Ry., Ontario.					87,000 00	70,075 00	157,075 00
53	do	24	192,000 00	{ Montreal and Ottawa Railway, Ontario.					49,960 00		49,960 00
53	do	24	44,800 00	{ Cornwallis Valley Ry., N.S.					42,670 00	2,130 00	44,800 00
52	do	31	320,000 00	Ottawa and Gatineau Valley Railway, Quebec.					87,582 00	38,790 00	126,372 00
51	do	31	83,612 54	{ Central Railway, N.B.					75,639 00	83,612 54	159,251 54
52	do	21	142,400 00	{ Montreal and Western Railway, Quebec.					76,143 00	32,253 00	108,396 00
53	do	21	361,270 00	{ Parry Sound Colonization Ry. Co., Ont.					30,400 00	30,400 00	30,400 00
52	do	31	163,200 00	{ Shuswap and Okanagan Ry. Co., B.C.					162,260 00	162,260 00	162,260 00
54-5	do	8	89,600 00	{ Tobique Valley Railway Co., N.B.					73,000 00	73,000 00	73,000 00
53	do	21	35,200 00	{ Columbia and Kootenay Railway Co., B.C.					88,800 00	88,800 00	88,800 00
53	do	21	112,000 00	{ Waterloo, Junc. Ry. Co., Que.					32,800 00	32,800 00	32,800 00
53	do	21	35,200 00	{ Orford Mountain Railway Co., Que.					32,000 00	32,000 00	32,000 00
53	do	21	99,200 00	{ St. Lawrence and Adirondack Ry. Co., Que.					40,256 00	40,256 00	40,256 00
53	do	21	57,600 00	{ Chatham Branch Railway Co., N.B.					24,439 84	24,439 84	24,439 84
53	do	31	24,439 84								
53	do	31	208,000 403,245 2,171,249 1,406,533 1,027,041 92 846,721 83 1,491,595 72 1,079,105 87 1,061,615 93 9,695,108 27								

This return does not include the following:—

1. The Canada Central Railway.
2. The Canadian Pacific Railway—main line.
3. The Atlantic and North-western Railway.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th November, 1892.

LEONARD SHANNON,  
*Accountant.*

## APPENDIX No. 4.

CANADIAN GOVERNMENT RAILWAYS,  
OFFICE OF THE CHIEF ENGINEER AND GENERAL MANAGER,  
OTTAWA, 10th October, 1892.

SIR,—I have the honour to submit my annual report in connection with the construction of the Canadian Pacific Railway, the Cape Breton Railway, the Oxford and New Glasgow section of the Intercolonial Railway, the Digby and Annapolis Railway, and also in connection with the subsidized railways, both to 30th June, 1892, and to the present date.

CANADIAN PACIFIC RAILWAY.

I stated in my last year's report that the arbitrators appointed to adjudicate upon the claim made upon the Government by the Canadian Pacific Railway Company in connection with the construction of the section of railway built by the Government between Savona's Ferry (Kamloops) and Port Moody, awarded the company the sum of \$579,255.20, of this amount the sum of \$202,675.20 was awarded for works executed during the progress of the arbitration, leaving a balance of \$376,580 for work remaining to be done to complete the road as required by the award. The award was dated July, 1891, since which the works of improvement under the award have been carried on under the supervision as to expenditure by Mr. Francis J. Lynch who carefully notes the progress being made, the character of the work being done and the expenditure, so as to enable him to send in monthly returns of the expenditure on each item named in the award. His returns show the following progress with the work.

From July, 1891, to February, 1892, amount expended and certified.....	\$ 11,966 79
In February, amount expended and certified.....	188 15
In March do do .....	9,160 77
In April do do .....	16,674 16
In May do do .....	16,010 86
In June do do .....	21,696 89
In July do do .....	21,907 15
In August do do .....	19,477 77
	\$ 117,082 54
Amount awarded for work done prior to July, 1891.	202,675 20
	\$ 319,757 74

Leaving work to the value of \$259,497.46 to be done. At the rate of progress which has been made up to the 31st August, 1892, it will take two more seasons to complete the work, but it is hoped that in future it will be prosecuted with greater vigour, and that the whole may be completed next season. The engineer in charge informs me that the works of their several kinds are well and substantially executed.

The two claims before the arbitrators in connection with some steel rails have not yet been finally disposed of, but it is probable the arbitrators will deal with these matters shortly. I stated in my report of last year that a number of claims for land and land damages remained unsettled, since which very little progress has been made towards settling them, a number of these being for land on the British Columbia

## Department of Railways and Canals.

section, which cases are, I believe, before the Exchequer Court, and I understand a court has recently been held at Victoria, British Columbia, to hear them.

In addition to the works of improvements being made under the award of the arbitrators upon the Savona, Port Moody section, the company throughout their line are making large and heavy permanent improvements in the way of converting wooden trestle bridges into solid earthen embankments and by replacing wooden truss bridges with substantial steel structures, and for wooden grasshopper trestles and cribwork, solid masonry and concrete retaining walls have been substituted, these retaining walls ranging from 5 to 50 feet in height. By the close of the present working season it is expected there will be over 700 wooden structures replaced by solid earth embankments, steel structures, and about 7,500 lineal feet of solid masonry or concrete retaining wall.

In addition to these works some of the heavy grades on the eastern section of the road have been reduced with a view to increased efficiency and economy in operating the road, and on portions of the line where the traffic is specially heavy, the 56 lbs. steel rails have been lifted and replaced by 72 lbs. steel rails, so that what was originally a well constructed road with wooden structures, is being rapidly converted into a road of a very solid and substantial character.

I have mentioned all these matters relating to this road, feeling that the interests of the country are largely wrapped up in the success of this undertaking, which is doing more to develop its resources than any other railway enterprise in the country, as would naturally be the case with so extensive a road tapping, as it does, sections of the country in almost every point of the compass.

The president of the road who is very enterprising and evidently has the courage of his convictions, is still further extending several important branch roads and building others.

The traffic operations of this road continue to show astonishingly good results, which, considering the road passes through long stretches of undeveloped country, is very surprising, and as much of it is a fine agricultural district, while other sections are rich in minerals, leads to the belief that the road has a great future before it, as no doubt the traffic must rapidly develop year by year, as the country fills up with population, and its great resources are developed. The road has a length of 5,767 miles, and its operations for the year ended 30th June last, were as follows :—

Gross earnings... ..	\$21,032,120 13
Working expenses.....	12,654,498 42
Net earnings.....	<u>\$ 8,377,621 71</u>

The value of this road as a great highway across this continent has been fully demonstrated during the past twelve months by the good despatch with which marines and others for the British Government have been transported over the road between the port of Halifax on the Atlantic Ocean and the port of Vancouver on the Pacific, and the comfort and ease with which they were enabled to make so long a journey, not only so, but it appears as if the Canadian Pacific Railway is fast becoming the favourite route between Europe, Japan and China. While this foreign trade is being developed, the local trade of Canada is also rapidly developing through the influence of the railway system of Canada, and especially the Canadian Pacific Railway.

### TRAIN FERRY ACROSS STRAIT OF CANSO.

The cost of this work is estimated at about \$120,000, up to this date very little progress has been made with the work, the grading of the approach to the ferry on the Cape Breton side of the Strait of Canso has been executed under contract by Messrs. Gray and McManus and is completed. Mr. William Starkey, the contractor for the construction of the floating gang-way, is making good progress with the work. The iron work is being made under contract by "The Truro Foundry and Machine Company." Messrs. McDonald and Moffat have contracted to build the train barge, but have made little or no progress with the work. Tenders

are now being invited for the construction of a ferry steamer upon plans and specifications prepared by Messrs. Carrier, Iainé & Co., of Lévis.

Expenditure up to 30th June, 1892.....	\$10,297 65
do from 30th June, 1892, to 31st August, 1892.	5,839 72
Total .....	<u>\$16,137 37</u>

#### OXFORD AND NEW GLASGOW SECTION OF INTERCOLONIAL RAILWAY.

All the works of construction have been completed on this section of road excepting the water service, there remaining two water stations yet to complete, for which there is an appropriation available.

##### COST OF CONSTRUCTION AND EQUIPMENT.

Expenditure up to 30th June, 1892.....	\$1,825,192 14
do from 30th June, 1892, to 31st Aug., 1892..	129 75
Total.....	<u>\$1,825,321 89</u>

#### CAPE BRETON RAILWAY.

The section of this road between Sydney, North Sydney and the Grand Narrows has been in operation since the 24th November, 1890, and the section between the Grand Narrows and Point Tupper, since 1st January, 1891, so that it will be observed the road has been under traffic bordering on two years. It was, however, opened for public traffic to accommodate the public before it was completed, and at the close of the fiscal year 1891-92, there still remained some accounts for works of construction and equipment unpaid, these accounts were principally owing to the Intercolonial Railway for the stations equipment, and for the transport of construction materials during the progress of the works in the year previous, there also remained some minor works of construction to be done, and some land claims to be settled. These are now in a fair way of being completed. The session before last, this road was by Act of Parliament made part and parcel of the Intercolonial Railway. The passenger traffic on the Cape Breton section of the Intercolonial Railway is very good during the summer season, and very light in winter, but the freight business is exceedingly light the year round, especially so during the season of navigation.

##### COST OF CONSTRUCTION AND EQUIPMENT.

Expenditure up to 30th June, 1892, was.....	\$3,630,833 54
do from 30th June, 1892, to 31st Aug., 1892..	1,341 49
Total.....	<u>\$3,632,175 03</u>

#### DIGBY AND ANNAPOLIS RAILWAY.

This road was completed and handed over to the Western Counties Railway Company (for which it was built) in July, 1891, since which time it has been in continuous operation. The contractors for the construction of this road have made a claim on the Government in connection with this work in excess of the engineer's final estimate of \$107,776.25, of this \$1,925.61 has been allowed, leaving a balance of \$105,850.64, to which it is considered the contractors are not entitled under the contract.

Expenditure up to 30th June, 1892.....	\$614,789 27
do from 30th June, 1892, to 31st August, 1892.....	
Total.....	<u>\$614,789 27</u>



# Department of Railway and Canals.

## RAILWAYS SUBSIDIZED IN CASH, RAILS OR LAND.

List of Railways receiving a Cash Subsidy per mile, in a lump sum, or 15 per cent on cost of tunnel or bridge; showing the amount of subsidy granted to each, amounts paid up to 30th June, 1891, during the year ended 30th June, 1892, and during the three months ended 30th September, 1892, respectively; also, the total amount paid up to the last named date.

Name of Railway.	Estimated Length in Miles.	Subsidy granted.	Subsidy paid up to 30th June, 1891.	Subsidy paid during the year ended 30th June, 1892.	Total Subsidy paid up to 30th June, 1892.	Total Subsidy paid up to 30th September, 1892.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1 Albert Southern.....	16	51,200 00	31,500 00	18,960 00	50,460 00	50,460 00
2 Baie des Chaleurs.....	70	620,000 00	524,175 00		524,175 00	524,175 00
3 Beauharnois Junction.....	30	96,000 00	58,900 00		58,900 00	58,900 00
4 Belleville and North Hastings.....	7	22,400 00	21,888 00		21,888 00	21,888 00
5 Belleville and Lake Nipissing.....	30	96,000 00				
6 Bracebridge and Baysville.....	15	48,000 00				
7 Brantford, Waterloo and Lake Erie.....	18	37,600 00	52,810 00		52,810 00	52,810 00
8 Brockville, Westport and Sault Ste. Marie.....	60	192,000 00	92,400 00	12,800 00	105,200 00	105,200 00
9 Buctouche and Moncton.....	32	102,400 00	67,020 00		67,020 00	67,020 00
10 Canada Atlantic.....	53 & bridge	314,400 00	282,355 20		282,355 20	282,355 20
11 Canada Central.....	120	1,525,250 00	1,525,250 00		1,525,250 00	1,525,250 00
12 Canadian Pacific.....	1,905	25,000,000 00	25,000,000 00		25,000,000 00	25,000,000 00
13 For extension of C.P.R.....	160	1,500,000 00		1,500,000 00	1,500,000 00	1,500,000 00
14 Cap Rouge and St. Lawrence.....	12	38,400 00				
15 For a line Cape Tormentine towards Murray Bay.....	20	64,000 00				
16 Carasquet.....	67	224,000 00	224,000 00		224,000 00	224,000 00
17 Central.....	44 <sup>5</sup> / <sub>16</sub>	142,400 00	75,639 00		75,639 00	75,639 00
18 Cobourg, Northumberland and Pacific.....	49	136,800 00				
19 Cornwallis Valley.....	14	44,800 00	42,670 00	2,130 00	44,800 00	44,800 00
20 Columbia and Kootenay.....	35	112,000 00		88,800 00	88,800 00	88,800 00
21 Cumberland.....	14	44,800 00	39,850 00		39,850 00	39,850 00
22 Dominion Lime Co.....	7	22,400 00	15,360 00		15,360 00	15,360 00
23 Drummond County.....	63 <sup>10</sup> / <sub>16</sub>	201,320 00	177,300 00		177,300 00	177,300 00
24 Elgin, Peticoodiac and Havelock.....	12	38,400 00		5,105 00	5,105 00	5,105 00
25 Erie and Huron.....	52	106,400 00	96,000 00		96,000 00	96,000 00
26 Esquimaux and Nanaimo.....	71	750,000 00	750,000 00		750,000 00	750,000 00
27 For a line Fredericton <i>via</i> Oromocto and (agetown to New Brunswick.....	30	96,000 00				
28 Fredericton and St. Mary's.....	1	30,000 00	30,000 00		30,000 00	30,000 00
29 Goderich and Wingham.....	31	99,200 00				
30 Grand Trunk, Georgian Bay and Lake Erie.....	15	48,000 00				
31 Great Eastern.....	60	228,500 00	35,500 00	4,845 00	40,345 00	40,345 00

List of Railways receiving a Cash Subsidy per mile, in a lump sum, or 15 per cent on cost, &c., up to 30th June, 1892—Concluded.

Name of Railway.	Estimated Length in Miles.	Subsidy granted.	Subsidy paid up to 30th June, 1891.	Subsidy paid during the year ended 30th June, 1892.	Total Subsidy paid up to 30th June, 1892.	Total Subsidy paid up to 30th September, 1892.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
32 Great Northern.....	50	160,000 00	54,588 00	24,100 00	78,688 00	78,688 00
33 Guelph Junction.....	16	51,200 00	46,000 00		46,000 00	46,000 00
34 Harvey Branch.....	3	9,000 00	5,553 57		5,553 57	5,553 57
35 Hereford.....	49	156,800 00	155,200 00		155,200 00	155,200 00
36 International.....	49	156,800 00	156,800 00		156,800 00	156,800 00
37 Inverness and Richmond.....	25	80,000 00				
38 Irondale, Bancroft and Ottawa.....	50	160,000 00	15,000 00		15,000 00	15,000 00
39 Joliette to St. Jean de Matha.....	8	25,000 00				
40 Joggins.....	18, <sup>50</sup> / <sub>100</sub>	58,400 00	37,500 00		37,500 00	37,500 00
41 Kingston and Pembroke.....	15	48,000 00	48,000 00		48,000 00	48,000 00
42 Napanee, Kingston and Western.....	78	268,400 00	192,944 00		192,944 00	192,944 00
43 L'A Assomption.....	3, <sup>60</sup> / <sub>100</sub>	11,200 00	11,200 00		11,200 00	11,200 00
44 For a line from Lachine Bank to Riviere des Prairies.....	15	48,000 00				
45 Lake Erie and Detroit River.....	85	342,400 00	118,400 00		118,400 00	118,400 00
46 Lake Temiscauingue Colonization.....	68, <sup>50</sup> / <sub>100</sub>	240,200 00	52,760 00		52,760 00	52,760 00
47 Leamington and St. Clair.....	16	51,200 00	51,200 00		51,200 00	51,200 00
48 Lindsay, Bobcaygeon and Pontypool.....	32	102,400 00				
49 Lotbiniere and Megantic.....	15	48,000 00				
50 Manitoulin and North Shore.....	30	96,000 00				
51 Massawippi Junction.....	25	80,000 00				
52 Maskinonge and Nipissing.....	30	96,000 00				
53 Montreal and Sorel.....	45	112,000 00	93,757 57		93,757 57	93,757 57
54 Montreal and Champlain Junction.....	63	103,600 00	88,500 00		88,500 00	88,500 00
55 Montreal and Western.....	70	361,270 00	76,143 00	32,253 00	108,396 00	186,031 00
56 Montreal and Lake Maskinonge.....	13, <sup>50</sup> / <sub>100</sub>	42,200 00	41,280 00		41,280 00	41,280 00
57 Montreal and Ottawa.....	60	192,000 00		49,960 00	49,960 00	49,960 00
58 Montford Colonization.....	21	67,200 00				
59 New Brunswick and Prince Edward.....	37	118,400 00	113,440 00		113,440 00	113,440 00
60 Nicola Valley.....	25	80,000 00				
61 Nipissing and James Bay.....	25	80,000 00				
62 New Glasgow Iron, Coal and Railway Co.....	12, <sup>50</sup> / <sub>100</sub>	40,000 00				
63 Northern and Western.....	100	320,000 00	312,000 00		312,000 00	312,000 00
64 Northern Pacific Junction.....	110	1,320,000 00	1,320,000 00		1,320,000 00	1,320,000 00
65 Nova Scotia Central.....	80	256,000 00	222,400 00	8,300 00	230,700 00	230,700 00
66 Ontario and Pacific.....	55, <sup>70</sup> / <sub>100</sub>	172,400 00				
67 Ontario, Belmont and Northern.....	10	32,000 00				
68 Orford Mountain.....	31	99,200 00		32,000 00	32,000 00	32,000 00

# Department of Railways and Canals.

69	Oshawa Railway and Navigation Company.								
70	Ottawa and Gaineau Valley.	7	22,400 00	87,582 00	38,790 00	126,372 00	176,192 00		
71	Ottawa, Arnprior and PARRY Sound.	62	320,000 00						
72	For a line from Ottawa to Morrisburg.	107	430,400 00						
73	PARRY Sound Colonization.	52	166,400 00		30,400 00	30,400 00	30,400 00		
74	Pontiac Pacific Junction.	40	128,000 00						
		92 <sup>5</sup> / <sub>8</sub> and bridge.	337,100 00	174,828 00		174,828 00	174,828 00		
75	Philipsburg Junction.	6 <sup>1</sup> / <sub>2</sub>	21,600 00						
76	Pontiac and Renfrew.	6	19,200 00	13,600 00		13,600 00	13,600 00		
77	Port Arthur, Duluth and Western.	80 <sup>7</sup> / <sub>8</sub>	287,200 00	87,000 00	70,075 00	157,075 00	157,075 00		
78	Quebec Central.	15 <sup>5</sup> / <sub>8</sub>	60,342 00	60,342 00		60,342 00	60,342 00		
79	Quebec and Lake St. John.	248	1,003,495 00	818,705 00	262,227 73	844,927 73	844,928 73		
80	Quebec, Montmorency and Charlevoix.	30	96,000 00	65,600 00		65,600 00	65,600 00		
81	Restigouche and Victoria.	15	48,000 00						
82	For a line Revelstoke to head of Arrow Lake.	25	80,000 00						
83	For a line Sand Point, Shelburne Harbour to Annapolis Royal and to a point at or near Glasgow to Liverpool.								
84	Shuswap and Okanagan.	75	240,000 00						
85	South Norfolk.	51	163,200 00	162,260 00	54,400 00	162,260 00	162,260 00		
86	South Ontario Pacific.	17	54,400 00				54,400 00		
87	St. Catharines and Niagara.	49	158,400 00						
88	St. Eustache to a point on C. P. R. to Isle Jésus.	12	38,400 00	38,400 00	38,400 00	38,400 00	38,400 00		
89	St. Eustache to St. Placide.	12	38,400 00						
90	St. Flavie or Little Métis to Matane.	18	57,600 00						
91	St. Césaire to St. Paul d'Abbotsford.	50	160,000 00						
92	St. Clair Frontier Tunnel.	5	16,000 00						
		2.50 & tunnel							
93	St. Lawrence and Lower Laurentian.	36 <sup>5</sup> / <sub>8</sub>	375,000 00	316,400 00	58,600 00	375,000 00	375,000 00		
94	St. Lawrence and Adirondack.	25 <sup>5</sup> / <sub>8</sub>	217,600 00	124,816 00	92,784 00	217,600 00	217,600 00		
95	St. John to Ste. Rosalie.	32	82,624 00		40,256 00	40,256 00	64,704 00		
96	St. Louis to Richibucto.	7	102,400 00						
97	St. John Valley and Rivière du Loup.	59	22,400 00	22,400 00		22,400 00	22,400 00		
98	St. Placide to St. Andrews.	8	188,800 00						
99	St. Rémi to St. Cyrrien.	8	25,600 00						
100	St. Stephen and Mill-Town.	12	38,400 00						
101	Stewiacke and Lansdowne.	3 <sup>1</sup> / <sub>8</sub>	11,200 00						
102	Summerside to Richmond Bay.	74	236,800 00						
103	Sydney to Louisburg.	3	9,600 00						
104	Témiscouata.	28	89,600 00						
105	Thousand Island.	119	670,800 00	569,970 00	54,830 00	624,800 00	645,950 00		
106	Tilsonburg, Lake Erie and Pacific.	18	54,400 00	10,400 00		10,400 00	10,400 00		
107	Tobique Valley.	16	51,200 00						
108	Toronto, Grey and Bruce.	28	134,400 00						
109	Waterloo Junction.	5	16,000 00						
110	Western Counties.	11	35,200 00						
111	Woodstock via London to Chatham.	20	500,000 00	500,000 00		500,000 00	500,000 00		
112	Woodstock and Centreville.	80	256,000 00	256,000 00		256,000 00	256,000 00		
		26	83,200 00						
		6,253 <sup>5</sup> / <sub>8</sub>	44,968,501 00	35,701,986 34	2,404,466 73	38,068,053 07	38,241,106 07		
		Total							

It will be observed the above table includes the Canada Central, the North Shore Railway, the Esquimalt and Nanaimo Railway, and the Canadian Pacific Railway.

List of Railways receiving Cash Subsidies of fixed sums per annum for a series of years.

Name of Railway.	Miles.	Amount payable each ½ year for 20 years.	Remarks.
		\$ cts.	
Atlantic and North-western.....	252	93,300 00	Road completed and in operation.
Chignecto Marine Transport.....	16 85	85,301 00	
Kingston, Smith's Falls and Ottawa.....	56	3,136 00	
Quebec Central.....	90	10,595 77	
St. Catharines and Niagara.....	34	1,890 00	
Provincial Government of Quebec (Q. M. O. and O. R.) and North Shore Ry.....	279	59,850 00	
			Road completed and in operation, NOTE.—160 miles of this road between Stewarton Junction and Quebec appears in the statement of railways receiving a cash subsidy per mile.

Amount paid annually to the Province of Quebec is entered upon subsidy granted to Quebec, Montreal, Ottawa and Occidental Railway, and North Shore Railway; 5 per cent on the sum of \$2,394,000, equal to \$119,700 annually.

The railway subsidized from Montreal to St. Andrew's, St. John and Halifax, to the amount of \$250,000 per annum, for 20 years, and contracts by the Atlantic and North-western Railway Company was divided into three sections as follows:—

- (1.) Montreal to Sherbrooke, 108 miles.
- (2.) International Boundary to Mattawamkeag, 144 miles.
- (3.) Harvey to Salisbury, 115 miles.

This latter section has not been built and the amount of subsidy applicable thereto has lapsed, amounting to \$63,400.

The two first-named sections are completed and under traffic, entitling the company to receive the sum of \$93,300 each half year for 20 years.

On the Chignecto Marine Transport Railway, the works of construction have made no progress since my last year's report.

Cost of railway lines built by the Dominion Government and transferred to the Canadian Pacific Railway Company up to 30th June, 1892.....	\$30,404,577 65
From 30th June 1892, to 30th September, 1892.....	292,334 44

Total up to 30th September, 1892..... \$30,696,912 09

Cost of Dominion Government Railways to 30th June and 30th September, 1892.

Name of Railway.	Cost up to 30th June.	Expended from 30th June to 31st August 1892.	Total expended up to 31st August 1892.
	\$ cts.	\$ cts.	\$ cts.
Intercolonial Railway.....	53,949,933 65	131,039 11	54,080,972 76
Prince Edward Island Railway.....	3,750,081 38	484 00	3,750,565 38
Total.....	57,700,015 03	131,523 11	57,831,538 14

## Department of Railways and Canals.

List of Railways to which grant of Subsidies in Old Rails to the value appearing opposite their respective names, has been authorized by Parliament.

Name of Railway.	Value of old Iron Rails granted as Subsidy.	Remarks.
	\$    cts.	
Albert.....	14,665 45	
Central of New Brunswick.....	83,612 54	Earned and transferred.
Chatham Branch.....	24,439 84	do            do
Elgin, Petibodioc and Havelock.....	44,252 82	do            do
Kent Northern.....	58,334 27	
Halifax Cotton Co.....	4,335 00	
Steel Company of Canada.....	11,964 66	
Total.....	241,604 58	

List of Railways to which grants of Land Subsidies have been authorized by Parliament.

Name of Railway.	Miles.	Acres granted.	Remarks.
Alberta Railway and Coal Co.....	50	320,000	
Alberta and Arthabaska.....	300	1,920,000	
Brandon and South-western.....	17	108,800	
Calgary and Edmonton.....	340	2,176,000	
Canadian Pacific (Trunk Line).....	1,905	25,000,000	
Canadian Pacific Branches.....	245	1,568,000	
Esquimalt and Nanaimo.....	78	1,900,000	Completed and in operation.
Great North-west Central.....	450	2,880,000	50 miles completed and in operation.
Lake Manitoba Railway and Canal Co.....	142	902,000	
Lake Seul.....	18	115,200	
Manitoba North-western.....	456	2,918,400	
Manitoba South-western Colonization.....	218½	1,396,500	
Manitoba South-eastern.....	110	704,000	
Medicine Hat Railway and Coal Co.....	8	51,200	
North-western of Canada.....	330	3,300,000	
North-west Coal and Navigation Co.....	209½	1,089,180	109 miles constructed and in operation.
Qu'Appelle, Long Lake and Saskatchewan.....	348½	2,229,333	248 miles constructed and in operation.
Red Deer Valley Railway and Coal Co.....	55	352,000	
Winnipeg and Hudson Bay.....	No distance given.		6,400 acres per mile in Manitoba ; 12,800 in North-west Territories.
Wood Mountain and Qu'Appelle.....	240	1,536,000	

Name changed by 52 Vic., cap. 65, to the North-western Railway Company of Canada.

I am not in possession of the information necessary to enable me to state the quantities of land conveyed to the companies.

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

**COLLINGWOOD SCHREIBER,**  
*Chief Engineer and General Manager.*

To the Secretary,  
Department of Railways and Canals.

## APPENDIX No. 4a.

DEPARTMENT OF RAILWAYS AND CANALS, GOVERNMENT RAILWAYS,  
OFFICE OF THE CHIEF ENGINEER AND GENERAL MANAGER,  
OTTAWA, 10th October, 1892.

SIR,—I have the honour to submit to you as usual my annual report upon the working of the Government railways for the year ended 30th June, 1892, and I attach hereto the reports of the Chief Superintendent, Chief Engineer and Mechanical Superintendent of the Intercolonial Railway and also those of the Superintendent and the Mechanical Superintendent of the Prince Edward Island Railway together with statement of accounts prepared by the accountants of these roads.

TABLE showing the length of the Government railways on the 30th June, 1892.

## INTERCOLONIAL RAILWAY.

	Miles.	Total Miles.
Chaudière Junction to Halifax.....	678	
Moncton to St. John.....	89	
Truro to Sydney.....	217	
Oxford Junction to Pictou.....	70	
Chaudière Junction to Lévis.....	8	
Lévis to St. Charles Junction, <i>via</i> Harlaka.....	14	
Dalhousie Junction to Dalhousie.....	7	
Derby Junction to Indiantown.....	14	
Painsec Junction to Point du Chêne.....	11	
Pugwash Junction to Pugwash.....	5	
Stellarton Junction to Brown's Point.....	12	
North Sydney Junction to North Sydney.....	5	
New Glasgow to Pictou Landing.....	7	
Richmond to Dartmouth.....	5	

Total miles showing a regular train service.....1,142

## FREIGHT BRANCHES.

Rivière du Loup Wharf Branch.....	4	
Rimouski do.....	2	
New Castle do.....	2	
Dorchester do.....	1	
Courtney Bay do.....	1	
Sackville do.....	$\frac{1}{2}$	
Stewiacke do.....	1	
Halifax Cotton Factory do.....	1	
		12 $\frac{1}{2}$

Total length of the Intercolonial Railway..... 1,154 $\frac{1}{2}$

## WINDSOR BRANCH.

Windsor Junction to Windsor.....	32
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# Department of Railways and Canals.

## PRINCE EDWARD ISLAND RAILWAY.

	Miles.	Total Miles.
Souris to Tignish.....	168	
Mount Stewart to Georgetown.....	24	
Charlottetown to Royalty Junction.....	5	
Emerald Junction to Cape Traverse.....	13	
Alberton to Cascumpec Wharf.....	1	
	211	

Total length of Government railways..... 1,397½

The result of the year's operations of the Government railways may be stated as follows:—

Name of Railway.	Mileage in operation.		Amount.	Profit.	Loss.
			\$    cts.	\$    cts.	\$    cts.
Intercolonial Railway .....	1,142	Earnings .....	2,945,441 97		
		Working expenses...	3,439,377 00		493,935 03
Windsor Branch Railway .....	32	Earnings .....	33,508 85		
		Maintenance.....	19,514 37	13,994 48	
Prince Edward Island Railway.	211	Earnings .....	157,442 69		
		Working expenses...	289,706 38		132,263 69
					626,198 72
					13,994 48
Total miles.....	1,375			Net loss..	612,204 24

In the first half of the year appearances indicated that the loss in the year's operations would assume greater proportions than for the year previous, and had not the Honourable the Minister adopted vigorous measures to reduce the cost of working the road, without impairing its efficiency, the loss would probably have exceeded that of the year previous, but as a result of his determined action upon taking charge of the department in the early part of the last half of the fiscal year, in adopting the measures of economy the loss of working the road for the year is \$155,170.93 less than for the year previous, the loss being \$612,204.24, as against a loss in the previous year of \$767,375.17, and this result has been achieved in the face of a dull season's traffic and a consequent falling off in the earnings as compared with the earnings of the year previous.

The gross earnings of the Government railways for the last two years, compared as follows:—

	1890-91.	1891-92.
Intercolonial Railway .....	\$2,977,395 38	\$2,945,441 97
Windsor Branch Railway.....	30,235 13	33,508 85
Prince Edward Island Railway.....	174,258 05	157,442 69
	\$3,181,888 56	\$3,136,393 51

Showing a decline in the gross earnings for the year as compared with those of the year previous of \$45,495.05.

This falling off in the gross earnings is almost entirely due to dulness in the freight traffic, especially in the local traffic (which commands the best rates), it having decreased by about 46,000 tons as compared with the previous year, whilst the through freight (which is carried at low rates) increased by about 6,000 tons, so that if the local freight traffic had been as favourable as the year previous an even better result in the net earnings would have been obtained. However, the adoption of these measures of economy began to take effect too late in the year to bring about any near approach to an equilibrium between earnings and working expenses, but it is confidently expected that if the determined policy of economy in the working of these roads is continued in future, the Honourable Minister will be able to show at the close of the current year a greatly improved state of affairs as regards the net results.

#### INTERCOLONIAL RAILWAY.

I mentioned in my report of last year, that the Eastern Extension and the Cape Breton Railways were by Act of Parliament merged into the Intercolonial Railway. As this is the first year in which the cost of these road and the Oxford and New Glasgow section appear in the capital account of the Intercolonial Railway, they are each shown separately, but hereafter, they will be in one sum as the cost of the Intercolonial Railway. The accounts for the operations of these sections of road are blended with those of the other sections of the Intercolonial Railway and form one great whole.

The grain traffic from the west for shipment at Halifax was greatly in excess of that of previous years, but it was continued to be carried over the road at the exceedingly low rate of  $\frac{1}{100}$  of a cent per ton per mile. The quantity of grain so carried was 1,265,497 bushels, and as a quantity of this grain came forward weeks before it was required for shipment, and the grain elevator at Halifax was full, awaiting the arrival of ships to take it away, the sidings stood full of loaded cars not only in Halifax, but along the line between Truro and Halifax, much to the inconvenience and displacement of the ordinary business of the road. No doubt if such a volume or a greater volume of grain traffic was to continue, the facilities for handling it at Halifax would be insufficient, if it is to be sent forward weeks and, indeed, months before it is required for shipment; but the question which arises is, in ordinary seasons, will the port of Halifax be sought as an outlet for the surplus grain of the country? This is a question which has yet to be solved, if it is, it can only be done by providing greater facilities for the traffic, and if this is done the grain rate, it appears to me should be raised to such a figure as would at least pay the cost of transportation, it being an undisputed fact that  $\frac{1}{100}$  of a cent per ton per mile will not, especially in the winter season, when the cost of transport is increased, pay the cost. There are occasions, no doubt, when it is an advantage to furnish loads for cars, which would otherwise run light, at a very low figure.

The through coal traffic has been lighter this year than for some years past, attributable in some degree I am informed by reason of the coal companies having failed to secure contracts from the trunk lines of the same magnitude they had for some years past.

The system of heating the passenger trains by steam direct from the locomotive has given great satisfaction, and has contributed very much to the comfort of the travelling public, as well as to their safety, and the fitting up of the engines and cars with these heating appliances has been continued during the year until at the close of the year there were 62 locomotives and 190 cars so fitted up.

The interest of the employees of the road has not been neglected, the Westinghouse automatic air brake having been fitted to 13 locomotives and 61 freight cars during the year, making a total of 70 locomotives and 677 freight cars so fitted up, but the full advantage of the application of this brake will not be realized until all the freight cars running over the road are furnished with them.

No portion of the appropriation of \$150,000 for increased accommodation at Halifax has as yet been expended.



## Department of Railways and Canals.

The following is a statement of the quantity and classes of the rolling stock purchased on capital account up to 30th June, 1892 :—

	Engines.	Passenger Car Stock.						Conductors' Vans.	Box and Cattle Cars.	Platform Cars.	Coal Cars of three several kinds.	Snow Ploughs.	Wing Ploughs.	Flangers.	Rotary Steam Snow Ploughs.
		1st Class Sleeping and Parlour.	1st Class.	2nd Class Sleeping.	2nd Class.	Baggage and Mail.									
	206	15	92	6	95	24	99	2071	2130	999	44	10	21	2	
		5				39		103		471					
		20				63		2174		794					
										2264					

The following is a statement of the quantity and classes of rolling stock which has been rebuilt during the year at cost of revenue to maintain the stock :—

	Engines.	Passenger Car Stock.						Conductors' Vans.	Box and Cattle Cars.	Platform Cars.	Coal Cars of three several kinds.	Snow Ploughs.	Wing Ploughs.	Flangers.	Rotary Steam Snow Ploughs.
		1st Class Sleeping and Parlour.	1st Class.	2nd Class Sleeping.	2nd Class.	Baggage and Mail.									
	1		4		2	4	2	17	40	38	1		6		
										42					
										23					
										109					

I may here remark that in last year's report the clerk who abstracted the statement of rolling stock rebuilt during that year from the Mechanical Superintendent's report made an error by taking out the number to be rebuilt, instead of those rebuilt during the year.

The statement for that year should have been as follows, viz.:—

	Engines.	Passenger Car Stock.						Conductors' Vans.	Box and Cattle Cars.	Platform Cars.	Coal Cars of three several kinds.	Snow Ploughs.	Wing Ploughs.	Flangers.	Rotary Steam Ploughs.
		1st Class Sleeping and Parlour.	1st Class.	2nd Class Sleeping.	2nd Class.	Baggage and Mail.									
			5			2		73	157	159	3	4			
										10					
										169					

The following table shows the working expenses, gross earnings, the tonnage of freight and number of passengers carried each year since 1st July, 1876, when the road was first opened as a through line to the west.

Year.	Average Miles in Operation.	Working Expenses.	Gross Earnings.	Profit.	Loss.	Tons of Freight carried.	No. of Passengers carried.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.		
1876-77	714	1,661,673 55	1,154,445 33		507,228 22	421,327	613,420
1877-78	714	1,816,273 56	1,378,946 78		432,326 78	522,710	618,957
1878-79	714	2,010,183 22	1,294,009 69		716 083 53	510,861	640,101
1879-80	829	1,603,429 71	1,506,298 48		97,131 23	561,924	581,483
1880-81	840	1,759,851 27	1,760,393 92	542 65		725,777	631,245
1881-82	840	2,069,657 48	2,079,262 66	9,605 18		838,956	779,994
1882-83	840	2,360,373 27	2,370,910 10	10,547 83		970,961	878,600
1883-84	887	2,377,433 62	2,384,414 92	6,981 30		1,009,237	944,636
1884-85	941	2,519,751 56	2,441,203 66		78,547 90	989,936	957,228
1885-86	946	2,583,999 67	2,450,093 88		133,905 79	1,023,788	932,880
1886-87	966	2,922,369 62	2,660,116 93		262,252 69	1,143,020	942,784
1887-88	971	3,366,781 74	2,983,336 05		383,445 69	1,288,823	1,040,163
1888-89	971	3,244,647 73	2,967,801 00		276,846 73	1,218,877	1,136,272
1889-90	971	3,560,575 74	3,012,739 87		547,835 87	1,368,819	1,219,233
1890-91	1,094	3,662,341 94	2,977,395 38		684,946 56	1,304,534	1,298,304
1891-92	1,142	3,439,377 00	2,945,441 97		493,935 03	1,264,575	1,297,732

The following table shows the number of tons of coal carried over the Intercolonial Railway from the Nova Scotia collieries to Chaudière Junction and St. John for points west thereof, and to local stations in each year since the commencement of the trade in 1879 :—

Calendar Year.	For the West.		To Local Stations.	Total.
	Via Chaudière.	Via St. John.		
1876-77			103,420	103,420
1877-78			97,043	97,043
1878-79	300		112,232	112,532
1879-80	1,097		135,369	136,466
1880-81	6,102	4,022	174,483	184,607
1881-82	18,015	11,779	218,364	248,158
1882-83	12,837	22,206	227,380	262,423
1883-84	22,014	19,534	252,014	293,562
1884-85	133,440	1,773	213,791	349,004
1885-86	171,170	21,150	215,272	407,592
1886-87	192,871	27,586	233,178	453,585
1887-88	183,704	36,228	309,727	529,659
1888-89	160,026	27,923	338,538	526,487
1889-90	164,453	25,126	366,967	556,546
1890-91	113,996	39,213	344,829	498,038
1891-92	35,447	5,918	392,441	433,806

In thus appears that the largest tonnage of coal carried over the road from the west was in the year 1886-87, when it reached 192,022 tons, since which the through coal traffic for points west of the Intercolonial Railway has been on the decline.

## Department of Railways and Canals.

**TABLE showing the number of bushels of grain carried during each year for shipment at Halifax since the road was opened as a through line to the west.**

Year.	Bushels.		Total.	Year.	Bushels.		Total.
	Via Chaudière.	Via St. John.			Via Chaudière.	Via St. John.	
1876-77				Brot. forward	104,400		104,400
1877-78				1884-85	300,901		300,901
1878-79				1885-86	389,122		389,122
1879-80				1886-87	575,880		575,880
1880-81				1887-88	69,021		69,021
1881-82				1888-89	129,725		129,725
1882-83	31,011		31,011	1889-90	502,012		502,012
1883-84	73,389		73,389	1890-91	148,803	69,534	218,337
Carried forward	104,400		104,400	1891-92	745,997	519,500	1,265,497
				Total	2,965,861	589,034	3,554,895

**TABLE showing the number of barrels of flour carried during each year since the road was first opened as a through line to the west.**

Year.	Barrels.	Year.	Barrels.
1876-77	254,710	1884-85	935,977
1877-78	657,778	1885-86	761,127
1878-79	630,329	1886-87	763,894
1879-80	533,248	1887-88	871,838
1880-81	672,310	1888-89	948,514
1881-82	692,095	1889-90	1,116,050
1882-83	983,916	1890-91	1,013,129
1883-84	817,134	1891-92	954,015

**TABLE showing the number of bushels of grain carried during each year since the road was first opened as a through line to the west.**

Year.	Bushels.	Year.	Bushels.
1876-77	292,852	1884-85	734,902
1877-78	331,170	1885-86	849,800
1878-79	302,921	1886-87	1,018,395
1879-80	534,021	1887-88	1,219,035
1880-81	565,678	1888-89	1,526,158
1881-82	560,253	1889-90	2,610,202
1882-83	1,195,601	1890-91	2,890,921
1883-84	664,673	1891-92	3,776,677

TABLE showing the quantity of lumber in feet carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Feet.	Year.	Feet.
1876-77.....	58,096,474	1884-85.....	138,493,675
1877-78.....	56,626,547	1885-86.....	117,186,512
1878-79.....	55,626,696	1886-87.....	161,801,763
1879-80.....	55,462,654	1887-88.....	197,755,272
1880-81.....	72,841,388	1888-89.....	199,507,777
1881-82.....	78,356,418	1889-90.....	210,886,071
1882-83.....	104,633,417	1890-91.....	184,188,324
1883-84.....	131,120,948	1891-92.....	175,474,340

TABLE showing the number of live stock carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Number.	Year.	Number.
1876-77.....	34,414	1884-85.....	70,785
1877-78.....	46,498	1885-86.....	74,498
1878-79.....	47,584	1886-87.....	82,896
1879-80.....	70,990	1887-88.....	98,302
1880-81.....	61,574	1888-89.....	85,960
1881-82.....	73,479	1889-90.....	86,771
1882-83.....	68,338	1890-91.....	95,529
1883-84.....	60,090	1891-92.....	87,889

TABLE showing the number of tons of ocean borne goods to and from Europe, *via* the Port of Halifax carried over the road during each year since it was first opened for traffic as a through line.

Year.	To Chau- diere for the West.	To St. John for the West.	To local stations.	Total.
	Tons.	Tons.	Tons.	Tons.
1876-77.....				
1877-78.....	14,949		3,405	18,354
1878-79.....	21,628		2,643	24,271
1879-80.....	21,073		4,952	26,025
1880-81.....	15,454		3,334	18,788
1881-82.....	21,607		4,168	25,775
1882-83.....	24,875		7,911	32,786
1883-84.....	19,696		6,533	26,229
1884-85.....	22,787		8,405	31,192
1885-86.....	13,464		8,216	21,680
1886-87.....	16,923		9,811	26,734
1887-88.....	41,864		8,878	50,742
1888-89.....	17,340		11,481	28,821
1889-90.....	9,895		11,730	21,625
1890-91.....	9,923		10,764	20,687
1891-92.....	9,719	17	23,835	33,571

## Department of Railways and Canals.

TABLE showing the number of tons of raw and refined sugar carried over the road during each year since it was first opened as a through line.

Year.	Raw Sugar.				Refined Sugar.			
	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total.	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77.....	340			340				
1877-78.....	186			186				
1878-79.....	1,041			1,041				
1879-80.....	12,220			12,220				
1880-81.....	13,872			13,872	4,022		2,902	6,924
1881-82.....	14,256		1,290	15,546	7,146		3,607	10,753
1882-83.....	9,465		508	9,973	11,126		5,497	16,623
1883-84.....	13,778		3,068	16,846	14,543		7,265	21,808
1884-85.....	10,381		3,661	14,042	18,024		8,445	26,469
1885-86.....	4,394		3,998	8,392	7,660		5,858	13,518
1886-87.....	20,450		8,500	28,950	15,044		8,395	23,439
1887-88.....	14,320		14,085	28,405	21,641		7,133	28,774
1888-89.....	24,358		7,160	31,518	12,955		11,120	24,075
1889-90.....	7,390		8,913	16,303	6,778		6,125	12,903
1890-91.....	5,088	4,670	8,215	17,973	10,130	468	5,996	16,594
1891-92.....	7,142	3,960	10,535	21,637	12,633	7,674	12,414	32,721

TABLE showing the number of tons of Fresh and Salt Fish carried over the road during each year since it was opened as a through line.

Year.	Fresh Fish.				Salt Fish.			
	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total.	To Chaudière for the West.	To St. John for the West.	To Local Stations.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77.....	590	921	527	1,978	551	1,848	802	3,201
1877-78.....	596	1,015	474	2,085	898	1,644	805	3,347
1878-79.....	471	1,336	817	2,624	988	1,038	1,048	2,974
1879-80.....	519	1,362	453	2,334	1,612	2,238	959	4,809
1880-81.....	498	1,879	920	3,297	2,418	937	1,051	4,406
1881-82.....	475	1,619	957	3,051	4,031	1,066	2,487	7,584
1882-83.....	542	384	393	1,319	3,299	759	1,354	5,412
1883-84.....	838	1,682	412	2,932	1,322	1,143	1,224	3,689
1884-85.....	1,062	1,885	484	3,431	3,563	3,600	1,596	8,759
1885-86.....	1,669	1,645	902	4,216	1,680	2,047	3,376	7,103
1886-87.....	1,278	1,572	2,008	4,858	3,236	569	1,747	5,552
1887-88.....	1,533	1,477	1,031	4,041	2,617	476	1,099	4,193
1888-89.....	2,474	2,000	1,870	6,344	3,070	7,746	2,994	13,810
1889-90.....	2,235	1,787	2,111	6,223	2,449	847	3,288	6,584
1890-91.....	2,029	2,788	1,848	6,665	1,953	1,917	3,236	7,106
1891-92.....	1,367	1,746	547	3,660	1,946	928	1,889	4,763

Forty-three miles of the 56-lb. steel rails have been lifted and replaced at the cost of revenue by 4,560 tons of 67-lb. steel rails, and 500,374 ties have been renewed, being considerably in excess of the number renewed in any previous year.

About 1,000 feet of the trestle bridge which spans the "Narrows" of the Halifax harbour was carried away in a very severe storm, thus cutting off railway communication with Dartmouth. Prompt action was taken to rebuild it, but as the

water ranges in depth from 50 to 60 feet in deep sections, it was a work which took some time to carry out; however, the traffic was interrupted as short a time as possible. The cost of rebuilding it amounted to about \$32,000, which may be considered an extraordinary charge against revenue for the year and which it is trusted may not have to be repeated for many years. The same storm which destroyed the bridge across Halifax harbour carried away the trestle on the deep-water wharf at Halifax along which the grain is conveyed from the elevator to the vessels. The cost of replacing this work was an unforeseen expense. However, from year to year we have found such items of expenditure over which we have no control, arising unexpectedly from the action of the elements, and we are never able to calculate upon what destruction of property may take place during a year, from the effects of fire, wind and water. It is, however, confidently believed, that a continuance of the policy of economy inaugurated by the Honourable the Minister will result at an early day in an equilibrium between earnings and working expenses, but to accomplish this, the expenses will require to be kept down to the lowest degree possible consistent with efficiency, and that can only be brought about by the head of each department of the railway having full control of the men working under him, and by his looking closely after the work to see that no unnecessary expenditure is incurred.

## CAPITAL ACCOUNT.

Total cost of road and equipment to 30th June, 1891.	\$53,629,714 81
Add expenditure during year 1891-92.....	320,218 84
Total cost up to 30th June, 1892.....	<u>\$53,949,933 65</u>

Which is made up as follows, viz.:—

	Road.		Rolling Stock.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Intercolonial Railway.....	40,106,073	45	7,053,494	06	47,159,567	51
Eastern Extension Railway.....	1,127,859	02	196,183	79	1,324,042	81
Oxford and New Glasgow Section.....	1,488,567	62	336,624	52	1,825,192	14
Cape Breton Railway.....	3,490,118	65	151,012	54	3,641,131	19
	46,212,618	74	7,737,314	91	53,949,933	65

These roads being now merged into one by Act of Parliament, in future the capital account will appear as the cost of the road and rolling stock of the Intercolonial Railway.

Both the road and rolling stock are in very efficient condition and as the grades and general alignment of the trunk line are specially favourable for fast time, a good rate of speed is made with the through express trains.

## WINDSOR BRANCH RAILWAY.

The traffic of this road has been worked by the Windsor and Annapolis Railway Company under an agreement dated the 21st September, 1871, and which agreement will expire on the 1st January next, to be renewed on the same conditions or such other conditions as may be mutually agreed to. Under this agreement the Windsor and Annapolis Railway Company worked the traffic and the Government maintained the way, and works, the former receiving two-thirds and the latter one-third of the gross earnings. The road has been well maintained,  $4\frac{1}{2}$  miles of worn-out iron rails having been removed and replaced by  $4\frac{1}{2}$  miles of 56-lb. steel rails with angle fish-plates, and is in good running condition.

## Department of Railways and Canals.

TABLE showing the earnings and its division between the Windsor Branch and the Main Line of the Intercolonial Railway between Windsor and Halifax, the maintenance, expenses and net earnings of the Windsor Branch for each year since 1880.

Year.	Miles in Operation.	½ Gross Earnings.	Proportion of	Proportion of	Maintenance Expenses.	Profit.	Loss.
			½ Gross Earnings credited to Line West-ern Junction to Halifax.	½ Gross Earnings credited to the Wind-sor Branch.			
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1880-81..	32	28,434 29	7,217 76	21,216 53	20,502 26	714 27	.....
1881-82..	32	28,461 07	7,407 88	21,053 19	13,099 55	7,953 64	.....
1882-83..	32	32,199 77	8,085 88	24,113 89	23,103 93	1,009 96	.....
1883-84..	32	30,428 39	7,409 46	23,018 93	22,140 86	878 07	.....
1884-85..	32	32,246 30	7,794 95	24,451 35	18,751 96	5,699 39	.....
1885-86..	32	31,185 63	7,527 52	23,658 11	19,229 49	4,428 62	.....
1886-87..	32	33,564 58	8,257 00	25,327 58	26,042 33	.....	714 75
1887-88..	32	32,242 85	7,689 30	24,553 55	24,040 33	513 22	.....
1888-89..	32	37,313 43	8,941 32	28,372 11	20,856 50	7,515 61	.....
1889-90..	32	39,544 19	9,381 73	30,162 46	18,982 82	11,179 64	.....
1890-91..	32	39,519 56	9,284 43	30,235 13	28,931 71	1,303 42	.....
1891-92..	32	42,891 23	9,382 38	33,508 85	19,514 37	13,994 48	.....

If the renewal of the agreement of the 21st September, 1871, is made I suggest that one of the conditions should be that the Windsor and Annapolis Railway Company, both work the traffic and maintain the way and works, such arrangement will, I am convinced, be more satisfactory both to the Government and to the company.

### PRINCE EDWARD ISLAND RAILWAY.

#### CAPITAL ACCOUNT.

Total cost of road and rolling stock up to 30th June, 1891 .....	\$3,741,780 89 .
Expenditure during the year :—	
Removal of Summerside Station buildings.....	\$1,995 42
Land at Charlottetown Station.....	3,305 07
	8,300 49
Total cost up to 30th June, 1892.. .....	\$3,750,081 38
Made up as follows, viz. :—	
Cost of road.....	\$3,291,352 38
Cost of rolling stock.....	458,729 00
	\$3,750,081 38

The rolling stock provided on capital account, and representing the sum of \$458,729 as above consists of—

Engines.	Passenger Car Stock.				Box and Cattle Cars.	Platform Cars.	Con-ductors' Vans.	Pay Cars.	Snow Ploughs	Flangers
	1st Class Cars.	2nd Class Cars.	Bag-gage and Smok-ing Cars	Official Cars.						
21	17	15	3	1	175	125	3	1	8	7

Statement of rolling stock rebuilt during the year :—1 box car.

## REVENUE ACCOUNT.

The traffic for the year under consideration has been very dull, both the passenger and freight traffic having decreased, there having been 6,119 less passengers, and 8,446 less tons of freight, carried over the road than during the previous year, the amount earned from passenger traffic being \$1,333.02; for freight traffic \$11,677.59, and for mails and sundries \$3,804.75 less than in the year previous, making an aggregate decrease in the earnings of the year of \$16,815.36 over that of the previous year.

The following table shows the working expenses, the gross and net earnings, the tons of freight and number of passengers carried each year since the 30th June, 1875, when the road was first open for traffic:—

Year.	Miles in Operation.	Working Expenses.	Gross Earnings.	Loss.	Tons of Freight carried.	No. of Passengers carried.
		\$ cts.	\$ cts.	\$ cts.		
1875-76.....	199	214,930 43	118,060 96	96,869 47	28,358	93,964
1876-77.....	199	228,595 25	130,664 92	97,930 33	41,039	93,478
1877-78.....	199	221,599 49	135,899 60	85,699 89	38,923	111,428
1878-79.....	199	223,313 12	125,855 99	97,457 21	38,668	105,046
1879-80.....	199	164,640 55	113,851 11	50,789 44	37,208	90,533
1880-81.....	199	203,122 88	131,131 43	71,991 45	45,336	102,937
1881-82.....	199	228,259 97	137,267 54	90,922 43	48,315	118,436
1882-83.....	199	252,808 41	146,170 42	106,637 99	51,920	117,162
1883-84.....	199	236,428 13	144,504 12	91,924 01	51,841	118,988
1884-85.....	211	211,207 01	158,588 06	52,618 95	57,346	130,423
1885-86.....	211	216,744 34	155,584 36	61,159 98	57,913	120,374
1886-87.....	211	204,237 37	155,303 37	48,934 00	53,589	103,067
1887-88.....	211	229,639 95	158,363 62	71,276 33	59,603	131,246
1888-89.....	211	247,559 44	171,369 56	76,189 89	55,682	152,780
1889-90.....	211	266,485 85	160,971 78	105,514 07	51,604	133,099
1890-91.....	211	257,990 08	174,258 05	83,732 03	59,511	145,508
1891-92.....	211	289,706 38	157,442 69	132,263 69	51,065	139,389

A partial cause of the loss in 1891-92 being in excess of that of the year previous, was that the vessel carrying the new steel rails, which were to have been laid in the track in 1890-91, was wrecked off Cape Breton, as a consequence no rails were laid in the track that year, but the new steel rails provided for the two years were all laid in 1891-92, and charged against revenue in that year, the total charge being \$36,175.19, the half of which would, in the ordinary course, have been a charge against revenue for 1890-91, which would have shown a loss in each of these two last years as follows, viz., 1890-91, \$101,819.62, and in 1891-92, \$114,176.10.

During the year 11½ miles of 40-lb. iron rails were lifted and replaced by a like length of 50-lb. steel rails.

The road now has a length of steel track of.....	Miles. 85
And iron track of.....	126
<b>Total length of road. . . . .</b>	<b>211</b>

It is proposed to continue year by year to replace about 8 or 9 miles of old iron rails by new steel rails, until the whole line is steeled, using the best of the old iron rails for repairs.

The road and rolling stock have been maintained in a good state of repair.

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

COLLINGWOOD SCHREIBER,  
Chief Engineer and General Manager.

To the Secretary,  
Department of Railways and Canals.



# Department of Railways and Canals.

## INTERCOLONIAL RAILWAY.

OFFICE OF THE CHIEF SUPERINTENDENT,  
MONCTON, N.B., 26th September, 1892.

SIR,—I have the honour to submit the following report on the working of the Intercolonial Railway during the fiscal year which ended 30th June, 1892.

I inclose the reports of the chief engineer and mechanical superintendent, and the following statements prepared by the chief accountant and treasurer:—

- No. 1. Capital account.  
 2. Revenue account.  
 3. Locomotive power.  
 4. Car expenses.  
 5. Maintenance of way and works.  
 6. Station expenses.  
 7. General charges.  
 8. General stores accounts.  
 9. General balance.  
 10. Comparative statement of averages.

The mileage of railway in operation during the year was the same as stated in last year's report, 1,142 miles.

### CAPITAL.

The total cost of road and equipment on 30th June, 1891, by last report was.....	\$ 46,988,163 13
Less refund on account of previous year's expenditure.....	132 29

Total cost on 30th June, 1891.....\$ 46,988,030 86

Cost of the following railways and their equipment to 30th June, 1891:—

Eastern Extension Railway by last report.....	\$1,321,986 89
Add payments made at Ottawa.....	2,055 92

\$1,324,042 81

Oxford and New Glasgow Railway.....	1,776,446 91
Cape Breton Railway.....	3,541,194 23

6,641,683 95

Total.....\$ 53,629,714 81

The additions during the year were as follows:—

Foot bridge at Truro.....	\$ 5,983 70
Stairs at Halifax.....	691 00
Halifax Cotton Company's Siding.....	3,184 09
Increased accommodation at Moncton.....	710 00
do do New Glasgow.....	11,107 91
do do St. John.....	1,086 65
Extension along front of City of St. John..	176 15
Additional property accommodation at St. John.....	79,960 42
Dartmouth Branch.....	796 46
Indian Town Branch.....	642 75
St. Charles Branch.....	45,171 27
Rolling stock.....	22,026 25

\$171,536 65

Cape Breton and Eastern Extension Ry— Train Ferry between Mulgrave and Point Tupper.....	\$ 10,297 65
Oxford and New Glasgow Railway.....	48,745 23
Cape Breton Railway.....	89,639 31
	\$ 320,218 84
	\$ 53,949,933 65

The foot bridge at Truro is an iron structure, 300 feet in length, across the railway yard. The above amount is the total cost.

*Stairs at Halifax.*—This is the total cost of a covered stairway leading from the front of the Halifax passenger station to Lockman street.

*Increased accommodation, Moncton.*—This is the cost of some new machine tools purchased for the workshops.

*Increased accommodation, New Glasgow.*—This is a part of the cost of a new station and offices and extension of the freight shed and yard.

*Increased accommodation, St. John.*—This is for land taken some years ago for railway purposes.

*Extension along front of City of St. John.*—This is for surveys of the route.

*Additional property accommodation, St. John.*—This is a part of the cost of the Harris property adjoining the railway station.

*Dartmouth Branch.*—This is for the payment of land taken at the time of construction.

*Indian Town Branch.*—This is for the payment of land claims and expenses of settling them.

*St. Charles Branch.*—This is for the payment of land claims and the legal expenses connected with them.

*Rolling Stock.*—This is the cost of applying the Westinghouse automatic air brake to 61 freight cars and 13 locomotives, and fitting 41 passenger-train cars and 5 locomotives with steam-heating apparatus.

The total number of freight cars fitted with the Westinghouse automatic air brake is now 661.

The total number of passenger-train cars fitted with apparatus to heat them by means of steam from the locomotive is 190, and the total number of locomotives fitted to give steam to heat the cars is 62.

*Train Ferry between Mulgrave and Point Tupper.*—This is for work done on the approaches, and for material supplied.

*Oxford and New Glasgow Railway, and Cape Breton Railway.*—These amounts are for expenditures by the construction department.

#### REVENUE ACCOUNT.

The expenditure and earnings for the year compare as follows:—

Expenditure.....	\$3,439,377 00
Earnings.....	2,945,441 97
	\$ 493,935 03

The gross earnings compare as follows with those of the previous year:—

In 1890-91.....	\$2,977,395 38
In 1891-92.....	2,945,441 97
	\$ 31,953 41

## Department of Railways and Canals.

The earnings from passenger traffic compare as follows :—

In 1890-91.....	\$962,316 88
In 1891-92.....	961,427 94
	\$ 888 94

The earnings from freight traffic compare as follows :—

In 1890-91.....	\$1,854,629 88
In 1891-92.....	1,803,529 03
	\$ 51,100 85

The earnings from mails and sundries compare as follows :—

In 1891-92.....	\$180,485 00
In 1890-91.....	160,448 62
	\$ 20,036 38

The number of passengers carried compare as follows with the previous year :—

In 1890-91.....	1,298,304
In 1891-92.....	1,297,732
	572

The weight of freight carried compares as follows :—

	Tons.
In 1890-91.....	1,304,534
In 1891-92.....	1,264,575
	39,959

The following is a comparative statement of a few of the chief articles of freight showing the quantity carried in this and in the previous year :—

Articles.	1890-91.	1891-92.	Increase.	Decrease.
Barrels of flour.....	1,013,129	954,015		59,114
Bushels of grain.....	2,890,921	3,776,677	885,756	
Lumber, in feet.....	184,138,324	175,474,340		8,663,984
Head of live stock.....	95,529	87,889		7,640
Other goods, in tons.....	899,724	858,635		41,089

There was a decrease in the quantity of almost all classes of freight carried.

The increase in grain carried was in oats, barley and pease for shipment at Halifax.

The quantity of coal carried from the mines in Nova Scotia to the Upper Provinces, compares as follows with the previous year :—

	Tons <i>Via</i> Chaudière Junction and Quebec.	Tons <i>Via</i> St. John
In year ended 31st December, 1890.....	137,355	137
do do 1891.....	116,005	7,663

## WORKING EXPENSES.

The working expenses compare as follows with the previous year :—

In 1890-91.....	\$3,662,341 94
In 1891-92.....	3,439,377 00
	\$222,964 94

They compare with last year as follows :

	Cents.
Per mile run by engines—	
In 1890-91.....	60·23
In 1891-92.....	60·96
Per mile by trains—	
In 1890-91.....	72·84
In 1891-92.....	73·13
Per mile of railway—	
In 1890-91.....	\$3,347 66
In 1891-92.....	3,011 71

The necessary repairs were made to the permanent way and structures, and all the works of the railway were maintained in a state of efficiency.

The number of new ties used was 500,374 ; 160 miles of track were re-ballasted, 43 miles of track were relaid with heavier steel rails, 67 lbs. to the yard, and 3 miles of new sidings were constructed at various places.

The bridge across the " Narrows " of Halifax harbour at Richmond, was carried away by a storm and was rebuilt at a cost of \$32,000.

Three new steel bridges were put in to replace wooden ones.

Seven new and stronger steel bridges, 20 spans in all, were put in to replace iron ones.

The floors of a large number of bridges were renewed and improved.

Two new iron over-head bridges were built to replace wooden ones.

The fences received necessary repairs, and 103 miles of new fences were built. In addition to the repairs of snow fences, 14,000 lineal feet of snow fences were rebuilt.

The snow sheds received necessary repairs and 1,600 lineal feet of snow sheds were rebuilt.

The buildings on all parts of the line were kept in good repair. One station house and agent's dwelling, two dwelling houses for agents, two freight houses, two large coal sheds each 300 feet long, one brick building 51 feet by 42 feet, besides several smaller buildings were erected. Extensive alterations and improvements were made at Amherst station.

The wharves and trestles received extensive repairs.

A large amount of dredging was done at Pictou Landing and St. John.

The rolling stock received necessary repairs and is in good order.

Four new and powerful locomotives for freight traffic were purchased to maintain the stock, and one locomotive was rebuilt in the railway shops.

Ten passenger train cars, one hundred and sixty-eight freight cars, one snow plough and six flanger cars were purchased, or rebuilt in the railway shops to replace those taken out of service.

The water service was maintained in a state of efficiency.

## STORES.

The value of stores purchased was.....	\$ 1,022,186 70
The value of stores used was.....	1,420,683 21
The value of old material sold was.....	81,644 04

## Department of Railways and Canals.

The value of stores on hand at the end of the year was:—

Ordinary stores including fuel.....	\$	471,826	38
Iron and steel rails and fastenings.....		120,556	21
Old material for sale.....		131,482	03
			<hr/>
		\$723,864	62

### GENERAL.

The winter of 1891-92 was mild and the trains were seldom delayed by snow. The cost of cleaning snow and ice was much less than in the previous year.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,

*Chief Superintendent.*

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager, Government Railways,  
Ottawa.

No. 1.—INTERCOLONIAL RAILWAY.  
CAPITAL ACCOUNT, Year ending 30th June, 1892.

DR.

CR.

1891. June 30.	1892. June 30.	\$ cts.	\$ cts.	1891. June 30.	By Dominion of Canada	\$ cts.
To Cost of Intercolonial Railway		46,988,030 86				53,629,714 81
Eastern Extension Railway		1,324,042 81				
Oxford and New Glasgow Railway		1,776,446 91				
Cape Breton Railway		3,541,194 23				
Expenditure for current year—			53,629,714 81			
Intercolonial Railway		3,184 09				
Halifax Cotton Company Siding		45,171 27				
St. Charles Branch—						
Rolling stock		22,026 25				
Extension of front of St. John City		176 15				
Increased accommodation, New Glasgow		11,107 91				
Indian Town Branch		11,642 75				
Stairs from Halifax Station		691 00				
Increased accommodation, Moncton		710 00				
do St. John		1,086 65				
Additional property, St. John		79,960 52				
Dartmouth Branch		796 46				
Footbridge, Truro		5,983 70				
Eastern Extension, Cape Breton Railway—		171,536 65				
Train Ferry, Strait of Canso		10,297 65				
Oxford and New Glasgow Railway		48,745 23				
Cape Breton Railway		89,639 31				
			320,218 84			320,218 84
			53,949,933 65			53,949,933 65

THOMAS WILLIAMS,  
Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1892.

# Department of Railways and Canals.

## No. 2.—INTERCOLONIAL RAILWAY.

DR. REVENUE ACCOUNT, Year ending 30th June, 1892. CR.

Previous Year.	Expenditure.	Year ending 30th June, 1892.	Previous Year.	Earnings.	Year ending 30th June, 1892.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
1,281,800 32	Locomotive power, Abstract No. 1.	1,148,199 20	962,316 88	Passenger traffic.	961,427 94
808,212 35	Car expenses, Abstract No 2. ....	703,557 89	1,854,629 88	Freight do ..	1,803,529 03
955,293 68	Maintenance of way and works, Abstract No. 3. ....	1,007,935 40	160,448 62	Mails and sundries	180,485 00
396,320 22	Station expenses, Abstract No. 4.	393,569 74	2,977,395 38		2,945,441 97
197,006 56	General charges, do No. 5.	189,263 60	684,946 56	Balance. ....	493,935 03
3,638,633 13		3,442,525 83			
23,708 81	Car mileage. ....	3,148 83			
3,662,341 94		3,439,377 00	3,662,341 94		3,439,377 00

THOMAS WILLIAMS,  
*Chief Accountant and Treasurer.*

MONCTON, N.B., 30th June, 1892.

## No. 3.—INTERCOLONIAL RAILWAY.

### LOCOMOTIVE POWER—(Abstract No. 1).

Previous Year.		Year ending 30th June, 1892.
\$ cts.		\$ cts.
11,851 10	Mechanical superintendent's salary, clerks, office and travelling expenses. . . . .	11,985 68
274,281 45	Wages, drivers, firemen and cleaners. ....	273,946 11
555,848 04	Fuel. ....	485,123 87
52,172 11	Oil, tallow, waste and small stores. ....	47,324 88
304,550 77	Repairs to engines, tenders and engine tools. ....	273,548 23
51,496 55	Water, including pump and tank repairs. ....	33,979 92
31,600 30	Miscellaneous. ....	22,290 51
1,281,800 32		1,148,199 20

THOMAS WILLIAMS,  
*Chief Accountant and Treasurer.*

MONCTON, N.B., 30th June, 1892.

## No. 4.—INTERCOLONIAL RAILWAY.

## CAR EXPENSES—(Abstract No. 2).

Previous Year.		Year ending 30th June, 1892.
\$ cts.		\$ cts.
102,388 24	Repairs to passengers cars .....	89,811 00
24,627 52	do postal, express and baggage cars .....	24,656 74
283,029 80	do freight cars and vans .....	210,149 12
21,181 51	do snow ploughs and flangers .....	8,297 98
259,940 94	Wages of conductors, train baggage masters and brakemen .....	247,725 93
27,101 53	Oil and waste for packing .....	25,643 02
64,975 67	Small stores and fuel .....	63,524 71
24,967 14	Miscellaneous .....	33,749 39
808,212 35		703,557 89

MONCTON, N.B., 30th June, 1892.

THOMAS WILLIAMS,  
*Chief Accountant and Treasurer.*

## No. 5.—INTERCOLONIAL RAILWAY.

## MAINTENANCE OF WAY AND WORKS—(Abstract No. 3).

Previous Year.		Year ending 30th June, 1892.
\$ cts.		\$ cts.
7,864 26	Chief and assistant engineers, salaries, clerks, office and travelling expenses .....	7,753 96
396,937 65	Wages in repairing roadway, fences and semaphores, including new sidings laid in .....	425,053 54
181,364 70	Rails and fastenings, including new sidings laid in .....	150,649 59
45,975 39	Ties .....	112,912 04
159,894 31	Timber, lumber, &c., for repairs to bridges, cattle-guards, sheds, fences, &c. ....	169,378 31
5,345 04	Repairs to wharves .....	9,588 00
68,755 29	Repairs to buildings and platforms .....	87,836 88
13,020 80	Repairs to tools .....	11,410 52
74,055 07	Clearing ice and snow .....	30,340 43
2,081 17	Miscellaneous .....	3,012 10
955,293 68		1,007,935 40

MONCTON, N.B., 30th June, 1892.

THOMAS WILLIAMS,  
*Chief Accountant and Treasurer.*



# Department of Railways and Canals.

## No. 6.—INTERCOLONIAL RAILWAY.

### STATION EXPENSES—(Abstract No. 4).

Previous Year.		Year ended 30th June, 1892.
\$ cts.		\$ cts.
297,226 60	Salaries and wages of station masters, agents, clerks, telegraph operators, station baggage masters, yard masters, switchmen, watchmen and labourers.....	306,068 66
99,093 62	Fuel, oil, light, stationery, tickets and other incidental expenses.....	87,501 08
396,320 22		393,569 74

**THOMAS WILLIAMS,**  
*Chief Accountant and Treasurer.*

MONCTON, N.B., 30th June, 1892.

## No. 7.—INTERCOLONIAL RAILWAY.

### GENERAL CHARGES—(Abstract No. 5).

Previous Year.		Year ended 30th June, 1892.
\$ cts.		\$ cts.
73,338 73	Chief superintendent, district superintendents, train despatchers, general freight agent, general passenger agent, clerks, office and travelling expenses.....	76,366 77
25,248 67	Accounting department—salaries of the chief accountant and treasurer, traffic auditor, paymaster, cashier, clerks, office and travelling expenses	25,578 91
16,964 06	Damages to men, animals and goods .....	6,758 26
26,674 42	Ferry service .....	29,922 20
1,298 51	Telegraph expenses (not including pay to operators).....	2,766 13
38,901 19	Miscellaneous—printing, advertising, &c.....	32,699 79
14,580 98	Agency expenses.....	15,171 53
197,006 56		189,263 60

**THOMAS WILLIAMS,**  
*Chief Accountant and Treasurer.*

MONCTON, N.B., 30th June, 1892.



Department of Railways and Canals.

No. 9.—INTERCOLONIAL RAILWAY.

Dr.

GENERAL BALANCE, Year ending 30th June, 1892.

Cr.

	\$	cts.	\$	cts.
Cash.....			1,018,252	07
General stores—			218	82
Ordinary stores, fuel.....	\$471,826	38	3,513	50
Iron and steel rail fastenings.....	120,566	21		07
Old material for sale.....	131,482	03		
Stations.....			723,864	62
Rents.....			62,004	70
Departmental accounts—			1,795	09
Agriculture.....	\$	6,287		
Post Office.....		29,810		
Marine.....		16		
Militia and Defence.....		3,144		
53 Canada Eastern Railway—traffic account.....	\$	6,318	39,257	88
do general account.....		651		
Western Counties Railway—general account.....	\$	15,893	6,970	01
do do traffic account.....		1,657		
Grand Trunk Railway—traffic account.....			17,550	77
Quebec Central.....			6,040	99
C.P.R. rolling stock.....			5,381	85
Oxford and New Glasgow.....			22,446	90
Windsor and Annapolis Railway—general account.....			4,240	75
Joggins Railway.....			541	06
New Brunswick and Prince Edward Island Railway.....			3	74
Caracquet Railway.....			19	28
Kent Northern Railway.....			314	09
Teniscouata Railway.....			1	41
Canadian Pacific Railway—general.....			7	33
Buctouche and Moncton Railway.....			9,090	19
Western Counties Railway.....			102	80
Cap Breton Railway.....			3	15
Bas des Chaleurs Railway.....			15,914	09
Nova Scotia Central Railway.....			90	50
Canadian Pacific Railway—New Brunswick division.....			10	82
Salisbury and Harvey Railway.....			4,316	80
Maine Central Railway.....			54	60
			15	70
Dominion of Canada.....				
Unclaimed freight.....				
Suspense.....				
Chatham Railway.....				
Canadian Pacific Railway, New Brunswick division—traffic account.....				
Prince Edward Island Railway.....				
Grand Trunk Railway—general.....				
I. C. R. Employees' Relief and Insurance Association.....				
Prince Edward Island Steam Navigation Co.....				
Albert Southern Railway.....				
Intercolonial Coal Co.....				

DR.

GENERAL BALANCE, Year ending 30th June, 1892.—Continued.

CR.

\$ cts.

	\$	cts.
South-eastern Railway.....	12	50
New York and New England Railway.....	9	89
Springhill and Parsboro' Railway.....	3,161	99
Halifax and Cape Breton Railway.....	1,151	42
Elgin Branch Railway.....	726	40
Elgin Peticoadiac and Havelock.....	12	40
Chicago and Grand Trunk Railway.....	10	50
Canada Atlantic Railway.....	2	64
Hamilton and Dayton Railway.....	1	60
Ann Harbour and Michigan Railway.....	0	57
Central Railway.....	1	28
Cumberland Railway and Coal Co.....	53	19
St. John Street Railway Co.....	20	00
Pullman Palace Car Co.....	403	55
Canadian Express Co.....	1,500	00
Allan Steamship Line.....	1,892	13
Acadia Coal Co.....	823	93
International Coal Co.....	19	32
Londonderry Iron Co.....	15	10
Union Bearing Co.....	928	18
Halifax Cotton Co.—Siding.....	10,802	78
Polson Iron Work.....	273	25
Town of Dartmouth.....	24,000	00
Western Union Telegraph Co.....	1,565	17
Ontario Car and Foundry Co.....	1,276	00
Steamer "Admiral".....	7,516	22
do "Conest".....	2,213	75
do "Labrador".....	23	50
do "Sarnia".....	12	50
New Glasgow Coal and Iron Co.....	27,558	43
Remittances destroyed.....	7,888	81
Nauwigewank Station.....	3	00
Glenarry Station.....	5	00
Bloomfield Station.....	25	21
Coal Branch Station.....	65	84
Welford Station.....	55	00
Ste. Lucie Station.....	80	00
Bic Station.....	22	00
St. Arsene Station.....	107	12
Valley Station.....	6	65
Iona Station.....	72	71
Nappan Station.....	40	00
Kent Junction Station.....	28	38

Department of Railways and Canals.

Derby Junction Station.....	231 04	
Gloucester Junction Station.....	78 87	
Dalhousie Station.....	19 89	
Campbellton Station (freight).....	25 00	
Isle Verte Station.....	25 00	
Schooner "Mary Jane".....	71 30	
Cold Brook Rolling Mills.....	1,967 41	
Canada Meat Packing Co.....	6 50	
Truro Foundry and Machine Co.....	231 67	
Nova Scotia Glass Co.....	20 03	
Halifax Cotton Co.....	19 80	
Individual accounts.....	20,193 59	
Total.....	1,030,866 39	1,030,866 39

E. O. F.

THOMAS WILLIAMS,  
*Chief Accountant and Treasurer.*

MONCTON, N.B., 30th June, 1892.

## No. 10.—INTERCOLONIAL RAILWAY.

## COMPARATIVE STATEMENT of Averages, Year ending 30th June, 1892.

	1892.	1891.
Mileage of railway.....	1,142	1,094
Engine mileage.....	5,641,888	6,080,791
Train do.....	4,703,151	5,027,791
Car do.....	51,940,141	56,492,801
Receipts per engine mile..... Cents.	52·21	48·96
do mile of railway..... Dollars.	2,519·19	2,721·57
Percentage of passenger earnings to gross earnings.....	32·64	32·32
do freight do do.....	61·23	62·29
do other do do.....	6·13	5·39
Expenses per engine mile—		
Drivers, firemen and cleaners' wages..... Cents.	4·85	4·51
Fuel.....	8·60	9·14
Oil, tallow, waste and small stores.....	·84	·86
Repairs to engines.....	4·85	5·01
Water and tank repairs.....	·60	·84
Miscellaneous.....	·40	·52
Total.....	20·14	20·88
Mechanical superintendent's salary, office and travelling expenses.....	·21	·20
Total.....	20·35	21·08
Locomotive power per engine mile.....	20·35	21·08
Car expenses do.....	12·47	13·29
Maintenance of way and works do.....	17·87	15·71
Station expenses do.....	6·98	6·52
General charges do.....	3·35	3·24
Car mileage..... Cr.	61·02	59·84
Total per engine mile.....	·06	·39
Total.....	60·96	60·23
Locomotive power per train mile.....	24·41	25·49
Car expenses do.....	14·96	16·08
Maintenance of way and works do.....	21·43	19·00
Station expenses do.....	8·37	7·88
General charges do.....	4·02	3·92
Car mileage..... Cr.	73·19	72·37
Total per train mile.....	·06	·47
Total.....	73·13	72·84
Working expenses per mile of railway.....	3,011·71	3,347·66

THOMAS WILLIAMS,  
Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1892.

# Department of Railways and Canals.

## INTERCOLONIAL RAILWAY,

CHIEF ENGINEER'S OFFICE,

MONCTON, 21st September, 1892.

SIR,—I have the honour to submit my report of the Engineering Department for the year ending 30th June, 1892.

### TRACK.

The mileage of the main line and branches maintained under my charge, has been increased from 1,048 to 1,144 miles, by the addition of the Cape Breton Division extending from Point Tupper to Sydney and North Sydney, in all 96 miles.

During the year, 43½ miles of old steel rails (4 inch), have been taken up and replaced with new 4½ steel rails, weighing 67 pounds to the yard.

### TIES.

During the year, 500,374 ordinary ties, and 113 sets of switch ties, were renewed.

### BALLASTING.

About 125,000 cubic yards of ballast were used during the year throughout the whole line. The cost of this service amounted to \$44,818.24. A new pit containing 15 acres was purchased at Anagance, and a branch line 2½ miles was built into it, at a cost of \$9,500.

### SEMAPHORE SIGNALS.

One electric semaphore was erected at Amherst, and another ordinary semaphore at Shubenacadie. Ordinary semaphore signals were also erected at all stations on the Oxford and New Glasgow Division. This latter was done at the expense of capital account.

### SIDINGS.

During the year, three miles of additional accommodation was provided throughout the line.

### FENCING.

One hundred and three and a-third miles of new barbed wire and woven wire fencing were erected during the past year, and a large quantity overhauled and repaired throughout the line.

The expenditure for this service amounted to \$40,405.70.

### SNOW SHEDS AND SNOW FENCES.

During the year, 1,600 feet of snow shedding was renewed on Northern Division No. 3, and large repairs made to other sheds on this division.

14,023 feet of snow fencing was renewed, and a large quantity overhauled and repaired. The cost of this work amounted to \$15,801.42.

### WHARVES AND TRESTLES.

At the Deep Water Terminus, Halifax, 950 feet of the old hemlock trestle approach to the coal shed on the south side of the freight shed, was renewed with Georgia pitch pine at a large cost.

A heavy wind storm on the 7th of September carried away about 400 feet of the grain elevator gallery, and badly damaged the belt and other machinery in connection therewith. These repairs were all made good at an expense of about \$1,500.

A hoisting gang-way connecting the Deep Water Terminus freight house and the immigrant shed, was erected for the more convenient handling of baggage. Large repairs were made to the trestle approaches leading to the freight house.

At Richmond, 200 lineal feet of the hemlock approach to coal trestle on the outside wharf at Richmond, was renewed in pitch pine.

About 1,000 lineal feet of the bridge across the harbour at Richmond, was carried away by the heavy wind storm of the 7th of September. This was replaced, and opened for traffic before the close of the season.

The expenditure for this service amounted to \$32,000.

At Stewiacke the wharf for the accommodation of the Maitland business, was considerably damaged by the ice run in April last. A portion of this wharf was taken down and the balance of it properly secured with piling and capping, so that it is now more efficient than previous to being damaged.

At Truro the high level coal shed and the trestle approach were thoroughly overhauled and repaired.

Necessary repairs were made to the wharves at Mulgrave and Point Tupper.

At Dorchester a large portion of the top of wharf was renewed. Thirty new fenders were also provided.

At St. John very heavy repairs were made to the Deep Water Terminus wharf on the Courtenay Bay Branch. Six additional mooring posts were also provided for this wharf.

A heavy storm in October last carried away about 300 feet of the wharf at Pointe du Chêne, and badly damaged other portions of the same wharf. These damages have all been made good.

#### BUILDINGS AND PLATFORMS.

At North Street Station a new hardwood floor was laid in the waiting room, and a new office was provided for the ticket agent.

An extension of 12 by 9 feet was made to the freight checker's office, and the switchman's house overhauled and repaired.

At Richmond 8 sets of cattle-guard stringers were renewed. The approach to the cattle shed, 60 by 30 feet, was renewed.

The high level coal shed was roofed over with a building 300 feet long, 50 feet wide, and 14 feet posts, which admits now of the coal being dumped under cover. This renders the flat roof and hatches unnecessary.

At Rockingham the platform was extended 50 feet.

At Bedford the platform was extended 50 feet.

At Enfield a new loading platform was provided, and a pair of cattle-guards renewed.

At Elmsdale the passenger platform was renewed.

At Shubenacadie the station platform, 340 feet long and 12 feet wide, was renewed. The roof of station was recovered with metallic shingles. The cattle pen was renewed and the loading platform repaired.

At Brookfield a set of cattle-guards and the cattle-pen were renewed.

At Truro the sills of station building were renewed. The restaurant was thoroughly overhauled and large repairs made; the drainage from this restaurant was also very much improved. The track blacksmith shop, situated at the west end of the yard, was moved over and placed beside the roundhouse, so that the blacksmiths might be more efficiently supervised by the mechanical foreman. This necessitated the rebuilding of the forges, chimneys, &c. A new tool-house was provided for the section foreman. General repairs were made to the roundhouse, coal shed, and other buildings in Truro yard.

At Riverside the station was thoroughly overhauled and repaired. The office was sheathed the full height of the walls. Two sets of cattle-guards were renewed at this place.

At Lorne Siding a new flag-station was erected.

At Campbell's Siding a tool house was erected for the section men.

At New Glasgow contracts were let for a new brick passenger station, a large addition to the freight house, and a large baggage-room.

The yard and sidings were also rearranged and extended. These improvements are now about completed.

At Pictou Landing, the station platform 116 feet long by 9 feet wide was renewed. A portion of the west end of the station was fitted up as a freight shed.



## Department of Railways and Canals.

At West Merigomish the roof of station was recovered with metallic shingles. At Piedmont the roof of station was recovered with metallic shingles and painted.

At Avondale the station was overhauled and repaired.

At Marshy Hope a small kitchen was built to the rear of station for the agent's use, and the roof of station recovered with metallic shingles and painted.

At Antigonish the front of station was painted. The agent's office was enlarged and painted, and the passenger platform extended a distance of 80 feet by 6 feet wide.

At Pomquet and Heatherton, the stations were overhauled, and necessary repairs made.

At Tracadie one side of the roof was recovered with metallic shingles and painted.

At Harbour au Bouche the station was overhauled and repaired.

At Mulgrave a hardwood floor was put in the ladies' waiting-room.

At Pictou the engine shed was overhauled and repaired.

At Ross Road a freight platform was erected.

At Henderson's Siding a freight platform was erected.

The building formerly used as a car shed at Pictou Landing was removed to Pugwash, and converted into a freight shed on the Deep Water Wharf for the accommodation of freight shipped by water. A suitable slip for landing freight and passengers was provided.

At Wentworth the sills of station were renewed, a new hardwood floor was laid in the waiting-room, and the platforms of station and freight house renewed.

At River Phillips the sills of station and freight house, also the station platform, were renewed. A new floor was laid in the station master's office, and the loading platform recovered.

At Salt Springs the station platform was renewed.

At Spring Hill Junction and Maccan Stations, the waiting-rooms were sheathed and necessary repairs made to the station platforms.

At Amherst the dwelling apartments of present stone station were converted into a large general waiting-room. The floor of the whole building was lowered about two feet. The masonry of the windows and door was cut down to suit the new level, and the windows enlarged correspondingly. The ticket office, general waiting, and ladies' waiting-rooms, were sheathed with hardwood. A first class hot-water heating apparatus was provided to heat the whole building. Flush water-closets were also provided for the ladies' and general waiting-rooms. These improvements cost about \$2,000.

At Aulac the station building was painted.

At Sackville the baggage-room was sheathed, and the roof of freight house painted.

At Rockland the station building and platform were repaired, and the waiting room sheathed.

At Meadow Brook a new flag-station was erected, and a new loading platform provided.

At Memramcook the old freight-house was converted into an office for the agent and a ladies' waiting-room. The building was thoroughly overhauled and painted, the sills were renewed, and the old spruce floors replaced with hardwood floors. A new freight shed, 50 by 20 feet, was built to replace the old one.

At Shediac new floors were laid in the station and dwelling apartments, and necessary repairs made to plaster, &c. The station platform, 420 feet by 16 feet, was renewed.

At Pointe du Chêne the station building was sheathed and a new floor laid. The platform, 187 feet by 9 feet, was renewed.

At Moncton a large brick addition was made to the erecting shop, 201 feet long by 110 feet wide. It was covered with an iron roof.

A new brick round-house, with accommodation for 27 locomotives, was built.

These buildings cost about \$75,000, and were charged to capital account. A brick building, 51 feet by 42 feet, for the accommodation of the electric light plant and machinery, was erected at a cost of \$3,413.60.

The Government cottages occupied by employees were overhauled and repaired. Necessary repairs were made to the baggage room. The sills and floors in the old erecting shop were renewed. The station building was overhauled, and some slight repairs made to same.

At Salisbury the walls of office were sheathed, and outside sashes provided for the building.

At Petitcodiac the roof of station was recovered with metallic shingles, and necessary repairs made where required.

At Sussex two new doors were provided for the roundhouse and the roof of freight shed was recovered with metallic shingles.

At Apohaqui a new top was put on the loading platform.

At Hampton the platform was extended 100 feet.

At Bloomfield a new floor was laid in the station, and a new top put on the loading platform.

At Saunder's Crossing a new platform, 100 feet long by 7 feet wide, was erected.

At Riverside the platform was renewed.

At Coldbrook the platform, 300 feet long by 7 feet wide, was renewed.

At St. John, a coachman's shelter, 30 by 15 feet, was erected at a cost of \$695. The train shed received a coat of Sparham roofing, and extensive repairs were also made to sky-lights of same. The paint shop, which was partially destroyed by fire, was rebuilt.

At Berry's Mills the waiting-room and office were sheathed.

At Coal Branch the station office was sheathed.

At Birch Ridge an addition of 50 feet was made to the station platform.

At Harcourt the station platform, 234 feet long by 9 feet wide, was renewed; a new cellar wall was also put under the agent's house.

At Kent Junction a new station and freight house were erected by contract to replace those destroyed by heavy bush fires. Storm porches and outside sashes were also provided for the station.

At Rogersville storm porches and outside sashes were provided for the station.

At Newcastle a new catch basin was built in the roundhouse, and necessary repairs made to the pits and floor of same. A new building was put over the gas meter. Necessary repairs were made to the station.

The coal sheds at the following stations were covered with sheet iron and painted:—Canaan, Coal Branch, Barnaby River, Chatham Junction and Derby Junction.

Necessary repairs were made to all station platforms between Moncton and Newcastle.

At Bartibogue the tank-house was repaired.

At Red Pine the roof of station was repaired, and a new chimney built. A well and pump were provided for the station agent's use, and the platform was extended 30 feet.

At Petite Roche the roof of station building and dwelling-house were recovered with metallic shingles.

At Belledune the cellar was lined with plank, and the walls filled with saw-dust to make it frost proof. The tank-house was painted and the loading platform recovered.

At Jacquet River the roof of the dwelling-house and station was recovered with metallic shingles, and a new door put in the station.

The tank-house was painted, and the station platform repaired.

At Nash's Creek necessary repairs were made to the foundation of station.

At New Mills the roof of station and dwelling-house was recovered with metallic shingles, and the doors and platform of freight-house repaired. The station platform, 250 feet long by 8 feet wide, was renewed.

At Charlo a dwelling-house was built for the agent, repairs were made to the station building and the tank-house painted.

At Eel River repairs were made to the foundation of station, and the waiting-room and office painted.

At Dalhousie Junction the water was put into the station for the agent's use, and a w. c. provided in the station. A cedar box drain, 200 feet long, was made from

## Department of Railways and Canals.

the station to the river. Two new doors were put in the baggage-room, and other repairs made. The tank-house was painted.

At Dalhousie the roof of tank-house was recovered with metallic shingles, and repairs made to doors and windows of station.

At Campbellton a new roof was put on the coal shed and other repairs made to the building. Necessary repairs were made to the baggage-room and icehouse, and one pit in the roundhouse was renewed.

The round house was provided with an automatic water closet for the use of the employees. An 18-inch sewer was put in to connect the station, roundhouse and other buildings, with the river. Three flush closets were provided for the station.

At Flat Lands a new kitchen was built for the accommodation of the agent.

At Metapedia outside sashes were provided for the station, and 400 feet of the platform renewed.

At Millstream, a kitchen was built to the station and the coal-shed repaired.

At Causapsca the roof of kitchen was recovered with metallic shingles.

At Amqui the roofs of station and freight shed were recovered with metallic shingles. A water closet was provided, and 350 feet of the platform renewed.

At Cedar Hall the coal-shed was repaired.

At Sayabec an addition was made to the station to provide dwelling apartments for the agent.

At St. Moise the kitchen roof was recovered with metallic shingles.

At Little Metis 500 feet of the platform was renewed.

At St. Octave 50 feet of the platform was renewed.

At Ste. Flavie the rooms of dwelling apartment were sheathed. The building heaved badly with the frost, and the plaster was constantly coming down. The roof of station was recovered with metallic shingles. Necessary repairs were made to the round-house and coal-shed.

The iron frame of snow shed west of Ste. Flavie was painted, and the woodwork whitewashed.

At Rimouski the waiting-room was sheathed and painted. The platform was repaired. The snow shed near this station was whitewashed.

At Bic the roof of station was recovered with metallic shingles, and the platform repaired.

At St. Fabien the ironwork of snow-shed was painted, and the woodwork whitewashed.

At Trois Pistoles the station and restaurant were painted.

At Isle Verte the snow-shed was whitewashed.

At St. Arsène the roof of station was partially recovered and the snow-shed white washed.

At Rivière du Loup, a coal shed, 300 feet long and 23 feet wide, was erected to replace the shed burned down. Necessary repairs were made to the roundhouse and floors of machine shop. A new water-closet was provided in the general waiting-room of station.

At St. Roch slight repairs were made to the interior of station.

At St. Jean Port Joli a new hardwood floor was laid in the kitchen.

At Cap St. Ignace, St. Thomas, St. Valier and St. Charles, the waiting-rooms were sheathed.

At St. François a new hardwood floor was laid in the waiting-room and office, and the station platform was renewed.

At St. Henri a station platform was renewed.

At Chaudière repairs were made to the freight-shed. Three new hardwood floors and new storm porches were provided for the dwelling-houses at this station.

At Hadlow the floor of the engine-house was repaired.

### BRIDGES AND CULVERTS.

An iron stairway was erected to enable passengers to reach Lockman street from the exit of North street station at Halifax. It cost about \$700.

Two of the stone pedestals under the columns of overhead bridge at North street were rebuilt.

The masonry of the centre pier of Stewiacke bridge has been in bad order for some years, and it was necessary to strap it with iron bands to keep it together. A proper foundation was prepared, and the pier was cased from low water to the top with two feet of concrete, which to date has proved a very satisfactory job. The abutments of this bridge were also overhauled and pointed, and the parapet walls taken down to the level of the bridge seats.

A new paving was put in a box culvert one and a half miles east of Stewiacke. Two other box culverts within a mile of Stewiacke station received large repairs.

At Johnson's one abutment of Meadow Brook bridge was taken down and rebuilt, one pier and the other abutment were overhauled and pointed.

At Truro a new iron overhead foot bridge of three spans, 1 span 92 feet, 1 span 105 feet, and 1 span 106 feet, was erected between the station and the freight-shed, to connect Inglis street on the north side with Exhibition street on the south side. It is expected that the erection of this bridge will accommodate a large number of foot passengers that have heretofore used the level crossings at either end of Truro station ground.

The track scale at this station was out of order, as was also the masonry foundation of it. A more convenient site for this scale was selected, and the foundation and scale moved to it.

A gang of masons was employed throughout the season, repairing, pointing and overhauling masonry structures between Halifax and Pictou.

At Sutherland's River a new steel span 160 feet long was put in to replace the old wooden Howe truss bridge at that place, at a cost of \$10,953.

At Pine Tree a new creosote pine bent was put in to replace a hemlock bent cut out by sea-worms.

The wooden Howe trusses at South River West River, and Pomquet, were overhauled and thoroughly repaired. A number of spruce braces were put in each bridge. These bridges will all have to be replaced in two or three years.

At Yankee Grant a 75 feet through steel plate girder was put in to replace a Howe truss span of the same length.

These new bridges have all been fitted with Georgia pitch pine floors, well choaked, and provided with guard rail.

Eighteen pairs of timber cattle-guards at public crossings between New Glasgow and Mulgrave were renewed with flattened cedar during the year. These guards were originally built of hemlock and spruce.

A gang of masons was employed in general repairs between Truro and Painsec Junction during the working season.

A 15 feet arch culvert was put in to replace a wooden trestle at Frosty Hollow, near Sackville, at a cost of \$9,200.

The 100-foot Howe truss at Missequash was replaced with a steel span of the same length, at a cost of about \$5,000. The abutments of this bridge were thoroughly overhauled and pointed.

A wooden bridge of three spans of about 20 feet each, on the Shediac Branch, about three miles east of Painsec Junction, was renewed.

A large arch culvert about five miles east of Moncton, was badly damaged by a washout, and the necessary repairs were made.

A gang of masons was engaged throughout the season overhauling, pointing and repairing masonry structures between St. John and Pointe du Chêne.

The masonry piers of the Miramichi bridge were overhauled and pointed.

A pile trestle at Loch Broom, near Pictou, was filled in with a solid embankment through which a suitable culvert was provided. This trestle lifted with the ice in winter and gave a great deal of trouble.

A new overhead bridge of 60 feet clear span was built near Rogersville to connect the public roads on either side of the track, and thus avoid two level crossings. This bridge cost \$1,360.

The old wooden overhead bridge, near Charlo, of three spans was replaced with an iron bow-string girder of 86 feet clear span, placed on a substructure of first class masonry, at a cost of \$1,685.

## Department of Railways and Canals.

Between Campbellton and Ste. Flavie, the stringers of 30 beam culverts were renewed.

A large culvert west of Campbellton was overhauled and thoroughly repaired.

For some years we have had a great deal of trouble with the Tartague tunnel near St. Moise, which was frequently broken down at the lower end. About two years ago a portion of it was lined. Last year a piece between the lining and the mouth of the tunnel broke down, and obstructed the stream for about 100 yards. A large expenditure was necessary to remove the obstruction and put the tunnel in a state of efficiency.

A very heavy expenditure was made on the line between Rivière du Loup and Lévis, putting in new spans and strengthening the old iron spans, which have been found entirely too light for the heavy rolling stock on that division.

At Rivière Ouelle 8 spans of new 44 feet steel plate girders were put in and fitted with standard floor and guard rails.

Another pair of new 44 feet steel plate girders were put in three-quarters of a mile west of Rivière Ouelle.

At West St. Thomas two new 64 feet steel plate girders were provided, and six pairs of 64 feet plate girders at East St. Thomas.

The six old spans of East St. Thomas, and seven old spans of West St. Thomas were doubled up and provided with steel hangers and new steel floor beams. They were also fitted with new standard floors, painted and put in first class shape.

At Boyer River a pair of 54 feet steel plate girders replaced a pair of old-fashioned plate girders. The old plate girders will be doubled up and used later on.

A new pair of steel plate girders 44 feet span, were put in three-quarters of a mile east of L'Islet. This bridge was changed from a through to a deck, and fitted with standard floor and guard rails.

Two new spans of 44 feet each, steel deck plate girders, fitted with a standard floor and guard rails, were put in one mile east of St. Roch.

Three 12 feet beam culverts near St. Philippe de Néri were provided with double rail girders.

The overhead bridge near Etchemin was provided with a new floor.

The cutwaters of the West St. Thomas bridge were banded and strapped with old iron rails, to prevent their being damaged by the ice.

The following bridges were painted :—

Etchemin bridge.....	The tubular span 170 feet long was painted outside, also 55 feet plate girder span, and the ties and hand rails of whole bridge.
St Romuald bridge.....	28 feet long, iron and ties.
St. Thomas do.....	Iron work of seven 60 feet spans, and ties of fifteen 60 feet spans.
Isle Verte do.....	2 span 100 feet, Iron and ties.
Trois Pistoles do.....	5 do 100 do Ties only.
Amqui do.....	1 do 100 do Iron work only.
Indian Brook do.....	3 do 40 do Ties only.
Kane's Brook do.....	1 do 23 do do
Gilmour's Brook bridge.....	1 do 60 do Ties only.
Restigouche bridge.....	1 do 200 do Iron and ties.
North Branch Charlo bridge.....	3 do 50 do do
South do do.....	2 do 50 do do
New Mills bridge.....	2 do 80 do Ties only.
Moreton's Millrace bridge.....	1 do 30 do do
Benjamin River bridge.....	3 do 50 do do
Dickie's undercrossing.....	1 do 40 do do
Nash's Creek bridge.....	1 do 80 do do
Louison's Brook bridge.....	1 do 60 do do
Jacquet River.....	3 do 100 do do
Elm Tree do.....	1 do 80 do Iron and ties.
Nigadoo do.....	1 do 80 do do
Mill Stream do.....	1 do 80 do do
Grant's Brook do.....	1 do 80 do do
Tête-à-Gauche do.....	5 do 100 do Ties only.
Middle River do.....	2 do 80 do do
Little River do.....	1 do 60 do do
Red Pine do.....	3 do 40 do Iron and ties.
North-west Miramichi bridge.....	6 do 200 do do

South-west Miramichi bridge	6 span	200 feet.	Iron and ties.
Undercrossing west of Moncton	1 do	46 do	Ties only.
Hayward's bridge	1 do	30 do	Iron and ties.
Sproul's do	1 do	30 do	do
Moosehorn do	1 do	30 do	do
Lakeside overhead bridge			
Otty's do do			
Gondola Point road (undercrossing)			Stringers and ties.
Davidson's Cove bridge	1 do	30 do	Iron and ties.
McCulloch's (undercrossing)	1 do	30 do	do
Lawlor's Lake, overhead	1 do	70 do	do
4 mile undercrossing	1 do	50 do	Iron only.
Hall's Creek bridge	1 do	50 do	Iron and ties.
Mountain Road overhead bridge			
Scadouc bridge		350 do	Ties only.
La Planche bridge	1 do	80 do	Iron and ties.
Memramcook River bridge	1 do	60 do	do
McManus's bridge	1 do	50 do	Ties only.
Nappan bridge	1 do	100 do	do
Experimental Farm, overhead bridge			
North River bridge	2 do	100 do	Iron and ties.
Mud Creek do	1 do	50 do	Ties only.
Bible Hill do	1 do	23 do	Iron and ties.
Truro Y do	1 do	40 do	Ties only.
Shubenacadie do		325 do	do
Draw span, Narrows bridge			Iron only.
Barney's River do	1 do	70 do	Iron and ties.
Yankee Grant do	1 do	60 do	do

The iron and ties of 40 spans from 10 feet to 20 feet, old rail girders, at various points on the line were painted.

The following bridges had standard floors put on of Georgia pine ties, full chocked, and iron guard rails:—

Nash's Creek bridge	1 span	80 feet.	Through.
Louison's Brook bridge	1 do	60 do	do
Dickie's undercrossing	1 do	40 do	Deck.
Middle River bridge	2 do	80 do	Through.
Scadouc River bridge		350 do	Deck.
La Planche do	1 do	80 do	Through.
North River do	2 do	100 do	do
Bible Hill do	1 do	23 do	Deck.
Shubenacadie do	3 do	100 do	do
Riversdale do	3 do	40 do	do

The following bridges had the ties placed 4 inches apart, full chocked, and iron guard rails put on:—

Amqui bridge	1 span	100 feet.	Through.
Indian Brook bridge	3 do	60 do	Deck.
Clarke's Brook bridge	1 do	60 do	do
Doyle's do do	1 do	13 do	do
Gordon's do do	1 do	40 do	do
Trout Creek do	3 do	86 do	Through.
Hamond River do	3 do	100 do	do
Walker's undercrossing	1 do	25 do	Deck.
Matthew's Cove bridge	1 do	25 do	do
Robinson's Meadow bridge	20 do	30 do	do
Humbery's Mill Stream bridge	4 do	25 do	do
Musquash bridge	4 do	20 do	do
Fowler's Creek bridge	8 do	15 do	do
Rodger's bridge	3 do	15 do	do

The wood stringers of the following beam culverts were renewed with old rail girders and standard tops:—

1 .....	20 feet clear span.	1 .....	12 feet clear span.
1 .....	14 do do	4 .....	10 do do
1 .....	15 do do		

The wood trestle near Pointe du Chêne had new stringers and ties of Georgia pine, chocked, and iron guards put on. Three spans 14 feet.

Turner's pile bridge, 1 span 14 feet, had new caps and stringers of Georgia pine, with standard top put on.

An extra trestle was put in temporary bridge at Palmer's Pond. The ties were chocked, and iron guard rail put on.

## Department of Railways and Canals.

A crib work of timber filled with stone was built around the piles at late arch culvert, two and a half miles east of Truro, to prevent scouring.

Two escapes were built on River Phillip bridge.

A box culvert of cedar was built under Loch Broom bridge, and the bridge filled in.

Full sized chocks were put between the ties on the bridges between Oxford Junction and Brown's Point.

The riveting of the following bridges was thoroughly overhauled and all loose rivets renewed:—

Riversdale bridge.....	3 spans	40 feet.		Third Crossing bridge.....	1 span	30 feet.
Richibucto River bridge.....	3 do	50 do		Bartibogue bridge.....	1 do	80 do
Second Crossing Barnaby River.....	1 do	80 do		Rimouski bridge.....	5 spans	80 do

The following bridges had a system of lateral bracing put in:—

Richibucto River bridge.....	3 spans	50 feet.		Bartibogue bridge.....	1 span	80 feet.
Rimouski bridge.....	5 do	80 do				

At Windsor Junction, 410 feet of 2-in. wrought iron pipe were laid to connect the station with a spring and furnish a domestic water supply for the station agent. A suitable pump was also provided.

Between New Glasgow and Mulgrave, 12 new public crossing sign posts and boards were put up. Sixty-two sign boards on this division were also painted and relettered.

At Pictou Landing, a large amount of dredging was done on the west side of the wharf. A berth 400 feet long by 40 feet wide, and from 24 feet deep at the outer end, to 12 feet deep at the shore end, was provided.

The east side of this wharf was dredged last year, so that now there is accommodation for four large ships.

The north side of the Deep Water Wharf at St. John, was also dredged to a depth of 25 feet.

A working train was employed for about six weeks on each division, cleaning out cuttings, widening embankments, and taking down loose and dangerous rocks from cuttings.

Ten sets of cattle-guards within the limits of the town of Campbellton, were taken up and placed at the boundaries of the streets, making the roadways over the track 50 feet instead of 20 feet.

On the division between Rivière du Loup and Lévis, 16 stone culverts were taken down and rebuilt. Many others were overhauled, repaired and pointed.

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

P. S. ARCHIBALD,  
*Chief Engineer.*

D. POTTINGER, Esq.,  
Chief Superintendent, Intercolonial Railway,  
Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA,  
OFFICE OF THE MECHANICAL SUPERINTENDENT,  
MONCTON, N.B., 6th September, 1892.

SIR,—I beg to submit for your information the following statements of the operations of the Mechanical Department for the year ending 30th June, 1892:—

- A.—Statement showing the number of locomotives and various classes of cars.
- B.—Statement showing the locomotives and car mileages, and the average number of passenger and freight cars hauled per mile run by engines.
- C.—Abstract of locomotive returns.
- D.—Statement of the cost of locomotive power for each month during the year.
- E.—General statement of the expenses of the Mechanical Department.

Four large new locomotives were purchased and charged to revenue to replace 4 old ones taken off the list; 1 engine was rebuilt; 3 engines received heavy repairs, amounting almost to rebuilding.

One new boiler, 2 new fire-boxes, 22 new cylinders, 8 new saddles, 13 new extensions, 204 new driving tires, 9 new cabs, 63 new smoke-stacks, 26 new pilots, and 6 new tenders complete were supplied.

The Westinghouse brake was applied to 7 engines, and the American steam brake to 2. Sewell's heating apparatus was placed on 13 engines.

Five first-class cars were transferred from the Oxford and New Glasgow to the Intercolonial Railway. Four first-class, 2 second-class, 4 baggage and express, 15 box, 2 cattle, 40 platform, 38 6-ton hoppers, 42 20-ton gondolas, 29 20-ton platform, and 2 conductors' vans were rebuilt. One common snow-plough and 6 flangers were rebuilt also.

There are now 190 steam-heated cars, and 82 lighted with electricity. Sixty-five engines are now equipped with steam-heating devices.

Seven parlour cars, 11 sleeping cars, 50 first-class cars, 13 second-class sleepers, and 19 vans were thoroughly overhauled and renovated. Lighter repairs were put on 1 sleeper, 1 parlour car, 50 first-class, 58 second, 15 postal, 10 baggage, and 47 vans. Extensive repairs were put on 2 wing and 1 common plough, and four flangers; 464 freight cars had very heavy repairs put on them, almost amounting to rebuilding. Sixty-six freight cars were strengthened to increase their capacity ten thousand each. Steam heating was applied to 15 first-class, 6 second-class, and 4 baggage cars. Upwards of 150 passenger, baggage and postal, and 632 vans and freight cars, passed through the paint shop and were cleaned and painted to a more or less extent, generally thoroughly.

#### WATER SERVICE.

Tank-house at Elmsdale was burned in October, 1891, and a temporary tank and house put up.

At Alton repaired reservoir and put in new boiler.

Londonderry pump, hot air, received repairs several times. I would advise that a steam pump be erected there.

The tank at Folley was painted. Amherst tank was painted.

At Moncton 1 crane was taken off the water company pipe and put on the railway line, and another one was put up near the roundhouse.

A breakwater was built at Peticodiac to prevent sawdust from getting in the suction pipe.

The boiler and reservoir at Canaan were repaired. A new trestle was put under tank at Newcastle.

The reservoir at Jacquet River was cleaned.

The boiler at Charlo was repaired.

At Campbellton 175 feet of 2½-inch pipe was laid to wash out ash pans.

Cleaned and fenced reservoir at Metapedia.

Reservoir at Ste. Flavie was cleaned and repaired.

Reservoir at Trois Pistoles was cleaned out.

Two hundred and fifty feet 1-inch pipe was laid from tank to station at L'Islet.

At Oxford Junction 250 feet 2½-inch pipe was laid from tank to engine-house.

Hoops on tank at Antigonish reset and tank painted.

A new windmill pump was put up at River John.

A new 50,000 gallon tank was erected at Pugwash Junction.

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

H. A. WHITNEY,  
*Mechanical Superintendent.*

D. POTTINGER, Esq.,  
Chief Superintendent.



Department of Railways and Canals.

A.—INTERCOLONIAL RAILWAY.

STATEMENT showing the number of Locomotives and the various classes of Cars on the 1st July, 1891, and on the 30th June, 1892.

		The Various Classes of Cars.														Total						
		Locomotives	First Class Sleepers	Second Class Sleepers	Parlour	First Class Passenger	Second Class Passenger	Postal and Smoking	Baggage and Express	Box	Cattle	Platform, 10, 15 and 20 tons	Hoppers, 5 and 6 tons	Gondolas, 20 tons	Coal Cars, 20 tons	Vans	Total	Snow Ploughs	Wing Ploughs	Planters	Steam Ploughs	Total
On hand, 1st July, 1891, serviceable		206	15	5	5	84	95	24	36	2,067	96	2,109	800	513	794	97	6,830	43	10	20	2	75
do do condemned			1			3			3	4	7	14	5	7	2	46	1		1	1		2
Total		206	15	6	5	87	95	24	39	2,071	103	2,123	805	513	801	99	6,876	44	10	21	2	77
Purchased and charged to revenue		4				5											5					
Received from Oxford and New Glasgow Railway													104	*42			62					
Changed from gondola to hopper												7			7							
do large coal to platform																						
do Taken off register, replaced by new		4																				
Total		206	15	6	5	92	95	24	39	2,071	103	2,130	909	471	794	99	6,943	44	10	21	2	77
Condemned, July, 1891			1			3			3	4	7	14	5		7	2	46	1		1		2
do during the year		1				2	2	1	1	55	3	72	33	42	34		245	2		5		7
Total condemned		1				5	2	1	4	59	10	86	38	42	41	2	291	3		6		9
Rebuilt		1				4	2		4	15	2	40	38	*42	29	2	178	1		6		7
			1			1		1		44	8	46			12		113	2				2

J. SUTTON,  
Mechanical Accountant.

MONCTON, N.B., 30th June, 1892.

## B.—INTERCOLONIAL RAILWAY.

## STATEMENT of Locomotive and Car Mileage for the Year ending 30th June, 1892.

Months.	Locomotive Mileage.		Car Mileage.						Average Freight.
	Passenger.	Freight.	Passenger.	Express, Postal and Baggage.	Freight.	Total.	Snow Plough Mileage.	Average Passenger.	
1891—July.....	147,123	254,016	549,880	275,681	3,355,880	4,181,441	.....	5.60	13.21
August.....	142,711	266,378	555,195	268,906	3,526,831	4,350,932	.....	5.77	13.24
September.....	139,739	255,757	559,295	265,965	3,419,984	4,245,244	343	5.90	13.37
October.....	119,635	302,170	489,242	255,266	4,008,208	4,752,716	999	6.22	13.26
November.....	94,534	309,048	408,149	216,952	4,145,478	4,770,579	2,963	6.61	13.41
December.....	102,839	347,345	442,565	233,350	4,484,190	5,160,105	2,219	6.57	12.92
1892—January.....	104,598	279,326	417,921	215,755	3,253,947	3,886,723	7,080	6.04	11.64
February.....	95,792	263,366	380,228	198,575	3,121,439	3,700,242	16,894	6.03	11.85
March.....	108,726	302,708	423,519	225,822	3,828,155	4,477,496	11,545	5.96	12.64
April.....	99,623	279,853	422,801	223,438	3,809,884	4,456,123	2,227	6.48	13.61
May.....	98,835	250,881	391,800	222,862	3,456,652	4,071,314	1,985	6.23	13.77
June.....	101,678	236,410	436,847	243,641	3,206,738	3,887,226	.....	6.68	13.56
Total.....	1,355,893	3,347,258	5,476,542	2,846,213	43,617,386	51,940,141	46,255	6.14	13.03

J. SUTTON,  
*Mechanical Accountant.*

MONCTON, N.B., 30th June, 1892.

Department of Railways and Canals.

C.—INTERCOLONIAL RAILWAY.  
 ABSTRACT of Locomotive Returns for the Year ending 30th June, 1892.

Months.	Hours in Steam.	Locomotive Mileage.	Consumption.				Average Consumption per 100 Miles.				
			Tons of Coal.	Pints of Oil.	Pints of Valve Oil and Tallow.	Pounds Waste.	Miles Run to hour in Steam.	Pounds Coal.	Pounds Coal.	Pounds Coal.	Valve Oil and Pounds Tallow.
1891—July.....	43,054	478,967	14,147	29,345	28,099	12,991	11.12	6,616	6.12	5.84	2.71
August.....	43,380	485,174	13,958	29,433	27,169	12,675	11.18	6,441	6.06	5.60	2.61
September....	42,091	468,456	14,072	25,424	25,119	12,041	11.12	6,728	5.42	5.36	2.57
October.....	46,634	506,208	16,084	27,004	25,855	12,549	10.85	7,117	5.33	5.11	2.57
November....	44,955	483,200	15,731	25,277	23,075	10,883	10.74	7,541	5.23	4.94	2.25
December....	59,557	540,033	18,323	29,432	26,117	12,489	10.68	7,600	5.45	4.76	2.31
1892—January.....	42,851	464,114	15,378	25,624	21,983	10,692	10.83	7,505	5.52	4.73	2.06
February.....	40,243	432,943	14,579	24,924	21,285	10,295	10.75	7,543	5.75	4.91	2.35
March.....	45,247	491,288	16,497	28,718	23,377	11,639	10.85	7,521	5.84	4.75	2.36
April.....	42,324	456,989	14,330	26,356	22,847	10,679	10.79	7,024	5.77	4.99	2.33
May.....	38,744	426,514	12,990	24,605	21,900	9,956	11.01	6,822	5.76	5.11	2.33
June.....	36,831	408,000	11,600	23,919	21,327	9,154	11.07	6,368	5.86	5.22	2.24
Total.....	516,911	5,641,888	177,689	320,061	288,153	135,863	10.91	7,054	5.67	5.10	2.40

J. SUTTON,  
 Mechanical Accountant.

MONCTON, N.B., 30th June, 1892.

## D.—INTERCOLONIAL RAILWAY.

STATEMENT of the cost of Locomotive Power for each month, from 1st July, 1891, to 30th June, 1892.

Months.	Miles run by Engines.	Mechanical Supt.'s Salary and Office Expenses.	Engine-men's Wages.	Fuel.	Oil, Tallow and Water.	Repairs to Engines, Tenders and Tools.	Water.	Engine-houses and Turntables.	Total.	Average per 100 miles.						Total	
										\$	cts.	\$	cts.	\$	cts.		\$
1891—July...	478,967	928 26	23,557 23	38,310 82	4,584 00	31,496 50	2,713 29	1,579 55	103,169 65	19 4	927 99	96 6	58	57	33 21	54	
Aug...	483,174	1,069 03	20,438 58	37,628 96	4,370 98	32,782 20	1,946 52	1,261 64	98,327 91	23 4	227 76	90 6	76	41	23 20	51	
Sept...	463,458	978 31	22,617 72	38,172 32	3,996 08	29,395 34	2,271 94	1,486 72	98,918 43	21 4	83 8	15	85 6	27	48	32 21	11
Oct...	506,298	1,029 60	23,851 68	43,836 23	4,154 73	33,564 89	2,767 19	2,015 26	111,219 58	20 4	71 8	66	82 6	63	54	40 21	96
Nov...	483,200	1,018 98	23,342 48	42,737 04	3,705 23	25,571 87	2,638 06	2,549 39	101,563 05	21 4	83 8	84	77 5	29	54	53 21	01
Dec...	540,033	1,108 29	25,545 69	49,800 78	4,316 60	24,019 83	4,061 89	2,727 23	111,580 31	21 4	73 9	22	80 4	45	75	50 20	66
1892—Jan...	464,114	964 42	23,286 00	41,838 18	3,672 21	18,560 07	3,499 04	2,785 14	94,625 06	21 5	02 9	02	79 3	99	75	60 20	38
Feb...	432,943	982 27	22,108 59	40,322 68	3,709 75	14,771 20	2,421 72	2,545 95	86,842 16	22 5	11 9	29	87 3	41	56	59 20	05
Mar...	491,288	1,052 55	24,753 51	45,536 91	4,076 66	15,320 19	3,101 70	2,183 62	96,025 14	21 5	04 9	26	83 3	12	63	45 19	54
April...	456,989	954 69	23,330 58	39,898 36	3,755 14	20,704 38	2,628 86	1,109 41	92,441 42	20 5	11 8	73	82 4	54	58	24 20	22
May...	426,514	941 13	21,516 75	35,761 45	3,607 10	14,361 90	3,130 61	912 73	80,231 67	22 5	05 8	39	84 3	36	73	22 18	81
June...	408,000	948 15	19,397 30	31,260 14	3,376 40	12,939 86	2,799 10	1,133 87	72,054 82	23 4	80 7	66	83 3	17	68	29 17	66
Total....	5,641,888	11,985 68	273,946 11	485,123 87	47,324 88	273,548 23	33,979 92	22,230 51	1,148,199 20	21 4	85 8	59	84 4	84	60	39 20	35

J. SUTTON,

Mechanical Accountant.

MONCTON, N.B., 30th June, 1892.

# Department of Railways and Canals.

## E.—INTERCOLONIAL RAILWAY.

**GENERAL STATEMENT of the Expenses of the Mechanical Department, for the Year ended 30th June, 1892.**

The miles run by trains.....	4,703,151
do    engines.....	5,641,888
do    cars.....	51,940,141
do    snow ploughs.....	46,255
	<b>\$    cts.</b>
The cost of locomotive power.....	1,148,199 20
The cost of car repairs :	
Repairs to passenger cars.....	89,811 00
do    postal, express and baggage cars.....	24,656 74
do    freight cars and vans.....	210,149 12
Oil and waste for packing.....	8,297 98
Miscellaneous.....	25,643 02
Total cost of car expenses.....	358,557 86
The cost of locomotive power per 100 miles run by trains.....	24 41
do    do    do    engines.....	20 33
do    do    do    cars.....	2 21
The cost of repairs to cars and ploughs per 100 miles run by trains.....	7 09
do    do    engines.....	5 91
do    do    cars.....	0 64
The cost of oil and waste for packing per 100 miles run by trains.....	0 54
do    do    do    engines.....	0 45
do    do    do    cars and ploughs.....	0 04
The cost of repairs to cars per 100 miles run by them :	
do    passenger, per 100 miles run by them.....	1 64
do    express and baggage, per 100 miles run by them.....	0 86
do    freight cars and vans    do.....	0 48
do    ploughs and flangers    do.....	17 93

**J. SUTTON.**  
*Mechanical Accountant.*

MONCTON, N.B., 30th June, 1892.

## INTERCOLONIAL

## RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1891.						
July 2.	8.30		Shunting.		J. Phinney	124
do 2.	10.00	Special	Freight	Jno. McDonald.	Jas. Sproull	88
do 4.	5.00	do	do	J. B. Crockett.	J. Gilfillan	30
do 6.	10.00		Pilot	T. Bellemare.	Geo. Findlay	193
do 8.	5.00		Shunting.		J. Phinney	124
do 9.	9.30	Special	Freight	W. Welling	F. W. Welling	30
do 10.	19.20	do	do	T. C. Ayer.	S. W. Carson	178
do 17.	9.00		Shunting.		A. Fryers J. Cole	33 18
do 18.						
do 20.	15.30	Special	Working.	W. F. Ferguson.	J. Howie	40
do 24.	15.20	25	Express	W. Gunn.	R. McDonald.	198
do 27.	10.12	59	Accommodation.	E. S. Vye	F. H. Moore	70
do 27.	13.30	31	Express	Jno. McFadzen	J. H. Moore	74
Aug. 7.	14.08	Special	Working.	W. W. Gordon	Geo. Anderson	32
do 8.		76	Freight	M. Cummings	W. Gross	182
do 12.	9.45	33	Express	M. Letarte	E. Parsons	157
do 12.	11.00	83	Accommodation.	Jno. Casey	W. F. Hicks	52
do 12.	16.20	Special	Freight	W. Bovard	Geo. Spears	160
do 13.	16.00	do	Working	W. F. Ferguson	J. Howie	181
do 14.	18.00	do	do	McKinnon	L. King	167
do 20.	9.30		Shunting.		P. Fogarty	190
do 21.						
do 27.	8.00	16	Freight	W. J. Dickson	Geo. Feetham	136
do 28.	7.30	Special	Working	J. B. Crockett	P. McKenna	117
Sept. 1.	5.00	34	Express	A. McLellan	A. Donald	150
do 1.	5.10	104	Freight	Geo. C. Keys	A. Prowse	72
do 4.	7.00	34	Express	Jno. Coffey	Jno. Nairn	197
do 14.	2.00	Special	Freight	F. Guinan	J. G. McDonald	125
do 17.						
do 17.	15.00	Special	Working	C. Beswhanger	B. Titus	19
do 18.	18.12	do	Freight	Geo. McGinn	N. Copeland	112
do 22.	7.00	42	do		L. Michaud	134
do 22.	3.45	Special	do	Geo. Couchy	J. Cloutier	85
do 29.	19.35	do	Working	Louis Belanger	A. Connell	176
Oct. 2.	8.55	18	Accommodation.	J. W. Miller	D. Duncan	56
do 9.	23.30		Shunting		M. O'Brien	99
do 24.	5.20	67	Freight	A. B. Vance	Ben. Cook	113

# Department of Railways and Canals.

## RAILWAY.

Line of the Intercolonial Railway during the Year ended 30th June, 1892.

Place of Accident.	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Truro	Daniel Hendas.	Employee.	While coupling	Thigh injured.	
Stellarton.	Samuel Gray.	do	do	Foot injured	
St. John.	Jos. Stockford	do	While oiling engine.	do	
Levis	V. Delisle.	do	While coupling	Slightly injured.	
Truro	Jno. Glenfield	do	Stepped off engine while in motion.	Foot sprained.	
Amherst.	E. Esterbrooks.	do	While coupling	Thumb injured.	
Newcastle	T. C. Ayer.	do	Fell while getting on train.	Shoulder injured	
Moncton	Onésime Bourque	do	Car under which he was working, collided by shunter.	Leg broken.	
Near Westchester.	Chas. Seifert.	Neither.	Found alongside of track with feet cut off.	Fatal	Accidental.
Near Charlo.	Jas. Dagle.	Employee.	While loading rails	Hand smashed	
Truro	— Philips (Deaf and dumb Indian).	Neither.	Walking on track	Slightly injured.	
Derby Junction.	Robt. Swetman.	Employee.	While shunting	Foot amputated.	
Pointe du Chêne.	Dan. McNevin.	Passenger	Slipped while getting on train.	Hip dislocated.	
Harbour au Bouche.	Samuel Gray.	Employee.	While coupling	Hand injured	
Moncton.	Jno. Budd	do	Jumped off train while in motion.	Face scratched.	
Near St. Roch.	Christine Fournier.	Neither.	Walking on track	Fatal	No inquest.
Moncton.	R. Donnelly	do	Crossing track in wagon	Slightly injured.	
Campbellton.	Miss Letellier	do	do do	do do	
	— Vermette, 6 yrs	do	do do	Eye do	
	Lacasse, girl 12 "	do	do do	Arm do	
	" " 10 "	do	do do	Head do	
Jacquet River	" boy 8 "	do	do do	Collar-bone brok-	
	" girl 3½ "	do	do do	Arm amputated.	
Near Iona	A. Barreau.	Employee.	While loading lumber	Thumb injured.	
Moncton	John McNeil	do	Fell off train	Fatal	Accidental.
Near Sussex	Angus Cormier.	do	While coupling	Slightly squeezed	
Brookfield	Welgton Linden	Neither.	Walking on track (intoxicated).	Fatal	Accidental.
Brookfield	Jacob Harvey.	do	Attempting to go between cars.	Foot injured.	
Near Sussex	Jude Légère.	Employee.	While taking cable off car.	do	
Moncton	Ed. Breau.	do	While uncoupling hose.	Hand injured	
North Sydney Junction.	J. T. McDonald	do	Fell while getting off car.	Wrist sprained.	
Amherst.	Mrs. Stokes.	Neither.	Struck by engine while driving cow off track.	Side injured	
Riversdale.	Jno. Spain.	Employee.	Fell off train	Slightly injured.	
Salt Springs.	O. C. Cummings	Neither.	Found dead on track, supposed to have been struck by train.	Fatal	Accidental.
North Sydney Junction.	S. McCormick	Employee.	Knocked off car by cable.	Arm broken	
Red Pine	Edgar Steeves.	do	Slipped off pilot of engine.	Leg injured.	
River du Loup.	Wilfred Soucy	do	While coupling	Hand crushed.	
do	Jos. Paquet.	Neither.	Walking on track	Fatal	Accidental.
Sayabec	Ant. Berubé	Employee.	While coupling	Finger crushed.	
Valley	— Sutherland (child).	Neither.	Standing on crossing.	Slightly injured.	
Moncton	J. H. Cochrane.	Employee	While coupling	Hand injured	
Stewiacke	D. Mahar	Neither.	Found dead on track, struck by No. 26 train.	Fatal	Accidental.

## INTERCOLONIAL

## RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1892.						
Oct. 29..	10.25	50	Accommodation..	Jos. Guay .....	W. Brock .....	141
do 31..	4.15	45	do	X. Langlais .....	Geo. Morrison .....	38
do —		Special.	Freight .....	J. L. Hébert .....	Jas. Fohy .....	
do 31..	12.30		Shunting .....		J. Walsh .....	93
do 31..	13.30		do .....		M. Tobin .....	98
Nov. 3..	21.20		do .....		J. Leonard .....	95
do 4..	19.20	74	Accommodation..	Jas. McDonald .....	A. Scott .....	105
do 7..	12.00		Shunting .....		J. Cole .....	18
do 13..	4.50	40	Freight .....	W. M. Thompson .....	W. Gross .....	203
do 13..	14.55	74	Accommodation..	James McDonald .....	A. Scott .....	27
do 16..	7.45		Shunting .....		D. Sullivan .....	24
do 21..	20.30	6	Freight .....	Jno. Hughes .....	S. Wilson .....	48
do 30..	10.00		W. & A. Railway		R. Stewart .....	6
do 30..	16.10	Special.	Freight .....	J. L. Chisholm .....	T. Hennessey .....	160
Dec. 2..	18.00	do	do .....	W. L. Broad .....	P. McKenna .....	209
do 2..	21.00		Shunting .....		C. McHugh .....	18
do 2..	21.30	15	Freight .....	Geo. Margeson .....	J. G. McDonald .....	175
do 3..	21.00	Special.	do .....	Geo. Keys .....	do .....	175
do 5..	1.30	do	do .....	A. Gamache .....	A. Connell .....	176
do 9..	7.33	2	Express .....	G. H. Trueman .....	T. Prince .....	148
do 10..	1.00		Shunting .....		E. Stockall .....	87
do 14..	14.00	Special.	Freight .....	J. Buchanan .....	H. Stewart .....	5
do 18..	7.15	do	do .....	J. R. Fisher .....	L. Starratt .....	171
do 18..	15.45	do	do .....	R. A. McDonald .....	A. Sproull .....	186
do 21..	15.00		Shunting .....		W. Lovett .....	44
					W. Appleton .....	87
do 25..	14.00	24	Freight .....	W. McDermott .....	N. Sinclair .....	79
do 28..	11.30	Special.	do .....	J. H. Richardson .....	J. W. Nairn .....	197
do 28..	21.00		Shunting .....		G. Currie .....	93
1892.						
Jan. 11..	7.10	21	Accommodation..	D. McIntosh .....	Jno. Campbell .....	14
do 21..	9.10	Special.	Snow-plough .....	L. N. Letarte .....	Jos. Collett .....	76
Feb. 5..	7.30	do	Freight .....	W. W. Irving .....	Jno. McCracken .....	26
do 13..	14.45	do	Snow-plough .....	Jas. Card .....	J. Hackett .....	6
do 13..	23.45	46	Accommodation..	M. Audet .....	G. Spear .....	40
do 17..	9.40		Shunting .....		E. B. Price .....	181
					J. Walsh .....	128
do 18..	17.40	81	Express .....	C. Upham .....	W. Lovett .....	68



# Department of Railways and Canals.

## RAILWAY.

on the Line of the Intercolonial Railway, &c.—Continued.

Place of Accident.	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Near St. Charles Junction.	Mendel Wagner.	Passenger	Jumped off train while in motion.	Fatal	Accidental.
Ste. Luce	Geo. Morrison	Employee	No. 45 and special trains colliding.	Considerably injured.	
do	Alph. Berubé	do	do do	Slightly injured.	
Richmond	John Munroe	do	Deal falling off car	Head injured	
do	L. Bezanson	do	While coupling	Hand injured	
Truro	Fred. Fowle	do	do	do	
Scotsburn	Jno. Carmichael	do	While stepping off engine, fell between train and platform.	Fatal	Accidental.
Moncton	N. Stableford	do	While coupling	Hand injured	
Chatham Junc.	Frank Jonah	do	do	do	
Oxford	Jno. Mockler	Neither	Walking alongside of track.	Slightly injured.	
Campbellton	A. Dickie	Employee	Stepping off van	Ankle sprained	
Salisbury	Walter Clark	do	While coupling	Hand injured	
Halifax	David Kennedy	Neither	Crossing track with team	Fatal	Accidental.
Shubenacadie	Arthur Purdy	Employee	Fell off engine while in motion.	Seriously injured	
Spring Hill Junc.	George Mills	do	While coupling	Slightly injured.	
Moncton	H. S. Cutten	do	While going to engine, stepped on edge of rail.	Ankle sprained.	
Londonderry	A. Philips	do	While coupling	Hand jammed	
Greenville	Jno. Leahy	do	Slipped while stepping on engine.	Foot injured	
Ste. Flavie	Jos. Poirier	do	Fell off train while in motion.	Leg amputated.	
Rothsay	Mrs. Hogan	Passenger	Jumped off train while in motion.	Leg broken	
Richmond	Thos. Fenerty	Employee	While coupling	Hand crushed	
Stewiacke	B. Ripley	do	do	do	
Brookfield	A. Langille	do	Link falling off tender of engine.	Head injured	
New Glasgow	— Conolly	Neither	While crossing track in team.	Slightly injured.	
} Richmond	R. Riger (sailor)	do	Cars shunted against one on which he was working, knocking him off.	Leg broken	
Oxford Junction	W. H. Manship	Employee	While coupling	Hand injured	
Truro	J. H. Richardson	do	While coupling, foot caught between platform and rails.	Foot amputated.	
Richmond shop.	Hy. Colter	do	Caught between car and old engine standing in shop.	Fatal	Accidental.
Stellarton	B. D. Rogers	Neither	While crossing track in team.	Slightly injured	
$\frac{3}{4}$ mile east of Lévis.	Jos. Bacon	do	Walking on track	do	
Newcastle	W. W. Irving	Employee	While coupling, wood fell off car on him.	Foot and back injured.	
2 miles west of Newcastle.	H. Thomson	do	Chain broke in wing plough	Leg injured	
Near St. Morse.	Nap. Levesque	do	While coupling	Slightly squeezed	
Richmond	Abram Rumbolt	Neither	Cars colliding with the one in which he was loading sugar.	Seriously injured	
Rockingham	Wm. Parks	do	Attempting to get on No. 94 train, slipped and struck by engine.	Ankle sprained and hip injured.	

## INTERCOLONIAL

## RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1892.						.
Feb. 20..	19.30	46	Accommodation..	M. Audet .....	A. J. Sharpe.....	139
do 21..	17.55	Special.	Mail .....	J. B. Paulet.....	W. Bastin .....	162
Mar. 7..	9.00	37	Freight .....	E. L. Watts.....	C. Langley.....	25
do 13..			Shunting .....		D. Sullivan.....	94
do 20..	13.10	75	Freight .....	L. Proulx.....	O. Brock .....	17
do 24..	10.00				F. Cloutier.....	111
do 26..	10.30	Special.	Freight .....	W. McClafferty .....	D. Peterson.....	210
April 1..	11.00		Shunting .....		Jas. McDermott.....	18
do 1..	17.30	Special.	Freight .....	T. W. Johnson .....	C. Saunders.....	49
do 5..	7.45	34	Express .....	Y. C. Campbell.....	H. McAuley.....	199
do 5..	22.35	45	Accommodation..	J. B. Dube.....	J. McNutt.....	185
do 9..	15.30	Special.	Freight .....	Geo. Couchy.....	E. Ouellett.....	195
do 15..	16.45	do ..	do .....	E. L. Watts.....	S. W. Carson.....	47
do 22..	15.45	do ..	do .....	J. B. Pollock.....	H. Stewart.....	126
do 23..	18.40	do ..	do .....	F. Brown.....	D. Youlds.....	172
May 23..	12.15	28	Accommodation..	A. Grant .....	J. H. Campbell.....	107
do 24..	12.50	Special.	Freight .....	R. A. McDonald.....	Geo. W. Anderson.....	52
do 26..	19.17	1	Express .....	A. Rainnie.....	Jno. Stewart.....	36
June 2..	8.25	Special.	Freight .....	J. B. Crockett .....	E. Rushton.....	91
do 2..	18.15	104	do .....	A. C. McLean.....	D. McLennan.....	24
do 12..	20.00	Special.	do .....	E. Rioux .....	T. Matheson.....	40
do 21..	15.20	do ..	do .....	W. W. Gordon .....	A. Sproull.....	124
do 24..	10.45	37	do .....	M. Cummings.....	E. S. White.....	25
do 29..	6.00	56	do .....	Jas. Holmes.....	A. Dunbar.....	13

# Department of Railways and Canals.

## RAILWAY.

on the Line of the Intercolonial Railway, &c.—*Concluded.*

Place of Accident.	Name of Person injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
3 miles east of Ste. Flavie.	— Godbout.....	News agent.	Fell from train.....	Fatal.....	Accidental.
6 miles west of Mill Stream.	f W. Bastien... H. Sharpe....	Employee... do.....	Run into snow slide... do do.....	Slightly injured. do.....	
Harcourt.....	J. H. Haines....	do.....	While coupling.....	Finger smashed.	
Campbellton....	D. Sullivan....	do.....	Fell off tender of engine...	Slightly injured.	
$\frac{3}{4}$ mile east of Lévis.	Marie Forgues..	Neither....	While walking on track...	Fatal.....	Accidental.
Halifax.....	Thos. Delaney..	Employee..	While unloading an anchor, hand caught in crane.	Hand injured...	
Stellarton.....	John Brown....	do.....	While coupling.....	Finger amputat- ed.	
Moncton.....	Albert Weldon..	do.....	Struck by engine while checking cars.	Slightly injured.	
Near Belmont..	T. W. Johnson..	do.....	Fell out side door of van, chain broke.	do.....	
Sackville.....	Chas. Bass.....	do.....	While loading baggage....	Finger jammed.	
Mill Stream....	Chas. Audet....	do.....	Fell off train while slacking brake.	Considerably in- jured.	
Point Lévis....	Godfrey Bontin.	Neither....	Attempting to get on train.	Leg broken.....	
Newcastle.....	Frank Williams.	Employee..	While cleaning window of engine cab.	Hand cut.....	
Alton.....	G. Herbert.....	do.....	While getting off train....	Leg injured....	
Spring Hill Junc	A. G. Cormier..	do.....	do do engine...	Ankle sprained.	
Pictou.....	Jno. Avery, 4 yrs.	Neither....	Crossing track.....	Slightly injured.	
New Glasgow..	Jno. McNeil....	do.....	do.....	Fatal.....	Accidental.
Jardine's Bridge, near St. John.	Thos. Hunter....	do.....	Walking on track.....	do.....	do
Spring Hill Junc	Jas. Melanson..	Employee..	Lump of coal falling on hand	Fingers smashed	
Sydney.....	A. Cameron....	do.....	While shunting.....	Foot injured....	
Rimouski.....	A. J. McDonald	do.....	While feeling eccentric, engine backed up.	Arm broken...	
1 mile east of Hopewell.	C. Sullivan....	Neither....	Lying alongside of track (intoxicated).	Slightly injured.	
Barnaby River..	— McDonald....	Passenger..	While closing door of car, train started.	Fingers jammed.	
Girrior's.....	Jno. Pushie....	Employee..	Fell off van.....	Considerably in- jured.	

## WINDSOR BRANCH RAILWAY.

OFFICE OF THE CHIEF SUPERINTENDENT,

MONCTON, N.B., 27th September, 1892.

SIR,—I have the honour to submit the following statements showing the results of the working of the Windsor Branch Railway, for the year which ended the 30th June, 1892:—

- No. 1. Revenue account.
2. Maintenance of way and works.
3. General balance.
4. Statement of earnings.

I also send you the report of the Chief Engineer on the condition of the permanent way and works.

This line, 32 miles in length, was operated during the year by the Windsor and Annapolis Railway Company, on the same terms as last year, the company being allowed to retain two-thirds of the gross earnings, the balance, one-third, being paid over to the Government, the latter maintaining the line.

There was an increase in the earnings accruing to the Government, when compared with last year, as follows:—

In 1891-92.....	\$33,508 85
1890-91.....	30,235 13
	\$3,273 72

The expenses of maintenance were considerably less than last year:—

In 1890-91.....	\$28,931 71
1891-92.....	19,514 37
	\$9,417 34

The earnings and expenses compare as follows:—

Earnings.....	\$33,508 85
Expenses.....	19,514 37
	\$13,994 48

The necessary repairs and renewals were made and some improvements, including, among others, the laying of a siding, four hundred feet long, at Newport. The permanent way and works are in good order.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,

*Chief Superintendent.*

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager, Government Railways,  
Ottawa.

Department of Railways and Canals.

No. 1.—WINDSOR BRANCH RAILWAY.

DR.

REVENUE ACCOUNT, Year ending 30th June, 1892.

CR.

Previous Year.	Expenditure.	Year ending 30th June, 1892.	Previous Year.	Receipts and Earnings.	Amount, Year ending 30th June, 1892.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
28,931 71	Maintenance of way and works, Abstract No. 1.....	19,514 37	10,746 38	Passenger traffic.....	12,187 76
			18,336 91	Freight traffic.....	20,165 57
			1,151 84	Mails.....	1,155 52
1,303 42	Balance.....	13,994 48			
30,235 13		33,508 85	30,235 13		33,508 85

Certified correct,

T. WILLIAMS,

Chief Acct. and Treas., I. C. R.

MONCTON, N.B., 30th June, 1892.

R. B. BOGGS,

Acct., W. B. Ry.

## No. 2.—WINDSOR BRANCH RAILWAY.

## MAINTENANCE of Way and Works.

Previous Year.	Particulars.	Amount.
\$ cts.		\$ cts.
12,642 04	Repairs to track.....	11,284 50
4,052 02	Rails and fastenings.....	1,395 38
3,529 30	Ties.....	3,709 10
5,422 36	Bridges.....	456 13
3 00	Signals.....	
12 60	Switch locks.....	12 60
467 49	Culverts and cattle-guards.....	124 53
	Wharf at Windsor.....	5 10
463 09	Buildings and platforms.....	241 90
27 45	Hand cars and trollies.....	2 10
134 95	Snow ploughs and flangers.....	203 52
173 31	Tools and repairs.....	200 45
850 59	Fencing.....	690 23
1,104 72	Accountant's office and expenses.....	1,111 49
48 79	Miscellaneous.....	77 34
28,931 71		19,514 37

Certified correct,

T. WILLIAMS,

*Chief Acct. and Treasurer, I.C.R.*

MONCTON, N. B., 30th June, 1892.

R. B. BOGGS,  
*Acct., W. B. Ry.*

# Department of Railways and Canals.

## No. 3.—WINDSOR BRANCH RAILWAY.

### MONTHLY STATEMENT of Receipts—One-third Earnings.

Month.	Passengers.	Freight.	Mails.	Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1891—July .....	1,169 84	96 91	1,383 72	2,650 47
August .....	1,714 82	96 91	1,345 56	3,157 29
September.....	1,993 35	96 90	2,078 38	4,168 63
October.....	1,026 61	96 91	2,413 29	3,536 81
November.....	825 02	96 91	2,086 79	3,008 72
December.....	902 42	96 90	1,830 99	2,880 31
1892—January .....	637 43	95 68	1,292 50	2,025 61
February.....	678 26	95 68	1,248 07	2,022 01
March .....	664 22	95 68	1,733 97	2,493 87
April.....	796 54	95 68	1,609 01	2,501 23
May.....	806 14	95 68	1,496 81	2,398 63
June.....	973 11	95 68	1,646 48	2,715 27
	12,187 76	1,155 52	20,165 57	33,508 85

Certified correct,  
**T. WILLIAMS,**  
*Chief Acct. and Treasurer, I. C. R.*  
 MONCTON, N.B., 30th June, 1892.

**R. B. BOGGS,**  
*Acct., W. B. Ry.*

INTERCOLONIAL RAILWAY,  
CHIEF ENGINEER'S OFFICE,  
27th September, 1892.

SIR,—I have the honour to submit the following report for the maintenance of the Windsor Branch for the year ending 30th June, 1892.

TRACK.

The mileage remains the same as last year. Seven miles of the iron rails in track which were badly worn, were replaced with new 4½ steel rails with angle fish-plate joints.

BALLASTING.

During the year, 7,320 cubic yards of ballast were put on the branch.

TIES.

During the year, 19,137 ordinary ties, and seven sets of switch ties, have been renewed.

SIDINGS.

A siding 400 feet long was put in at Newport for the Plaster Company. The sidings at Hibbert's and Fenerty's were relaid with the old iron rails taken out of the main line.

FENCING.

During the year, 500 rods of barbed wire and woven wire fencing have been erected, and large repairs made to the old fence.

BUILDINGS AND PLATFORMS.

At Windsor Junction a portion of the platform was renewed, and the freight house repaired.

At Mount Uniacke the station building was painted.

At Ellershouse necessary repairs were made to the doors and windows of station, and the building painted.

At Newport the station building was overhauled, repaired and painted.

At Windsor necessary repairs were made to the station building, and the roof was recovered with metallic shingles and painted. The engine-house roof was overhauled and repaired, necessary repairs were also made to the doors and windows of same.

One cattle-guard was also renewed.

At South Uniacke the cattle-guards were renewed.

BRIDGES AND CULVERTS.

Three piers of Jordan bridge were strapped with old rails and iron screw rods fitted with turnbuckles.

Bulkheads of timber were built at the ends of abutments of Big Bog bridge to retain embankments.

The masonry of Sackville, Big Bog and Ste. Croix bridges was overhauled and pointed.

A new top of Georgia pine was put on Carrel's bridge, and iron guard rails provided.

Two cedar culverts 3 by 4 were put in at Fenerty's siding.

At Ellershouse a cedar culvert 3 by 4 was put in.

A cedar culvert 3 by 4 was also put in west of Ellershouse station.

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

P. S. ARCHIBALD,  
*Chief Engineer.*

D. POTTINGER, Esq.,  
Chief Superintendent, Intercolonial Railway,  
Moncton, N.B.



# Department of Railways and Canals.

## PRINCE EDWARD ISLAND RAILWAY.

SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, P.E.I., 26th August, 1892.

SIR,—I have the honour to submit the following report on the working of the Prince Edward Island Railway, for the fiscal year ended 30th June, 1892.

I also inclose the following statements prepared by the accountant and auditor:—

- |        |                                      |                   |  |
|--------|--------------------------------------|-------------------|--|
| No. 1. | Capital account.                     |                   |  |
| 2.     | Revenue account.                     |                   |  |
| 3.     | Locomotive power.                    | (Abstract No. 1.) |  |
| 4.     | Car expenses.                        | ( do 2.)          |  |
| 5.     | Maintenance of way and works.        | ( do 3.)          |  |
| 6.     | Station expenses.                    | ( do 4.)          |  |
| 7.     | General charges.                     | ( do 5.)          |  |
| 8.     | Statement of general stores account. |                   |  |
| 9.     | General balance.                     |                   |  |
| 10.    | Comparative statement of averages.   |                   |  |

### CAPITAL ACCOUNT.

The total expenditure on capital account to 30th June, 1891,	
was .....	\$3,741,780 89
The additions during the year are as follows:—	
Removal of Summerside Station.....	\$4,995 42
Expropriation of land from R. McMillan....	3,305 07
	8,300 49
Total expenditure on capital account to 30th June, 1892	\$3,750,081 38

Removal of Summerside Station.—This is the cost of moving the station from the wharf to Water street, and moving the freight shed one hundred feet east.

Expropriation of land from R. McMillan.—This is a payment for land expropriated and legal expenses, in connection with the extension of the track to the Charlottetown Steam Navigation Company's wharf at Charlottetown.

### REVENUE ACCOUNT.

The gross earnings for the year amounted to.....	\$157,442 69
Previous year.....	174,258 05
	Decrease..... \$16,815 36

The earnings per mile of railway compare with the previous year as follows:—

1890-91 .....	\$829 80
1891-92.....	749 72
	A decrease per mile of..... \$ 80 08

The length of road operated in each year was the same, namely, 210 miles.

Since the opening of navigation this spring, traffic has been unusually dull, owing to the poor market for the staple farm products; also the increased competition by water against which we have to contend this year. Nearly \$10,000 of the shortage in this year's receipts is due to the late closing and early opening of navigation, the steamers "Stanley" and "Northumberland" taking large quantities of freight and numbers of passengers to and from Charlottetown and Pictou direct, which, had the winter been an ordinary one, would have passed over the road to and from Georgetown.

STATEMENT.

	Passengers carried.	Earnings.
1890-91.....	145,508	\$72,292 23
1891-92.....	139,389	70,959 21
Decrease.....	<u>6,119</u>	<u>\$1,333 02</u>
	Tons of freight carried.	Earnings.
1890-91.....	59,511	\$81,660 82
1891-92.....	51,065	69,983 23
Decrease.....	<u>8,446</u>	<u>\$11,677 59</u>
Mails and sundries, 1890-91.....		\$20,305 00
do 1891-92.....		16,500 25
Decrease.....		<u>\$3,804 75</u>

The engine mileage compared with last year was :—

1890-91.....	335,202
1891-92.....	307,421
Decrease .....	<u>27,781</u>

The train mileage as compared with last year was :—

1890-91.....	272,475
1891-92.....	245,102
Decrease .....	<u>27,373</u>

The car mileage as compared with last year was :—

1890-91.....	1,420,425
1891-92.....	1,304,659
Decrease.....	<u>115,766</u>

EXPENDITURE.

The working expenses as compared with last year were as follows :—

*Renewals.*

	Ordinary.	Rails and Fastenings.	Rolling Stock.	Total.
1890-91.....	\$257,039 13	.....	\$950 95	\$257,990 08
1891-92.....	252,970 37	\$36,175 19	560 82	289,706 38
Increases . .....		\$36,175 19	.....	\$ 37,716 30
Decreases.. \$	<u>4,068 76</u>	<u>.....</u>	<u>\$390 13</u>	<u>.....</u>

Included in the above ordinary expenditure are the following amounts for new works :—

Harper's bridge.....	\$1,155 74
Pig Brook bridge.....	2,353 08
Moore's bridge.....	264 68
Blushank bridge.....	255 40
Baldwin's bridge.....	470 79
Total new works.....	<u>\$4,499 69</u>

## Department of Railways and Canals.

### TRACK.

The mileage remains the same as last year—125 miles laid with iron rails, and 85 miles laid with steel rails.

During the year 11½ miles iron rails were replaced with steel rails weighing 50 lbs. to the yard.

### TIES.

During the year 77,052 ties, 36 sets switch ties, and 22 head-blocks were renewed.

### BALLASTING.

During the year about 7,098 cubic yards of ballast were distributed.

### FENCING.

Twenty-six miles of new barbed and woven wire, and 3,330 feet wire and picket fence were erected during the year to replace old fence burnt and worn out.

### SNOW FENCE.

Eleven thousand six hundred and fifty-six feet of new snow fence was built, and 18,936 feet was renewed during the year.

### WHARVES.

At Summerside some floor timbers, fenders, and 275 feet of the planking were renewed.

At Souris the wharf was ballasted with brush and stone, and track repaired.

At Charlottetown the wharf and breastwork were ballasted with brush and stone.

At Georgetown the wharf was ballasted with stone; 20 fenders and one mooring post renewed.

### BUILDINGS AND PLATFORMS.

At Conway the flag-station was rebuilt and platform renewed.

At Elmsdale the flag-station was rebuilt and platform renewed.

At O'Leary new sills were put under coal-shed.

At Summerside the station building was moved from the wharf to Water street, placed on a new foundation, thoroughly overhauled, repaired, and the interior and exterior painted. The freight shed moved 100 feet east, placed on a new foundation, repaired and painted. Freight shed on wharf raised two feet, floor timbers and flooring renewed.

At Mount Stewart the gravel roof on station was renewed.

At Georgetown the station was painted, and roof on baggage-room was renewed.

At Perth the flag-station was rebuilt, painted, and platform renewed.

At St. Andrew's the flag-station was rebuilt and platform renewed.

At Douglass the flag-station was rebuilt.

The pits in the engine-houses at Mount Stewart and Georgetown were rebuilt.

### BRIDGES, CULVERTS, &C.

At Harper's bridge the top was renewed with pitch pine.

At Pig Brook bridge the stone abutments were completed, and top renewed with a 66-foot iron girder.

At Mount Stewart bridge 32 floor timbers were renewed, and abutments pointed with cement.

At St. Peter's bridge 30 angle braces, 14 straining blocks and 4 struts were renewed.

At Morell bridge the foundation at the east end, stringers and ties renewed.

At Scrimgeour's bridge the top was renewed.

At Taylor's bridge the top was renewed.

Twelve timber culverts rebuilt.

Two stone culverts rebuilt.

Two culverts renewed with 12-inch iron pipe.

Stone culverts at Winter River and Union repaired and pointed with cement.

Twenty-seven cattle-guards rebuilt.

Extensive repairs were made to the embankments at Morell, Marie and Midgell bridges, 4,000 cubic yards rip-rap being used for this work.

#### STORES.

The purchase of stores during the year amounted to \$99,362.51.

The value of stores on hand to 30th June, 1892, was:—

General stores.....	\$71,359 37
Coal.....	10,341 11
Old rails and fastenings.....	9,367 36
Old material serviceable.....	7,390 65
	<hr/>
	\$98,358 49

The stores for the most part have been purchased by tender and contracts, which follows out the practice of previous years.

I inclose a return of accidents and casualties which have occurred on the railway during the year.

I am pleased to say that the road-bed, buildings and rolling stock are in good condition.

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

J. UNSWORTH,  
*Superintendent and Mechanical Superintendent.*

COLLINGWOOD SCHREIBER, Esq.,  
Chief Engineer and General Manager Government Railways,  
Ottawa.

# Department of Railways and Canals.

## No. 1.—PRINCE EDWARD ISLAND RAILWAY.

DR.		CAPITAL ACCOUNT.		CR.			
1891.		\$	cts.	1891.		\$	cts.
June 30...	To cost of road and equipment to date.....	3,741,780	89	June 30...	By Dominion of Canada..	3,741,780	89
1892.	To expenditure, year ended 30th June, 1892—			1892.			
June 30...	On removal of Summerside Station..... \$4,995 42			June 30...	do do ....		8,300 49
	Expropriation of land from R. McMillan, Charlottetown 3,305 07						
		8,300	49				
		3,750,081	38			3,750,081	38

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 2.—PRINCE EDWARD ISLAND RAILWAY.

### REVENUE ACCOUNT for Year ended 30th June, 1892.

Previous Year.	Expenditure.	Year ended 30th June, 1892.	Previous Year.	Receipts.	Year ended 30th June, 1892.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
64,158 96	Locomotive power, per Abstract No. 1.....	66,772 79	72,292 23	Passenger traffic.....	70,959 21
37,696 58	Car expenses, per Abstract No. 2.....	35,204 87	81,660 82	Freight traffic.....	69,983 23
115,195 66	Maintenance of way and works, per Abstract No. 3	147,461 53	20,305 00	Mails and sundries.....	16,500 25
29,551 09	Station expenses, per Abstract No. 4.....	28,370 27	174,258 00	Total receipt.....	157,442 69
11,387 79	General charges, per Abstract No. 5.....	11,896 92	83,732 03	Balance.....	132,263 69
257,990 08	.... Totals.....	289,706 38	257,990 08	.... Totals.....	289,706 38

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 3.—PRINCE EDWARD ISLAND RAILWAY.

## LOCOMOTIVE POWER—(Abstract No. 1).

Previous Year.	Details.	Year ended 30th June, 1892.
\$ cts.		\$ cts.
1,412 16	Mechanical superintendent's salary, clerks, office and travelling expenses. ....	1,414 05
17,481 16	Wages of drivers, firemen and cleaners.....	16,383 50
14,905 62	Fuel.....	15,303 77
2,599 97	Oil, tallow, waste and small stores.....	2,735 05
24,524 71	Repairs to engines, tenders and engine tools.....	28,237 17
1,139 06	Water, including pump and tank repairs.....	718 35
2,096 28	Miscellaneous.....	1,980 90
64,158 96	Totals.....	66,772 79

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 4.—PRINCE EDWARD ISLAND RAILWAY.

## CAR EXPENSES—(Abstract No. 2).

Previous Year.	Details.	Year ended 30th June, 1892.
\$ cts.		\$ cts.
10,648 03	Repairs to passenger cars.....	9,129 84
1,546 58	do postal and baggage cars.....	1,507 95
5,302 64	do freight cars and vans.....	6,089 83
15,470 95	Wages of conductors, train baggagemasters and brakemen.....	14,140 82
535 03	Oil and waste for packing.....	558 27
3,270 96	Small stores and fuel.....	2,979 37
922 39	Miscellaneous.....	798 79
37,696 58	Totals.....	35,204 87

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## Department of Railways and Canals.

### No. 5.—PRINCE EDWARD ISLAND RAILWAY.

#### MAINTENANCE of Way and Works—(Abstract No.3).

Previous Year.	Details.	Year ended 30th June, 1892.
\$ cts.		\$ cts.
419 21	Engineer's salary, clerks, office and travelling expenses.....	369 96
48,543 46	Wages in repairing roadway, fences and semaphores.....	42,844 87
3,497 12	Rails, chairs and spikes.....	39,570 55
25,445 10	Ties.....	26,383 12
13,984 56	Timber and lumber for repairs to bridges, cattle-guards, fences, &c.....	22,880 32
3,146 41	Repairs to wharves.....	2,635 81
7,562 83	do buildings and platforms.....	7,758 87
2,894 10	do snow-ploughs, flangers and tools.....	4,067 36
9,702 87	Clearing ice and snow.....	950 67
115,195 66	Totals.....	147,461 53

**W. T. HUGGAN,**  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

### No. 6.—PRINCE EDWARD ISLAND RAILWAY.

#### STATION EXPENSES—(Abstract No. 4).

Previous Year.	Details.	Year ended 30th June, 1892.
\$ cts.		\$ cts.
21,073 19	Salaries and wages of stationmasters, agents, clerks, telegraph operators, station baggagemen, yardmasters, switchmen, watchmen and labourers..	20,075 83
8,477 90	Fuel, oil, light, stationery, tickets and other incidental expenses.....	8,294 44
.....	Miscellaneous.....	.....
29,551 09	Totals.....	28,370 27

**W. T. HUGGAN,**  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 7.—PRINCE EDWARD ISLAND RAILWAY.

## GENERAL CHARGES—(Abstract No. 5).

Previous Year.	Details.	Year ended 30th June, 1892.
\$ cts.		\$ cts.
4,308 49	Superintendent's and train despatchers' salaries, clerks, office and travelling expenses.....	4,115 04
5,269 99	Accountant and auditor's, paymaster's and cashier's salaries, clerks, office and travelling expenses.....	5,441 17
849 85	Advertising.....	817 32
84 46	Damages to men, animals and goods.....	171 97
375 47	Telegraph expenses (not including pay to operators).....	390 23
499 53	Miscellaneous.....	961 19
11,387 79	Totals.....	11,896 92

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 8.—PRINCE EDWARD ISLAND RAILWAY.

## STATEMENT of General Stores Account, Year ended 30th June, 1892.

1891.	DR.	\$ cts.	\$ cts.
June 30...	To Balance brought forward.....		142,107 41
1892.			
June 30...	To Purchase during the year, including rails.....	9,936 51	
	Charges from other departments.....	7,302 45	
	Pay-rolls.....	2,520 60	
			109,185 56
1892.	CR.		
June 30...	By Issues during the year.....		251,292 97
	Balance.....		
	( Ordinary stores.....	\$71,359 37	
	Fuel.....	10,241 11	
	Rails and fastenings on hand.....	9,367 36	
	Old material, serviceable.....	7,390 65	
			98,358 49

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.



# Department of Railways and Canals.

## No. 9.—PRINCE EDWARD ISLAND COMPANY.

DR.

### GENERAL BALANCE.

CR.

	\$	cts.		\$	cts.
General stores.....	98,358	49	Dominion account.....	99,301	20
Cash.....	4,281	26	Accident insurance.....	5,173	91
Stations.....	662	56			
Militia Department.....	195	94			
Anglo-American Telegraph Co.....	46	43			
Judge Weatherbee.....	30	00			
Sidney Gray.....	25	00			
Railway Extension, Charlottetown.....	812	83			
Intercolonial Railway.....	62	60			
Total.....	104,475	11	Total.....	104,475	11

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

## No. 10.—PRINCE EDWARD ISLAND RAILWAY.

## COMPARATIVE STATEMENT of Averages for Year ended 30th June, 1892.

Details.	1892.	1891.
Mileage of railway open.....	210	210
Engine mileage.....	307,421	335,202
Train do .....	245,102	272,475
Car do .....	1,304,639	1,420,425
Receipts per engine mile..... Cents.	51.21	51.99
do mile of railway..... Dollars.	749.72	829.80
Percentage of passenger earnings to gross receipts.....	45.07	41.49
do freight do do .....	44.45	46.86
do other do do .....	10.48	11.65
Expenses per engine mile—		
Drivers, firemen and cleaners' wages.....	5.33	5.21
Fuel.....	4.98	4.45
Oil, tallow, waste, and small stores.....	0.89	0.78
Repairs to engines.....	9.19	7.32
Water and tank repairs.....	0.23	0.34
Miscellaneous.....	0.64	0.62
Mechanical superintendent's salary, office and travelling expenses.....	21.26	18.72
	0.46	0.42
Total..... Cents.	21.72	19.14
Locomotive power per engine mile.....	21.72	19.14
Car expenses do .....	11.45	11.25
Maintenance of way and works do .....	47.97	34.37
Station expenses do .....	9.23	8.81
General charges.....	3.87	3.40
Total per engine mile..... Cents.	94.24	76.97
Locomotive power per train mile.....	27.24	23.55
Car expenses do .....	14.36	13.83
Maintenance of way and works do .....	60.16	42.28
Station expenses do .....	11.58	10.84
General charges do .....	4.85	4.18
Total per train mile..... Cents.	118.19	94.68
Working expenses per mile of railway..... Dollars.	1,379.55	1,228.52

W. T. HUGGAN,  
*Accountant and Auditor.*

CHARLOTTETOWN, P.E.I., 30th June, 1892.

# Department of Railways and Canals.

## PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, 18th August, 1892.

SIR,—I beg to submit for your information the following statements showing the operations of the Mechanical Department of this railway, for the fiscal year ending 30th June, 1892:—

A.—Monthly statement of the cost of locomotive power.

B.—Statement of the performance and consumption of locomotives.

C.—Monthly statement of car mileage.

D.—Statement showing the number of locomotives, cars, snow-ploughs and flangers.

E.—Comparative statement of the expenses of the Mechanical Department for the years 1890-91 and 1891-92.

Two new fire-boxes, 2 new cabs, 2 new smoke-boxes, 20 driving tires, 4 new tube sheets, 3 sets new tubes, 2 new tender frames and 4 new tender trucks have been supplied during the year.

By reference to statement "D" it will be seen that the stock of locomotives, cars, snow-ploughs and flangers provided on capital account consists of:—

21 locomotives.

17 first-class passenger cars.

15 second-class passenger cars.

3 postal and smoking cars.

175 box cars.

125 platform cars.

3 conductors' vans.

1 pay-car.

8 snow-ploughs.

7 flangers.

I am pleased to be able to report that the efficiency of the rolling stock has been well maintained during the year and is in good condition.

I have the honour to be, sir,

Your obedient servant,

J. UNSWORTH,

*Superintendent and Mechanical Superintendent.*

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager Government Railways,

Ottawa.

## PRINCE EDWARD

## MECHANICAL

## A.—STATEMENT of the Cost of Locomotive

Months.	Miles run by Engines, Less Ballasting.	Cost of				
		Enginemen's Wages.	Fuel.	Oil, Tallow, Waste. &c.	Repairs.	Water including Tank and Pump Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1891—July .....	33,899	1,474 12	1,364 08	201 57	2,529 19	26 87
August .....	30,693	1,465 52	1,207 13	224 51	2,111 64	16 99
September .....	30,102	1,585 78	1,486 74	353 67	1,683 92	60 25
October .....	32,203	1,538 20	1,532 52	291 74	2,296 41	107 60
November .....	30,388	1,460 41	1,748 34	278 05	3,535 79	9 26
December .....	26,024	1,448 51	1,398 78	231 99	2,503 19	76 59
1892—January .....	19,268	1,280 78	929 00	169 45	2,875 97	132 97
February .....	22,708	1,392 51	1,303 68	218 40	2,533 37	5 68
March .....	22,020	1,373 12	1,379 78	226 49	2,354 60	12 26
April .....	19,884	1,132 57	1,002 72	167 51	2,180 20	31 48
May .....	19,606	1,067 90	1,013 02	171 16	1,710 90	28 74
June .....	20,626	1,164 08	937 98	200 51	1,921 99	209 66
Totals .....	307,421	16,383 50	15,303 77	2,735 05	28,237 17	718 35

# Department of Railways and Canals.

## ISLAND RAILWAY.

### DEPARTMENT.

Power, for the Year ended 30th June, 1892.

		Average per Mile run.							Total.
		Engine-men.	Fuel.	Oil, Tallow, &c.	Repairs.	Water.	Miscellaneous.		
Miscellaneous, including Expenses of Office and Engine House.	Total.								
\$ cts.	\$ cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
222 53	5,818 36	4 35	4 03	0 59	7 46	0 07	0 66	17 16	
245 67	5,271 46	4 77	3 93	0 73	6 88	0 06	0 80	17 17	
368 71	5,539 07	5 27	4 94	1 17	5 59	0 20	1 22	18 39	
290 31	6,056 78	4 78	4 76	0 90	7 13	0 33	0 90	18 80	
329 17	7,361 02	4 81	5 75	0 91	11 64	0 03	1 08	24 22	
307 17	5,966 23	5 57	5 37	0 89	9 62	0 29	1 18	22 92	
314 14	5,702 31	6 65	4 82	0 88	14 92	0 69	1 63	29 59	
261 57	5,715 21	6 13	5 74	0 96	11 16	0 03	1 15	25 17	
329 03	5,675 28	6 23	6 27	1 03	10 69	0 06	1 49	25 77	
242 07	4,756 55	5 69	5 04	0 85	10 96	0 16	1 22	23 92	
242 95	4,234 67	5 44	5 17	0 87	8 72	0 15	1 24	21 59	
241 63	4,675 85	5 64	4 55	0 97	9 32	1 02	1 17	22 67	
3,394 95	66,772 79	5 33	4 98	0 88	9 19	0 24	1 10	21 72	

J. UNSWORTH,  
*Superintendent and Mechanical Superintendent.*

## PRINCE EDWARD

## MECHANICAL

## B.—STATEMENT of the Performance and Consumption

Months.	Hours in Steam.	Train Mileage.				Miles run by Engines.			
		Passenger.	Freight and Mixed.	Ballasting.	Piloting.	With Train.	Light.	Shunting.	Total.
1891— July .....	4,245	12,908	14,827	1,141	88	28,964	216	5,970	35,150
August .....	3,990	11,279	13,599	2,638	114	27,630	11	6,020	33,661
September .....	4,401	11,180	13,669	6,367	.....	31,216	18	5,825	37,059
October .....	4,053	12,424	14,217	2,631	101	29,373	13	5,818	35,204
November .....	3,907	10,461	14,084	2,857	80	27,482	174	5,879	33,535
December .....	3,494	2,014	18,203	392	.....	20,609	49	5,783	26,441
1892—January .....	2,810	674	13,756	.....	.....	14,430	.....	4,838	19,268
February .....	3,430	2,626	13,413	.....	1,738	17,777	62	4,869	22,708
March .....	3,574	2,661	14,316	.....	136	17,113	80	4,827	22,020
April .....	3,078	1,628	13,694	1,403	.....	16,725	196	4,491	21,412
May .....	3,031	2,744	12,342	2,898	116	18,100	20	4,777	22,897
June .....	2,850	4,164	11,846	573	.....	16,583	33	4,621	21,237
Totals .....	42,865	74,763	167,966	20,900	2,373	266,002	872	63,718	330,592

# Department of Railways and Canals.

## ISLAND RAILWAY.

### DEPARTMENT

of Locomotives, for the Year ended 30th June, 1892.

Total Mileage.		* Average of Cars per Mile run with Train.	Average Mileage.		Consumption.				Consumption per 100 Miles run by Engines.			
Cars.	Snow Ploughs.		Miles to one hour in Steam.	Of Cars to one of Engine.	Bushels of Coal	Pints of Oil.	Pounds of Tal-low.	Pounds of Waste.	Bushels of Coal	Pints of Oil.	Pounds of Tal-low.	Pounds of Waste.
153,563	.....	5·32	8·28	4·37	14,318	2,216	381	683	40·73	6·30	1·08	1·94
144,519	.....	5·26	8·44	4·29	13,233	2,237	435	677	39·31	6·64	1·29	2·01
169,573	.....	5·43	8·42	4·57	15,545	2,891	519	854	41·94	7·80	1·40	2·30
148,186	.....	5·08	8·68	4·21	14,927	2,588	542	800	42·40	7·35	1·53	2·27
149,781	.....	5·46	8·58	4·46	16,148	2,668	269	708	48·15	7·95	0·80	2·11
107,583	.....	5·22	7·57	4·06	11,973	2,282	12	628	45·28	8·63	0·04	2·37
61,484	486	4·26	6·86	3·19	7,542	1,504	33	443	39·14	7·80	0·17	2·29
72,062	6,102	4·49	6·62	3·17	10,899	2,176	27	562	47·99	9·59	0·11	2·47
90,593	767	5·33	6·16	4·11	9,602	1,734	29	492	43·60	7·87	0·13	2·23
111,280	.....	6·65	6·96	5·19	9,811	1,700	20	488	45·82	7·93	0·09	2·27
123,492	.....	6·87	7·55	5·39	10,732	1,829	.....	516	46·87	7·98	0·00	2·25
98,626	.....	5·94	7·45	4·64	8,621	1,848	70	528	40·59	8·70	0·33	2·48
1,430,742	7,355	5·42	7·71	4·32	143,351	25,673	2,337	7,379	43·36	7·76	0·70	2·23

J. UNSWORTH,  
*Superintendent and Mechanical Superintendent.*

## PRINCE EDWARD ISLAND RAILWAY.

## MECHANICAL DEPARTMENT.

## C.—MONTHLY STATEMENT of Car Mileage for Year ended 30th June, 1892.

Months.	First-class.	Second-class and Baggage.	Postal and Smoking.	Box and Stock.	Platform.	Total.
1891—July.....	33,056	27,636	22,338	38,738	31,795	153,563
August.....	28,334	22,104	21,567	39,474	33,040	144,519
September.....	27,466	17,204	30,425	42,843	51,635	169,573
October.....	31,490	23,431	26,258	42,895	24,112	148,186
November.....	23,532	21,002	21,960	60,137	23,150	149,781
December.....	20,673	17,218	14,595	46,133	8,964	107,583
1892—January.....	14,751	12,285	11,404	18,605	4,439	61,484
February.....	15,693	11,427	13,701	19,707	11,534	72,062
March.....	16,906	16,975	11,493	28,214	17,005	90,593
April.....	16,398	12,700	14,950	45,894	21,338	111,280
May.....	14,009	15,109	16,827	42,122	35,425	123,492
June.....	16,320	15,979	15,508	34,507	16,312	98,626
Totals.....	258,628	213,070	221,026	459,269	278,749	1,430,742
Less—Ballasting.....			18,696	3,111	104,276	126,083
Balance.....	258,628	213,070	202,330	456,158	174,473	1,304,659

J. UNSWORTH,

*Superintendent and Mechanical Superintendent.*

## PRINCE EDWARD ISLAND RAILWAY.

## MECHANICAL DEPARTMENT.

## D.—STATEMENT showing the number of Locomotives and the various classes of Cars and Snow-ploughs on hand, 30th June, 1892.

Particulars.	Locomotives.	Classification of Cars.								Snow-ploughs.	Flangers.	Total.
		1st Class.	2nd Class and Baggage.	Postal and Smoking.	Box and Stock.	Platform.	Vans.	Pay Car.	Total.			
On hand, 30th June, 1891, serviceable...	21	17	15	3	175	124	3	1	338	8	7	15
do do condemned.....						1			1			
Total stock, 30th June, 1891.....	21	17	15	3	175	125	3	1	339	8	7	15
Condemned on hand, 1st July, 1891.....						1			1			
do during the year.....						1			2			
Less—Rebuilt.....					1	2			3			
					1				1			
ADD—Serviceable and repairing.....	21	17	15	3	175	123	3	1	337	8	7	15
Total on record, 30th June, 1892....	21	17	15	3	175	125	3	1	339	8	7	15

J. UNSWORTH,

*Superintendent and Mechanical Superintendent.*



# Department of Railways and Canals.

## PRINCE EDWARD ISLAND RAILWAY.

### MECHANICAL DEPARTMENT.

**E.—COMPARATIVE STATEMENT of the Expenses of the Mechanical Department for the Year ended the 30th June, 1892.**

	1892.	1891.
The miles run by trains were.....	245,102	272,475
do engines were.....	307,421	335,202
do cars were.....	1,304,659	1,420,428
do snow ploughs were.....	7,355	27,126
	\$ cts.	\$ cts.
The cost of locomotive power was.....	66,772 79	64,158 96
do repairs to cars.....	16,727 62	17,497 25
do labour, oil, and waste for packing.....	558 27	535 03
do repairs to passenger cars was.....	9,129 84	10,648 03
do do postal and smoking cars was.....	1,507 95	1,546 58
do do freight cars and vans was.....	6,089 83	5,302 64
	27 24	23 54
The cost of locomotive power per 100 miles run by trains was.....	27 24	23 54
do do engines was.....	21 72	19 14
do do cars was.....	5 11	4 51
	6 82	6 42
The cost of repairs to cars per 100 miles run by trains was.....	6 82	6 42
do do engines was.....	5 44	5 22
do do cars was.....	1 28	1 23
	0 22	0 19
The cost of labour, oil and waste, for packing, per 100 miles run by trains was.....	0 22	0 19
do do engines was.....	0 18	0 15
do do cars was.....	0 04	0 03
	3 72	3 90
Repairs to passenger cars per 100 miles run by trains were.....	3 72	3 90
do postal and smoking cars were.....	0 61	0 56
do freight cars and vans were.....	2 48	1 94

**J. UNSWORTH,**

*Superintendent and Mechanical Superintendent.*

PRINCE EDWARD ISLAND RAILWAY.

RETURN of Accidents and Casualties which have occurred on the Prince Edward Island Railway, during the Year ended 30th June, 1892

Date.	Time of Day or Night.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.	Name of Persons injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Corner's Jury.
1891. July 27.	2 27 p.m.	...	Engine, light.	.....	M. Watson.....	10	Souris.....	D. F. Chevrier.....	.....	Struck child, 17 months old, sitting on the ballast between rails.	Fatal.....	Accidental.
1892. May 9.	2 50 p.m.	7	Accommodation.	G. W. Hibbett.	C. Moore.....	4	Royalty Junc.....	Frank Trail.....	Employee.	Fell between station platform and train.	Wheel passed over foot, crushing it.	

# Department of Railways and Canals.

## APPENDIX No. 5.

OFFICE OF THE CHIEF ENGINEER OF CANALS,

OTTAWA, 20th December, 1892.

SIR,—Having only recently entered upon the duties of Chief Engineer of Canals, I am not sufficiently familiar with the works of construction, now in progress, to warrant me in making a report thereon, I therefore merely submit the reports of the engineers in charge of the canals, and the statistical returns of the operations of the canals, prepared by the clerk in charge of that service.

I have the honour to be, sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,

*Chief Engineer.*

The Secretary,  
Department of Railways and Canals,  
Ottawa.

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DEPARTMENT OF RAILWAYS AND CANALS, MONTREAL DIVISION,

SUPERINTENDING ENGINEER'S OFFICE,

MONTREAL, 16th November, 1892.

SIR,—As requested by your letter No. 89463, dated 26th September last, I have the honour to submit my report on the various works under my charge, for the fiscal year 1891-92 ended 30th June last. The works are:

1st. The Lachine and Beauharnois Canals, on the St. Lawrence route.

2nd. The St. Ours lock and dam and Chambly canal on the Richelieu river and Lake Champlain route.

Statements are annexed, showing the amounts collected for fines and damages, together with the monthly returns of the highest and lowest water registered on the lower and upper entrances of each canal, and on each of the mitre sills of St. Ours lock.

### LACHINE CANAL.

This canal was closed on the 30th November, 1891, and reopened to navigation on the 1st May, 1892.

Two accidents took place during the season, which did not, however, in the least affect the navigation. The first accident took place on Tuesday, 20th October, 1891, when the barge "Maggie," owned by the Montreal Transportation Company, ran into Brewster's bridge, displacing it and breaking the pivot, the castings underneath and the bolts connecting the rollers with the turntable. It took three days to repair the damage done, and to replace the bridge in its former position.

The second accident happened on Friday, 30th October of the same year, when the lower gates of old lock No. 1 were carried away.

There was at the time a barge being locked, the lower sill and gates being very old and rotten, could not withstand the pressure of the current created in the lock at the time, and the lower gates were therefore swept away into the river. There were several boats below, awaiting their turn, but no further damage was done.

These gates were replaced by spare new ones in three days, but as stated above, navigation did not suffer any delay or inconvenience through these two accidents, and during the whole season it has been efficiently maintained, and the water was kept at a good height in all the levels, both for navigation and manufacturing purposes.

The work done on this canal during the fiscal year is classified under two heads, viz. :—Repairs and Income.

#### REPAIRS.

The water was drawn off on the night of 9th April last, and let in again on the night of the 30th of the same month, the canal being open to traffic on the following day.

While the water was out of the canal, all the works under water were overhauled and repaired. Extensive repairs were made to the different canal structures during the lapsed year, and are described below.

The abutment and rest pier at the north end of Brewster's bridge, which had been forced from their foundations by frost were taken down and rebuilt.

Two new masonry abutments were built to receive a new stationary bridge, as well as the retaining wall at the foot of old lock No. 3.

Five top courses of the wing wall on the south side of St. Gabriel lock, which was found to be in a dilapidated condition, were taken down and rebuilt in new masonry.

The masonry of three raceways, one above St. Gabriel bridge, and two below Côte St. Paul lock on south side of canal, which showed signs of falling down, were rebuilt in cement.

Three stone piers of the waste weir at Côte St. Paul were also taken down and rebuilt, and the weir and locks pointed with Portland cement.

Three new sluice gates were put in the old regulating weir at Lachine, and the masonry of the weir pointed with cement.

The old 2-inch pine flooring of the waste weir at Côte St. Paul, which had been considerably torn up by action of current was entirely renewed with 6-inch oak.

The side sheeting of the weir at the St. Gabriel lock was also torn up by the force of the water. It was found necessary to drill holes in the wall, bolt ties into the masonry, and fasten with spikes the sheeting to the ties.

The platforms mullions, front and back binders, were renewed in the upper and lower gates of old locks Nos. 1, 3, 4 and 5, also on gates of new locks Nos. 1, 2, 3 and 5.

The flooring of Black's, Wellington, St. Gabriel, Brewster's and Côte St. Paul bridges have been renewed with 2-inch oak planks, and the timber pier above St. Gabriel bridge and the ones in the centre and on both sides above and below Brewster's bridge have been rebuilt.

The different bridges on the canal (except Wellington) have been cleaned, and received three coats of paint each.

The slope walls between Côte St. Paul and Lachine required and underwent considerable repairs, as well as the tow-paths on both sides of the canal.

The shanties, at the different locks and bridges, which were very old and decayed, were replaced by new ones, thereby adding to the comfort and convenience of the canal staff, and the better appearance of the canal generally.

The canal roads in connection with the different basins, as well as the road between Wellington bridge and St. Gabriel lock on the south side, and Mill street from St. Etienne street to Black's bridge, have been macadamized and efficiently maintained.

The tow-paths, which measured fourteen miles on both sides of the canal, were kept in good order. All the Government planked foot-paths, within the city limits, and which measure over 9,000 lineal feet, have not only been well maintained, but also kept free from snow and ice during the winter.

The snubbing posts along the line of the canal on the tow-paths were repaired and sixty new ones set.

The weeds were dragged from the bed of the River St. Pierre, and all the off-take drains, culverts and ditches in connection with the canal were thoroughly cleaned and kept in good order.

The piers and booms at Lachine and in the canal proper, received the necessary repairs. Repairs were also made when needed, to the head gates of the mills and factories.

## Department of Railways and Canals.

The derrick-lifting scow was hauled out on the bank and the hull almost entirely renovated and the most important parts of the derrick timbers were replaced. The deck was also renewed and the vessel caulked and painted.

The old temporary weir at St. Gabriel lock has been filled in, and the road in front of the mills at this place, on the south side, graded and macadamized.

The timber abutments of the stationary bridge, above the new regulating weir at Lachine, and connecting the island with the main road, have been entirely rebuilt, and the overhauled bridge structure placed in position.

The electric plant and line, for lighting the canal, between the lower entrance and St. Gabriel locks, has been efficiently maintained and has given full satisfaction.

The private telephone service has also proved very efficient, both for canal and navigation interests.

### INCOME.

The Government piers at Lachine, which form the continuation of the Grand Trunk Railway wharf required and underwent considerable repairs. The greatest portion of the superstructure above water mark was rebuilt, additional stone filling put in the piers and the flooring renewed.

At the close of navigation, in 1891, work was commenced towards building spare gates for some of the old and new locks, and for which purpose a sum of \$24,500 had been voted.

Towards this object, the Government planer was installed in Messrs. Tate's saw-mill, and the gate timbers prepared by the canal workmen.

An extensive shed measuring 150 feet long, by 50 feet wide, and 40 feet in height, was erected on St. Gabriel Island, wherein the construction of the gates themselves was carried on. All the castings were finished and the iron-work prepared in the canal workshops.

Six pairs of spare gates were thus built, viz. :—

One pair for lower sill of old lock No. 1.

One pair for upper sill of old lock No. 1.

One pair for lower sill of old lock No. 2.

One pair for upper sill of old locks Nos. 3 and 4.

One pair for upper sill of new locks Nos. 3 and 4.

One pair for lower sill of old lock No. 5.

These gates have been distributed on the canal, at such points where they can be most advantageously handled, in case of emergency or accident.

### BEAUHARNOIS CANAL.

This canal was closed on the 1st of December, 1891, and reopened on the 30th of April, 1892; there was no accident and navigation has therefore been efficiently maintained without interruption during the whole season.

### REPAIRS.

Two pairs of lock gates were built and placed at lock No. 6, the old gates being brought to the workshops and taken apart. The foot bridge of the upper gates of the guard lock was renewed, and three anchor timbers were placed, one at lock No. 6 and two at lock No. 9. One new crab was also placed at lock No. 6, and four chain rollers at each of locks Nos. 7, 8, 9 and 12, and two at lock No. 3.

The lower gates of locks Nos. 7, 8, 9 and 12 were raised and readjusted, and three valves renewed, one at lock No. 8 and two at lock No. 11.

All the oak anchor timbers of gates and the crabs for working the gates were painted. Six new chains were placed, two at lock No. 6, two at lock No. 11 and one at each of locks Nos. 8 and 13.

All the swing-bridges have been kept in good state of repairs. The bridges over locks Nos. 7, 8, 10 and 13 were raised, adjusted, and the pivot of the St. Timothy bridge renewed.

The bridge stringers and the planking of the bridge above the guard lock at Valleyfield were renewed and new bridges built over the waste weirs at locks Nos. 7, 9 and 10.

Several farm bridges were renewed, and all the others to the number of 120 were kept in good repairs.

Two new houses were built, one 24 x 24 with an extension kitchen 12 x 12 for the lockmaster at lock No. 12, the other, also 24 x 24, for the ferry keeper of the new ferry, between locks Nos. 13 and 14; these houses were well finished and painted both inside and outside; all the other dwelling-houses for the staff, and fences on Government ground, were repaired when required, painted and otherwise kept in good condition.

Five new fender posts were erected at each of locks Nos. 7, 8, 9, 10 and 13, and repairs made to the others. One hundred and five new mooring posts were set on canal banks on both sides, and several others taken out and reset.

A new ferry scow and a small flat boat were built for the service of the new ferry, as well as approaches on both sides of the canal in connection with said ferry.

A considerable portion of the bank on the north or tow-path side has been macadamized and covered with gravel, and the lower and upper dams at the upper entrance underwent considerable repairs.

The Hungry Bay dyke has also been partly macadamized.

The long or north pier at the lower entrance, which had been considerably damaged by ice, has been rebuilt on a length of 75 feet by a height of from 10 to 12 feet.

The south entrance pier, opposite, also received considerable repairs, and both structures were lined outside with plank sheeting.

Leaks were stopped at the waste weirs at locks Nos. 6, 10 and 12.

The roads over the canal embankments and the Hungry Bay dyke, measuring over 26 miles in length, have been kept in good order.

The culvert wells, discharges, drains and side ditches were cleaned during the summer, and in the spring the snow and ice were removed.

According to custom the weeds were mowed at the proper time, on both sides of the canal.

The canal private telephone line has been maintained in good working order.

The electric plant, in use for lighting the lower portion of the canal has been efficiently maintained and the service has continued to give universal satisfaction.

#### CHAMBLY CANAL.

This canal was closed on the 30th of November, 1891, and reopened to navigation on the 2nd of May following. Apart of half a day's detention on the 2nd of May, caused by the discovery and stoppage of two small leaks in the reach above lock No. 7, the navigation has been efficiently maintained. The old works have been kept in good order and the works of reconstruction and improvement continued.

Considerable works were executed during the fiscal year, and are described under the following two heads, viz., ordinary repairs and income.

#### REPAIRS.

The planking of the long entrance pier, at the lower entrance, was repaired where required. All the posts of the garde-corps on the public road between St. Luke's road and the upper extremity of Ile Ste. Thérèse, have been renewed, and the top wooden railing replaced by a  $\frac{3}{4}$  steel wire cable; the balance of the old garde-corps has been kept in order until next year, when it is intended to renew it as above.

One pair of spare upper gates was placed at lock 4. The locks on this canal being of different dimensions, it is necessary to have on hand a greater number of spare gates than would otherwise be required. Of 16 pairs of gates actually in use,  $8\frac{1}{2}$  pairs are alike, but the remaining  $7\frac{1}{2}$  pairs are of different dimensions, not only with the first but with each other.

Since 1886  $7\frac{1}{2}$  pairs of spare gates have been put at different locks in place of old gates.

There remains yet 5 pairs of spare gates to meet the future requirements.

## Department of Railways and Canals.

The lower gates of the guard-lock at St. Johns have been strengthened by four oaken bars 10 inch square. All the gates were painted, and the lock walls pointed with Portland cement. Sixty-six mooring posts were set on canal banks where required.

The steam plant in the Government workshops has been kept in good order; it has proved invaluable in the preparation of timber for rebuilding the locks, bridges, and for the completion of the works generally.

The motive power to run the bellows, the boring machine, lathes, &c., in the blacksmith shop, was provided for by means of a shaft connecting the main workshops with the forge, and in order to reduce to a minimum the danger from fire, the flooring of the blacksmith shop was paved with cemented bricks. The different buildings on line of canal have been maintained in good order, and the dwelling-houses and outbuildings between the lower entrance and lock No. 2 have been painted or whitewashed, as well as the fences.

A frame brick-encased extension was made to the dwelling-house of the lock-master at lock 9.

The slope-wall on the tow-path side is generally in good order, with the exception of certain portions originally built with small round field stones, and which require constant care. The slope-wall, on the opposite or west side, is in bad shape, and it will therefore be necessary to rebuild it almost entirely with larger stones.

The by-washes have received the necessary repairs. The tail-race of Fryer's by-wash was excavated in the rock 2 feet, in a distance of 100 feet.

The tow-path has been kept in good order. Seven miles of this road have been covered with gravel since 1886; there still remains 4 miles of this tow-path to be similarly treated. The gravel used comes from Lake Champlain, and costs 60 cents per ton, delivered on the ground. It hardens the tow-path and greatly facilitates the towing.

Five iron gates, closing with padlocks, were made and placed at different points on the canal embankment, on the east side, to prevent travelling over the tow-path in the spring, and thereby saving deterioration.

A trench was made in the snow on a distance of  $2\frac{1}{2}$  miles between Wood's Creek and Ile Ste. Thérèse, 3 feet deep by 4 feet wide, to give a course to the water from the lands on the west side of the canal.

Twelve upright rolling posts were placed at the four sharpost corners of the canal to facilitate the tractive power of towing cables.

Seven bridges on the public road between Chambly and St. John's were entirely rebuilt on an enlarged scale, and four other bridges were repaired.

The mechanical structures of the gates have been much improved, and six new crabs placed at the lower gates of locks Nos. 1, 2, 3, 4, 5, 6 and 9.

The canal ditches, drains and discharges have been thoroughly cleaned. The ground occupied by the lockmasters of locks Nos. 2 and 3, has been fenced in with a fence of galvanized iron.

The collector's office at St. John's was also inclosed with a fence of cedar posts planted 12 feet apart, with an iron chain passing through the head of each post.

One hundred feet of the dry rubble wall below the C.P.R. crossing, and used in connection with the transhipment of lumber from the railway to the canal boats, fell down into the canal; the stones were all taken out, and this portion of the wall rebuilt.

The five lighthouses used in connection with the navigation of the Chambly Basin were repaired and painted.

The 4,000 feet of booms at Chambly and St. John's have been kept in good order. Bridges Nos. 4 and 5 have received sufficient repairs to make them last a couple of years longer.

The dredge mud-boxes, wheelbarrows, the movable and stationary derricks, track rollers and horse shovels also received necessary repairs.

The weeds were mowed on both sides of the canal as usual.

The canal telephone line has, as in the past, proved very efficient, and repairs were made when required by canal employees.

## IMPROVEMENTS CHARGEABLE TO INCOME.

The work done on this canal during the fiscal year, under the head of Income, is subdivided as follows:—

*Dredging.*

From 1st of July to close of navigation, dredging fleet No. 1 was employed in the canal proper. Considerable dredging was done in that part of the canal formed by a branch of the river and better known as "Le Petit Lac." The material excavated has been utilized to fill behind the dry rubble wall which was built along the canal water front of Ile Ste. Thérèse, and to raise the tow-path immediately in rear.

The ferry channel, at the upper extremity of the Island, has been deepened so as to prevent in future the stranding of the ferry scow, at low water.

Meeting places were made, one 1,000 feet in length at the fifth mile opposite Burland's and Mantel's farms, one 600 feet in length at Langelier's bridge, another measuring 200 feet at Wood's creek, and the last 600 feet long, between the ninth and ninth and a half mile. The dredged material was used in raising the public road and the tow-path when required.

The deepening of the upper canal entrance, or harbour of St. John's, was resumed in May following, and continued until the close of the fiscal year, when, owing to the fact that no money had been appropriated to complete the work, the whole fleet was sent to the Lachine Canal. It would have been in the interest of navigation that the work should have been completed, which could have been done in a couple of months.

It is considered urgent that the fleet should be sent back to St. John's, for the purpose not only of completing the work commenced, but also to create a basin between the Canadian Pacific Railway bridge and the old Grand Trunk Railway wharf.

The construction of a basin and wharves at this site has already been strongly advocated in former reports and will impose themselves, if trade continues to increase, specially if the Canadian Pacific Railway obtains access to the wharves for the transhipment of lumber by boats.

*Bridges on Langevin and Du Fort Streets.*

The surplus water of locks Nos. 4, 5 and 6 is discharged by three waste weirs, into a stream which forms the division line between the villages of Chambly Basin and Chambly Canton, and empties itself, after a course of about 1,200 feet, into the basin. The width of this watercourse increases yearly, which is due to the current thus created.

The two above-named streets, connecting the two villages, cross the stream referred to.

According to the request of both municipalities the Government appropriated a sum of \$600 for the construction of two bridges at the points of crossing.

Two bridges 24 x 12 feet, supported by stone abutments, have therefore been built; substantial railings or garde-corps have been placed on the sides and the approaches levelled.

Once completed, these bridges have been officially transferred to the Municipalities of Chambly Canton and Chambly Basin who have bound themselves to maintain these structures in the future.

*Dry Rubble Wall, Ile Ste. Thérèse and Land slides.*

In the last annual report, it is stated that a dry rubble wall was built at Ile Ste. Thérèse, on the face of the canal bank, for a distance of 11,800 feet, and the tow-path macadamized.

This is not quite exact, only 2,640 lineal feet of wall were built and the road has not been macadamized. It is only during 1891-92, that the rubble wall was erected on a distance of 9,160 feet, which, added to the quantity done in 1890, gives 11,800 feet quoted in the last report.



## Department of Railways and Canals.

The stone broken the year previous has been spread over the road, on a width of 9 feet, a depth of 9 inches in the centre and 6 inches on the sides; a 3-inch layer of gravel has been spread over the macadam, and the whole thoroughly rolled, it is to-day one of the finest roads of the district.

The old bridges on the Island have all been renewed, five new ones built, as well as eight wood and stone drains.

Portions of the road embankment, in the parishes of St. Luc and St. John's, which were disposed to slide into the canal, have been protected by heavy dry rubble walls.

All the west embankment referred to, on a distance of seven miles, between bridge No. 1 and St. John's, will have to be similarly protected, otherwise landslides will occur, which will endanger not only the navigation, but the public road on the top of the bank.

The work, done in time, can be executed at a comparatively low figure, and will prevent accidents and slides, which would cost at least ten times more to repair should they occur.

### *Rebuilding of Locks Nos. 4, 7 and 8.*

The reconstruction of the locks, commenced some years ago, has been continued during the year.

For that purpose extensive preparations had been made. All the materials and plant required were on the ground at the close of navigation.

The west side of lock No. 8, comprising the recess, abutment, culvert sluice and chamber, as well as the recess abutment, culvert sluice of west and east chambers of lock No. 7, were taken down on a total length of 380 feet by 17 feet in height and 8 feet in width or as far down as the foundations.

At lock No. 4, the east chamber of the abutment and lower recess were taken down on a length of 90 feet. The demolished portions were rebuilt, partly in timber and partly in stone.

All the locks on this canal have been overhauled with the exception of the east side of lock No. 3, and the whole of lock No. 9, which is the lower entrance lock of the canal, in the Chambly Basin.

There is an enormous leakage at this lock, which seriously interferes with the lockage at locks Nos. 8 and 7 above. The water in the chamber is receding at the rate of 9 feet per hour, viz., 7 feet for the first half hour, and 2 feet for the second half.

It is now over 50 years since this lock was constructed and, apart from the pointing of the walls, when required, no repairs have been made.

Owing to its location in the basin, the reconstruction of this lock will be expensive. It will necessitate extensive and costly coffer damming, and the constant use, during progress of works of powerful steam pumps to unwater the lock.

This lock will, in all probability, have to be entirely rebuilt and preparations must be made accordingly. A large quantity of timber will enter into the construction of the dams, besides over 1,000 cubic yards of puddle will be required.

This puddle can only be obtained by means of the dredge, which necessarily must return to Chambly, not only to furnish it but also to remove the puddle and dams once the lock has been rebuilt.

### *Electric Light.*

Work was continued during the year towards completing the electric lines. A line of posts was erected on the west side of the canal, from lock No. 2 to lock No. 7, to receive one of the arc circuit wires. The circuit wire for the incandescent light was also strung over these posts for lighting the superintendent's and collector's offices.

As the incandescent circuit for the workshops was insufficient for the number of lamps required to light efficiently, another wire was strung over the posts on the east side.

The joiner's work, in the electric station, has been completed, and dry rubble walls were built on each side of the tail-race in rear of the station, for the purpose of discharging, as far as possible, into the river, the water passing through the turbine.

A dynamo of 40 arc lamps capacity has been installed in the station and 27 lamps on the canal, between the waste weir on the east side, 400 feet above lock No. 2, and the lower entrance of the canal, or on a distance of  $1\frac{1}{2}$  miles, which comprises eight locks, four swing bridges, three extensive wharves, five basins and the workshops and yard. These lamps are placed, on an average, 342 feet apart.

Fourteen incandescent lamps off the arc circuit, were placed in the water houses and are used during season of navigation only.

The construction and installation of the above plant was done, under contract, by the Royal Electric Co., of Montreal, for the sum of \$3,650, and the whole done in a highly satisfactory manner.

Both extremities of the canal are now lit by electricity, the harbour of St. John from the Canadian Pacific Railway bridge downwards to the guard lock, by St. Johns Electric Light Company, at the rate of \$300 during season of navigation, and at Chambly from lock No. 2 to the lower entrance by the canal plant.

It is intended during the fiscal year 1892-93 to install in the workshops an electrical motor of 25 horse-power operated by two Edison dynamos (in hand) which will effect a great saving in running the machinery in said shops.

In a near future electricity will be an important factor, before long all the canals will be lit on their whole distance, thereby placing navigation in a better position to compete advantageously with the railways.

In order to diminish the cost of working expenses, it is more than probable that the electrical forces at the Government disposal, on the different canals, will, at a not distant date be called upon to contribute, for opening the lock gates and bridges, for the running of machinery, and will also likely furnish the motive power required for the towing of boats.

#### ST. OURS LOCK.

This lock was closed on the 30th of November, 1891, and reopened to navigation on the 11th of April, 1892.

There was no accident or delay, and navigation was efficiently maintained during the whole season.

The works executed at this station during the lapsed fiscal year are described under two heads, viz. :—Repairs and Income.

#### REPAIRS.

The canal or lock embankments on each side of the lock have been kept in good repairs.

The lock gates were raised and adjusted, the pivots and chains renewed, and all mechanical structures in connection with the lock and gates thoroughly overhauled and repaired.

Some timbers on the upper or west side of the dam having been carried away by the current and ice last spring, were replaced and the two toises of field stone placed at the toe.

The ice was cut away from the piers, wharves and lock gates, and the gates were loaded to prevent their being lifted by high water in the spring.

The booms were removed in the fall, placed in winter quarters and replaced in the spring.

The Government ground on the island, damaged by the works at the dam and high waters, has been filled in and levelled, and the embankment at both extremities of the island protected with stone.

All the scows were overhauled at the close of navigation and thoroughly repaired.

The superintendent's house, workshop and outbuildings received some repairs, and the fences were partly renewed.

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## INCOME.

After the completion of the work of overhauling the foundations of the St. Ours lock in May, 1891, it was found that the old piers or wharves which form the extension of the lock above and below, and which had been disconnected from the masonry work for the purpose of placing the required coffer dams in proper position were in a very dilapidated condition. These structures were therefore taken down and rebuilt.

### RICHELIEU RIVER SURVEY.

Pursuant to instructions contained in departmental letter No. 86089, dated 16th September, 1891, a survey was made during January and February, 1892, of the Richelieu River, at the site of the Grand Trunk Railway bridge at Belœil, with the object in view of remedying to the complaints of navigators as to the dangerous condition of the river at that point.

A plan showing the guide piers above the Grand Trunk Railway bridge, also the location and details of a proposed extension of the present wharf has been forwarded to the department, together with an estimate of the cost.

The result of this survey has demonstrated beyond a doubt the necessity of providing better accommodation for the safer navigation of this portion of the river.

The whole cost of the proposed structure has been estimated at \$9,000, including the removal of the four present guide piers on the shore side, and the dredging required to give the necessary depth at low water along the proposed works.

### LAKE ST. LOUIS CHANNEL.

#### CAPITAL.

The dredging fleet No. 2, which had been engaged at the end of the lapsed fiscal year in the Lachine Canal, removing projecting points and deepening the canal bottom, between locks Nos. 2 and 3, and at the entrance of the Wellington basin, was sent to Lake St. Louis to make test pits in connection with the proposed improvement of the lake channel.

Some eighteen test pits were made both in the proposed and old channels varying in depth from 8 to 20 feet, and about 6,000 cubic yards of black rock and hard-pan taken out, the material excavated being deposited as follows:

Three thousand cubic yards on the new wing dam, where it was utilized by the superintendent for widening and strengthening certain weak points of the structure; 2,000 cubic yards were put in the new Grand Trunk Railway wharf at Lachine, and 1,000 yards in Mr. Lepaillieur's wharf.

Mr. Geo. Yale, the superintendent of dredging, had charge of this portion of the work.

### LAKE ST. LOUIS SURVEY.

Commenced the previous year, the hydrographic survey of the lake was resumed on the 15th of July, 1891, and continued until the latter end of the month of November following.

During this period of time the weather has been generally fine but very windy, and only 24 days were sufficiently calm to permit sounding.

The portion of the lake surveyed, extends from the head of the Grand Trunk Railway pier, at the upper extremity of the Lachine Canal, to a point above the second light-ship, or a distance of over three miles.

As the bottom of the lake in this section proved very uneven Mr. L. S. Pariseau, the engineer of the survey work, considered it necessary to go over the ground covered during the previous year. Soundings have been taken at an average distance of 25 feet on parallel lines across the lake, such lines being 100 feet apart for the first mile and a half, and 200 feet apart for the remainder of the distance.

The result of the work performed during the summer is as follows:—

Shore line surveyed on main land and islands.....	6½ miles.
Road line surveyed.....	2½ “
Miles run in sounding.....	78 “
Number of soundings .....	14,500
Angles measured.....	1,900

Towards the end of the season a triangulation was made to verify and ensure the correctness of the survey.

During the course of the winter, a plan showing only the soundings taken during the summer was made, and the quantity of material to be excavated to form the proposed channel was calculated.

### LACHINE DRAINAGE SYSTEM.

The contractors for this work are Messrs. Heney & Borthwick, of Ottawa.

The contract was signed on the 25th July, 1891, and work begun on the 5th August following. The excavation was commenced at the lower end of the collecting drain, at the intersection of the River St. Pierre, above Côte St. Paul road.

Excavation was also commenced at the end of August on the trench connecting the collecting drain with the intended brick sewer from Lachine low lands. The work continued until the first week in December, when it was interrupted by the cold weather.

There was then a length of about 3,400 feet of the collecting drain completed, 1,100 feet of the connecting trench and 250 yards of the brick sewer built.

An attempt was made to continue the rock excavation in winter, from the 5th January last, but it was abandoned about the middle of February.

Work was then resumed on the 17th of April last, and has been continued until the present date.

At the end of the lapsed fiscal year a total length of 5,000 feet of the collecting drain was excavated, 1,100 feet of the connecting trench, and 450 yards of the brick sewer built, as well as the masonry at the lower entrance.

Mr. L. G. Papineau is the Government engineer in charge of the construction.

### REPAIRS TO VESSELS.

#### *Dredging Fleet No. 1.*

The above dredging fleet, which was stationed on the Chambly Canal, underwent considerable repairs during the winter months. The heavy timber work of the dredge hull was partly renewed. The repairs to the dredge alone have involved the use of 451 cubic feet of oak, besides the knees, the tamarack and pine timber. Three thousand six hundred and seventeen pounds of steel, iron and castings were employed to strengthen the hull and improve the machinery.

The four dredge scows, lodging ark and floating derrick, were thoroughly overhauled. The dredge and scows were caulked and painted.

#### *Dredging Fleet No. 2.*

Considerable repairs were made to the above fleet, which consists of a dredge, steam derrick, four scows, one steam yacht and lodging ark.

At the close of navigation this fleet, which had been operating on Lake St. Louis, took her winter quarters in the Lachine Canal. The dredge, steam derrick, yacht and ark went into Tate's dry dock, where the following repairs were made:—

The steps of the dredge crane were raised and the bolts of the spud slides were taken out and new ones put in place.

Two new steel shafts, one patent chain catcher with friction rods, as well as two new malleable castings with rods and swivels to strengthen the crane were put on.

The swinging drum was raised and new steel shaft made and placed in position. The winch shaft was lowered and the anchor shaft had a new bevel sleeve put on.

## Department of Railways and Canals.

Some repairs were made to the boiler, which was also provided with a patent "Hanna feed water purifier."

A new dipper-handle was made for the bucket, and two buckets had some very important alterations made.

The steam derrick hull, was strengthened by means of oak braces in different places inside.

Two upright posts were put in with swivel rods, from bow to stern, to stiffen the hull. The old guards were taken out and replaced by new ones.

The old guards of the scows were also renewed,

The hull of the lodging ark was partly renewed; the steam yacht had a new suction pipe put in, and some sundry repairs and alterations made to the machinery and boiler.

All these vessels were well caulked and painted, and were in first-class order when operations were resumed in the spring.

The above important repairs were executed under the immediate supervision of Mr. Geo. Yale, the mechanical engineer, who made all the drawings for the improvements and alterations required.

I have the honour to be, sir,

Your obedient servant,

E. H. PARENT,

*Superintending Engineer.*

### LACHINE CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Lock No. 1 at Lower Entrance and Lock No. 5 at Upper Entrance, during the Fiscal Year ending 30th June, 1892. (From Lockmaster's Returns).

Months.	Lock No. 1, Lower Sill.		Lock No. 5, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.	ft. in.	ft. in.	ft. in.	ft. in.
July.....	18 7	17 10	11 8	11 3
August.....	18 4	17 5	11 6	10 10
September.....	17 9	16 3	10 10	10 2
October.....	16 3	15 6	10 1	9 5
November.....	17 5	14 11	10 6	9 6
December.....	17 10	16 10	10 9	9 1
1892.				
January.....	32 9	16 11	12 3	10 2
February.....	31 9	24 3	10 11	8 4
March.....	26 11	24 6	9 5	8 8
April.....	36 6	16 9	13 5	10 8
May.....	19 5	18 0	11 9	10 11
June.....	20 10	18 7	13 4	11 4

## BEAUHARNOIS CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Lock No. 6 at Lower Entrance and Lock No. 14 at Upper Entrance, during the Fiscal Year ending 30th June, 1892. (From Lockmaster's Returns.)

Months.	Lock No. 6, Lower Sill.		Lock No. 14, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.	ft. in.	ft. in.	ft. in.	ft. in.
July.....	11 1	10 9	12 7	12 3
August.....	11 1	10 7	12 5	11 11
September.....	10 7	10 0	12 0	11 8
October.....	10 0	9 4	11 9	11 1
November.....	9 7	8 8	11 10	10 9
December.....	10 10	9 8	11 8	10 11
1892.				
January.....	13 8	10 11	11 7	11 0
February.....	14 6	13 0	11 2	10 2
March.....	15 3	11 0	11 4	10 5
April.....	13 2	10 3	12 10	11 0
May.....	11 4	10 3	12 2	11 3
June.....	12 11	11 0	12 7	11 8

## CHAMBLY CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Lock No. 9 at Lower Entrance and Lock No. 1 at Upper Entrance, during the Fiscal Year ending 30th June, 1892. (From Lockmaster's Returns.)

Months.	Lock No. 9, Lower Sill.		Lock No. 1, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.	ft. in.	ft. in.	ft. in.	ft. in.
July.....	10 9	9 7	8 10	7 10
August.....	9 6	9 1	8 8	7 7
September.....	9 7	8 9	8 5	7 2
October.....	8 8	7 10	8 2	6 11
November.....	8 10	7 8	8 9	6 10
December.....	11 0	8 2	9 6	7 2
1892.				
January.....	14 7	10 0	9 8	8 4
February.....	15 7	14 0	9 2	8 8
March.....	15 1	13 1	8 10	8 7
April.....	20 7	13 8	11 5	9 0
May.....	14 2	12 8	10 7	9 7
June.....	15 3	13 1	10 9	9 9

# Department of Railways and Canals.

## ST. OURS LOCK.

STATEMENT showing the depth of the River Water on the Mitre Sills of St. Ours Lock, during the Fiscal Year ending 30th June, 1892. (From Superintendent's Return.)

Months.	Lock No. 1, Lower Sill.		Lock No. 1, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.				
	ft.	in.	ft.	in.
July.....	10	0	8	9
August.....	9	9	8	4
September.....	8	9	7	2
October.....	8	3	6	7
November.....	8	3	8	10
December.....	12	1	9	9
1892.				
January.....	12	8	10	2½
February.....	12	3	10	0
March.....	11	10	11	10
April.....	19	7	11	4
May.....	12	7	11	0
June.....	14	0	11	1

## LACHINE CANAL.

STATEMENT of Fines and Damages collected during the Fiscal Year ending 30th June, 1892.

Date.	Name of Vessels.	Name of Owner.	Fines.	Damages.	Totals.
			\$ cts.	\$ cts.	\$ cts.
1891.					
July 18..	Barge "Donnelly".....	Damase Leroux.....	9 00		9 00
Aug. 28.	Steamer "Greetlands".....	H. Dobell & Co.....	20 00		20 00
Oct. 13.	Barge "Brodeur Demer".....	Damase Leroux.....	10 00		10 00
Nov. 5.	do "Richard".....	C. Richard.....	5 00		5 00
do 24.	do "Star".....	Montreal Transportation Co..	10 00		10 00
do 21.	Steamer "Acadia".....	J. Malcolmson.....		22 75	22 75
do 30.	Barge "Riley".....	B. St. Denis.....	4 00	6 00	10 00
1892.					
May 10.	Barge "Bonaventure".....	G. Gohier.....	5 00		5 00
June 23.	Steamer "Gertie".....	J. Clement.....	5 00	18 35	23 35
do 22.	do "Polino".....	Ross & Co.....	10 00		10 00
do 28.	do "Powerful".....	G. Gohier.....	12 00		12 00
Total.....			90 00	47 10	137 10

J. O'NEILL,  
Collector.

CANAL OFFICE,  
MONTREAL, 30th June, 1892.

## CHAMBLY CANAL.

STATEMENT of Fines and Damages collected during the Fiscal Year ending 30th June, 1892.

Date.	Name of Vessels.	Names of Owners.	Fines.	Damages.	Totals.
1891.			\$ cts.	\$ cts.	\$ cts.
Nov. 10.	Barge "R. H. Cooper".....	R. H. Kirby.....	.....	4 00	4 00
1892.					
July 18.	Yacht "Elfrida".....	W. S. Webb.....	.....	5 00	5 00
Aug. 18.	Barge "Ruby".....	Jes. Rosseau.....	.....	5 00	5 00
do 26.	do "Roi des Eaux".....	A. Desmarais.....	.....	5 00	5 00
		Totals.....	.....	19 00	19 00

CANAL OFFICE,  
CHAMBLY BASIN, 7th November, 1892.

M. D. S. MARTEL,  
Collector.



# Department of Railways and Canals.

## APPENDIX No. 6.

### ST. LAWRENCE DISTRICT.

SUPERINTENDING ENGINEER'S OFFICE,  
CORNWALL, 15th December, 1892.

SIR,—I have the honour to submit my annual report upon the maintenance, works of construction, surveys, &c., as connected with the enlargement of the St. Lawrence Canals.

This district includes the Cornwall, Williamsburg and Murray Canals, and the improved channels in the intermediate navigable reaches, and extends from the Province Line, Lake St. Francis, to the harbour of Presqu'Isle on Lake Ontario.

#### CORNWALL CANAL.

##### MAINTENANCE.

Navigation closed for the season of 1891 on the 5th December.

The canal which was unwatered on the 21st March, 1892, to facilitate the building operations of the contractors and for the usual repairs, opened for traffic on the 1st of May following, and was closed for the season of 1892 on the 5th instant.

During the time the water was out of the canal the appropriation of \$2,000, granted during the last session of Parliament, was expended in renewing the mitre sill and foundations of the lower recess and tail-race bay of old lock No. 17, also in cleaning out the basin below it, now used as a dry dock, and, generally, all old locks, weirs and other structures were overhauled and temporarily repaired where necessary.

The appropriation of \$500, also granted during the last session, was expended in repairs, fencing, &c., required at the residence recently purchased by the Government for the collector of tolls.

Navigation was maintained in a satisfactory manner, notwithstanding the low stage of the water during the early part of the season and the inconveniences incident to the prosecution of the works of enlargement.

The only accident to report during the season of navigation, which rendered the lowering of the levels necessary, and by which navigation was interrupted for twenty-eight hours, occurred at night, on the 3rd of August last, and was caused by the Montreal Transportation Company's barge "Toronto," in tow of the "Ranger," a small hired tug, colliding with the lower gates of lock No. 19, whilst closed and in use, and carrying them away, and also displacing the hollow-quin masonry in five courses of the south wall.

The damaged gates were replaced by others in good condition.

The amount of damage assessed against the owners of the barge "Toronto" was \$1,103.21. This account was forwarded by the Superintendent to the office of the Montreal Transportation Company on the 15th August, but has not yet been paid.

The water supply to the mills and factories was not so seriously affected during the past season as was the case in 1891.

The attention of the department is again directed to the necessity which, in my opinion, exists for constructing the necessary waste-weirs, and providing a telephone service connecting all locks, &c., with the office of the Engineer and Superintendent.

During the winter the superintendent staff at the Government workshops were engaged in repairing and renewing the spare lock-gates, &c., and generally in making preparations for the usual annual repairs.

In future it is proposed to ask for tenders for all materials and supplies required for "staff" or "repairs."

The locks of both old and new lower entrances were dismantled and prepared for the winter on the 6th instant, and the gate lifter, the canal scows, and the surveying steamer "Anderson," laid up in the Cornwall Basin.

The culvert at Wood's Creek continues to work satisfactorily, the back water from the river being entirely excluded from the Fly Creek thereby.

The question of the reconstruction of the Government sewer on Water Street, in the town of Cornwall, and of the culvert or drain under the canal, connected therewith, and referred to in my last report, are still under consideration.

The superannuations of the past year are as under, viz. :—

Edward Cass, lockmaster, 1st May, 1892.

John Bowie, lock labourer, 1st May, 1892.

Owen O'Keefe do 1st October, 1892.

and Timothy Sheal has replaced Cass as lockmaster (temporarily).

The passenger steamer, "Island Queen," was fined \$10 for damage done to gate at lock No. 18, 2nd September, 1892.

No wood or winterage dues have been collected during the past year.

The highest water recorded at lock No. 15 (old entrance) during the year was 22 feet 6 inches, and the lowest 9 feet 5 inches, and at lock No. 21, the old guard-lock, the highest was 10 feet 10 inches, and the lowest 6 feet 5 inches.

## CORNWALL CANAL ENLARGEMENT.

### CONSTRUCTION.

The canal has a total lockage of 48 feet, and surmounts the Long Sault Rapids. It extends from the town of Cornwall westwards to the village of Dickinson's Landing, a distance of  $11\frac{1}{2}$  miles.

It was completed and first opened for traffic in the year 1843.

The works of enlargement now under construction consist in deepening, widening and straightening the original channel, and strengthening and protecting the embankments, and in the construction of new and enlarged locks, supply weirs, bridges, &c.

The enlargement at the lower or eastern entrance (Sec. No. 1), was commenced in 1876, and completed in 1882. Section No. 10, the upper entrance, which is still in progress, was commenced in 1884, and may be finished in 1893.

In 1888 the remainder of the work required to complete the enlargement was placed under contract, and is still in progress.

### STATEMENT of work under existing contracts, and in progress.

Locality.	Section.	Contractors.	Date of Contract.	Date of Completion.
Cornwall .....	2	Wm. Davis & Sons .....	Nov. 5, 1888 .....	April 5, 1891.
Lock No. 19 .....	3			
Maple Grove .....	4			
Milleroches .....	5	The Gilbert Blasting and Dredging Co. ....	Nov. 2, 1888 .....	April 20, 1891.
Moulinette .....	6			
Land Bridge .....	7			
Long Sault .....	8	Jocks, Delorimier & Broder .....	April 7, 1884 .....	June, 1, 1886.
Dickinson's Landing .....	10			

NOTE.—Section No. 8 adjoins No. 10.

The water was drawn off the canal by the 21st March, 1892, and so continued until the 1st of May following. This enabled the contractors on Sections 2, 3 and 4, to proceed with work, which could not be carried on during navigation.

## Department of Railways and Canals.

The stone delivered in 1892 was procured from the quarries at Cornwall, Maple Grove, and Milleroches.

Masonry was begun in March, and continued until stopped by frost in November.

### SUMMARY OF THE SEASON'S WORK.

The south wall of old lock No. 17 on section No. 1, has been raised two feet, and a portion of the lower recess wall rebuilt from the floor.

#### *Section No. 2.*

The extension walls east and west of the south abutment of the Cornwall bridge have been well advanced.

#### *Sections No. 2 and 3.*

The extensions of wing walls at locks Nos. 18 and 19 have been completed, and at lock No. 20, the necessary coffer-dam in the canal was constructed, and such progress made on the wall as to nearly connect it with the embankment.

#### *Section No. 4.*

The outside retaining wall at the embankment west of lock No. 20 has been finished, with the exception of the central portion, where the coping and some of the top courses are wanting.

#### *Section No. 10.*

The supply weir at the guard-lock was completed in September, and, together with the new guard-lock, has since been brought into use.

The foundation of the supply weir at lock No. 18 was begun 9th November, and continued until stopped by frost.

Protection to banks has been commenced near the old guard-lock, and also below lock No. 18.

Work on the lock gates is well advanced, one pair has been placed in position at each of the new locks Nos. 18, 19 and 20.

All plant, and building materials required for an early commencement of the masonry next spring, have been provided.

Dredging, which was commenced at the upper entrance, section No. 10, on the 6th of April, and on the works below the guard-lock, section No. 8, on the 2nd May, has thus far been carried on without interruption, and will be continued until the close of the season.

The deepening and widening of the channel is now nearing completion, the work remaining to be done is chiefly on sections 4, 5 and 8.

The straightening of the channel way has only recently been commenced.

#### *Sections 6 and 7.*

All work has been suspended since July, 1891, pending a decision on the question of the "Sheik's Island Dams," for which location surveys have recently been completed.

The material from the dredges has generally been placed in spoil, and, when seasoned, used in the work for enlarging the embankments.

At the western end of the canal, however, a large portion of the dredged material has been wasted in the river south of Wagner's Island.

Good progress has been made with the work of reinforcing the high embankments west of lock No. 18, and preparations are now being made to deal with that to the east of lock No. 20 in a similar manner; and very satisfactory work has been done during the season upon the heavy embankment on the north side of the canal, in connection with the widening and straightening at Robertson's culvert.

The only important slide which occurred during the past season was that in the high bank at the head of lock No. 19; it was, however, discovered in time, and means adopted to prevent further damage.

Additional land on the north side of the canal, above lock No. 18, has been required for the purpose of straightening the channel.

Attention is directed to the necessity which exists for the widening and straightening of the upper entrance to this canal, also to the propriety of extending and improving the direction of the north pier at the lower entrance, and to the proposed raising of the level of the coping of the new guard lock, from 18 inches to 2 feet, to provide protection to the works during high stages of the river.

## WILLIAMSBURG CANALS.

### MAINTENANCE.

The several divisions of these canals, viz. :—Farran's Point, Rapide Plat, and the Point Iroquois Junction, and Galops, collectively styled the "Galops Canal," were closed for navigation on the 12th December, 1891. Navigation was resumed for the season of 1892, on the 25th of April last, and closed on the 13th of December.

The buoy service between Prescott and Dickinson's Landing was performed soon after the opening of navigation, and 13 new buoys substituted for those found to be unfit for use.

The usual repairs were made on the buoy boat and scow.

No accidents of any importance are to be reported, except the death by drowning, off lock No. 26, of James Flinn, sen., one of the lock labourers, which occurred on the night of the 23rd of April last. A son (James Flinn) of the deceased has since been appointed his successor on the lock.

Navigation on these canals has been fairly well maintained, but few detentions have occurred other than from grounding, due chiefly to overloading, during the low stage of the river in the early part of the season, and to the contractors' operations on the work of enlargement, in the narrow channels at Rapide Plat and the Galops.

Slight breaks and leakages occurred in the long embankment forming the tow-path of the Junction Canal, during the months of January and February last, which were temporarily repaired as soon as discovered and the bank afterwards further strengthened.

The mooring pier at "Pier Island," for which appropriations were made by Parliament in 1891 and 1892, has been completed at a cost of about \$1,000.

An agreement made with Murray & Cleveland, contractors at the Galops, to construct and deliver one pair of gates for the lower recess of lock No. 23, Rapide Plat, has been performed. These gates have been received at Morrisburg, and will be brought into use next season.

For the above service an appropriation of \$4,000 was made during the last session of Parliament.

General repairs were made to the various structures, to lock-gates, bridges, &c., and also to the banks, booms and entrance piers.

The following fines have been imposed on the under-mentioned vessels, for want of care and disregard to canal regulations, viz. :—

Barge "Duluth,"	7th May, 1892.....	\$ 5 00
" "Imperial,"	27th June 1892.....	5 00
Steamer "Corsican,"	3rd July, 1892.....	10 00
" "Ocean,"	10th Aug., 1892 .....	20 00
" "Alexandria,"	14th Oct., 1892.....	20 00

The chain vessel "Iroquois," which was removed in 1891 to her present berth below Frazer's Point, is now resting on the bottom with her hold full of water, the engines and other machinery on the main deck are in good order, but her hull and upper works are rotten, and the boilers worn out. Under these circumstances, it is recommended that the structure should be sold as she now lies.

The superannuations and appointments for the past year are as under :

Robert Toye, lockmaster, 1st December, 1891, succeeded by Alexander B. Robertson, appointed 15th December, 1891.

Owing to the progress of the works of enlargement at lock No. 23, the lock labourers' dwelling must be removed. The men have already vacated it, and obtained

## Department of Railways and Canals.

other quarters near the work, for which, as they are in the village of Morrisburg, an allowance of \$7 each per month is considered reasonable and has been allowed.

In addition to the ordinary repairs, the under-mentioned work has been performed:—

At *Farran's Point, lock No. 22*, the lock labourers' house has been plastered and repaired, and two kitchens built, and the foundation, which is partly on cribwork, renewed and protected.

At *Rapide Plat, Morrisburg*, some extensive repairs were made to the lower gates at lock No. 23, and the buffer posts renewed. At lock No. 24, a boat was provided for use in connection with the gates and weir during low water stages.

The lowest water on the sill of lock No. 23, as recorded during the season of navigation, was 7 feet 3 inches.

### GALOPS CANAL.

At *Lock No. 25, Iroquois*, the houses of the lockmaster and lock labourers were plastered, &c., fences built, embankments and approaches at lock raised and gravelled, and some necessary repairs and renewals made on the swing bridge and entrance pier, &c.

At *Lock No. 26, Cardinal*, the swing bridge has been nearly rebuilt, the lower gates removed and replaced by others recently rebuilt, and the buffer posts renewed.

## WILLIAMSBURG CANAL ENLARGEMENT CONSTRUCTION.

### FARRAN'S POINT.

This canal is about  $\frac{3}{4}$  of a mile in length, and has a lockage of  $3\frac{1}{2}$  feet. It overcomes a short rapid above the village of Farran's Point, situated about 5 miles west of Dickinson's Landing, the head of the Cornwall Canal.

There are no works under the head of construction to report.

A location survey has, however, been made for the enlargement of this work, including a general survey and examination of the channel leading from the proposed new upper entrance at Emphy's Point (Point Avoyon), following the north shore westward through the passage between Little Cat Island and the village of Aultsville, on the mainland; and from the present lower entrance, the survey was extended west to Baker's Point below the "Big Eddy," and connecting with the deep straight channel leading to the Cornwall Canal.

Plans have been prepared showing the proposed manner of enlarging and extending both of the entrances to this canal.

### RAPIDE PLAT.

The lockage on this canal is  $11\frac{1}{2}$  feet, it surmounts the rapid of "Rapide Plat" and extends from the village of Morrisburg west to Flagg's Bay, about  $3\frac{1}{4}$  miles.

The works now under contract and in progress, are as follows:—

Location.	Section.	Contractors.	Date of Contract.	Date of Completion.
Morrisburg.....	1	Poupore & Fraser.....	Jan. 26, 1891	April 1, 1894
Mariatown.....	2	The Weddel Dredging Co.....	do 12, 1891	do 20, 1893
New Road.....	3	Poupore & Fraser.....	do 26, 1891	do 20, 1893
Flagg's Bay.....	4	William Broder.....	April 2, 1884	June 1,

The enlargement was commenced in 1884 on section No. 4, the upper or western entrance, and completed and brought into use in 1888.

The work of enlargement consists in the deepening and widening of the old channel, and in constructing new and enlarged locks and supply weirs.

No change in the existing alignment is contemplated or provided for in the contract, and attention is therefore directed to this omission, as it is believed that the class of vessels for which these enlarged canals are designed, will have great difficulty in navigating them.

Section No. 1 extends west along the river front of the village of Morrisburg.

Dredging operations were commenced in April last, and will be continued until the end of the season.

All material dredged has been deposited in the space between the tow-path and the new protection cribwork. This cribwork is now completed, and the contractors' coffer-dams for the new lock pit are being constructed in accordance with the modified plan of 21st March, 1892.

The excavation for a trench for the "north wall," designed to have been executed by manual labour, was inadvertently permitted to be commenced by dredging, resulting in the sliding and caving in of the high clay banks which the wall was intended to support. The plan of commencing the wall at the bottom of the canal had therefore to be abandoned, and a cribwork base substituted therefor having its face built on the same line and batter as the proposed wall, and carried up to the level of 2 feet below normal water in the canal.

The bank where scarped by dredging operations, is now sufficiently protected by the cribwork base, and by a facing of borrowed earth, and it is therefore believed will suffer no further damage.

Upon and in rear of the cribwork, a berme will be formed of earth having its slopes protected by dry masonry.

The above change in plan has involved the purchase of a strip of land about 15 feet wide, extending along the deeper portion of the cutting, and also of a "borrow-pit" to furnish earth wherewith to restore the banks destroyed by the contractor's dredging operations, and for which, Mr. Ward, the Government valuator, has arranged with the owners.

The stone for the lock is being cut and prepared at Milleroches quarry, Cornwall Canal, and that for retaining walls, &c., at the Wolf Island quarries.

Section No. 2 begins at the west end of the village of Morrisburg, and extends westward to near Mariatown.

The work on this section consists chiefly of excavation, *i.e.*, dredging, and dry work. Dredging operations were commenced on the 1st of April last and are still in progress.

The dry work, or excavation above water, which also commenced in April, was stopped on the 1st of November.

Two dredges have been employed throughout the season, and a third is being built, and will be placed on the work early next season.

The bulk of the material dredged has been utilized in widening and strengthening the towing path and embankments.

Section No. 3 commences a short distance above Mariatown, and extends west to the vicinity of the guard lock (No. 24), and includes the widening and deepening of the east end of section No. 4, and also the spoil grounds, and other works connected with Flagg's Bay.

Work was begun by the steam excavator and a chartered dredge, in April last. The former was engaged on "dry work" on the high bank above water, and the dredge in prism excavation. Both machines will continue to work until the close of the season.

The excavated material, or "dry work," is hauled by locomotives to the spoil ground at Flagg's Bay.

The dredged material is conveyed in scows to the dumping ground on the south side of the channel, near Ogden's Island.

The "new road" on the north side of the canal has been completed and in use since last September.

## Department of Railways and Canals.

Upon the completion of the fencing, which is now in progress, it will be advisable to arrange with the municipal council of the township of Matilda, to assume the control and maintenance of the road.

The work on section No. 4 was finished in 1888, and at once brought into use. It comprises the new guard lock (No. 24) and supply weir, and the formation of the upper entrance to the canal, and also of the prism for a short distance below the lock. The final estimate of this contract was completed by the late Mr. Killaly, the resident engineer.

### GALOPS CANAL.

*Point Iroquois Division.* This canal as originally constructed was about 3 miles in length, with a lockage of 5 feet 7 inches at lock No. 25, in the village of Iroquois, from whence it extended westward to Presqu'Isle, overcoming the Point Iroquois rapid, and other stretches of swift water, notably that at Sparrowhawk's Point.

About ten years after the completion of these works, some important changes were made, viz.: The lower mitre sill of lock No. 25 was lowered 3 feet 2 inches, and means afforded of regulating the depth of water on the upper sill, and consequently in the canal, by connecting it with the Galops.

The Junction Division commences at Presqu'Isle, and extends up stream to lock No. 26, at the village of Cardinal. It chiefly consists of an embankment about 2½ miles in length, built in the river, to connect the Galops and Point Iroquois divisions, and thereby, as stated above, raise and afford a means of controlling the level of the water in the Iroquois reach.

The fall in the river between the above-mentioned canals is 1 foot 7½ inches.

Work on the junction was completed in 1856.

There are no works of construction on either of the divisions whereon to report.

Surveys have been made during the past season to obtain data upon which the scheme of enlargement may be definitely decided.

*Galops Division.* This, the original Galops Canal, had a lockage of 6 feet 8 inches, and extended upwards from the village of Cardinal, about two miles to the head of the Galops Rapid, which it was designed to overcome, and which commences about 7 miles east of the town of Prescott.

Some years after the completion of the canal, the pier head cribwork was extended up stream, and the lockage or fall increased 11½ inches.

The guard lock No. 27 at the upper entrance is the most westerly lock on the St. Lawrence navigation.

### *Upper Entrance.*

The work now under contract and in progress, and for which Messrs. Murray & Cleveland are the contractors, was commenced in 1889. Their contract was entered into 14th November, 1888, to be completed 15th of June, 1891. It embraces the construction of a lift lock, and of a guard lock and supply weir, also the deepening, widening and straightening of the channel from the upper entrance to Round Bay, a distance of about one mile, and the removal of the old guard lock, &c., &c.

Masonry was commenced on the 25th of April last, and stopped on the 25th of November.

Work as under has been done during the season, viz.:

The walls of the lift lock, the paving in tail bay of guard lock, and the extension of the upper and lower wing walls of the latter, have been completed.

Two pairs of gates for the guard lock have also been completed ready for launching, and a quantity of timber framed and prepared for the gates of the lift lock.

The greater part of the protection cribwork to be used in straightening the tow-path above McLaughlin's Point has been framed, and a number of the cribs built and launched.

The dredging and drilling and blasting operations were begun in May and have been continued without interruption throughout the season.

All dredged material, except rock required on the work, has been conveyed in dump scows to the dumping ground between Pier and Squaw Islands.

The coffer-dams continue staunch and water-tight.

A large quantity of dressed stone from the Belleville quarries has been delivered, also packing from the Galops quarry, situated near the work, which produces stone of excellent quality.

With a view to prevent accidents which might be caused by failure from any cause of the gates of the lift lock, it is proposed to extend the masonry far enough to form the recess for a pair of "guard gates," and, as in the case of the guard lock on the Cornwall Canal, it may become necessary to raise the level of the coping of both the lift and guard locks.

A survey has been made of the lower portion of this canal, for the purpose of deciding upon the nature of the enlargement, and a location survey of the north channel leading westwards from the upper entrance, has been completed.

#### *Galops Rapid Improvement.*

E. E. Gilbert & Sons, contractors. Contract entered into 5th August, 1879, to be completed 1st June, 1881.

The "Galops Rapid improvements" consisted in the formation, by subaqueous excavation, of a straight channel 200 feet wide and 17 feet deep through the shoals termed respectively "Upper Bar," "North" and "Caledonia" shoals, "Island" shoal and "Lower Bar," the whole of which are included in a distance of 3,300 feet.

The work was completed in November, 1888, and tested as directed by the late Chief Engineer, who in 1889 reported as follows:—

"The channel undertaken some years ago to be formed through these rapids has been completed. It is now 200 feet in width, straight and from 16½ to 17 feet in depth; but pilots, as usual, prefer putting up with all the disadvantages of the old, crooked, shallow line rather than use a new one with which they are unfamiliar.

"It is no uncommon occurrence for even this important and useful class of men to be a little prejudiced in favour of a route they have been accustomed to follow. It is, however, quite likely that the new line will, ere long, be found the most advantageous; at all events, this is certain to be the case when a larger, deeper-laden class of vessels are brought into use."

In May last the south side of the new channel was marked by five buoys. The channel, which was first brought into general use last year, is navigated by many of the large propellers, and other vessels, drawing over nine feet of water, but is systematically avoided by the forwarding companies' barges.

The channel was examined and surveyed by officers of the department in 1891, and reported upon by me. Obstructions were found to exist on either side of the Centre Range Marks: these the contractors asserted consisted of loose rock shoved into the channel since its completion, by ice, or from other natural causes.

Another, and a much more elaborate survey, is now nearly completed. It has been in progress since last May, under the direction of Mr. Kennedy, Chief Engineer to the Montreal Harbour Commissioners. The survey will probably represent with the greatest accuracy, and minuteness, the depth and width of the channel, and generally its present condition, but it is doubtful if the nature of the obstructions, whether rock *in situ*, or loose rock, will be determined.

This the most important question as stated in my last annual report, can only be satisfactorily decided, by sending a properly equipped dredging plant, to make an actual test of the material in the channel.

The survey ordered by the department, of the bed of the river, including also the new channel and its approaches and banks, which was commenced in 1891, was discontinued last season, for the reason that the operations connected therewith might to some extent interfere with Mr. Kennedy's work. The survey steamer "Anderson" which had been specially fitted for the work, was consequently transferred to the survey of the north channel.



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### *The North Channel.*

This channel from the Galops to the head of Spencer's Island, from its sheltered position, and moderate current, may be regarded as an extension of the Galops Canal.

From Prescott, to the head of the Galops Canal, the distance by this channel is seven miles, or two-thirds of a mile shorter than by the main channel through American waters.

The channel was thoroughly explored during my survey of the river in 1872, and early in October of that year, with the water on the sill of lock No. 27 at 8 feet 10 inches, the tug steamer "Glide" drawing 8 feet 3 inches with five barges light, passed up the channel guarded by the survey buoys.

Subsequently, in October, 1876, with the water 9 feet 4 inches on the sill, a large three-masted vessel, the "Hemisphere" drawing 9 feet of water, was successfully piloted down this channel to the canal, by Capt. Moore, of Prescott, assisted by the tug "Arctic."

After leaving the canal, and clearing the shoals off Boulton's Point, the channel lies through deep still water in Munro's Bay, and following the general direction of the Canadian shore to Luttle's Point, passing through the passage between it and Duck Island, thence leaving the mainland, a deep channel, with a moderate uniform current leads up between Drummond's and Spencer's Islands, and the banks below them, to the open water above the islands; at this point the current becomes stronger, and the channel, assuming the direction of the Windmill light, runs in deep water, through a passage between the shoals off Wright's Point, and the spit here abreast of the black buoys which mark the north point of Chimney Point reef, all obstacles are passed, and the main navigable channel leading to Lake Ontario reached.

This work has been thoroughly re-examined during the past season, and a location survey completed. The line as now recommended differs slightly from that represented on the plans of preliminary survey made in 1872, in the matter of curves, &c., the route, however, is the same.

Accurate cross sections have been made throughout, and drillings and borings made to test the material to be excavated.

The plans and specifications required for placing the work under contract are being prepared.

Spencer's Island near the head of the channel (held on Indian lease) has been acquired for use as service ground and as the base of operations during construction, also 1½ acres of land on Luttle's Point, with right of way thereto, over a private road, has been purchased for the purpose of securing convenient access to the work

## MURRAY CANAL.

### MAINTENANCE.

The canal which was closed for traffic on the 16th December, for the season of 1891, was again opened for passage of vessels on the 6th of April, 1892, and closed for the season on the 5th of December.

Navigation was maintained in a satisfactory manner throughout the season, notwithstanding the continuance of the low stage of the water in Lake Ontario.

The temporary lights on the entrance piers should be replaced by more powerful ones, as suggested in last year's report.

The number of vessels passed through the canal from the 15th of November, 1891, to the 27th of October, 1892, was 847.

No accidents have occurred during this period.

The three road bridges have been painted and repaired, and are in good order.

The railway bridge has also been painted and adjusted from time to time, but it still works badly.

The Trenton road within canal limits has been well graded and gravelled, and is now one of the best roads in the county.

The semaphores at the railway bridges are working to the satisfaction of the railway officials.

The stone protection to the banks has required and received constant attention. The distance renewed, or repaired this season, has exceeded 8,000 feet.

The tow-path ditches have been opened throughout their entire length twice during the season.

The grass seed sown in 1891 has answered a good purpose in preserving the slopes of the spoil banks.

A scow 55' x 15' x 3' has been built by the repairs staff, for their own use on the canal.

The snags and sunken logs complained of last year have been kept out of the channel by the steamer "Varina."

A close fence has been built on the north side of the canal, to prevent drift from the spoil banks covering the track of the Central Ontario Railway.

No fines were imposed during the past season.

#### CONSTRUCTION.

This work is situated at the head of the Bay of Quinté and extends from the channel, across the Isthmus of Murray, to Presqu'île Bay, on Lake Ontario, a natural harbour, and the future western terminus of river navigation.

This the "Harbour of Refuge" of the north-east shore of the lake, lies near the village of Brighton, about 75 miles west of Kingston, and within 120 miles of Port Dalhousie, the entrance to the Welland Canal.

J. D. Silcox & Co., contractors. Contract entered into 24th of August, 1882, to be completed 1st of July, 1885.

The works included in the contract are embraced in a distance of 9½ miles, and consist in :

1. The cutting or canal proper, through the isthmus, and the formation by dredging and piers of convenient entrances at either end, a distance of fully 6 miles located on a direct line from navigable water in the Bay of Quinté through Twelve o'Clock Point, Dead Creek Marsh, Wuse's Creek and the Brighton wharf.

The canal is practically an artificial "strait" or channel without locks, and is crossed by one railway, the Central Ontario, and three highway bridges.

2. The formation by dredging of the new entrance and channel to the harbour, through the "middle ground" and the other shoals which obstruct the present entrance, and also the channel near the Brighton shore, to connect the harbour with the upper entrance to the "strait," a distance of about 3 miles.

The width of the channel across the isthmus is 80 feet on bottom, and that of the entrances thereto 200 feet, with a depth at ordinary low water (or zero of the Toronto harbour gauge) of 12 feet 6 inches, fully 1 foot below the level of the "Telegraph Island" and other shoals in the Bay of Quinté.

The new entrance to the Presqu'île harbour is "bell-mouthed" in shape, and varies in width from over 1,000 feet in the lake outside the main light, to 200 feet in the channel-way off Salt Point light, with a maximum depth of 16 feet.

In connection with the harbour and new entrance, the attention of the department is again called to the necessity for immediate action, with a view to the preservation of the standing timber remaining on the Presqu'île peninsula.

The work was actually completed in August, 1889, by Mr. A. J. Mowry, of Syracuse, one of the original contractors, who is now the sole representative of the firm of J. D. Silcox & Co.

The final estimate has been completed, and is now with the Chief Engineer to be considered.

#### SURVEY OF ST. LAWRENCE RIVER AND CANALS.

The work done under this head during the past season, may be summarized as follows :—

A location survey of the proposed dams in the Sheik's Island Channel has been made, and the work is being prepared for letting.

## Department of Railways and Canals.

A survey, with a view to straighten and improve the upper entrance of the Cornwall Canal, is in progress.

Some additional surveying in connection with the location of the Farran's Point enlargement.

The shoals in the navigable reaches east and west of Rapide Plat Canal have been further examined; also those in the reach above the head of the Point Iroquois Canal.

Preliminary surveys have just been completed of the Point Iroquois junction and lower part of the "Old Galops" division of the Galops Canal, the plans of which will be prepared and submitted this winter.

The survey for the chart of the river at the Galops Rapid, recommenced in May last, but was discontinued, when the survey and the test by Mr. Kennedy was ordered to be made.

A final location of the north or Canadian channel has been completed, and the plans and specifications are being prepared.

In connection with the surveys it is submitted, that inasmuch as the charter of the steamer "Anderson" for two seasons would amount to, or even exceed, the sum required to purchase and repair her, and since a vessel of her peculiar class, adapted for either survey or inspection is considered a necessity, in view of the extent of this district, and the works in progress, it is recommended, as a matter of economy, that her purchase be authorized.

A statement is appended showing the highest and lowest water during the past year, at each of the canals in the St. Lawrence district.

The variations of the water level on the different canals are not uniform. The governing point assumed by the forwarding companies is at lock No. 23, Rapide Plat Canal, where the least depth of water on the mitre sill prevails at all stages of the river.

I have the honour to be, sir,

Your obedient servant,

TOM S. RUBIDGE,

*Superintending Engineer.*

The Secretary,  
Department of Railways and Canals,  
Ottawa.

STATEMENT of the Highest and Lowest Water on the Canals in the St. Lawrence District—1892.

Month.	Cornwall Canal.						Williamsburg Canal.												Lake Ontario.										
	Lock No. 15.			Lock No. 21.			Lock No. 22.		Lock No. 23.		Lock No. 24.		Lock No. 25.		Lock No. 27.		Murray Canal.												
	Highest.		Lowest.	Highest.		Lowest.	Highest.		Lowest.	Highest.		Lowest.	Highest.		Lowest.	Highest.		Lowest.											
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.											
January...	22	6	9	5	9	3	8	0	7	10	6	4	7	8	5	8	10	0	8	6	8	0	11	10	11	7			
February...	21	0	12	9	8	3	6	5	7	2	4	9	6	9	3	9	9	3	6	6	9	1	7	3	11	10	11	6	
March.....	17	10	11	5	9	4	7	2	8	8	6	10	7	9	5	7	4	8	9	10	6	10	8	2	6	10	11	8	
April.....	12	11	9	6	9	8	8	3	8	4	7	0	8	6	7	0	11	2	9	5	9	5	8	2	12	4	11	10	
May.....	10	5	9	5	9	11	9	0	9	6	7	6	8	6	7	3	11	2	9	10	9	6	8	6	8	6	12	3	
June.....	11	0	9	10	10	5	9	4	9	10	8	10	9	7	8	0	12	2	10	6	10	0	9	1	13	2	12	8	
July.....	11	5	10	8	10	9	10	0	10	3	9	4	10	0	8	9	12	8	12	0	10	3	9	9	13	6	13	1	
August.....	12	1	10	7	10	10	9	9	9	3	9	8	8	9	8	4	12	6	10	11	10	3	9	2	13	6	13	5	
September.	10	10	10	4	10	9	9	11	10	0	9	3	9	10	0	8	7	12	8	11	4	10	3	9	4	13	5	12	9
October.....	10	3	9	10	10	1	9	5	8	7	8	3	9	1	8	2	11	11	10	0	9	9	9	1	13	1	12	7	
November..	10	6	9	9	10	5	8	10	8	10	7	3	9	4	7	0	12	0	9	4	10	0	8	3	12	9	12	1	

# Department of Railways and Canals.

## APPENDIX No. 7.

### OTTAWA RIVER CANALS.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, 5th December, 1892.

SIR,—I have the honour to hand you the annual report on the Ottawa River Canals for the fiscal year ended the 30th June, 1892.

The navigation on these canals has been maintained throughout the year without accident or interruption of any kind.

#### STE. ANNE'S LOCK.

Navigation was closed here on the 26th November, 1891, and reopened on the 29th April, 1892.

#### *Repairs.*

The lock-walls, lock-gates, piers, bridges, fences and buildings received the ordinary amount of attention and were kept in good working order.

A new anchor pier was built between Ile aux Tourtes and the head of the channel above the new lock.

#### *Income.*

The strengthening of the old Grand Trunk Railway pier, forming the south side of the lower canal basin, commenced in 1890, and somewhat fully described in last year's report, was brought to completion in May last. This work consists of a crib foundation 1,160 feet long, built alongside of the old pier and firmly anchored to the river bottom, and of a heavy wall laid in hydraulic cement mortar on top of it. The whole is substantially built, and forms a safe protection to the basin below the lock.

#### CARILLON CANAL.

This canal was closed on the 28th November, 1891, and reopened on the 30th April, 1892.

The repairs done here during the season were as follows:—

Enlargement of mooring-pier at head of old canal by the addition of a new crib 24 × 26 × 20 feet alongside of it.

Sheeting lower end of guide-pier below lock No. 1.

Erection of a storehouse on the north bank of the canal above lock No. 1. This rests on a good stone foundation, and is 80 feet long by 18 feet wide and some 20 feet high.

The various structures, buildings, fences, bridges, roads, &c., have also been kept in a satisfactory state of repair throughout the year.

#### CARILLON DAM.

#### *Income.*

An examination of this important structure in the fall of 1890 gave serious fears as to its safety, and consequently a sum of \$15,000 was asked for and appropriated by Parliament at its following session towards strengthening and staunching it. Work was commenced in the month of October, 1891, and pushed as speedily as possible up to the middle of November, when the men were driven away by the rising water, and steps immediately taken to help the ice to form on the dam and

from the shores, in order to complete the parts undertaken before the following spring.

In the latter part of January a good road had been thus formed from both shores and men were again set to work, with the results that, on the 1st April following, over 400 feet in length of the dam were thoroughly repaired. A great many of the cribs forming the apron were found to be nearly empty; these were refilled with boulders, and the apron itself lengthened from 12 to 25 feet for a distance of 125 feet, and from 20 to 42 feet for another distance of 70 feet.

Besides this the whole of the apron was raised for a total length of 410 feet and given a gentle slope from the crest of the dam downwards, thus allowing the water to glide over the structure instead of falling down upon it a height of 9 feet as before. This is considered to be a material improvement, besides making the whole structure much heavier, which is a point of primary importance in all such structures.

The apron was sheeted over with rock elm 10 inches thick, firmly bolted together and to the cribwork underneath. In a couple of places a quantity of boulders was dumped above the dam and the embankment thus formed brought up to the level of the foundation cribs.

From the 1st April to the 30th June, a few men were kept busy preparing for next season operations.

It was highly time that this work were undertaken, otherwise an accident might have happened by which the whole navigation of the Ottawa river would have been stopped, or at least materially interfered with, some portions of the dam having been found in a most dangerous condition

#### GRENVILLE CANAL.

The closing and reopening of navigation here occurred on the same dates as on the Carillon Canal.

A good deal of work had to be done in the spring to clean the canal prism, especially on section 2 where the soft banks are continually washed down.

The tow-path was levelled and otherwise repaired for a distance of about one mile on section 2.

Two towing bridges at lock No. 5 were renewed and placed in a position better calculated to facilitate the towage of vessels into the lock.

The swing-bridge across lock 7 was also repaired, and one pair of valves in the lower gate of this lock renewed.

In November last it was considered necessary to remove the filling behind the south wing-wall at the head of lock No. 7. This wall, as well as the one on the north side, is built on cribwork, and owing to some cause or other has been so displaced that it may fall down into the canal at any time. The broken stone forming the filling behind the south one was removed down to the water level, and in April last, a layer of brush, some 5 feet thick, was deposited at the bottom of the trench and covered up with the material taken out in the fall. This was packed by hand in horizontal layers so as to lessen the pressure on the wall pending its reconstruction.

In addition to the above, the various structures, roads and fences connected with this canal were kept in good condition during the year.

#### CULBUTE CANAL.

There is very little to be said about this canal, beyond the fact that it was kept in good working order and in such a state as to accommodate the small traffic going through it.

I have the honour to be, sir,

Your obedient servant,

ERNEST MARCEAU,

*Assistant Superintending Engineer, O.R.C.*

The Secretary,  
Department of Railways and Canals.

# Department of Railways and Canals.

## STE. ANNE'S LOCK.

**STATEMENT showing the depth of the River Water on the Mitre Sills of Ste. Anne's Lock, during the Fiscal Year ending 30th June, 1892.**

Months.	Lock No. 1, Lower Sill.		Lock No. 1, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.				
July.....	ft. in.	ft. in.	ft. in.	ft. in.
July.....	11 5	11 1	12 8	11 9
August.....	11 5	10 9	12 9	11 10
September.....	10 9	10 0	12 0	11 1
October.....	10 0	9 5	11 4	10 10
November.....	10 7	9 2	13 0	10 5
December.....	12 1	10 7	13 10	12 3
1892.				
January.....	12 5	10 9	12 4	11 5
February.....	11 9	9 0	11 5	10 10
March.....	10 5	9 0	11 0	10 2
April.....	13 9	10 8	14 10	10 3
May.....	11 9	11 0	13 6	12 6
June.....	13 0	11 7	14 6	13 4

## CARILLON CANAL.

**STATEMENT showing the depth of the River Water on the Mitre Sills of Locks Nos. 1 and 2, Carillon Canal, during the Fiscal Year ending 30th June, 1892.**

Months.	Lock No. 1, Lower Sill.		Lock No. 2, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.				
July.....	ft. in.	ft. in.	ft. in.	ft. in.
July.....	14 3	12 10	14 0	13 0
August.....	14 3	12 11	14 1	12 10
September.....	13 2	12 4	13 0	12 2
October.....	12 8	11 9	12 3	12 0
November.....	14 10	11 7	15 6	11 9
December.....	15 7	14 1	15 6	14 0
1892.				
January.....	14 3	13 10	17 0	13 6
February.....	13 10	12 6	13 6	12 4
March.....	13 2	11 9	12 4	11 0
April.....	17 4	11 11	16 3	11 6
May.....	15 0	14 3	15 4	14 6
June.....	16 1	14 8	16 3	14 10

GRENVILLE CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Locks Nos. 3 and 7, Grenville Canal, during the Fiscal Year ending 30th June, 1892.

Months.	Lock No. 3, Lower Sill.		Lock No. 7, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1891.				
	ft.	in.	ft.	in.
July.....	16	10	15	6
August.....	17	0	15	4
September.....	15	6	14	5
October.....	14	8	14	0
November.....	18	4	13	0
December.....	18	4	16	10
1892.				
January.....	20	0	17	0
February.....	19	0	16	0
March.....	18	6	15	0
April.....	20	6	15	6
May.....	18	8	17	6
June.....	18	6	14	8

CARILLON CANAL.

STATEMENT of Fines and Damages collected during the Fiscal Year ending 30th June, 1892.

Date.	Name of Vessels.	Name of Owner.	Fines.	Damages.	Totals.
1891.			\$ cts.	\$ cts.	\$ cts.
1st Oct....	James Averill, Jun.....	Cap. Robert.....		5 00	5 00

Damage to lock No 1.

GRENVILLE CANAL.

STATEMENT of Fines and Damages collected during the Fiscal Year ending 30th June, 1892.

Date.	Name of Vessels.	Name of Owner.	Fines.	Damages.	Totals.
1891.			\$ cts.	\$ cts.	\$ cts.
12th Aug..	Timber.....	W. R. Machan.....	10 00	.....	10 00

For incorrectly reporting a quantity of timber passed through Canal.



APPENDIX No. 8.

SOULANGES CANAL.

ENGINEER'S OFFICE,  
COTEAU LANDING, P.Q., 5th November, 1892.

SIR,—I have the honour to report as follows:—

Surveys for an enlarged canal between Lakes St. Louis and St. Francis were made by Mr. G. F. Baillairgé, C.E., as far back as 1872-74. He reported in favour of a route between Coteau Landing and Cascades Point on the north shore. This was intended for a twelve-foot navigation—the scale adopted prior to 1875. Estimated cost \$3,360,000.

The question of this canal remained in abeyance until 1889, when extended examinations were begun with a view to a fourteen-foot navigation, and continued for two years. The line recommended in the early part of 1891 (see printed reports) being adopted by the Government after considerable discussion. Estimated cost \$4,750,000.

The present termini do not differ much from the location of 1872-74; but the canal line between them, 14 miles long, is now, for all navigation purposes, practically straight; there being only two curves in this distance, each of very large radius.

The total rise of about 82½ feet between the lakes will be overcome by five lift locks, four of 17½ feet lift each, and one of variable lift. There will also be a guard lock at the upper end of the canal; the submit level being about 10½ miles long; and for more than one-half of this length the canal is in embankment below the mean level of Lake St. Francis. At some places these banks are about 30 feet high. On the Beauharnois Canal there are nine locks (including the guard lock) to overcome the same rise, viz., 82½ feet.

It may be well to place on record, in this report, the principal differences between the plans of structures, &c., on this canal and those hitherto carried out on the enlarged Welland, Cornwall and Lachine Canals.

1. The superstructure of the entrance piers will be of concrete with copings of stone. Mooring posts of cast-iron.
2. The use of timber in the lock bottoms has been discontinued—the foundations being entirely of concrete and stone.
3. The side walls of the locks are differently proportioned to those of the Welland Canal. The cross section is heavier and wider at the base; whilst the rear is stepped almost from the bottom to the frost batter behind the coping.
4. The locks will be filled and emptied through culverts formed in the side walls running the whole length of the chamber, and connected with it by numerous openings. The discharge will be controlled by steel sluices of the "Stoney" pattern.
5. The upper gates will be placed upon a curved breast wall of solid masonry.
6. The gates will be framed, and suspended so as to avoid the use of either toe rollers or segment rails. They will not be pierced by valve holes, and will be operated by electrical power together with all the bridges, weirs, &c., throughout the whole length of the canal.
7. The weirs will regulate the height of water in the several reaches by an automatic electrical apparatus connected with their sluice gates. The water will not be partly discharged over a breast as heretofore: the arrangements being quite different from those of the weirs now in use on the canals.
8. The road bridges will not have a pivot pier placed in the centre of the canal. They will be made so that one arm will swing across the entire width between the toes of the inside slope, or one hundred feet.

9. The culverts to pass the rivers Delisle, Rouge, and à-la-Graisse under the canal will be formed of one or more lines of cast-iron tubes of ten feet diameter; embedded in concrete masses with wells at each end for the reception and discharge of the flowing water.

10. Concrete will be generally used where deemed advisable throughout the locks, weirs, bridges, &c., of the canal instead of the stone masonry construction hitherto adopted. Reasons for this course are given in my report on the Manchester Ship Canal, pp. 11 and 12.

Several minor improvements will also be effected in construction: the objects kept steadily in view being rapid transit, and the reduction to a minimum of the cost of future maintenance operation and repairs of this important link on the enlarged navigation. It may be said in this connection that the position of the canal with reference to the river both as regards line and level is peculiarly advantageous for the cheap development of electrical power of such extent as will enable it to be freely used in the operation of all structures, the lighting of the canal, and, if considered advisable, the introduction of cable or other systems of towing by which vessels of full size (about 2,000 tons) may be safely and expeditiously passed through the canal without using their own steam, except perhaps on a portion of the summit or long level. The point selected for a power station is at the crossing of the River à-la-Graisse, where the surface of the water in the canal will be about 20 feet above the St. Lawrence, the shore of which is distant only 600 feet.

Ten per cent of a moderate flow through the prism at this place would yield between 500 and 1,000 horse-power.

The details of this station are now being considered in conjunction with a plan for a gate yard and culverts to afford means for a rapid discharge of the summit level in case of accident to its banks in the reach below the guard lock. It may also be noted that the Soulanges Canal will overcome about two-fifths of the entire lockage between Montreal and Kingston; the average lift of lock being more than twice that which obtains on the other river canals.

The fall between Coteau Landing and Cascades Point is relatively much greater than on any similar length of the St. Lawrence between Lake Ontario and tide water.

The line has been subdivided into 13 sections. Tenders were received for the western three of these extending from Lake St. Francis to the Delisle River Crossing in January last. Also for two sections at the eastern or Cascades end in August. Three sections below the Delisle (Nos. 8, 9 and 10) are now advertised for tenders which will be received up to the 22nd of the present month of November.

These eight sections constitute about 45 per cent of the whole length of 14 miles; but as they embrace the entrance works at both ends and all the lift locks but one (No. 5) they will probably represent about 75 per cent of the estimated cost of construction of the completed canal.

The present state of affairs is briefly as follows:—

Section No. 13 was awarded to Randolph Macdonald. As before stated, tenders were received in January last, but the contract is dated 24th September, 1892, by which period the season was practically over and the contractor could therefore do no more than make preparations for an early commencement in the spring of next year. The works included are the construction of the entrance piers and channel at Lake St. Francis—a guard lock—road and railway bridges, together with a considerable amount of dredging and earth excavation.

Section No. 12. Denis O'Brien & Son. This contract is dated 8th April, 1892. Some progress has been made with the earth excavation, of which over 100,000 cubic yards have been done, representing about one-fifth of the whole. But the rock, of which there is about 100,000 cubic yards on the section, remains untouched to date.

Section No. 11. This section embraces a large culvert for the passage of the Delisle River under the canal; and a considerable amount of earth and rock excavation. The contract is dated 11th May, 1892. The progress made with this work is exceptionally slow and unsatisfactory. During the past season about 60,000 cubic

## Department of Railways and Canals.

yards of earth have been removed, but none of the tubes for the culvert have as yet been cast, although the specification calls for their delivery during the season of 1892 now nearly past.

Sections Nos. 10, 9 and 8 are, as previously stated, advertised for tenders which will be received up to the 22nd instant.

Sections Nos. 1 and 2 were let to Mr. Archibald Stewart, contract dated 24th September, 1892. The works embraced in this contract are the construction of four lift locks, four regulating weirs, retaining walls, &c., together with the piers at the Cascades entrance, and a large amount of rock and earth excavation. Operations were begun shortly after the work was awarded and some earthwork has been done. Preparations are being made to push the whole work energetically next season.

In the general danger of this canal, the spoiling of materials close to the prism in high and unsightly heaps has been avoided for obvious reasons. For the purpose of wasting, additional land has been purchased towards the western end where the prism is in heavy excavation. Along the eastern half of the summit level where the banks are high, it is intended to first carefully form the water-tight portions on each side of the canal, and subsequently use these as a level trackway upon which a portion of the surplus material to the west can be hauled forward by locomotives and cars, and deposited by tipping outside the banks already made so as to widen and strengthen them as far as possible where under the water level of Lake St. Francis, thus lessening the risk of accident; and also partly avoiding the necessity of purchasing an extra area of land off the line of the canal.

It may also be said that in order to reduce the damages consequent upon cutting across the farms, a macadamized road for public travel will be constructed on the north side of the canal between its terminal points, to which free access will be given. It is believed that this will greatly benefit the adjacent proprietors and form an excellent means of communication entirely separate from the towing paths.

Nearly all the land-owners between the River Delisle and the head of the canal have been settled with; and the valuator is now engaged in arranging for the areas expropriated in the vicinity of Cascades Point.

I am sir,

Your obedient servant,

THOMAS MONRO,

*M. Inst. C.E., Engineer Soulanges Canal.*

T. TRUDEAU, Esq.,

Deputy Minister and Chief Engineer of Canals,  
Ottawa.

## APPENDIX No. 9.

## WELLAND CANAL.

ST. CATHARINES, 23rd November, 1892.

SIR,—I have the honour to report upon the Welland Canal and its branches, for the fiscal year ending the 30th June, 1892.

Commencing at Port Dalhousie, the first important item of repair was at the stone wall separating the new and the old canals, where the water had found its way under the wall in many places, the soft material between the piles on which the wall was built having been partly washed away.

From the caisson which closes the passage between the new and the old canals, to the south end of the wall, the repair was effected by driving a row of tongued and grooved hard wood sheet piles, outside the footing-course on the new canal side of the wall, and filling in with concrete the washed out spaces between the sheet piling, and the piles supporting the wall.

The result has so far been satisfactory.

At locks No. 10 and 11, the lower wing walls on the west side of the canal, which at their outer ends rested on a clay slope of 2 to 1 had gradually settled down and moved forward, until their removal and rebuilding became necessary.

This work was accomplished in the months of March and April last, when the levels were unwatered at the locks mentioned.

Before rebuilding the wing walls, sheet piling was driven at the toe of the walls where considered necessary, on both sides of the canal, and was strengthened by timbers laid across the canal from side to side, below the level of the bottom, and bolted to piles driven for the purpose at intervals.

The walls were then rebuilt on the original lines.

In the "Deep Cut" between Allanburgh and Port Robinson, the very desirable work of sodding the long flat slopes was completed, the surface sodded amounting to 299,238 square yards.

The endless repairs of lock gates, bridges, and weirs, embankments and ditches, have been attended to, and though small individually, represent a large sum in materials and labour.

On the old canal, lock gates were rebuilt where necessary, additional valves were put in some of the weirs to admit of a more complete control of the water than hitherto, and between Thorold and Allanburgh, the "Higgins Culvert" under the canal was renewed.

On the line of the Feeder, the usual repairs to embankments were substantially made in places, with stone from the canal spoil banks near Humberston.

Between Stromness and Dunville, at the crossing of the Inman Line, a float bridge for teams was constructed, which has answered a good purpose, and at Dunnville, the approach to the fish pass in the Dunnville dam received attention, and is now in good order.

No interruption of traffic worthy of notice occurred during the year, which may be attributed to a closer observance of canal rules in the matter of getting out lines, when vessels are entering locks.

The low water of the previous year continued until about the opening of navigation in 1892, when 14 feet of water upon the mitre sills of the new lock at Port Colborne was again reached, and that depth was maintained throughout the canal for the remainder of the fiscal year.

In connection with return to the normal level of the water in Lake Erie, it may not be out of place to call attention to the fact that the Old Canal above lock No 3, is now seldom used for the passage of vessels and consequently affords better facilities than ever for utilizing the surplus water for power.

## Department of Railways and Canals.

This in connection with thoroughly tested appliances for conveying power by electricity, to more desirable locations than the immediate neighbourhood of the power sometimes affords, suggests the possibility of making the old canal a source of revenue to the Government while promoting manufacturing industries in a locality which possesses rare facilities for manufacturing and distributing a variety of supplies.

The canal was closed 17th December, 1891, and was opened for navigation 19th April, 1892.

Attached will be found a statement of the monthly highest and lowest water on the mitre sills of locks Nos. 1 and 27, at Port Dalhousie and Port Colborne respectively, during the fiscal year ending 30th June, 1892.

I have the honour to be, sir,

Your obedient servant,

W. G. THOMPSON,

*Superintending Engineer.*

T. TRUDEAU, Esq.,  
Acting Secretary, Dept. Railways and Canals,  
Ottawa.

" A. "

### STATEMENT of Fines and Damages collected from Vessels and Steamers, during the Fiscal Year ending 30th June, 1892.

Date.	Name of Vessel and Steamer.	Amount of Damages.
		\$ cts.
1891.		
November 11....	Barge "Gaskin" .....	21 95
	Steamer "Lakeside" .....	78 36
	do "Celtic" .....	19 94
December 11....	do "Ohio" .....	58 59
1892.		
January 15....	Steamer "Pentagont" .....	242 54
June 9.....	do "Josephine" .....	75 00
do .....	Schooner "Ogarita" .....	20 00
do .....	Steamer "Pueblo" .....	15 50
	do "Rosedale" .....	10 00
June 20.....	do "Northerner" .....	35 82
Total.....		574 70

Deposited with H. H. Collier, Collector, St. Catharines.....	\$338.88
do W. B. Clarke, Port Dalhousie.....	35.82
	\$574.70

## "B."

STATEMENT showing the Highest and Lowest Water on the Mitre Sill of New Lock No. 1, at Port Dalhousie, Welland Canal, for the Fiscal Year ending 30th June, 1892.

Months.	Upper Sill.		Months.	Upper Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1891.	ft. in.	ft. in.	1892.	ft. in.	ft. in.
July .....	16 8	16 4	January .....	14 8	14 2
August .....	16 4	15 10	February .....	14 8	14 3
September .....	16 0	15 3	March .....	14 8	14 2
October .....	15 5	14 6	April .....	15 2	14 7
November .....	14 7	13 11	May .....	15 5	14 10
December .....	16 2	13 9	June .....	15 11	15 5

## "C."

STATEMENT showing the Highest and Lowest Water on the Lower Mitre Sill of New Lock No. 27, at Port Colborne, Welland Canal, for the Fiscal Year ending 30th June, 1892.

Months.	Lower Sill.		Months.	Lower Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1891.	ft. in.	ft. in.	1892.	ft. in.	ft. in.
July .....	17 1	14 4	January .....	14 10	13 2
August .....	15 5	14 2	February .....	14 4	12 3
September .....	15 5	13 9	March .....	14 8	12 5
October .....	14 7	12 10	April .....	14 8	13 5
November .....	15 11	13 4	May .....	15 9	14 0
December .....	16 1	12 10	June .....	16 3	14 3

Department of Railways and Canals.

APPENDIX No. 10.

RIDEAU CANAL OFFICE,

OTTAWA, 29th October, 1892.

SIR,—I have the honour to submit the annual report of the works under my charge for the fiscal year ended 30th June, 1892.

Navigation closed at Ottawa, 28th November, 1891.  
do do Kingston Mills do 1891.  
do opened at Ottawa, 2nd May, 1892.  
do do Kingston Mills, 1st May, 1892.

On both the ascending and descending reaches from the summit (Little Rideau Lake) the water in the several levels was maintained to give the required depth of water on the lock sills throughout the season of navigation.

The freshets at the commencement of the season were unprecedentedly high, but passed off without material damage to the works.

Navigation has been uninterrupted during the whole season.

The principal repairs along the canal were as follows:—

*Kingston Mills.*

One hundred cubic yards of stone and gravel placed on embankment; one pair of lock gates renewed; four chain blocks, and other repairs to station.

*Davis' Lock.*

One pair of lock gates renewed; one pair of swing beams, and storage dam at Hart Lake repaired.

*Chaffey's.*

Bulkhead renewed, and masonry of wing walls repaired.

*Narrows.*

One pair of lock gates renewed; six new chain blocks.

*Poonamalie.*

Bulkhead renewed, and two new piers built on each side of same. Flange frames renewed, and sundry small repairs.

*Smith's Falls.*

Bulkhead renewed, and sundry repairs to lock.

*Maitland's.*

Bulkhead renewed, and the discharge increased by two more openings; upper lock gates repaired.

*Long Island.*

One pair of new lock-gates; six new chain blocks, and sundry repairs to station.

*Black Rapids.*

One pair of lock-gates renewed, and sundry small repairs to station.

*Hartwell's.*

One pair of lock-gates renewed; repairs to waste-weir; two new sluice frames; four chain blocks, cut between Hartwell's and Hogsback, cleared of loose stone and boulders; also "Mutchmor's Cut," between Hartwell's and Bank Street, cleaned out.

*Ottawa.*

Lower lock-gates renewed; new storehouse built to replace the one destroyed by fire; lower lock cleaned out by diver; two stone piers rebuilt between locks Nos. 8 and 9; lock gates painted, and general repairs to station; lock-house and men's quarters fitted up with incandescent electric lights.

## WORKS FOR WHICH SPECIAL APPROPRIATIONS WERE VOTED BY PARLIAMENT.

*Ottawa.*

The west side of the basin was excavated to give an uniform depth of not less than 6 feet, to correspond with the excavation on the east side of the basin which was done the previous winter.

The old slip was cleaned out and cribbed round the sides, a stop log entrance being prepared, so as to enable it to be used as a dry dock if necessary. Safety chains were placed round the basin and the rock cut leading to the eight locks, and were the means of saving life.

*Hogsback.*

A contract was entered into with Mr. F. Toms, of Ottawa, to excavate a channel through the rock on the east side of the old bulkhead, and a new bulkhead built containing seven openings of 20 feet wide and 6 feet deep, and one centre opening 21 feet wide and 17 feet deep.

This gives a discharge area of nearly 1,200 square feet if necessary, during spring freshets, or about three times the former discharge area. The material excavated out of the rock cutting was placed at the back of the clay dam in order to strengthen it.

It is to be hoped that these improvements will effectually allay the anxiety usually felt every spring by persons residing below the dam of the possibility of its being carried away.

The only damage that can be done now is by ice.

On the 2nd April last the river rose very rapidly, some six feet in a few hours, compelling the contractor to leave his work unfinished, there being some 100 feet of excavation above the new bulkhead yet to do to complete his contract. This will be done at the close of navigation.

*Merrickville.*

This work was let by contract to Mr. O'Toole of Ottawa, and consisted of building a new approach to the locks, and changing the site of the swing bridge, in order to avoid the detention to travel caused by the swinging of the bridge when boats were locking through, also the building of the masonry abutments, centre pier, &c., of the new swing bridge, and the masonry abutments of the new fixed bridge across the waste water channel, retaining walls, &c., &c.

The new swing and fixed bridges will be of steel, and are contracted for with the Canadian Bridge and Iron Co. of Montreal.

*Perth Branch.*

The extension of the canal was completed and the new swing bridge over the canal at Gore Street finished and is in working order.

*The dredge "Rideau"*

Was employed during the season, in deepening and straightening the channel through the shoals in the canal between Black Rapids and Burritts Rapids.



## Department of Railways and Canals.

### *The tug "Shanly,"*

When not employed with the dredge, was engaged in delivering timber to the different lock stations.

### *Plant.*

Two new side dumping scows and one flat scow were built during the winter by Mr. Waters of Hull, by contract. This gives the canal, now, a plant consisting of a dredge, tug, four dumping and two flat scows.

I have the honour to be, sir,

Your obedient servant,

FRED. A. WISE,

*Superintending Engineer,*

T. TRUDEAU, Esq.,  
Acting Secretary, Dept. Railways and Canals.

## APPENDIX No. II.

## TRENT VALLEY CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

PETERBOROUGH, 30th November, 1892.

SIR,—I have the honour to submit the annual report on the works under my charge in connection with the Department of Railways and Canals, for the fiscal year ended 30th June, 1892.

The works in the district under my supervision are constructed for two purposes, namely, those erected for the benefit of navigation such as locks, dams, &c., and those erected to facilitate the descent of timber such as slides, booms, &c. The former are under the control of the Department of Railways and Canals, the latter under the Department of Public Works.

The works are situated along the River Trent between the Bay of Quinté and Balsam Lake—a distance of about 170 miles.

Owing to the immense country drained, and the country becoming cleared, and the lumbermen's dams (which formerly checked the flow) becoming abandoned, there is a liability, till some provision is made to counteract it, of the heavy spring freshets damaging the several structures along the route. Last spring the water was only an average height. Towards the end of last season, owing to the very dry weather and the water not being properly husbanded in the upper reservoirs (over which I have no control), the water fell much below the normal level, in fact much lower than it has been known before. The proper storage of the water in the upper reservoirs is every year becoming a more serious question to those interested in navigation and water power. As has been referred to in former reports some action will soon have to be taken to husband the water, now that so many of the lumbermen have ceased their operations in the north country, otherwise there is a liability of there being a scarcity of water any season, as was the case last year. The traffic on these waters keeps increasing. There are now twenty-five steamers on the stretch between Lakefield, Balsam Lake and Port Perry (102 miles), and six steamers on the stretch between Peterborough and Heely's Falls (55 miles).

The total number of lockages was 2,883, being an increase of 267 over last year.

The following is a brief description of the work done at the several stations during the past year.

Navigation closed 20th November, 1891, and opened 21st April, 1892.

*Fenelon Falls.*

The dam (340 feet in length) at this station, having been assumed as per agreement with the Smith estate, was repaired. It was almost wholly rebuilt, as it was found upon opening up, after the water was drawn off, that it was in a much worse condition than was anticipated. Two new sluice-ways were constructed on the north side to regulate the water passing into the flumes of the mills on that side of the river. A coffer dam, 600 feet in length, was constructed above to shut off the water, so that there was every facility for making a substantial work, which was done.

*Bobcaygeon.*

One new pair of lock gates were constructed and put in the lower entrance. A new steel swing bridge (deck) built by the Central Bridge Works, Peterborough, was substituted for the old wooden one. The pivot pier and the abutment on the west side were taken down and rebuilt in a substantial manner. The north end of

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the east abutment was also rebuilt. Part of the old dam which obstructed the entrance to the dry dock was removed. The lock walls were pointed and the mitre sills, which leaked badly underneath, were caulked.

### *Buckhorn.*

Some minor repairs were done to the dam, sluices and stop-logs.

### *Peterborough.*

The piers of the west sluice of the dam became undermined, and a part of the stone filling went out. These were repaired as was also the flooring, part of which was taken out.

### *Hastings.*

The backing of the lock wall on the south side was taken down and rebuilt. The lock gates and lock office were given a coat of paint. The valves of the lower gates were repaired.

### *Heely's Falls.*

The dam was strengthened in order to make it stand the spring freshet, and till the more extensive repairs (for which the appropriation has been made) were done.

New lock offices were built at Fenelon Falls, Buckhorn, Burleigh and Peterborough. A number of buoys were placed along the navigation channel at dangerous points.

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

**RICHARD B. ROGERS,**

*Superintending Engineer.*

**T. TRUDEAU, Esq.,**  
Acting Secretary, Dept. Railways and Canals,  
Ottawa.

## APPENDIX No. 12.

## SAULT STE. MARIE CANAL.

OTTAWA, 6th December, 1892.

SIR,—I have the honour to report upon the progress of construction of the Sault Ste. Marie Canal, during the fiscal year ending 30th June, 1892, and to date.

## SECTION No. 1.

This section commences at the navigable channel of the St. Mary's River, opposite the town of Sault Ste. Marie, and extends up the stream a distance of 5,300 feet, to the foot of St. Mary's Island.

The work which is under contract to Messrs. Hugh Ryan & Co., embraces the excavation of a channel 250 feet in width at the bottom, which is to be 18 feet 6 inches below the level of the lowest recorded water surface in St. Mary's River, at the foot of the rapids; also the construction of cribwork piers on each side of the channel, at the upper end of the section which adjoins the lock.

The contract originally provided for the construction of a timber beacon in 18 feet of water, but it was considered more desirable in the interests of navigation, to dispense with the beacon, and apply the sum which it would have cost to increasing the length of the north pier, and that has been done.

The item for excavation and dredging embraces all kinds of material to be removed, and has been found to range from sand, gravel and other easily excavated substances, to Potsdam sandstone, requiring drilling and blasting before it can be dredged.

The following quantities represent the work done to 30th June, 1892 :—

Excavation, dredging and deepening channel, cubic yards....	122,110
Timber in sides and ends of cribs, lineal feet.....	28,961
Timber for ties, stringers and bottoms, lineal feet.....	28,680
Binding pieces, lineal feet .....	1,902
Blocks under heads of ties, No .....	1,266
Wrought iron in bolts, lbs.....	17,024
Pine in superstructure, cubic feet.....	5,161
Ties in superstructure, lineal feet.....	7,588
Blocks in superstructure, each.....	604
Stringers for top covering, lineal feet.....	1,940
3-inch pine plank for ditto, ft. B. M.....	28,224
Cap pieces 10 x 6, lineal feet.....	1,181
Mooring posts, No .....	8
Stone filling, cubic yards.....	7,134
Pressed spikes for top covering, lbs.....	1,507

*Materials Delivered.*

Iron bolts for cribwork, lbs.....	13,376
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Since the close of the fiscal year, here referred to, the contractors have completed the pier work as far as circumstances will at present admit of its being built, and the drilling, blasting and dredging has also been advanced to nearly the same stage.

At this date the work remaining to be done (excepting some cleaning up) lies at the extreme upper end of the section, in a distance of 600 feet, which is partly required for service ground in the construction of the lock on the adjoining section, and also forms the dam which excludes the river from the lock pit.

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It is in contemplation to so reduce the remaining quantity of work on this section by the date of the completion of the lock on the adjoining section, that a safe channel for vessels can speedily be cut through the dam, and the excavation and cribwork completed without delaying the opening of the canal.

The following quantities represent the amount of work done at date of 30th November, 1892:—

Excavation, dredging and deepening channel, cubic yds..	128,109
Timber in sides and ends of cribs, lineal feet.....	50,197
Timber for ties, stringers and bottoms do .....	49,600
Binding pieces, lineal feet.....	3,834
Blocks under heads of ties, No.....	2,274
Wrought iron in bolts, lbs.....	33,919
Pine in superstructure, cubic feet.....	10,319
Ties do lineal do .....	14,654
Blocks do No.....	1,135
Stringers for top covering, lineal feet.....	3,900
3-inch pine plank for, lineal feet B. M.....	55,222
Cap pieces, 10x6 feet, lineal feet.....	2,319
Mooring posts, No.....	16
Stone filling, cubic yards. ....	13,077
Pressed spikes for top covering, lbs.....	2,361

### SECTION NO. 2.

This section commences at the foot of St. Mary's Island, and extends westward 3,500 feet to the head of the Island.

It is also under contract to Messrs. Hugh Ryan & Co., and embraces the excavation for the lock pit and prism of the canal, the masonry for the lock, also for a guard gate above the lock, and the construction of side walls, puddle trenches, &c.

The dimensions of the lock-chamber were originally intended to be 600 feet in length between the hollow quoins, 85 feet in extreme width, and a depth of  $6\frac{1}{2}$  feet of water upon the mitre sills, at the lowest recorded water surface at the foot of the rapids; the upper gates to mitre above a breast wall, and the lock to be filled and emptied by means of culverts below the lock floor.

By an indenture bearing date of 13th June, 1891, the dimensions of the lock were enlarged to a chamber 650 feet in length between the hollow quoins, 100 feet in width, with gate openings of 60 feet, and 19 feet of water upon the mitre sills at the lowest recorded stage of water in the river at the foot of the rapids.

This design was worked to, until the spring of 1892, when, in consequence of a discussion in Parliament, during the session of 1891-92, the dimensions of the lock were, under the authority of an Order-in-Council dated 1st April, 1892, still further enlarged.

The lock as now being constructed, is 900 feet in length of chamber, from hollow quoin to hollow quoin, 60 feet in width of entrances and chamber throughout, and with 19 feet of water upon the mitre sills as before, the 19 feet which is from extreme low water, being equivalent to 20 feet so called, on the mitre sill of the new American lock at Sault Ste. Marie, which is taken from mean low water.

In consideration of the additional work involved in the changes last mentioned the time for the completion of the work under contract to Messrs. Hugh Ryan & Co. was further extended to 31st December, 1894.

And here it is proper to state that the filling culverts in the bottom of the lock, the gates, valves and operating machinery, were not included in Messrs. Hugh Ryan & Co's. contract, and was of necessity to be built, and placed, after the completion of their contract.

As regards the progress of the work at the close of the fiscal year ending 30th June, 1892, the excavation of the lock pit for the 900 feet lock, was near completion, and the delivery and preparation of materials for the lock, had progressed fairly as will be seen from the following statement of work done:—

*Quantities.*

1	Chopping, clearing and grubbing, acres.....	30
2	Earth excavation in side trenches, cubic yards.....	2,507
3	Rock do do do .....	74
4	Unwatering do do bulk sum.....	0.04
10	Earth excavation in prism of canal, cubic yards.....	57,600
11	Rock do do do .....	53,262
12	Unwatering do do bulk sum.....	0.35
17	Earth excavation in lock pit, cubic yards.....	37,081
17a	Additional earth excavation for lock chamber 100 feet wide, cubic yards. ....	2,934
17b	Additional earth excavation for lock chamber 60 feet wide, cubic yards.....	425
18	Rock excavation in lock pit, cubic yards.....	80,586
18a	Additional rock excavation from side of lock pit, c. yds.	8,385
18b	do do bottom do do ...	13,691
18c	do do culverts pits, cubic yards.....	12,443
18d	do do lengthening lock pit, cubic yds.	20,128
18e	do do lengthening culverts pits, c. yds.	4,434
19	Unwatering lock pit, bulk sum.....	0.54
19a	Additional unwatering, bulk sum .....	0.58
19b	do for lengthened lock, bulk sum.....	0.20

*Materials delivered.*

Stone from Anderdon quarry (dressed) cubic yards.....	628
do do (rough) do .....	1,334
Rough Anderdon stone dressed at Sault Ste. Marie, cub. yds.	4,590
Stone from Manitoulin quarry (rough), cubic yards.....	7,752
Sand delivered cubic yards.....	3,771
Cement delivered, barrels.....	5,300
Pine timber delivered for mitre sill platform, culverts, c. ft.	7,146
Plank delivered for mitre sill platform, culverts, M. ft. B. M..	85,599
Oak timber delivered for mitre sill platform, culverts, c. ft.	2,007

Since the close of the past fiscal year, the lock pit excavation has been completed, the necessary concreting in the lock bottom has also been done, and the work of building the lock walls was commenced on the 15th September last.

On the 12th November the severity of the weather made it desirable to discontinue building. The quantity of masonry laid at date of 30th November, 1892, being 7,707 cubic yards, or about  $\frac{1}{3}$  of the quantity of masonry in the lock.

During the past summer the friction in trade relations between Canada and the United States produced a widespread feeling in favour of completing the Sault Ste. Marie Canal at the earliest date possible, and to meet the general wish, arrangements were made with Messrs. Hugh Ryan & Co., who, by the use of additional plant, have undertaken to complete the work under contract to them in time to admit of the canal as a whole being completed by the 30th June, 1894.

The following statement represents the quantity of work done and materials delivered at date of 30th November, 1892:—

1	Chopping, clearing and grubbing, acres.....	30
2	Earth excavation in side trenches, cubic yards.....	2,507
3	Rock do do do .....	74
4	Unwatering, bulk sum.....	0.04
10	Earth excavation in prism of canal, cubic yards.....	58,728
11	Rock do do do .....	53,262
11a	Additional rock excavation, lowering prism, c. yards.	4,757
12	Unwatering prism of canal, bulk sum.....	0.35
12a	do do and contingencies, bulk sum.....	0.10
17	Earth excavation in lock pit, cubic yards.....	37,081

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17a	Additional earth excavation for lock chamber 100 feet wide, cubic yards.....	2,946
17b	Additional earth excavation for lock chamber 60 feet wide, cubic yards.....	425
18	Rock excavation in lock pit, cubic yards .....	80,586
18a	Additional excavation from side of lock pit, cubic yards .....	8,705
18b	Additional excavation from bottom, cubic yards .....	14,622
18c	do do culvert pits, cubic yards.	12,443
18d	do do lengthening lock pit, cub. yards .....	24,270
18e	Additional excavation from lengthening culvert pits, cubic yards.....	8,216
19	Unwatering lock pit, bulk sum.....	0.54
19a	Additional unwatering, bulk sum.....	0.60
19b	do do for lengthened lock, bulk sum.	0.62
20	Concrete of Portland cement in bottom of lock, c. yds.	3,768
20a	Additional concrete do do do ...	5,176
24	Drilling holes in rock for anchor bolts, lineal feet... ..	779
36	Masonry of lock walls, cubic yards .....	7,707
36a	Conditional consideration for expediting completion, bulk sum.....	0.03

### *Materials Delivered.*

Stone from Anderdon quarry (dressed), cubic yards.....		628
do do (rough) do .....		1,444
Rough Anderdon stone, dressed at Sault Ste. Marie, cubic yards.....		8,044
Stone from Manitoulin quarry (rough), cubic yards.....		11,040
Sand, cubic yards.....		2,988
Portland cement, barrels.....		6,083
Canadian natural cement, barrels.....		3,417
Iron for anchor bolts, &c., for culverts, lbs.....		113,960
Pine for mitre sill, platform and culverts, cubic feet.....		11,291
Plank do do do B. M.		109,619
Oak timber do do do .....		2,387

### SECTION No. 3.

This section extends westward from the head of St. Mary's Island, 9,300 feet, through shoals, until the navigation channel of the river above the rapids is again reached, at an elevation of 18 feet above the lower entrance to the lock.

The section is under contract to Messrs. Allan & Fleming, and embraces the excavation of the channel which is 250 feet in width, at the level of 18 feet below the lowest recorded surface of the river above the rapids. The construction of a beacon, and the construction of entrance piers.

The following quantities represent the work done at the date of 30th June last, when the beacon was completed:—

27	Excavation, dredging and deepening channel, &c., cub. yards .....	214,939
28	Timber for sides and ends of cribs, lineal feet.....	34,489
29	do ties, stringers and bottoms do .....	31,805
30	Binding pieces, lineal feet.....	2,292
31	Blocks under heads of ties, No.....	1,738
32	Wrought iron in bolts, lbs.....	16,548
33	Pine in superstructure, 12" × 12", cubic feet.....	1,141
35	Blocks under heads of ties in superstructure, No.....	31
41	Stone filling, cubic yds. ....	5,996
43	Rock elm in sides of beacon, cubic feet.....	6,959
44	Cross ties in beacon, lineal feet... ..	10,835

45	Blocks under heads of ties, No.....	426
46	Pine plank in binders for beacon, lineal feet.....	640
46½	One-half stone filling, cubic yds.....	2,055
47	Sheeting, 5 inches thick, ft. B. M.....	16,972
48	Top covering, 3-inch pine plank, ft. B. M.....	6,799
49	Wrought iron in bolts, lbs.....	15,650
50	do straps, lbs.....	5,984
51	Pressed spike.....	269
52	Framed structure.....	all bulk sum

*Materials Delivered.*

Rock elm beacon timber, lineal feet.....	2,500
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Since 30th June, the entrance piers at the east or lower end of the section, adjoining St. Mary's Island, have been completed as far as possible, the obstacle to their entire completion as originally designed, being the necessity for leaving a portion of the prism of the canal undisturbed, to serve as a dam, until the lock section is finished.

With the exception of the material forming the dam, and some cleaning up, the dredging on this section which is of the same character as that on section No. 1, will be completed in a few days, if severe frost does not close the river.

The following quantities represent the work done to 30th November, 1892:—

37	Excavating, dredging and deepening channel, &c., c. yds.....	228,228
28	Timber for sides and ends of cribs, lineal feet.....	38,313
29	Timber ties, stringers and bottom do.....	36,862
30	Binding pieces, lineal feet.....	3,574
31	Blocks under heads of ties, No.....	1,968
32	Wrought iron for bolts, lbs.....	26,254
33	Pine in superstructure, 12"×12", cubic feet.....	9,755
34	Pine for ties, superstructure, 10"×11", lineal feet.....	12,448
35	Blocks under head of ties in superstructure, No.....	1,012
36	Stringers for top covering, 7"×10", lineal feet.....	2,575
37	3" pine plank for top covering of piers, B. M.....	29,950
39	Cap pieces, 10"×6", lineal feet.....	609
40	Mooring posts, No.....	5
41	Stone filling, cubic yards.....	10,025
42	Pressed spike to secure top covering, lbs.....	758
43	Rock elm in sides of beacon, cubic feet.....	6,959
44	Cross ties in beacon, lineal feet.....	10,835
45	Blocks under heads of ties, No.....	426
46	Pine plank in binders, lineal feet.....	640
46½	Stone filling, cubic yds.....	2,055
47	Sheeting, 5" thick, ft. B. M.....	16,972
48	Top covering 3" pine plank, ft. B. M.....	6,799
49	Wrought iron in bolts, lbs.....	15,650
50	do straps, lbs.....	5,984
51	Pressed spike, lbs.....	269
52	Framed structure.....	all bulk sum.

*Material delivered.*

Rock elm beacon timber, lineal feet.....	2,500
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I have the honour to be, sir,

Your obedient servant,

W. G. THOMPSON,

*Superintending Engineer.*



Department of Railways and Canals.

APPENDIX No. 13.

ST. PETER'S CANAL.

ENGINEER'S OFFICE,

ST. PETER'S, 10th October, 1892.

SIR,—I have the honour to submit the following with reference to the St. Peter's Canal.

The work of reconstruction and repairing, which (owing to the inclemency of the weather) was closed down last December, was resumed again in April and has been vigorously prosecuted ever since. The removal of the old retaining wall, as well as the clay back of it, will be practically completed this month. A gang of men is now employed renewing and repairing the front tow-path wall, which could not be got at until the back retaining wall was removed. The west abutment of the swing bridge crossing the canal, which (owing to a defective foundation) has been gradually sliding towards the bridge, was pulled down and rebuilt, with an additional depth of 3 feet to the foundation, and it is now believed to be perfectly secure.

The swing bridge has been carefully overhauled, and all necessary repairs (including painting) made to it.

The warehouse, which was in a very dilapidated condition, was raised  $2\frac{1}{2}$  feet and thoroughly repaired, and a good stone foundation put to it.

Owing to the new slope back of the retaining wall having cut into the old road that ran along the top of the old slope, it became necessary to rebuild a part of this road further back from the edge, and as the Government had not sufficient land to admit of this being done, I acquired by instructions from the department the necessary quantity; a good road was built, and the old fence, which was badly in need of repairs, was torn down and a good substantial wire fence with cedar posts was substituted to include the new piece of land acquired.

The lock house was repainted inside and out, and some minor repairs made to it.

The contractor for the new wharf at the southern entrance to this canal completed his work to my satisfaction, and the wharf which was much needed is now being extensively used.

The under-water portion of the canal, which I had carefully examined by an experienced diver, was found to be badly worm-eaten, and it will be necessary in the near future to have the lock pumped out, and the flooring, mitre sills, gates, &c., repaired. I shall, however, report fully in detail on this matter later on, giving the necessary estimate of the cost of making the repairs, &c.

Navigation through this canal only closed on the 20th of January, and opened again on the 1st of April last.

I have the honour to be, sir,

Your obedient servant,

WM. McCARTHY,

*Resident Engineer.*

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

## APPENDIX No. 14.

## ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES—A.

FROM STRAITS OF BELLE-ISLE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR, BY WATER.

From.	To	Sections of Navigation.	Statute Miles.	
			Inter-mediate.	Total to Straits of Belle-Isle.
Straits of Belle-Isle	Cap Whittle	Gulf of St. Lawrence	240	240
Cape Whittle	West Point, Anticosti	do	201	441
West Point, Anticosti	Father Point	River St. Lawrence	202	643
Father Point	Rimouski	do	6	649
Rimouski	Bic	do	12	661
Bic	Isle Verte	do	39	700
Isle Verte (opp. Saguenay)	Quebec	do	126	826
Quebec	Three Rivers	do to Tide-water	74	900
Three Rivers	Montreal	do	86	986
Montreal	Lachine	Lachine Canal	8 $\frac{1}{2}$	994 $\frac{1}{2}$
Lachine	Beauharnois	Lake St. Louis	15 $\frac{1}{2}$	1,009 $\frac{1}{2}$
Beauharnois	Ste. Cécile	Beauharnois Canal	11 $\frac{1}{2}$	1,021
Ste. Cécile	Cornwall	Lake St. Louis	32 $\frac{1}{2}$	1,053 $\frac{1}{2}$
Cornwall	Dickinson's Landing	Cornwall Canal	11 $\frac{1}{2}$	1,065 $\frac{1}{2}$
Dickinson's Landing	Farran's Point	River St. Lawrence	5	1,070 $\frac{1}{2}$
Farran's Point	Upper end of Croyle's Island	Farran's Point	$\frac{1}{2}$	1,071
Upper end Croyle's Island	Williamsburg or Morrisburg	River St. Lawrence	10 $\frac{1}{2}$	1,081 $\frac{1}{2}$
Williamsburg	Rapide Plat	Rapide Plat Canal	4	1,085 $\frac{1}{2}$
Rapide Plat	Point Iroquois Village	River St. Lawrence	4 $\frac{1}{2}$	1,090
Point Iroquois Village	Upper end Presqu'Isle	Point Iroquois Canal	3	1,093
Presqu'Isle	Point Cardinal, Edwardsburg	Junction Canal	2 $\frac{1}{2}$	1,095 $\frac{1}{2}$
Point Cardinal	Head of Galops Rapids	Galops Canal	2	1,097 $\frac{1}{2}$
Galops Rapids	Prescott	River St. Lawrence	7 $\frac{1}{2}$	1,105
Prescott	Kingston	do	59	1,164
Kingston	Port Dalhousie	Lake Ontario	170	1,334
Port Dalhousie	Port Colborne	Welland Canal	26 $\frac{1}{2}$	1,360 $\frac{1}{2}$
Port Colborne	Amherstburg	Lake Erie	232	1,592 $\frac{1}{2}$
Amherstburg	Windsor	River Detroit	18	1,610 $\frac{1}{2}$
Windsor	Foot of St. Mary's Island	Lake St. Clair	25	1,635 $\frac{1}{2}$
Foot of St. Mary's Island	Sarnia	River St. Clair	33	1,668 $\frac{1}{2}$
Sarnia	Foot of St. Joseph's Island	Lake Huron	270	1,938 $\frac{1}{2}$
Foot of St. Joseph's Island	Foot of Sault Ste. Marie	River St. Mary	47	1,985 $\frac{1}{2}$
Sault Ste. Marie	Head of Sault Ste. Marie	Sault Ste. Marie Canal	1	1,986 $\frac{1}{2}$
Head of Sault Ste. Marie	Pointe aux Pins	River St. Mary	7	1,993 $\frac{1}{2}$
Pointe aux Pins	Port Arthur	Lake Superior	266	2,259 $\frac{1}{2}$
Port Arthur to Lake Shebandowan			45	
Lake Shebandowan to North-West Angle			312	
North-West Angle to Winnipeg			95	
Pointe aux Pins to Duluth			390	

Of the 2,259 $\frac{1}{2}$  miles from the Straits of Belle-Isle to the head of Lake Superior, 71 miles are artificial navigation, and 2,188 $\frac{1}{2}$  open navigation.

Straits of Belle-Isle to Liverpool, 1,942 geographical or 2,234 statute miles.

The total fall from Lake Superior to Tide-water is about 600 feet.

The steam-boat voyage from Collingwood to Port Arthur is 532 miles.

# Department of Railways and Canals.

## APPENDIX No. 15.

TABLE of distances of Stations between the Cities of Ottawa and Kingston.

No. of Stations.	Name of Station.	Distances from Ottawa.	Locks.			Dams.			Length of Artificial Canal at each Station in miles.		
			No.	Lift at Low Water.		No.	Length.	Height.			
				Rise.	Ft. in.					Feet.	Feet.
		Miles.									
1	Ottawa .....	0	8	82	0	3	{	230 1,320 1,616	{	13 33 14	4 00
2	Hartwell's .....	4 $\frac{1}{2}$	2	22	0	1	100	320	28	0 13 0 13 1 50 0 50 0 05 0 33 0 13 0 06 0 25 0 13 1 25 0 06	
3	Hogsback .....	5 $\frac{1}{2}$	2	13	6	1	300	850	68		
4	Black Rapids .....	9 $\frac{1}{2}$	1	10	0	1	300	240	14		
5	Long Island .....	14 $\frac{1}{2}$	3	27	0	3	850	500	9		
6	Burritt's .....	40 $\frac{1}{2}$	1	10	6	1	240	481	16		
7	Nicholson's .....	43 $\frac{1}{2}$	1	15	2	1	500	150	6		
8	Clowes .....	44 $\frac{1}{2}$	1	10	0	1	481	270	8		
9	Merrickville .....	46 $\frac{1}{2}$	3	25	0	1	150	250	20		
10	Maitland .....	55	1	4	9	1	270	250	20		
11	Edmunds .....	59 $\frac{1}{2}$	1	10	10	1	943	600	24		
12	Old Sly's .....	60 $\frac{1}{2}$	2	15	6	1	250	260	5		
13	Smith's Falls .....	61 $\frac{1}{2}$	4	33	9	2	600	600	9		
14	First Rapids or Poonamalie .....	64	1	7	9	1	260	600	9		
15	Narrow .....	83 $\frac{1}{2}$	1	4	0	1	600				
Total rise at low water .....					292	3					
					Fall.						
16	Isthmus .....	87 $\frac{1}{2}$	1	4	0					1 25	
17	Chaffey's .....	92	1	12	6					0 13	
18	Davis .....	94 $\frac{1}{2}$	1	9	0	1	300	15			
19	Jones' Falls .....	97 $\frac{1}{2}$	4	60	0	1	300	60			
20	Brewer's Upper Mills .....	108 $\frac{1}{2}$	2	19	0	1	200	20			
21	do Lower Mills .....	110	1	14	2	1	200	12			
22	Kingston Mills .....	120 $\frac{1}{2}$	4	46	8	1	6,042	14			
23	Kingston .....	126 $\frac{1}{2}$									
Total fall at low water .....					165	4					
Total .....			47			24	15,472			16 46	

## APPENDIX No. 16

TABLE showing the dates of the closing of the Canals in the Autumn of 1891 and of the opening in the Spring of 1892.

Canals.	Closing.	Opening.
Lachine Canal.....	30th November, 1891.....	1st May, 1892.
Beauharnois Canal.....	1st December, 1891.....	30th April, 1892.
Cornwall Canal.....	5th do 1891.....	1st May, 1892.
Ste. Anne's Lock and Dam.....	26th November, 1891.....	29th April, 1892.
Carillon Canal.....	28th do 1891.....	30th April, 1892.
Grenville Canal.....	28th do 1891.....	30th April, 1892.
Culbute Lock and Dam.....		
Rideau.....	{ Kingston Mills.....	30th November, 1891.....
	{ Ottawa.....	28th do 1891.....
St. Ours Lock.....	30th do 1891.....	11th April, 1892.
Chambly Canal.....	30th do 1891.....	2nd May, 1892.
Williamsburg Canal.....	12th December, 1891.....	25th April, 1892.
Welland Canal.....	17th November, 1891.....	19th April, 1892.
Erie Canal (New York).....	5th December, 1891.....	1st May, 1892.
St. Peter's Canal (Cape Breton).....	20th January, 1892.....	1st April, 1892.
Trent Canal Works.....	20th November, 1891.....	21st April, 1892.
Murray Canal.....	16th December, 1891.....	5th April, 1892.

# Department of Railways and Canals.

## APPENDIX No. 17

STATEMENT of Contracts entered into during the Fiscal Year ended 30th June, 1892.

### 1. SUBSIDIZED RAILWAYS.

No. of Contracts.	Name of Contract.	Date of Signature.	General Description.
10938	St. Stephen and Milltown Railway Co.	Not signed, 1891.	From St. Stephens to Milltown.
10990	Winnipeg and Hudson Bay Railway Co.	18th Sept., 1891.	From C. P. Ry., to Hudson Bay (subsidy in land).
11012	Montreal and Ottawa Railway Co.	Not signed, 1891.	From end of the 30th mile (subsidized by 50-51 Vic., c. 24, under contract 9660) 30 miles towards Ottawa.
11023	Témiscouata Railway Co.	20th Oct., 1891.	From west end of contract No. 9666 at Clair's siding to Connor's Station, St. Francis branch.
11071	Orford Mountain Railway Co.	16th Dec., 1891.	From Eastman to Kingsbury.
11237	do do	10th Sept., 1892.	From Lawrenceville to Kingsbury.
11274	Quebec and Lake St. John Railway Co.	17th Oct., 1892.	From 30th to 50th mile, Chicoutimi branch 20 miles and to complete first 30 miles, and 4 miles towards Roberval.
11294	Tobique Valley Railway Co.	27th Sept., 1892.	From end of the 14 miles already built near Trout Brook, for 14 miles to Plaister Rock Island.
11304	Woodstock and Centreville Railway Co.	16th Sept., 1892.	From Woodstock to Centreville, 20 miles; thence 6 miles to United States boundary.
11326	Thousand Islands Railway Co.	Not signed.	From Gananoque Junction, on company's line, to a point connecting with Brockville, Westport and Sault Ste. Marie Railway, the Kingston, Napanee and Western Railway, the Kingston, Smith's Falls and Ottawa Railway, or waters of Rideau Canal and an extension across mouth of Gananoque river.
11327	Ontario, Belmont and Northern Railway Co.	Not signed.	From Belmont iron mines to Junction, in Hastings, of Central Ontario Railway and Canadian Pacific Railway.
11328	Ottawa, Arnprior and Parry Sound Railway Co.	29th Sept., 1892.	From Renfrew to Eganville, 22 miles, Eganville to Barry's Bay, 30 miles.
11342	do do	Not signed.	From Barry's Bay towards the Northern Pacific Junction Railway.

### 2. CAPE BRETON RAILWAY.

10983	J. Harris & Co.	2nd Sept., 1891.	2 Russell snow-ploughs.
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### 3. OXFORD AND NEW GLASGOW RAILWAY.

10985	J. Harris & Co.	2nd Sept., 1891.	2 Russell snow-ploughs.
11054	J. K. McDonald.	5th Oct., 1891.	Construct a water supply at Pugwash Junction.

### 4. INTERCOLONIAL RAILWAY.

10961	Jas Brown	3rd Aug., 1891.	Passenger station and freight shed, Kent Junction.
10962	Corporation, town of Antigonish	4th do	Supply water for engines, &c., Antigonish.
10984	J. Harris & Co.	2nd Sept., 1891.	Two Russell snow-ploughs.
10986	A. J. Grant & Co.	14th July, 1891.	Passenger coach oil.
10987	Bushnell Co. (Limited).	14th do	Petroleum, dynamo oil and spindle oil.

APPENDIX No. 17.—Statement of Contracts entered into during the Fiscal Year ended 30th June, 1892—*Continued.*4. INTERCOLONIAL RAILWAY—*Continued.*

No. of Contract.	Name of Contractor.	Date of Signature.	General Description.
10988	M. Lodge	14th July, 1891.	Petroleum, passenger coach oil and engine oil.
10989	Rhodes, Curry & Co.	26th Aug., 1891.	Brick building at Moncton.
10996	Imperial Oil Co.	14th July, 1891.	Freight car axle oil.
10997	J. R. Hutchins.	14th do	Signal oil, cylinder oil and engine oil.
11029	Grant & McIntosh	9th Sept., 1891.	Station and shed at New Glasgow.
11030	A. Myles	22nd do	Waiting-room for hackmen, St. John, N.B.
11031	A. Laberge	23rd do	Snow shed, east of Little Metis station.
11032	W. D. McCurdy	28th do	Addition to Charlo station.
11053	Paul Roy	28th do	do to Saybec do
11057	Canadian Locomotive and Engine Co. (Limited)	30th do	Four ten-wheeled locomotives.
11062	Northern & Western Ry. Co.	20th Aug., 1883.	Building a railway from St. Mary's to I. C. Railway, thence to Beaubear's Point.
11077	Jas. Brown	3rd Dec., 1891.	Oil warehouse at Moncton.
11089	Ed. Foran	1st do	Loading sugar at Richmond and Halifax.
11123	W. & A. Moir	15th Jan., 1892.	Iron stair at North street station, Halifax.
11124	Barrow Hematite Steel Co. (Limited)	17th Feb., 1891.	Steel rails.
11125	do do	17th do	do
11126	do do	17th do	do
11136	G. McLeod	26th Jan., 1892.	750 farm gates.
11148	Dominion Bridge Co. (Ltd.)	26th Feb., 1892.	Steel foot bridge, Truro station yard.
11151	J. C. Calhoun	19th do	Fencing.
11152	E. Crossman	20th do	do
11153	J. Lewis	19th do	do
11154	F. Bellavance & Co.	20th do	do
11160	J. Kelly	20th do	do
11175	P. Doucet	19th do	do
11194	King Bros.	26th Dec., 1891.	Fence posts.
11195	King Brothers	26th Dec., 1891.	Cedar ties.
11196	F. C. Dubé	do	do
11227	St. Lawrence Steam Navigation Co.	30th April, 1892.	Mail, &c., between I.C.R., at Rimouski wharf and British Mail Steamers.
11228	D. Hallisay	19th Feb., do	Fencing.
11229	Dominion Bridge Co., Limtd	2nd May, do	Girder Bridge, Barney's River at Dwear's Mills.
11247	W. Starkay	13th June, do	Transfer lifting bridges, Point Tupper.
11264	Truro Foundry and Machine Co.	20th do do	Hoisting machinery for do
11265	Gray & McManus	20th do do	Excavation for ferry do
11266	Acadia Coal Co.	20th do do	Supply coal.
11271	Canada Coal Co.	20th do do	do
11272	Bay of Fundy Coal and Railway Co.	20th do do	do
11273	A. Lemieux	18th July, do	Transshipping goods at Chaudière Junction.
11275	Gardner Coal Co.	20th June, do	Supply coal.
11281	McDonald & Moffatt	27th July, do	1 car barge.
11282	do	18th do do	Excavation and cribwork, Mulgrave.
11283	J. Harris & Co., Limited	3rd June, do	Car wheels.
11291	P. S. McManus	1st August, do	Box culvert, Robinson's Meadow, near Brockville station.
11292	do	do do	Grading at Eureka Junction.
11296	A. J. Grant & Co.	22nd July, do	Oil for 1892.
11297	J. R. Hutchins	do do	Dynamo oil.
11298	Eastern Oil Co.	do do	Passenger coach oil.
11299	J. & S. C. Drury	3rd August, do	Freight shed at deep water terminus, St. John
11300	A. Holden	22nd July, do	Cylinder oil.
11303	J. McIntosh	12th Aug., do	Station and shed at Eureka Junction.
11304	General Mining Association	20th June, do	Coal supply.
11308	Imperial Oil Co.	22nd July, do	Axle oil, &c.
11315	S. O'Donoghue	26th Aug., do	Cribwork, Point Tupper.
11330	Smith & Crow	9th Sept., do	Freight shed, Orangedale station.
11339	Jas. Brown	17th do do	do deep water terminus, St. John.
11340	do	17th do do	do Newcastle, N.B.

## Department of Railways and Canals.

APPENDIX No. 17.—Statement of Contracts entered into during the Fiscal Year ended 30th June, 1892—*Continued.*

### 5. PRINCE EDWARD ISLAND RAILWAY.

No. of Contract.	Name of Contractor.	Date of Signature.	General Description.
11103	N. Boulter	14th Jan., 1892	Sleepers.
11104	D. McKenzie	12th do	do
11105	A. McKinnon	12th do	Cedar posts, 3 sleepers, &c.
11106	R. Ellis, jr	12th do	do do
11107	W. Taylor	13th do	Sleepers, &c.
11108	J. R. Larkins	13th do	Timber and sleepers.
11109	S. E. Gallant	12th do	Sleepers.
11110	O. Haywood	12th do	do
11111	J. T. Windsor	13th do	do
11199	Glace Bay Mining Co.	22nd April, 1892	Coal for engines.
11202	Patent Nut and Bolt Co., Limited	9th May, 1892	Iron bolts and nuts.
11344	S. Grey	16th Sept., 1882	License to sell newspapers, &c., on trains.

### 6. RIDEAU CANAL.

11050	F. Toms	24th Oct., 1891	Works at Hogsback Station.
11078	T. McLaughlin	30th Dec., 1891	Deepen basin and make slip, Ottawa.
11088	P. G. Waters	8th Jan., 1892	Dumping scows and flat scow.
11161	J. O'Toole	28th March, 1892	Change site of swing bridge, Merrickville.
11252	Canadian Bridge and Iron Co	25th July, 1892	Bridges at Merrickville.

### 7. SAULT STE. MARIE CANAL.

11174	Hugh Ryan & Co.	5th April, 1892	Changes lock 900 feet long.
11193	do	18th May, 1892	Dispense with beacon, add 390 feet to pier.

### 8. SOULANGES CANAL.

11165	Geo. Goodwin	11th May, 1892	Form section 11, Coteau du Lac.
11178	D. O'Brien & Son	8th April, 1892	do 12 do
11278	R. Macdonald	24th Sept., 1892	do 13, Coteau Landing.
11331	Arch. Stewart	24th do	do 1 and 2, Cascades entrance.

### 9. TRENT VALLEY CANAL.

11203	Wm. H. Law	30th April, 1892	Swing bridge, Bobcaygeon.
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### 10. WELLAND CANAL.

11063	Wm. Hutchinson	1st Dec., 1891	Float bridge near Dunnville.
11277	Arch. McDonald	18th Sept., 1892	Culvert at Stromness.

## APPENDIX

## GENERAL STATE

## 1st. WATER POWER and other Public Property leased by the Department

Date of Signature.	Term of Lease.	Lessees.	Property leased.	Area of Property leased.
Oct. 17, '92	Pleasure of the Government.	Ottawa Transportation Co. Line.	<i>Carillon Canal.</i> Lot at lower entrance of canal.	50' x 25'.
Dec. 2, '91	Pleasure of the Government.	D. Parizeau.	<i>Lachine Canal.</i> Lots 13, 14, east of St. Gabriel basin No. 3.	14,967' 16,912'.
Dec. 29, '91	do	R. Ready.	Lot 17, do	16,912'.
Oct. 1, '91	do	Standard Agency Co.	Lots 7, 8, 9, S.E. of Wellington basin.	
Nov. 20, '91	Winter 1891-92	R. Latimer.	Space in shed No. 4, St. Gabriel.	80 feet.
May 17, '92	Pleasure of the Government.	P. McCrory.	Lot 20, W. of St. Gabriel basin No. 2.	16,912'.
March 9, '92	do	End, Trihey & Co.	Lots 1, 2, do do do	19,046'.
July 21, '92	do	Dominion Wadding Co.	Water thermometer, 9" pipe, to factory at Ste. Cunégonde.	
Oct. 22, '91	Pleasure of the Government.	H. J. Gonder.	<i>Welland Canal.</i> Pt. lot 26 in 5th con., Crowland, town of Welland, North of Main St., and west of Canal.	0.18 acres.
'91	21 years only.	W. Martin.	Lot on west bank of Grand River, Port Maitland.	0.50 acres.
Sept. 22, '91	Pleasure of the Government.	D. Dittrick.	Pts. lots 16, 17, in 6th con., Grantham.	0.75 acres.
Oct. 3, '91	do	T. F. Brown & Bros.	Water from Welland, Raceway for mill on their land.	
Oct. 3, '91	do	W. H. Crow.	Pt. lot 26 in 5th con., Crowland, near north Main St., town of Welland.	0.79 acres.
July 15, '92	10 years only.	Capt. N. J. Wigle.	Lot at St. Catharines, near old lock No. 2.	0.30 acres.
'92	Pleasure of the Government.	Lake Erie Glass Work Co.	Lot at Port Colborne do do	1.69 acres.
'92	Pleasure of the Government.	Ag't of Wyoming Park.	<i>Rideau Canal.</i> Pt. lot K, con. C., Nepean, near swing bridge.	0.71 acres.
May 18, '92	do	T. H. Hughes.	Pt. lot 17, in 8th con., S. Crosby, at Chaffy's lock.	3 rods, 18 per.
Oct. 1, '92	do	R. C. Lampman.	Pt. lot 35, subd. 5, con. B, Nepean.	
Oct. 1, '92	do	North American Telegraph Co.	Place poles and wires, along canal, Ottawa to Kingston.	
'91	Pleasure of the Government.	Minister of Fisheries.	<i>Intercolonial Railway.</i> Wharf lot at deep water terminus, Halifax.	
Mar. 28, '92	Terminate on 6 months' notice.	Grand Trunk Ry. Co.	Exchange Passenger traffic, Lévis Station.	
Mar. 9, '92	5 years.	Executors of Jas. Hunter (to Government).	Ground floor on lot 132, Hollis Street, Halifax.	32' x 35'.
Aug. 17, '92	1 year.	Canada Ry News Co.	Sell newspapers on all trains.	



# Department of Railways and Canals.

No. 18.

## MENT SHOWING

of Railways and Canals, during the Fiscal Year ended 30th June, 1892.

For what Purpose used.	Amount of Water Power leased.	Date from which Lease is reckoned.	Annual Rental.	Terms of Payment.			Remarks.
				Amount of each instalment	When due each year.	When first instalment was due.	
Stabling room.....		Jan. 1, '92	\$ cts. 3 00	\$ cts. 3 00	Jan. 1....	Jan. 1, '92	In advance.
Storing lumber.....		June 8, '91	412 33	412 33	June 8....	June 8, '91 & on deliv'ry	do
do .....		do	169 12	169 12	do .....	do	do
do .....		May 1, '91	600 00	600 00	May 1....	On deliv'ry of lease.	do
Storing salt.....		Dec. 1, '91	10 00	10 00		do	do
Storing coal.....		May 1, '92	169 12	169 12	May 1....	do	do
Storing lumber.....		Jan. 1, '91	380 92	380 92	Jan. 1....	Jan. 1, '91	do
Fire protection. 9" pipe.....		July 1, '92	10 00	10 00	July 1....	July 1, '92	do
Storehouse.....		Nov. 21, '87	25 00	25 00	Nov. 21...	On delivery of lease.	do
Club house and wharf.....		April 1, '91	50 00	50 00	April 1....	do	do
Wood and coal yard.....		Sept. 1, '91	10 00	10 00	Sept. 1....	do	do
Grist-mill.....	40 horse power.	do	240 00	240 00	do .....	do	In advance, also \$6 per h. p. for 20 h. p. if req. hereafter.
Piling lumber.....		July 1, '88	50 00	50 00	July 1....	do	do
Wharf, &c.....		July 1, '92	15 00	15 00	do .....	do	do
Glass factory.....		Aug. 1, '92	50 00	50 00	Aug. 1....	do	do
Boat house and park.....		Dec. 1, '91	10 00	10 00	Dec. 1....	do	do
Grist-mill.....	Surplus water to pass thro'	July 1, '91	5 00	5 00	July 1....	do	do (cancels 7,816).
.....		Jan. 1, '92	2 00	1 00	Jan. 1....	do	do (cancels 9,919).
Telegraph.....		Aug. 1, '92	1 00	1 00	Aug. 1....	Aug. 1, '92	
Wharfage.....		Sept. 1, '91	100 00	100 00	Sept. 1...	Sept. 1, '91	do
.....			Rates		Monthly..	do	
I.C.Ry.....		May 1, '92	400 00	100 00	Aug. Nov. Feb. May	Aug. 1, '92	
.....		Aug. 1, '92	2,500 00	208 34	Monthly..	do	do

2ND. PROPERTY purchased, or damaged, by the Department of Railways and Canals, during the Fiscal Year ended 30th June, 1892.

Date of Signature.	Who sold to Her Majesty.	Lot.	Property purchased, &c.		County.	Area of Land.	Amount paid.	Remarks.
			District, &c.					
Nov. 2, 1891.	Geo. McLaughlin		Annapolis and Digby Railway.		Annapolis		\$ cts.	
do	Trustees Methodist Church	Damage by bridge	abutting on St. George street,		do		557 20	
do	Rev. J. J. Ritchie	George street	Annapolis		do		933 33	
do	Annie R. McKay	do	do		do		1,815 56	
do	Wm. Malcolm	do	do		do		780 20	
do	E. B. Gavazza, et al.	do	do		do		1,807 00	
April 15, 1892.	J. R. Hunt	22	do		Digby	0 83	25 00	
do	B. Taylor	20	do		do	0 31	400 00	
Nov. 13, 1889.	F. J. Winchester (guardian)	25	do		do	1 0 72	550 00	
July 14, 1890.	W. F. Turnbull	lot 5 & water lot	Block S.		do	1 0 13	300 00	
May 1, 1890.	G. Starking, et al.	8	do		do	1 84	300 00	
Dec. 19, 1889.	J. Woodman, et al.	12	do		do	2 36	150 00	
do	T. Woodman	10	do		do	1 97	280 00	
do	A. F. Randolph to heirs		(Release of mortgage).		do		150 00	
Nov. 25, 1889.	Dennison	Pt lot	Block T.		do	1 41	200 00	
Dec. 24, 1889.	J. Raymond	Pt. 4	do		do	0 36	80 00	
do	E. A. Dakin	Pt. 7	do		do	0 69	80 00	
do	E. G. Woodman	Pt. 11 & 11	do		do	0 68	60 00	
do	J. F. Raymond	Pt. 9	do		do	4 00	550 00	
do	Wm. Mumford	Pt. 6	Land S. E. of railway.		do	0 36	50 00	
do	C. Winchester	Pt. 24	Smith's Cove.		do	3 49	1,515 00	
			Beauharnois Canal.					
Oct. 28, 1891.	F. Poirier, fils	181	St. Timothée, bridge.		do		200 00	
Nov. 6, 1891.	A. Mercier	20	do fences, ditches, discharges and bridge.		do		773 75	
do	Jos. Auger	379	St. Clément, fences and ditches.		do		6 69	

# Department of Railways and Canals.

Date	Name	Particulars	Amount	Description	Amount	Description
Dec. 23, 1891	G. E. Robertson	22		Stornont	2 87	
March 8, 1892	W. J. & H. Wood	W. # 13		do	1 32	Release damages.
do	W. J. Wood	E. # 13		do	0 58	Land
Sept. 26, 1892	G. E. Robertson	S. pt W. # 16		do	2 41	Release.
Oct. 1, 1892	W. W. Robertson	E. # 16 W. # 15		do	3 54	do
Nov. 10, 1891	W. F. McCurdy et al.	164,165,168,169		Victoria	1,279 50	Cyprusum.
Aug. 10, 1891	H. N. Paint	Release to him		\$1, debt of costs.	275 30	
do	do	do		Richmond	1,846 20	
		A. F. C. )				
		2a, 2b, 2c )				
		3a, 4b )				
		3 )				
		11 )				
		13 )				
		15 )				
		17 )				
		18 )				
		18d )				
		18 )				
		19 )				
		18a )				
		18b )				
		Road )				
		108 )				
July 13, 1890	Julia McNeil et al.	Orangedale		Inverness	20 30	Indemnity bond
		Carillon & Grenville Canals.				
		Interest on amounts awarded.				
Oct. 19, 1891	Geo. Goodwin	W # 13			34,571 64	Damages.
Feb. 20, 1891	H. Hughes et al.				15 00	
Oct. 6, 1891	New Glasgow Iron, Coal and Railway Co.					
Jan. 25, 1892	J. Harris & Co. (Limited)	1,300 tons rails sold to Company			26,000 00	Bond of G. Fraser et
March 21, 1892	do	Land, &c., St. John, N.B.			195,000 00	
June 28, 1892	Hon. P. Mitchell	do (confirmatory deed)				
Not dated		Use of lot Newcastle		Miramanchi	1,500 00	
		Carleton, City of St. John Branch Railroad			40,000 00	



# Department of Railways and Canals.

<i>Canadian Pacific Railway.</i>		<i>Trent Valley Canal.</i>		<i>Welland Canal.</i>			
Oct. 13, 1891.	Wm. Clarke	72	St. Paul, O. Q. M.	0.99	Northern Ext'n.	10 00	Reserve of right of way.
April 17, 1878.	F. B. Deroster	65	do	71.92	do	20 00	
Oct. 30, 1891.	A. C. Garrioch	NE 4 1	Tr. 9, r. 3 E.	4.00	Pembina Branch.	29 10	Right of way reserved.
Sept. 5, 1891.	Alliance Trust Co. (Limited)	NE 4 16	Tr. 3, r. 3 E.	5.82	do		
Jan. 25, 1888.	J. Fulsher & J. H. Harper	NE 4 66	St. Paul, O. Q. M.	56.00	Northern Ext'n.	30 00	
March 28, 1892.	H. W. B. Smith	(NE 4 12)	Tr. 7, r. 3 E.	4.00	Pembina Branch.	32 75	
June 17, 1892.	Mary & M. Kelly	(SE 4 13)	Tr. 6, r. 3 E.	2.00	do	66 75	Right of way reserved in patent.
Not dated	Aikens, Culver & Co.	NE 4 27	Tr. 3, r. 3 E.	13.35	do	90 00	do
Oct. 24, 1889.	Agnes Schultz	NE 4 39	St. John	90.00	East of Selkirk.		
March 18, 1891.	A. A. V. Andrews, adm tr		do	24.00	do		
	H. G. Chubbuck	39					
Oct. 3, 1891.	Executors of R. C. Smith.	171	Fenelon Falls Village.	2.09	Victoria	25,000 00	Release.
Dec. 10, 1891.	P. Duffy	15	8th c. Emily		Peterborough	93 00	do
Oct. 18, 1891.	E. F. & W. R. McCracken	29, 31	4th c. Dumpper		do	100 00	do
Feb. 1, 1892.	D. Morrissey	18	10th c. Emily		Victoria	70 00	Damages.
Feb. 1, 1892.	P. O'Leary	16	8th and 9th c. Emily		do	80 00	do
do 22, 1892.	R. Weir	18, 17	8th c. Emily		do	20 00	do
March 12, 1892.	M. Lowes	20	7th and 8th c. Emily		do	40 00	do
do 19, 1892.	R. Perdue	20	12th c. Emily		do	20 00	do
do 19, 1892.	J. T. Flaherty	22	10th c. do		do	20 00	do
do 16, 1892.	N. Nichols	2	10th c. Verulam		do	1,000 00	Damages.
do 21, 1892.	C. Armstrong	20	8th c. Sidney		Hastings	80 00	do
do 19, 1892.	H. Fitzgerald	23	11th c. Emily		Victoria	60 00	do
do 12, 1892.	D. Traviss	23	10th c. do		do	40 00	do
do 24, 1892.	M. & M. Gannon	7, 8	10th c. Ennismore		Peterboro'	30 00	do
April 5, 1892.	M. P. Cadigan	5 and 4	10th c. do		do	40 00	do
do 20, 1892.	W. Hennessy	19	11th c. Emily		Victoria	150 00	do
June 8, 1892.	W. Franks	22	10th and 11th c. Emily		do	100 00	do
do 29, 1892.	J. T. Flaherty	22	do		do		
Oct. 31, 1891.	P. Caffrey et al.	13, 14	7th c. Grantham		Lincoln.	310 00	Damage by hydraulic force.
Dec. 2, 1891.	J. Gilleland	26	5th c. do		St. Catharines	1,100 00	Bridge.
do 12, 1891.	B. Flynn	15	Crowland.		Welland Raceway.	30 00	Decl.
do 31, 1891.	Corporation of Dunnville	Roads, &c.	Dunnville		Haldimand.	2,457 00	Release damages.
do 21, 1891.	W. Hutchinson	Pers. property	do		do	290 00	do
Jan. 25, 1892.	L. B. Ford et al.	6	N. of Canal St. E., Dunnville		do	275 00	do
do 19, 1892.	Port Robinson Dry Dock	Re-entry Gov. lot 283	Thorold, Port Robinson		Welland.	225 00	Release damages.
do 30, 1892.	W. Walther	Mill, &c.	Byng, Twp. Dunn		Haldimand.	84 00	do
Feb. 2, 1892	M. A. Smith	Lumber.	Moulton		do		
	(Jas. Ferguson)						

2ND. PROPERTY purchased, or damaged, &c.—Continued.

Date of Signature.	Who sold to Her Majesty.	Property purchased, &c.			Amount paid.	Remarks.
		Lot.	District, &c.	County.		
			<i>Welland Canal—Continued.</i>			
Feb. 3, 1892.	J. Norris.	9, 10, 21	Canal St. E., Dunnville.	Haldimand	70 00	Release damages.
March 14, 1892.	J. Hewitt.	37	N. Canal St. E. do	do	75 00	do
Feb. 19, 1892.	J. T. Johnson.		Dunnville.	do	100 00	do
April 8, 1892.	Executor Wm. Holmes.	16	Canal St., E. Dunnville	do	158 00	do
do 18, 1892.	J. Wade <i>et al.</i>	27, 28	5th and 6th c. Growland	do	200 00	Damage by hydraulic race.
March 5, 1892.	Hon. L. McCallum <i>et al.</i>	7, 8	W. Ouse St., Cayuga.	do	50 00	do
April 2, 1892.	Executor A. McIndoe <i>et al.</i>	20	Lock St., Dunnville.	do	80 00	Release damages.
do 26, 1892.	J. G. Winslow.	4	Broad St., Dunnville.	do	100 00	do
do 28, 1892.	J. Taylor.		Dunnville, &c.	do	40 00	do
do 27, 1892.	R. May.	5	Lock St., Dunnville.	do	105 00	do
do 28, 1892.	W. B. Johnson.		Dunnville.	do	60 00	do
May 11, 1892.	J. C. Harris <i>et al.</i>		do	do	215 00	do
do 11, 1892.	C. Leaney.		do	do	135 00	do
do 6, 1892.	Emma Darling.	6, 7	Lock St., Dunnville.	do	60 00	do
do 14, 1892.	R. Morrison.	36	Canal St. E., Dunnville.	do	95 00	do
June 15, 1892.	Executor J. Aikens.	7	do do	do	20 00	do
do 15, 1892.	Executrix W. J. Aikens.	5	do do	do	255 00	do
do 23, 1892.	H. Penny.	9, 10	do do	do	110 00	do
do 30, 1892.	Executrix W. Kennedy.	40	Broad St. E. do	do	40 00	do
do 27, 1892.	J. R. Brown.	5, 7, 8	Canal St. E. do	do	125 00	do
do 16, 1892.	Admex. H. T. Johnson.	14	Lock St. do	do	40 00	do
do 16, 1892.	M. L. Johnson.		Broad St. do	do	200 00	do
do 28, 1892.	Adm. W. Ward <i>et al.</i>	8	Front St. do	do	112 00	do
July 8, 1892.	Administrator Geo. Sime.	24, 25, 26	Canal St. E. do	do	500 00	do
do 5, 1892.	Admex. D. McDonald.	A lot	do do	do	50 00	do
do 8, 1892.	Admex. R. Chambers.	9, 10	Canal and Bridge St., Dunnville.	do	400 00	do
do 8, 1892.	S. Chambers.	11	Canal St. E., Dunnville.	do	40 00	do
do 21, 1892.	W. W. Montague.	Gov. lot 17, 18	Canal and Maple St., Dunnville.	do	130 00	do
Aug. 13, 1892.	Admex. Jabez Arnsden.	A, sub lot 4	Canal St. W., Dunnville.	do	160 00	do
July 29, 1892.	Executor J. Stewart.	14	Lock St. do	do	300 00	do
do 27, 1892.	G. A. S. Wallace <i>et al.</i>	20, 19	Canal St. E. do	do	212 00	do
Aug. 27, 1892.			Broad St. E. do	do	300 00	do

Department of Railways and Canals.

Date	Parties	Locations	Names	Amount	Release damages
Sept. 3, 1892	Executor E. McNeal	5 Canal St. W.	Haldimand	200 00	
Aug. 20, 1892	Admtx. W. White	19 Broad St. E.	do	225 00	do
Sept. 12, 1892	H. Amsden et al.	21, 22, 23 Main St.	do	1,200 00	do
July 2, 1892	Administrator D. Jewhurst	B & A, sub lot 4	do	70 00	do
Sept. 21, 1892	Admtx. A. McDonald	30 Canal St. E.	do	100 00	do
		19, 20, 21 Main St.	do		

3rd. AGREEMENTS respecting Subsidies in aid of construction of

Date of Signature.	Name of Railway Company.	Lines of Railways to be constructed.	Acts of Canada granting Subsidy.	Amount of Subsidy.	
				Per Mile.	Not more in all than
1891.				\$	\$
Not signed	St. Stephen & Milltown.	From St. Stephen to Milltown. . . . .	53 V. c. 2	3,200	11,200
Sept. 18..	Winnipeg & Hudson Bay.	From C. P. Ry. to Hudson Bay. . . . .	47 V. c. 25 & 70	{ ac. 6,400 " 12,800	Manitoba. N. W. T.
Not signed	Montreal & Ottawa.	{ From end of 30 miles of 50-51 V., c. } 24, towards Ottawa. . . . .	53 V. c. 2	3,200	96,000
Oct. 20..	Témiscouata Ry. Co.	From Clair's Siding to Connor's Station, St. Francis branch.	53 V. c. 2	3,200	51,200
Dec. 16..	Orford Mountain. . . . .	From Eastman to Kingsbury, P. Q. . . . .	53 V. c. 2	3,200	99,200
1892.					
Sept. 10..	do do . . . . .	From Lawrenceville to do . . . . .	53 V. c. 2	3,200	99,200
Oct. 17..	Quebec & Lake St. John.	{ From 30th to 50th mile, Chicoutimi } branch, complete 1st 30 miles, } and 4 towards Roberval. . . . .	52 V. c. 3 } 55-56 V. c. 5 }	3,200	{ 64,000 } { 12,800 }
Sept. 27..	Tobique Valley. . . . .	{ From Trout Brook 11 miles to- } wards, and thence 3 miles to, } Plaister Rock Island. . . . .	53 V. c. 2 } 55-56 V. c. 5 }	3,200	{ 35,200 } { 9,600 }
do 16..	Woodstock & Centre-ville.	{ From Woodstock to Centreville, } thence to U. S. boundary. . . . .	55-56 V. c. 5 }	3,200	{ 64,000 } { 19,200 }
Nov. 30..	Thousand Islands. . . . .	From Gananoque Junction to a point on Brockville, Westport & S. Ste. M. Ry., the Kingston, Napanee & W. Ry., the Kingston, Smith's Falls & O. Ry., on Rideau Canal waters; also extension across mouth of river, Gananoque.	55-56 V. c. 5	in all	44,000
Not signed	Ontario, Belmont & Northern.	From Belmont Iron Mines to junction of Central Ontario Ry. and C. P. Ry.	55-56 V. c. 5	3,200	32,000
Sept. 29..	{ Ottawa, Arnprior & } { Parry Sound. . . . .	{ From Renfrew on C. P. Ry. to Egan- } ville, Eganville to Barry's Bay. . }	55-56 V. c. 5 }	3,200	{ 70,400 } { 96,000 }
Nov. 8..	do do	{ From Barry's Bay towards North- } ern Pacific Junction Ry. . . . .	55-56 V. c. 5 }	{ 6,400 } { 3,200	{ 176,000 } { 88,000 }

OTTAWA, 2nd December, 1892.



# Department of Railways and Canals.

Railways, entered into during the fiscal year ended 30th June, 1892.

No. of Miles sub- sidized.	Maximum Grade, Feet per mile.	Radius of Curvature not less than	Width of Clearing each side.	Width of Cuttings.	Embankments.	Steel Rails, lbs. per lineal yard.	When to be com- pleted.	Remarks.
No.	Feet.	Feet.	Feet.	Feet.	Ft.	Lbs.		
3½	80	{ 955 <sup>1</sup> 716 <sup>1</sup> }	15	20	15	56	July 1, 1893..	
} 250	65	955	{ 50 100 at start- ing each side }	20	14	56	June 1, 1894..	Land subsidy.
30	53	1,910	50	20	15	56	Dec. 31, 1892..	
12	70	818	50	20	15	56	Aug. 1, 1892..	
31	69	882	33	20	15	56	Dec. 1, 1893..	Colonization road.
16½	74	818	33	20	14	56	Aug. 1, 1893..	do do
20	80	{ 955 818 1,146 }	50	20	15	56	Aug. 1, 1893..	
11 3 }	80	819	50	20	15	56	Dec. 1, 1893..	
20 6 }	80	955	50	20	15	56	Jan. 1, 1894..	
.....	53	955	50	20	15	56	Aug. 1, 1896..	{ 1st part \$30,000 2nd do 14,000
10	130	716	33	16	14	56	Oct. 31, 1893..	
22	40	2,865)	50	20	15	56	Aug. 1, 1896..	
30	80	1,433)	50	20	15	56	Nov. 1, 1894..	
27½ 27½ }	60	1,433	50	20	15	56		

H. A. FISSIAULT.

APPENDIX No. 19.

No. 1—ALPHABETICAL List of Railways subsidized by the Parliament of Canada.

Authority for Grant.	Designation of Act.	Company or Work subsidized.	Details of Grant.			Total of Subsidy Grant Mileage to each Company.		
			Rate per Mile.	Estimated Number of Miles.	Not to exceed.	No. of Miles subsidized.	Amount.	
			\$		\$	cts.	\$	cts.
1884-47 Vic, c. 8.		Albert Southern Ry. Co., Hopewell to Alma.	3,200	16	51,200 00		16	51,200 00
1889-52 Vic, c. 3.		(Metepediac towards Paspébiac. From 20 miles end to Paspébiac.						
1884-47 Vic, c. 8.		Baie des Chaleurs Ry. Co. { Subsidy voted for the first section of 20 miles transferred to the second 20 miles, and that for the 70th to the 100th to the subsidy for the 40th to the 70th mile.		70 {	300,000 00		70 {	620,000 00
1883-46 Vic, c. 25.			Acts of Amendment.			320,000 00		
1886-49 Vic, c. 17.								
1889-52 Vic, c. 3.								
1887-50-51 Vic, c. 24.		Beauharnois Junction Ry. Co., St. Martin's towards St. Antec.	3,200	30	96,000 00		30	96,000 00
1885-48-49 Vic, c. 59.		Belleville and North Hastings Ry. Co., Madoc to Eldorado.	1,500		10,500 00			
1886-49 Vic, c. 10.			1,700	7	11,900 00		7	22,400 00
1890-53 Vic, c. 2.		Belleville and Lake Nipissing. { Belleville to Tweed and Bridge-water. Revote of balance unexpended.	3,200	30	96,000 00		30	96,000 00
1892-55-56 Vic, c. 5.		Bracebridge and Baysville Ry. Co., from Bracebridge to Baysville.	3,200	15	48,000 00		15	48,000 00
1892-55-56 Vic, c. 5.		Brantford, Waterloo and Lake Erie Ry. Co., Brantford to Hagersville or Waterford, or some intermediate point on Canada Southern Railway.	3,200	18	57,600 00		18	57,600 00
1887-50-51 Vic, c. 24.				40 {	128,000 00			
1885-48-49 Vic, c. 59.		Brockville, Westport and Sault Ste. Marie Ry. Co. { Point near Newboro' towards Palmer Rapids. Revote of balance unexpended.	3,200	20	64,000 00		60	192,000 00
1892-55-56 Vic, c. 5.								
1886-49 Vic, c. 10.		Buctouche and Moncton Ry. Co. { Moncton to Buctouche. From W. end of section subsidized to Moncton. Revote of balance unexpended.	3,200	30 {	96,000 00		30 {	102,400 00
1887-50-51 Vic, c. 24.			3,200	2	6,400 00		2	
1892-55-56 Vic, c. 5.								

# Department of Railways and Canals.

Year	Project	1,000	Cost	Value
1885	48-49 Vic., c. 59.			
1886	49 Vic., c. 10.			314,400 00
1887	50-51 Vic., c. 24.	53	38,400 00	
1874	37 Vic., c. 14.		180,000 00	
1883	46 Vic., c. 2.	120	1,410,000 00	1,525,250 00
1881	44 Vic., c. 1.	1,905	85,250 00	25,000,000 00
1884	47 Vic., c. 8.	160	25,000,000 00	1,500,000 00
1885	48-49 Vic., c. 58.		340,000 00	
1884	47 Vic., c. 8.	12	38,400 00	38,400 00
1886	49 Vic., c. 10.	20	64,000 00	64,000 00
1889	52 Vic., c. 3.	67	115,200 00	224,000 00
1892	55-56 Vic., c. 5.	44.50	76,800 00	224,000 00
1883	46 Vic., c. 25.		32,000 00	
1884	47 Vic., c. 8.		128,000 00	142,400 00
1889	52 Vic., c. 3.	49	14,400 00	156,800 00
1890	53 Vic., c. 2.	14	96,000 00	44,800 00
1890	53 Vic., c. 2.	35	60,800 00	112,000 00
1892	55-56 Vic., c. 5.	14	96,000 00	44,800 00
1887	50-51 Vic., c. 24.	7	22,400 00	22,400 00
1887	50-51 Vic., c. 24.	63.10	96,000 00	201,920 00
1887	50-51 Vic., c. 24.		14,400 00	
1889	52 Vic., c. 3.	24	76,800 00	
1890	53 Vic., c. 2.	4.75	14,720 00	
1892	55-56 Vic., c. 5.	12	38,400 00	38,400 00
1884	47 Vic., c. 8.	52	96,000 00	166,400 00
1890	53 Vic., c. 2.	71	70,400 00	750,000 00
1884	47 Vic., c. 6.	30	96,000 00	96,000 00
1890	53 Vic., c. 2.	1	30,000 00	30,000 00
1889	52 Vic., c. 3.	15	99,200 00	99,200 00
1892	55-56 Vic., c. 5.	60	48,000 00	48,000 00
1889	52 Vic., c. 3.		32,000 00	
1886	49 Vic., c. 10.		96,000 00	
1887	50-51 Vic., c. 24.		64,000 00	
1891	54-55 Vic., c. 8.		64,000 00	
1889	52 Vic., c. 3.		37,500 00	
1890	53 Vic., c. 2.			

Valleyfield to west of Johnson's and Johnson's to Lacolle.  
 Terminus, Ottawa, to Chaudiere Falls  
 Clarke's Island to Valleyfield  
 Lacolle to International Boundary  
 For a bridge over the St. Lawrence, at Coteau Landing, on the line of the Canada Atlantic Railway  
 Canada Central Railway, Pembroke to Callander  
 do to recoup Town of Pembroke  
 Canadian Pacific Ry. Co., Callander to Fort Arthur, and Selkirk to Kamloops  
 do (St. Martin's Junction to Quebec.  
 do do (additional).  
 Connecting Jacques Cartier Union Junc. with North Shore.  
 Cap Rouge and St. Lawrence Ry. Co., Lorette to Quebec.  
 For a line, Cap Tourmente towards Murray Bay  
 Carraquet Railway Co., Bathurst to Carraquet  
 do Carraquet to Shippegan Harbour  
 do Lower Carraquet to Shippegan  
 do Head of Grand Lake to Intercolonial Railway, Sussex, N.B.  
 do In extension  
 Cobourg, Northumberland ) Cobourg to Ontario and Quebec Railway  
 and Pacific Ry. Co. ) Additional for 19 miles  
 Cornwallis Valley Ry. Co. ) Kentville to Kingsport  
 Columbia and Kootenay Ry. Co. ) From end of subsidized line to Kingsport  
 do ) Kootenay Lake to near junction of Kootenay and Columbia Rivers.  
 Cumberland Railway and Coal Co., near Spring Hill to near Oxford Village.  
 Dominion Lime Co., from point on Quebec Central Ry. to Dudswell Lime Co.'s quarries.  
 Drummond County Ry. Co. ) From end of subside line to Ball's Wharf, St. Lawrence River.  
 do Drummondville to Ste. Rosalie  
 do Extension to Ste. Rosalie Junction  
 Elgin, Petitecodiac and Havelock Ry. Co., Petitecodiac to Havelock Corner.  
 do Wallaceburg to Sarnia  
 Erie and Huron Ry. Co. ) Petrolas *via* Oil Springs to Dresden  
 Esquimalt and Nanaimo Ry. Co., Esquimalt to Nanaimo, Vancouver's Island.  
 For a line, Fredericton *via* Oromocto and Gagetown to New Brunswick Railway  
 Fredericton and St. Mary's Bridge Co., for a bridge over the St. John River at Fredericton.  
 Goderich and Wingham Ry. Co., from Goderich to Wingham *via* Port Albert.  
 Grand Trunk, Georgian Bay, and Lake Erie Ry. Co., from Tara on point between Tara and Hepworth to the Town of Owen Sound.  
 do Yamaska to River St. Francis.  
 Great Eastern Ry. Co. ) St. Francis to St. Grégoire  
 do ) St. Grégoire towards Chaudiere Junction, I.C.R.  
 do ) (To bridge Nicolet and St. Francis Rivers

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No. 1—ALPHABETICAL List of Railways subsidized by the Parliament of Canada—Continued.

A.D.	Authority for Grant.	Designation of Act.	Company or Work subsidized.	Details of Grant.			Total of Subsidy Grant Mileage to each Company.	Amount.
				Rate per Mile.	Estimated Number of Miles.	Not to exceed.		
				\$		\$	\$ cts.	
1884 47 Vic, c. 8.			St. Jérôme to New Glasgow	3,200	10	32,000 00	180,000 00	
1886 49 Vic, c. 10.			New Glasgow or St. Lin to Montcalm.	3,200	18	57,600 00		
1891 54-55 Vic, c. 8.			At or near Montcalm to C.P.R., between Joliette and St. Félix de Valois	3,200	7	22,400 00		
1886 49 Vic, c. 10.			At or near Montcalm to C.P.R., between Joliette and St. Félix de Valois	3,200	15	48,000 00	51,200 00	
1890 53 Vic, c. 2.			From Campbellville, on C.P.R., to Guelph	3,200	3	9,600 00		
1887 50-51 Vic, c. 24.			From southern terminus of Albert Railway to Harvey Bank.	3,200	3	9,600 00		
1887 50-51 Vic, c. 24.			Hereford to International Railway	3,200	34	108,800 00	156,800 00	
1886 49 Vic, c. 10.			Cookshire to Quebec Central Railway at Duds well	3,200	15	48,000 00		
1889 62 Vic, c. 3.			International Railway Co., Sherbrooke to International Boundary.	3,200	49	156,800 00	80,000 00	
1890 53 Vic, c. 25.			Inverness and Richmond Railway Co., at or near Orangedale to Broad Cove.	3,200	25	80,000 00		
1892 55-56 Vic, c. 5.			Irondale, Bancroft and Ottawa Railway Co., Victoria Branch of Midland Railway to Bancroft.	3,200	50	160,000 00	25,600 00	
1884 47 Vic, c. 8.			Joliette to St. Jean de Matha Railway Co., from St. Félix de Valois to St. Jean	3,200	8	25,600 00		
1892 55-56 Vic, c. 5.			McCann Station to Joggins	3,200	12	38,400 00	58,400 00	
1886 49 Vic, c. 10.			From south end to the wharves.	3,200	14	44,800 00		
1887 50-51 Vic, c. 24.			From some point on Joggins Railway to Young's Mills.	3,200	18-25	58,400 00	48,000 00	
1889 62 Vic, c. 3.			Kingston and Pembroke Railway Co., Mississippi to Renfrew	3,200	5	16,000 00		
1884 47 Vic, c. 8.			Napanee to Tamworth	3,200	15	48,000 00	268,400 00	
1885 46 Vic, c. 25.			Tamworth to Tweed	3,200	28	89,600 00		
1886 49 Vic, c. 10.			From north end of section subsidized to Tweed		18	70,000 00	22,400 00	
1887 50-51 Vic, c. 24.			At or near Harrowsmith to Sydneyham	3,200	7	9,600 00		
1889 62 Vic, c. 3.			Yarker to Harrowsmith	3,200	3	9,600 00	11,200 00	
1892 55-56 Vic, c. 5.			Extension to County of Hastings and iron deposits.	3,200	20	64,000 00		
1892 55-56 Vic, c. 5.			L'Assomption Railway Co., L'Assomption to L'Épiphanie.	3,200	3-50	11,200 00		

# Department of Railways and Canals.

Year	Description	Mileage	Cost	Total
1890	53 Vic, c. 2	15	48,000 00	48,000 00
1897	50-51 Vic, c. 24	85	118,400 00	166,400 00
1890	53 Vic, c. 2	85	160,000 00	326,400 00
1892	55-56 Vic, c. 5	20	64,000 00	390,400 00
1897	50-51 Vic, c. 24	6	19,200 00	409,600 00
1887	50-51 Vic, c. 24	2	12,400 00	422,000 00
1887	50-51 Vic, c. 24	10 1/2	32,600 00	454,600 00
1892	55-56 Vic, c. 5	35	112,000 00	566,600 00
1892	55-56 Vic, c. 5	TB	63,000 00	629,600 00
1885	48-49 Vic, c. 59	14	44,800 00	674,400 00
1887	50-51 Vic, c. 24	2	6,400 00	680,800 00
1890	53 Vic, c. 2	16	51,200 00	732,000 00
1892	55-56 Vic, c. 5	16	51,200 00	783,200 00
1892	55-56 Vic, c. 5	15	48,000 00	831,200 00
1890	53 Vic, c. 2	30	96,000 00	927,200 00
1888	51 Vic, c. 3	25	32,000 00	959,200 00
1889	52 Vic, c. 3	25	48,000 00	1,007,200 00
1889	52 Vic, c. 3	15	48,000 00	1,055,200 00
1889	52 Vic, c. 3	15	72,000 00	1,127,200 00
1885	48-49 Vic, c. 59	45	40,000 00	1,167,200 00
1885	48-49 Vic, c. 59	60	30,000 00	1,197,200 00
1887	50-51 Vic, c. 24	63	64,000 00	1,261,200 00
1890	53 Vic, c. 2	3	9,600 00	1,270,800 00
1892	55-56 Vic, c. 5	70	361,270 00	1,632,070 00
1886	49 Vic, c. 10	13	32,000 00	1,664,070 00
1890	53 Vic, c. 2	3 1/2	10,200 00	1,674,270 00
1887	50-51 Vic, c. 24	30	96,000 00	1,770,270 00
1890	53 Vic, c. 2	30	96,000 00	1,866,270 00
1892	55-56 Vic, c. 5	21	67,200 00	1,933,470 00
1885	48-49 Vic, c. 59	37	118,400 00	2,051,870 00
1892	55-56 Vic, c. 5	25	80,000 00	2,131,870 00
1892	55-56 Vic, c. 5	12	40,000 00	2,171,870 00
1884	47 Vic, c. 8	40	128,000 00	2,300,000 00
1885	48-49 Vic, c. 59	6	19,200 00	2,319,200 00
1886	49 Vic, c. 10	10	32,000 00	2,351,200 00
		100	320,000 00	2,671,200 00
		44	140,800 00	2,812,000 00

For a line, Lachine Bank on G. T. Railway to Rivière des Prairies. . . . .  
 Lake Erie and Detroit (Walkerville to Cedar Creek . . . . .  
 River Railway Co. (Cedar Creek to Ridgetown. . . . .  
 Long Sault to Lake Temiscamingue (amended) . . . . .  
 To overcome rapids of the Ottawa River at La  
 Michache, La Cave, Les Erables and La Montagne,  
 and for construction of wharves and landings at  
 such rapids. . . . .  
 Lake Temiscamingue Col- . . . . .  
 onization Railway Co. (Long Sault to Lake Kippewa. . . . .  
 Matawa to Long Sault. . . . .  
 Long Sault to crossing of the Kippewa and 15 per  
 cent on value of wooden truss bridge. . . . .  
 Leamington and St. Clair . . . . .  
 Railway Co. (Comber to Lake Erie. . . . .  
 Lindsay, Bobcaygeon and . . . . .  
 Pontypool Ry. Co. (Bobcaygeon to Midland Railway. . . . .  
 Lotbinière and Mégantic . . . . .  
 Railway Co. (In extension . . . . .  
 from St. Jean Deschaillons towards  
 Glen Lloyd. . . . .  
 Manitoulin and North Shore . . . . .  
 Railway Co. (Little Current to Algoma Branch  
 of C. P. R. . . . .  
 Massawippi Junction Ry. . . . .  
 Co. (From point on Atlantic and North-western Railway  
 near Masgoz, to Ayer's Flat Station on the Mas-  
 sawippi Railway. . . . .  
 Ayer's Flat to Coaticook. . . . .  
 Maskinongé and Nipis- . . . . .  
 sing Railway Co. (From near Maskinongé or Louiseville towards Parish  
 of St. Michel des Saints, P.Q. . . . .  
 Montreal and Sorel Rail- . . . . .  
 way Co. (Extension . . . . .  
 To complete line. . . . .  
 Brouseau to Dundee. . . . .  
 Montreal and Champlain . . . . .  
 Junction Railway Co. (Salmon River at Fort Covington to Massena Springs  
 From end of subsidized line. . . . .  
 Montreal and Western . . . . .  
 Railway Co. (Revote of unexpended balance  
 of St. Jérôme towards Le Désert. . . . .  
 Montreal and Lake Mas- . . . . .  
 kinongé Railway Co. (St. Félix to Lake Maskinongé.  
 For extension . . . . .  
 Montreal and Ottawa (Vaudreuil to Hawkesbury. . . . .  
 Railway Co. (From end subsidized towards Ottawa.  
 Montfort Colonization . . . . .  
 Railway Co. (From St. Jérôme westwards. . . . .  
 New Brunswick and Prince . . . . .  
 Edward Railway Co. (Sackville to Cape Tormentine  
 Nicola Valley Railway Co., . . . . .  
 near Spence's Bridge to Nicola Lake.  
 New Glasgow Iron and . . . . .  
 Coal Co. (Fredericton to Miramichi River  
 End of line previously subsidized to Boiestown . . . . .  
 Northern and Western . . . . .  
 Railway Co. (Additional between Fredericton and Indian town  
 and extension to deep water at Chatham . . . . .  
 Indian town to Junction with Northern and West-  
 ern Railway at or near Boiestown. . . . .

No. 1—ALPHABETICAL List of Railways subsidized by the Parliament of Canada—Continued.

Authority for Grant.	Designation of Act.	Company or Work subsidized.	Details of Grant.			Total of Subsidy Grant Mileage to each Company.
			Rate per Mile.	Estimated Number of Miles.	Not to exceed.	
			\$		\$ cts.	\$ cts.
AD						
1882 45 Vic, c. 14		(Gravenhurst to Callander				
1883 46 Vic, c. 25		{ Additional)	6,000	110	660,000 00	110
1889 52 Vic, c. 3		Northern and Pacific Junction Railway Co.	6,000		660,000 00	
1890 53 Vic, c. 2						
1887 50-51 Vic, c. 24		(Lunenburg to a point in district of New Germany, and branch to Bridgewater Railway Wharf.	3,200	34	108,800 00	80
1888 51 Vic, c. 3		way Co.	3,200	46	147,200 00	
1892 55-56 Vic, c. 5		Nipissing and James Bay Ry, from at or near North Bay, C. P. R., towards James Bay.	3,200	25	80,000 00	
1889 52 Vic, c. 3		Ontario and Pacific Railway Co., Cornwall to Ottawa.	3,200	53-87	172,400 00	53-87
1892 55-56 Vic, c. 5		Ontario, Belmont and Northern Ry., Belmont Iron Mines to C. P. R. and Central Ontario Railway.	3,200	10	32,000 00	10
1890 53 Vic, c. 2		Orford Mountain Railway and Navigation Co., Eastman and Kingsbury	3,200	31	99,200 00	31
1887 50-51 Vic, c. 24		Oshawa Railway and Navigation Co., Port Oshawa towards Raglan.	3,200	7	22,400 00	7
1885 48-49 Vic, c. 59						
1889 52 Vic, c. 3		Ottawa and Gatineau Valley Railway Co., Hull Station towards Le Désert	3,200	62	320,000 00	62
		(Point on C. P. R. to Egansville	3,200	22	70,400 00	
		Egansville to Barry's Bay		30	96,000 00	
1892 55-56 Vic, c. 5		Barry's Bay to Northern Pacific Railway Junction.	6,400	27½	264,000 00	107
			3,200	55	166,400 00	
			3,200	52	128,000 00	
1890 53 Vic, c. 2		For a line, Ottawa to Morrisburgh.	3,200	40	272,000 00	40
1889 52 Vic, c. 3		Parry Sound Colonization Railway Co., Parry Sound to Sundridge	3,200	82	9,600 00	
		Hull to Pembroke.	3,200	3	24,000 00	
1884 47 Vic, c. 8		From 3 miles east of Pembroke to Pembroke.	3,200	7½	31,500 00	92-50
1888 51 Vic, c. 3		Hull to Aylmer.	3,200			
1890 53 Vic, c. 2		Bridging Ottawa at Culbute, &c.				
1892 55-56 Vic, c. 5		(Revoke of balance unexpended under 47 Vic, c. 8.				
1892 55-56 Vic, c. 5		Phillipsburg Junction Railway and Quarry Co., Stanbridge to Phillipsburg.	3,200	6-75	21,600 00	6-75

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Vicinity	Description	3,200	6	19,200 00	6	19,200 00
1889 52 Vic., c. 3.	Pontiac and Renfrew Railway Co., opposite Braside or Bristol to Pontiac Pacific Junction Railway, near Quion River.	3,200	6	19,200 00	6	19,200 00
1888 51 Vic., c. 3.	Port Arthur, Duluth and Port Arthur to Gun Flint Lake.	3,200	84 1/2	271,200 00	89.75	287,200 00
1890 53 Vic., c. 2.	Western Railway Co., Branch to Kabeka Falls.	3,200	5	16,000 00		
1884 47 Vic., c. 3.	Quebec Central Railway Co., Beauce to Internationnal (amended). See also annual instalments.		15	60,342 00	15	60,342 00
1888 51 Vic., c. 8.	St. Raymond to Lake St. John.	3,200	120	384,000 00		
1882 45 Vic., c. 14.	(Additional).	3,200	25	80,000 00		
1883 46 Vic., c. 25.	Junction on North Shore Railway to St. Raymond.	3,200	30	96,000 00		
1885 48-49 Vic., c. 59.	50 miles north of St. Raymond to Lake St. John (additional).	3,200	(95)	186,295 00		
1887 50-51 Vic., c. 25.	Quebec to Lake St. John—being portion uncovered by previous subsidies (additional).	3,200	9	28,800 00	248	1,003,495 00
1888 51 Vic., c. 3.	St. John towards Chicoutimi.	3,200	30	96,000 00		
1890 53 Vic., c. 2.	From end of section subsidized from St. John to wards Chicoutimi.	3,200	20	64,000 00		
1891 54-55 Vic., c. 8 }	For St. Charles Bridge and from Lorette to Charlebourg.	3,200	12	30,000 00		
1892 55-56 Vic., c. 5.	Revote of balance unexpended under 52 Vic., c. 3 & 50-51 Vic., c. 24.	3,200		38,400 00		
1889 52 Vic., c. 3.	Quebec, Montmorency and Charlevoix Railway Co., East Bank of St. Charles River to or near Cape Tourmente.	3,200	30	96,000 00	30	96,000 00
1892 55 56 Vic., c. 5.	Restigouche and Victoria Railway Co., Campbelltown towards Grand Lake.	3,200	15	48,000 00	15	48,000 00
1892 55-56 Vic., c. 5.	For a line, Revelstoke to the head of Arrow Lake.	3,200	25	80,000 00	25	80,000 00
1892 55-56 Vic., c. 5.	For a line, Sandpoint, Shelburne Harbour to Annapolis Royal, and to a junction at or near New Germany to Liverpool (Revote).	3,200	75	240,000 00	75	240,000 00
1889 52 Vic., c. 3.	Shuswap and Okanagan Railway Co., from Sicamous to a point on Lake Okanagan.	3,200	17	163,200 00	51	163,200 00
1887 50-51 Vic., c. 3.	South Norfolk Railway Co., Port Rowan to Simcoe.	3,200	17	54,400 00	17	54,400 00
1887 50-51 Vic., c. 24.	South Ontario Pacific Railway Co., Woodstock to Hamilton.	3,200	49	158,400 00	49	158,400 00
1891 54-55 Vic., c. 8.	St. Catharines and Niagara Central Railway Co. See also annual instalments.	3,200	12	38,400 00	12	38,400 00
1887 50-51 Vic., c. 24.	St. Eustache to a point on C. P. R., Isle Jesus.	3,200	12	38,400 00	12	38,400 00
1892 55-56 Vic., c. 5.	St. Eustache and St. Placide.	3,200	18	57,600 00	18	57,600 00
1892 55-56 Vic., c. 5.	St. Flavie and Little Metis to Matane.	3,200	50	160,000 00	50	160,000 00
1889 52 Vic., c. 3.	For a line, St. Césaire to St. Paul d'Abbotsford.	3,200	5	16,000 00	5	16,000 00
1889 52 Vic., c. 3.	St. Clair Frontier Tunnel Co., for a tunnel under St. Clair River at or near Sarnia.	3,200	2 50	375,000 00	2 50	375,000 00
1887 50-51 Vic., c. 24.	St. Lawrence and Lower Laurentian and Saguenay Railway Co., Grand Piles to junction with Lake St. John Railway.	3,200	18	217,600 00	38.85	217,600 00
1890 53 Vic., c. 2.	St. Lawrence and Adiron-Valleyfield to Huntingdon.			57,600 00		
1892 55-56 Vic., c. 5.	Part of road to Huntingdon and end towards International B'ndry.		5 42 2 40	25,024 00	25.82	82,624 00
1892 55-56 Vic., c. 5.	St. John's to St. Rosalie.		32	102,400 00	32	102,400 00
1884 47 Vic., c. 8.	St. Louis and Richibucto.		7	22,400 00	7	22,400 00
1890 53 Vic., c. 2.	St. John Valley, Fredericton to Village of Prince William.	3,200	22	70,400 00		
1890 53 Vic., c. 2.	Village of Prince William towards the Town of Woodstock.			22,400 00		
1892 55-56 Vic., c. 5.	St. John Valley and Rivière du Loup Railway Extension from north end of line subsidized towards Town of Woodstock.	3,200	22	70,400 00	59	188,800 00
1892 55-56 Vic., c. 5.	St. Placide to St. Andrews.	3,200	15	48,000 00	15	48,000 00
1892 55-56 Vic., c. 5.		3,200	8	25,600 00	8	25,600 00

No. 1—ALPHABETICAL List of Railways subsidized by the Parliament of Canada—Concluded.

Authority for Grant.	Designation of Act.	Company or Work subsidized.	Details of Grant.			Total of Subsidy Grant Mileage to each Company.
			Rate per mile.	Estimated Number of Miles.	Not to exceed.	
			\$		\$	cts.
	1892 55-56 Vic, c. 5.	St. Rémi to St. Cyprien		12	38,400 00	38,400 00
	1890 53 Vic, c. 2.	St. Stephen and Milltown		3½	11,200 00	11,200 00
	1892 55-56 Vic, c. 5.	Stewiacke and Lansdowne Railway Co. (From point on I. C. R. through Stewiacke Valley.		25	80,000 00	286,800 00
	1892 53 Vic, c. 2.	From Truro to Newport.		49	156,800 00	
	1890 55-56 Vic, c. 5.	For a line, Summerside to Richmond Bay, P. E. I.		3	9,600 00	9,600 00
		Sydney to Louisbourg		28	89,600 00	89,600 00
	1892 45 Vic, c. 14.	Rivière du Loup to Edmundston	\$3,200 for 75 ms.		240,000 00	
	1885 48-49 Vic, c. 58.		\$2,800 for 75 ms.	83	258,000 00	
	1888 51 Vic, c. 3.	Branch from Edmundston towards St. Francis River.	\$8,000 for 8 ms.	20	100,000 00	670,800 00
	1890 53 Vic, c. 2.	In extension of 20 miles subsidized	3,200	16	51,000 00	
	1892 55-56 Vic, c. 5.	In addition to subsidy granted by 53 Vic, c. 2			21,600 00	
	1889 52 Vic, c. 3.	(Gananoque to Gananoque Junction, G. T. R.				
		Gananoque Junction, G. T. R., to connect with	3,200	18	54,400 00	54,400 00
		Brockville, Westport and Sault Ste. Marie Ry.				
	1890 55-56 Vic, c. 5.	Revoite of balance of balance unexpended		16	51,200 00	51,200 00
	1892 55-56 Vic, c. 5.	Pacific Railway Co., Port Burwell to Tilsonburg		14	89,600 00	
	1890 53 Vic, c. 2.	Perth Centre towards Plaister Rock		11	35,200 00	134,400 00
	1891 54-55 Vic, c. 8.	In extension of 14 miles.		28	9,600 00	
	1892 55-56 Vic, c. 5.	do last subsidized		4	16,000 00	16,000 00
	1886 49 Vic, c. 10.	Toronto, Grey and Bruce Railway Co., Glenshannan to Wingham	3,200	5	16,000 00	16,000 00
	1890 53 Vic, c. 2.	Waterloo Junction Railway, Waterloo to Elmira	3,200	11	35,200 00	35,200 00
	1887 50-51 Vic, c. 25.	Western Counties Railway, Digby to Annapolis		20	500,000 00	500,000 00
	1889 52 Vic, c. 8.	For a line, Woodstock <i>via</i> London to Chatham, Ont. (See Ontario and Pacific and West Ontario Pacific Railway).	3,200	80	256,000 00	256,000 00
	1890 53 Vic, c. 2.	Woodstock and Centreville Railway Co.	3,200	20	64,000 00	
	1892 55-56 Vic, c. 5.	To International Boundary	3,200	6	19,200 00	83,200 00



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No. 2.—STATEMENT showing Railways receiving Cash Subsidies (not included in Statement No. 1), of fixed amounts, payable Annually or Semi-annually for fixed periods of years, or Interest in place of or until the Capital granted be paid.

Year.	Designation of Act.	Description of Lines subsidized.	Miles subsidized.	Amount of Subsidy voted.	Amount of Instalment.	Date and Number of Instalment paid.	Total paid.
				\$ cts.	\$ cts.		\$ cts.
1885	48-49 Vic., c. 58.	International Railway Co. (Atlantic and North-western), Montreal to Harbours of St. John and Halifax	252		93,300 00 per ½ year for 20 years.	30th June (6)	559,800 00
1882	45 Vic., c. 55.	Chignecto Marine Transport Ry. Co., Ship Railway—Gulf of St. Lawrence to Bay of Fundy	16-85		do . 20 do	Nil.	Nil.
1886	49 Vic., c. 18.	Kingston, Smith's Falls and Ottawa Ry. Co.	56	179,200 00	do 21 do	do	do
1892	54-55 Vic., c. 5.	Quebec Central Railway Co.	90	288,000 00	do 20 do	do	do
1888	51 Vic., c. 3.	St. Catharines and Niagara Central Ry. Co.	34	1108,000 00	do 20 do	do	do
1890	53 Vic., c. 3.	Provincial Govt. of Quebec, Montreal to Quebec.	279	2,394,000 00	*59,850 00	do 15	do
1892	55-56 Vic., c. 5	do					
1884	47 Vic., c. 8.	do					

\* Annual interest at rate of 5 per cent; interest only paid, subsidy still due.

+ \$800 short voted in amount specified under the Acts 52 and 53 Vic., as being replaced by the Act 55-56 Vic., c. 5.

## No. 3.—STATEMENT showing Railways subsidized by the Grant of Loans.

Year.	Designation of Act.	Description of Lines subsidized.	Amount of authorized Loan.	Amount of Loan paid to the Company.	Amount of Loan undrawn.
		LOANS.	\$	\$ cts.	\$ cts.
1886	49 Vic., c. 10....	Albert Railway Company, Salisbury to Hopewell.	15,000	14,725 56	274 44
1889	52 Vic., c. 3....	Fredericton and St. Mary's Bridge Company.....	300,000	300,000 00	.....
1883	46 Vic., c. 26....	St. John Bridge and Railway Extension Company	500,000	433,900 00	66,100 00

## No. 4.—STATEMENT showing Railways subsidized by the Grant of certain used Iron Rails valued at the amount set forth.

Year.	Designation of Act.		Tons of used Rails.	Standing in Public Accounts as an Asset.	Paid.	Still due, 30th June, 1892.
				\$ cts.	\$ cts.	\$ cts.
1888	51 Vic., c. 3.	Central Ry. Co. of New Brunswick..	4,052	83,612 54	83,612 54	.....
		Elgin, Petitcodiac and Havelock Ry..	2,201	44,252 82	44,252 82	.....
		Kent Northern Ry. of New Brunswick	2,549	58,334 27	.....	58,334 27
		Halifax Cotton Company Siding. . .	233	4,335 00	.....	4,335 00
		Steel Company of Canada.....	597	11,964 66	.....	11,964 66
		Albert Railway Company.....	726	14,665 45	.....	14,665 45
		Chatham Branch Railway.....	958	24,439 84	24,439 84	.....
		Total .....		241,604 58	152,305 20	89,299 38

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No. 5.—STATEMENT showing Railways subsidized by Grants of Land.

Year.	Act.	Line subsidized.	Acres per Mile.	Estimated Number of Miles.	Total Grant. Acres.	Completed and in operation. 50 miles completed and in operation.
1869	52 Vic, c. 4 . . .	<p>Alberta Railway and Coal Co., Lethbridge to International boundary.</p> <p>* Alberta and Athabaska Ry. Co., Bow River on C.P.R., between Calgary and Crowfoot, to point near Town Plot of Edmonton. (See North-western Railway Co. of Canada.)</p> <p>Brandon and South-western Ry. Co., from point in Township 1, Range 23 or 24, west of 1st Principal Meridian, to Deloraine</p> <p>Calgary and Edmonton Ry. Co., from Calgary to a point at or near Edmonton, and from Calgary to International boundary</p> <p>Canadian Pacific Ry. Co., Callender to Port Arthur, and Selkirk to Kamloops</p> <p>From Glenboro' westerly to a proposed branch running from Brandon south-westerly</p> <p>From Brandon south-westerly to near Township 3, Range 27, west of 1st Principal Meridian, and thence westerly</p> <p>Branch from western end of 100 miles, to a point at or near La Roche Percée, Township 1, Range 6, west of 2nd Meridian.</p> <p>From Brandon branch to Deloraine</p> <p>Esquimalt and Nanaimo Ry. Co., Esquimalt to Nanaimo, Vancouver Island</p> <p>Great North-west Central Ry. Co., Brandon to Battleford</p> <p>Laque Manitoba Rail. (From Portage la Prairie to southern boundary of Lake Manitoba way and Canal Co. Meadow Portage</p> <p>Lac Seul Railway Co., from point at or near Shelley Station, C.P.R., to a point at or near White Mud Lake, Winnipeg River</p> <p>Manitoba and North-western Ry. Co., (Portage la Prairie to 20 miles from Prince Albert western Ry. Co.) Branch from Todburn to Shellmouth</p> <p>Manitoba South-western Railway Co., Winnipeg to Whitewater Lake</p> <p>Manitoba and South-western Colonization Ry. Branch, Carman to Barnsley</p> <p>Manitoba South-eastern Railway Co., Winnipeg to a point on west side of the Lake of the Woods</p> <p>Medicine Hat Railway and Coal Co., Medicine Hat to Coal Fields</p> <p>North-western Railway Co. of Canada, from Calgary to near Edmonton, and Calgary to Lethbridge</p> <p>North-western Coal and Navigation Co. (Medicine Hat to Belly River, do Additional do Lethbridge to Crow's Nest Pass</p>	6,400	50	320,000	<p>1,568,000</p> <p>384,000</p> <p>640,000</p> <p>384,000</p> <p>160,000</p> <p>1,900,000</p> <p>2,880,000</p> <p>902,000</p> <p>115,200</p> <p>2,918,400</p> <p>960,000</p> <p>396,500</p> <p>40,000</p> <p>704,000</p> <p>51,200</p> <p>3,300,000</p> <p>1,080,180</p> <p>209 miles completed, and in operation.</p>
1870	53 Vic, c. 4 . . .					
1871	53 Vic, c. 4 . . .					
1872	53 Vic, c. 4 . . .					
1873	53 Vic, c. 4 . . .					
1874	53 Vic, c. 4 . . .					
1875	53 Vic, c. 4 . . .					
1876	53 Vic, c. 4 . . .					
1877	53 Vic, c. 4 . . .					
1878	53 Vic, c. 4 . . .					
1879	53 Vic, c. 4 . . .					
1880	53 Vic, c. 4 . . .					
1881	53 Vic, c. 4 . . .					
1882	53 Vic, c. 4 . . .					
1883	53 Vic, c. 4 . . .					
1884	53 Vic, c. 4 . . .					
1885	53 Vic, c. 4 . . .					
1886	53 Vic, c. 4 . . .					
1887	53 Vic, c. 4 . . .					
1888	53 Vic, c. 4 . . .					
1889	53 Vic, c. 4 . . .					
1890	53 Vic, c. 4 . . .					
1891	53 Vic, c. 4 . . .					
1892	53 Vic, c. 4 . . .					
1893	53 Vic, c. 4 . . .					
1894	53 Vic, c. 4 . . .					
1895	53 Vic, c. 4 . . .					
1896	53 Vic, c. 4 . . .					
1897	53 Vic, c. 4 . . .					
1898	53 Vic, c. 4 . . .					
1899	53 Vic, c. 4 . . .					
1900	53 Vic, c. 4 . . .					

No. 5.—STATEMENT showing Railways subsidized by Grants of Land—Concluded.

Year.	Act.	Line subsidized.	Acres per Mile.	Estimated Number of Miles.	Total Grant. Acres.
1885	48-49 Vic., c. 60	Qu'Appelle, Long Lake and (Regina to Long Lake. . . . . Saskatchewan Railway and ( Long Laketon to near Elbow North Saskatchewan, with Steam-boat Co., and branches to Prince Albert and Battleford. . . . . Red Deer Valley and Coal Co., from Town of Calgary to point on Township 29, Range 23, west 4th Meridian. . . . . Winnipeg and Hudson Bay Railway Co., Winnipeg to Hudson Bay . . . . . Wood Mountain and Qu'Appelle Railway Co., from Wood Mountain <i>via</i> Qu'Appelle and Fort Qu'Appelle to the Manitoba and North-western Railway. . . . .	6,400	293 } 348½	2,229,333
1887	50-51 Vic., c. 23		6,400	325 }	352,000
1891	54-55 Vic., c. 9.		6,400 acres in Manitoba. 12,800 acres in N. W. T.	55 }	
1884	47 Vic., c. 25.		6,400	240	1,536,000
1886	49 Vic., c. 11.				

248 miles com-  
pleted and in  
operation.

\* Name changed by 52 Vic., c. 65, to the North-western Railway of Canada.

APPENDIX No. 20.

LIST OF RAILWAY SUBSIDY ACTS PASSED IN EACH YEAR.

NOTE.—The marginal number opposite each subsidy has reference to the alphabetical list in the Minister's report showing the action taken in cases where a contract for work has been made with any company.

By the Acts of Parliament below specified, authority has been placed in the hands of the Governor in Council to grant, upon certain conditions, aid towards the construction of various lines of railway throughout the Dominion, as follows, namely:—

By the Act 45 Vic., cap. 14 (1882.) (*Assented to 17th May, 1882*):—

- |   |           |
|---|-----------|
| 1. For a railway from Gravenhurst to Callander, both in the Province of Ontario, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole.....  | \$660,000 |
| 2. For a railway from St. Raymond to Lake St. John, both in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 384,000   |
| 3. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the Province of Quebec, or between them, to Edmundston, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 240,000   |
| 4. For a railway from Oxford to New Glasgow, both in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 224,000   |

“The said subsidies to be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to complete the said railways respectively, within a reasonable time, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in an agreement to be made by the company with the Government, and which the Government is empowered to make, and to be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, such proportion to be established by the report of the said Minister; provided always, that the granting of such bonuses or subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting therewith, as the Governor in Council may determine.”

By the special Act 45 Vic., cap. 55 (1882.) (*Assented to 17th May, 1882*):—

- |   |           |
|---|-----------|
| 5. A subsidy authorized in favour of “The Chignecto Marine Transport Railway Company,” provided that they construct and thereafter maintain and operate a ship railway, to be approved by the Government, across the Isthmus of Chignecto, from the Gulf of St. Lawrence to the Bay of Fundy, per year, for twenty-five years.... | \$150,000 |
|---|-----------|

By the Act 46 Vic., cap. 25 (1883.) (*Assented to 25th May, 1883*):—

- |  |         |
|--|---------|
| 6. To the Baie des Chaleurs Railway Company, for 100 miles of their railway, from Matapediac, on the Intercolonial Railway, to Pasbebiac, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 320,000 |
|--|---------|

7. To the Caraquet Railway Company, for 36 miles of their railway from a point near Bathurst to Caraquet, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$115,200
8. To the Gatineau Valley Railway Company, for the first 50-mile section of their railway, from Hull station, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	160,000
9. To the Great American and European Short Line Railway Company, for 80 miles of their railway from Canso to Louisburg or Sydney in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	256,000
10. To the International Railway Company, for 49 miles of their railway from Sherbrooke, in the Province of Quebec, to the International boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	156,800
11. To the Northern and Western Railway Company, for 32 miles of their railway, from the Intercolonial Railway, near the Miramichi, to Moran's near Demphy village, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	102,410
12. To the Montreal and Western Railway Company, for the first 50-mile section of their railway, out of St. Jérôme, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000
13. To the Napanee, Tamworth and Quebec Railway Company, for 28 miles of their railway from Napanee to Tamworth, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600
14. To the Quebec and Lake St. John Railway Company, for 25 miles of their railway, from St. Raymond to Lake St. John, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.	
15. For a railway from the International Railway at Petitcodiac to Havelock Corner, in the Province of New Brunswick, 12 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
16. For a railway from Gravenhurst to Callender, 110 miles, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole.....	660,000
In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.	

"The nine subsidies first mentioned to be granted to the companies hereinbefore named respectively; and the two subsidies last mentioned to be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to complete the said railways, respectively; and all the eleven lines above mentioned, and also the lines of railway in respect of which it is provided by the Act of forty-fifth Victoria, chapter fourteen, that subsidies may be granted, shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years from and after the passing of this Act, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made by each company with the Government, and which the Government is empowered to make; and all the said subsidies authorized by this Act, respectively, to be paid out of the Consolidated Revenue Fund of Canada by instalments, on the completion of each section of not less than ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, to be established by the report of the said Minister; Provided always, that the granted

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of such subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized as the Governor in Council may determine."

By the special Act 46 Vic., cap. 26 (1883.) (*Assented to 25th May, 1883*):—

17. An advance authorized in favour of the "St. John Bridge and Railway Extension Company," to enable them to build a railway bridge across the River St. John, N.B., with railway connection with the Intercolonial, such advance to be secured by a mortgage on their entire property, not to exceed 80 per cent of the expenditure on the work, nor a total sum of.....\$ 500,000

By the Act 47 Vic., cap. 8 (1884.) (*Assented to 19th April, 1884*):—

18. To the Government of the Province of Quebec, in consideration of their having constructed the railway from Quebec to Ottawa, forming a connecting line between the Atlantic and Pacific coasts *via* the Intercolonial and Canadian Pacific Railways, and being as such a work of national and not merely provincial utility, a subsidy not exceeding \$6,000 per mile for the portion between Quebec and Montreal, 159 miles, nor exceeding in the whole..... 954,000
19. And for the portion between Montreal and Ottawa, 120 miles, \$12,000 per mile, nor exceeding in the whole.....1,440,000
20. For the construction of a line of railway connecting Montreal with the harbours of St. John and Halifax by the shortest and best practicable route, after the report of competent engineers, a subsidy not exceeding \$170,000 per annum, for fifteen years, or a guarantee of a like sum for a like period as interest on bonds of the company undertaking the work.
21. For the construction of a line of railway from Oxford station, on the Intercolonial Railway, to Sydney or Louisburg, a subsidy not exceeding \$30,000 per annum for fifteen years or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work, in addition to the subsidies previously granted, and also a lease or transfer to such company of the Eastern Extension Railway, from New Glasgow to Canso, with its present equipment.
22. To the Quebec Central Railway Company, for a line of railway from Beauce Junction to the International boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. .... 211,200
23. For the extension of the Canadian Pacific Railway, from its terminus at St. Martin's Junction, near Montreal, or some other point on the Canadian Pacific Railway, to the harbour of Quebec, in such manner as may be approved by the Governor in Council, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole..... 960,000
24. To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria branch of the Midland Railway to the village of Bancroft, in the Township of Dungannon, County of Hastings, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 160,000
25. To the Pontiac Pacific Junction Railway, for a line of railway from Hull or Aylmer to Pembroke, provided the Ottawa River is crossed at some point not east of Lapasse, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 272,000
26. To the Gatineau Railway Company, for a line of railway from Kazuabazua to Le Désert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 160,000

27. To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth to Bogart and Bridgewater, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	\$ 70,400
28. To the Montreal and Western Railway Company, for a line of railway from the end of the line subsidized in the now last Session of Parliament, towards Le Désert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000
29. To the Northern and Western Railway Company, for a line of railway from Fredericton to the Miramichi River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (instead of the subsidy proposed in 1883). .....	128,000
30. To the Erie and Huron Railway Company, for a line of railway from Wallaceburg to Sarnia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
31. To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	262,400
32. To the Kingston and Pembroke Railway Company, for a line of railway from Mississippi to Renfrew, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
33. To the Great Northern Railway Company, for that portion of their railway between St. Jérôme and New Glasgow, in the County of Terrebonne, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
34. For a line of railway and bridge between the Jacques Cartier Union Railway Junction with the Canadian Pacific Railway and St. Martin's Junction, connecting the Jacques Cartier Union Railway with the North Shore Railway proper, a subsidy not exceeding in the whole.....	200,000
35. For a line of railway from Richibucto to St. Louis, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
36. For a line of railway from Hopewell to Alma, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
37. For a line of railway from St. Andrews to Lachute, in the County of Argenteuil, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
38. For a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	217,600
39. For a line of railway from Annapolis to Digby, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
40. For a line of the Central Railway, from the head of Grand Lake to the Intercolonial Railway, between Sussex and St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	128,000
41. To the Caraquet Railway Company, for the extension of their line of railway from Caraquet to Shippegan Harbour, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
42. For a branch of the Intercolonial Railway, from Metapedia eastward towards Paspébiac, twenty miles, in the Province of Quebec, a sum not exceeding in the whole.....	300,000
43. For a branch of the Intercolonial Railway, from Derby Station to Indiantown, fourteen miles, a sum not exceeding in the whole.....	140,000

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the



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said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of July next and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, except the line mentioned in the fourth section of this Act,\* which shall be commenced within one year, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister. The subsidies to the Province of Quebec shall be capitalized, and the interest shall be payable at such time and in such manner as the Government of Canada shall agree upon with the Government of the said province. The two subsidies last mentioned in the list are for works to be constructed by the Government of Canada.

“ Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine.”

By the special Act 47 Vic., cap. 6 (1884). (*Assented to 19th April, 1884*):—

44. Relating to an agreement with the Province of British Columbia, authority was given, *inter alia*, for the grant of a subsidy to “the Esquimalt and Nanaimo Railway Company” in aid of the construction of a line of railway and telegraph between the points named; such subsidy to be in lands *en bloc* on Vancouver Island, the boundaries being fixed by the Act, and in money..... \$750,000

By the Act 48-49 Vic., cap. 59 (1885). (*Assented to 20th July, 1885*):—

45. To the Ottawa, Waddington and New York Railway and Bridge Company, for a line of railway from Ottawa to Waddington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 166,400
46. To the New Brunswick and Prince Edward Island Railway Company, for a line of railway from Sackville to the Straits of Northumberland, at or near Cape Tormentine, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 118,400
47. To the Montreal and Sorel Railway Company, for a line of railway from St. Lambert to Sorel, a subsidy not exceeding \$1,600 per mile, nor exceeding in the whole..... 72,000
48. To the Brockville, Westport and Sault Ste. Marie Railway Company, for a line of railway from Brockville to Westport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 128,000
49. To the Quebec and Lake St. John Railway Company, for a line of railway from its junction on the North Shore Railway to St. Raymond, upon condition of the company extending their road to a point 50 miles north of St. Raymond, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 96,000
50. To the Northern and Western Railway Company, for a line of railway from the northern end of the 40 miles subsidized between Fredericton and the Miramichi River by 47 Victoria, chapter 8, to

\*The extension of the Canadian Pacific Railway from its terminus at St. Martin's Junction, or some other point on the said railway, to the harbour at Quebec.

	Boiestown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$19,200
51.	To the Montreal and Champlain Junction Railway Company, for a line of railway from Brosseau's to Dundee, a subsidy not exceeding \$500 per mile, nor exceeding in the whole .....	30,000
52.	To the Thunder Bay Colonization Railway Company, for a line of railway from the Murillo station of the Canadian Pacific Railway to the east end of Whitefish Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	92,000
53.	To the Central Ontario Railway Company, for a line of railway from Coe Hill or Rathbun, to Bancroft, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
54.	To the Belleville and North Hastings Railway Company, for a line of railway from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, a subsidy not exceeding \$1,500 per mile, nor exceeding in the whole.....	10,500
55.	For a line of railway from Long Sault to the foot of Lake Temiscamingue, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,600
56.	For a line of railway from a point on the Canada Southern Railway near Comber, to Lake Erie, at or near the village of Leamington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	44,800
57.	To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth towards Bogart and Bridgewater, 16 miles, in lieu of the subsidy granted by 47 Vic., chapter 8, a subsidy of.....	70,000
58.	To the Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of 62 miles, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, a subsidy of.....	320,000
59.	For a line of railway from the Grand Piles, on the River St. Maurice, to its junction with Lake St. John Railway, a distance of about 50 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, for a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy of.....	217,600
60.	To the Canada Atlantic Railway Company, for a line of railway from Valleyfield to a point one and a-half miles west of Johnston's, a subsidy not exceeding \$1,600 per mile, and from one and a-half miles west of Johnston's to Lacolle; also from the present terminus at Ottawa, to the Chaudière Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
61.	For a line of railway from Indiantown <i>via</i> the Miramichi Valley, to its junction with the Northern and Western Railway at or near Boiestown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	140,800

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions, specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively,

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shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister.

“Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connected with those so subsidized, as the Governor in Council may determine.”

By the Act 48-49 Vic., cap. 58 (1885). (*Assented to 20th July, 1885*):—

62. “For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the Province of Quebec, to Edmundston, in the Province of New Brunswick, a subsidy not exceeding two thousand eight hundred dollars per mile for seventy-five miles, and six thousand dollars per mile for eight miles, nor exceeding in the whole two hundred and fifty-eight thousand dollars; the said subsidy to be in addition to the subsidy authorized to be granted in aid of the construction of the said railway by the Act forty-fifth Victoria, chapter fourteen, and constituting with the subsidy so authorized, a subsidy not exceeding in the whole four hundred and ninety-eight thousand dollars, and to be granted for the said railway upon the terms and conditions specified in the said Act, and payable out of the Consolidated Revenue Fund of Canada; and for the purpose of incorporating the persons undertaking the construction of the said railway and those who shall be associated with them in the undertaking, the Governor may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, which shall be similar to such of the franchises, privileges and powers granted to railway companies during the present Session as the Governor shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.”
63. “For a line of railway from the south bank of the St. Lawrence river, opposite or near Montreal, to the harbours of St. Andrews, St. John and Halifax, *via* Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton and Salisbury, a subsidy not exceeding eighty thousand dollars per annum for twenty years, forming in the whole, together with the subsidy authorized by the Act forty-seventh Victoria, chapter eight, for a line of railway connecting Montreal with the said harbours of St. John and Halifax by the shortest and best practicable route, which the line above described is found to be, a subsidy not exceeding two hundred and fifty thousand dollars per annum, the whole of which shall be paid in aid of the construction of such a line of railway for a period of twenty years, or a guarantee bond of a like sum for a like period as interest on the bonds of the company undertaking the work; the said subsidy to be so granted upon the terms and conditions of and payable out of the Consolidated Revenue Fund in the manner specified in the said last mentioned Act in respect of the subsidy thereby authorized in aid of the said line of railway.”
64. “The Governor in Council may grant a further subsidy as an aid towards procuring free access as hereinafter described for the trains and traffic of the Canadian Pacific Railway Company from St. Martin’s Junction, near Montreal, or from some other point on their railway to be selected by the said company, to the harbour of Quebec, in

such a manner as shall be approved by the Governor in Council, that is to say: an additional subsidy not exceeding three hundred and forty thousand dollars, constituting, together with the subsidy authorized by the said last mentioned Act to aid in procuring the extension of the Canadian Pacific Railway to Quebec, and the subsidy also thereby authorized to aid in constructing a line connecting the Canadian Pacific Railway at the Jacques Cartier Union Junction with the North Shore Railway proper (which subsidies shall be applicable to the said first mentioned purpose) a sum not exceeding in the whole the sum of one million five hundred thousand dollars, payable out of the Consolidated Revenue Fund of Canada."

The said Act further provided as follows in relation to this matter:—

"If it should be expedient so to do in order to facilitate such access, the Governor in Council may acquire the North Shore Railway, and may apply the said sum of one million five hundred thousand dollars, or any part thereof, in aid of such acquisition; and upon such acquisition may transfer and convey or lease the said railway to the Canadian Pacific Railway Company, subject to such obligation as the Government shall have assumed in acquiring it."

By the Act 49 Vic., cap. 10 (1886.) (*Assented to 2nd June, 1886*):—

- |     |   |           |
|-----|---|-----------|
| 65. | For a railway from a point at or near Moncton, to Buctouche, in the Province of New Brunswick, thirty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....  | \$ 96,000 |
| 66. | For a railway from Ingersoll <i>via</i> London to Chatham, in the Province of Ontario, eighty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....  | 256,000   |
| 67. | To the Northern and Western Railway Company, for ten miles of their railway, intervening between the termini of the portions of their railway for which subsidies are already granted, the one from Fredericton and the other from Indiantown, and an extension of two miles down to deep water at Chatham, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 32,000    |
| 68. | To the Caraquet Railway Company, for ten miles of their railway from the end of the present subsidized portion at Lower Caraquet to Shippegan, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....  | 32,000    |
| 69. | To the Lake Erie, Essex and Detroit River Railway Company, for thirty-seven miles of their railway, from Windsor to Leamington, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 118,400   |
| 70. | To the Thunder Bay Colonization Railway Company, for fifty-six miles of their railway, from the end of the present subsidized section to a point near Crooked Lake, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 179,200   |
| 71. | To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the Village of Sandridge, on the line of the Northern Pacific Junction Railway, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 128,000   |
| 72. | For a railway from a point at or near New Glasgow or St. Lin, to or near to Montcalm, in the Province of Quebec, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....  | 57,600    |
| 73. | For a railway from Hereford to the International Railway, in the township of Eaton, in the Province of Quebec, thirty-four miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 108,800   |
| 74. | For a railway from St. Félix to Lake Maskinongé, Parish of St. Gabriel, in the Province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....   | 32,000    |

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75.	For a railway from Glenannan to Wingham, in the Province of Ontario, five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 16,000
76.	For a railway from a point at or near the McCann Station, on the Intercolonial Railway, to the Joggins, on Cumberland Basin, in the Province of Nova Scotia, twelve miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
77.	For a railway from L'Assomption to L'Epiphanie, in the Province of Quebec, three miles and a half, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	11,200
78.	To the Montreal and Western Railway Company, for seventy miles of their railway from St. Jérôme, north-westerly towards Désert, in the Province of Quebec, a subsidy of \$5,161 per mile, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, not exceeding in the whole.....	361,270
79.	For a railway from St. Andrews to the Canadian Pacific Railway at or at any point east of the Town of Lachute, in the County of Argensteuil, in the Province of Quebec, seven miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
80.	To the Canada Atlantic Railway Company, for twelve miles of their railway from Clark's Island to Valleyfield, and from Lacolle, in the Province of Quebec, to the International boundary, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
81.	For a railway from Truro to Newport, in the Province of Nova Scotia, forty-nine miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	156,800
82.	To the Quebec and Lake St. John Railway Company, for ninety-five miles of their railway, from a point fifty miles north of St. Raymond to Lake St. John, in the Province of Quebec, a subsidy not exceeding \$1,961 per mile, nor exceeding in the whole (in addition to the subsidy granted by 45 Victoria, chapter 14, and 46 Victoria, chapter 25, of \$3,200 per mile).....	186,295
83.	To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway from Lorette <i>via</i> Cap Rouge to Quebec, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
84.	For the construction of wharves and landing stages on the line of the railway from Long Sault to the foot of Lake Temiscamingue, a subsidy of.....	6,000
85.	To the Gananoque, Perth and James Bay Railway Company, seven-teen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400
86.	For a railway from St. Eustache to St. Placide, County of Two Mountains, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
87.	For a railway from a point on the Intercolonial Railway through the Stewiacke Valley, on the line which will afford facilities of communication with the Iron Mines, Spring Side, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
88.	For a railway from Yamaska to the River St. Francis, in the Province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
89.	For a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, in the Province of New Brunswick, twenty-eight miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600

<b>90.</b> For a railway from Fredericton to the village of Prince William, in the Province of New Brunswick, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 70,400
<b>91.</b> For a railway from a point on the Intercolonial Railway near Newcastle or <i>via</i> Douglstown to a point on the River Miramichi, opposite the town of Chatham, in the Province of New Brunswick, six miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
<b>92.</b> For a railway from a point on the Canadian Pacific Railway to Eganville, in the Province of Ontario, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
<b>93.</b> To the Belleville and North Hastings Railway Company, for seven miles of their railway, from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, in the Province of Ontario, a subsidy (in addition to the subsidy of \$1,500 per mile granted by 48-49 Victoria, chapter 59), not exceeding \$1,700 per mile, nor exceeding in the whole... ..	11,900
<b>94.</b> To the Napanee, Tamworth and Quebec Railway Company, for eighteen miles of their railway from Tamworth to Tweed, in lieu of the subsidy granted by 48-49 Victoria, chapter 59, a subsidy of.....	70,000
<b>95.</b> To the Albert Railway Company, for their railway from Salisbury to Hopewell, in the Province of New Brunswick, which is a feeder to the Intercolonial Railway, in the form of a loan, repayable at such time and secured in such manner as the Governor in Council determines, a subsidy of.....	15,000

"The subsidies hereinbefore mentioned as to be granted to the companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies have been granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall be so constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in the agreement to be made in each case by the company to the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council, and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister: Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements, and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine."

By Section 2 of this Act authority was given for the grant of a charter by the Governor in Council for the purpose of constructing a railway from Long Sault to the foot of Lake Temiscamingue.

By the Act 50-51 Vic., cap. 24 (1887.) (*Assented to 23rd June, 1887*):—

<b>96.</b> To the St. Catharines and Niagara Railway Company, for twelve miles of their railway from the city of St. Catharines to the bridge over the Niagara River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 38,400
<b>97.</b> To the Vaudreuil and Prescott Railway Company, for thirty miles of their railway from Vaudreuil towards Hawkesbury, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000

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98.	To the Richmond Hill Junction Railway Company, for five miles of their railway from Richmond Hill Junction, on the Northern Railway of Canada, to Richmond Hill village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 16,000
99.	To the Drummond County Railway Company, for thirty miles of their railway from Drummondville towards Nicolet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
100.	To the Joggins Railway Company, for one and a quarter miles of their railway extending from the southern end of the portion subsidized by the Act 49 Victoria, chapter 10, to the wharves, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	4,000
101.	To the Moncton and Buctouche Railway Company, for two miles of their railway from the west end of the portion subsidized by the Act 49 Victoria, chapter 10, to Moncton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	6,400
102.	To the Beauharnois Junction Railway Company, for thirty miles of their railway from St. Martin's towards St. Anicet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
103.	To the Harvey Branch Railway Company, for three miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600
104.	To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway from the town of Brantford to the village of Hagarville or the village of Waterford, or some intermediate point on the Canada Southern Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
105.	To the Guelph Junction Railway Company, for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the town of Guelph, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
106.	To the Massawippi Railway Company, for ten miles of their railway from a point on the Atlantic and North-western Railway, near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
107.	To the Napanee, Tamworth and Quebec Railway Company, for four miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to Tweed, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	12,800
108.	To the Dominion Lime Company, for seven miles of their railway from a point on the Quebec Central Railway, in the township of Dudswell to the Dudswell Lime Company's quarries, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
109.	To the South Norfolk Railway Company, for seventeen miles of their railway from Port Rowan to the town of Simcoe, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400
110.	To the Jacques Cartier Union Railway Company, extending and completing their railway, a subsidy of.....	20,000
111.	For a line of railway from Mount Forest to Walkerton, twenty-four miles in length, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
112.	To the Oshawa Railway and Navigation Company, for seven miles of their railway from Port Oshawa towards Raglan, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
113.	To the Saguenay and Lake St. John Railway Company, for thirty miles of their railway from Lake St. John towards Chicoutimi, or	

	from Chicoutimi towards Lake St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 96,000
114.	To the Great Eastern Railway Company, for thirty miles of their railway from the River St. Francis to the Arthabaska Railway, at St. Grégoire station, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
115.	To the Ontario and Pacific Railway Company, for six miles of their railway from the northern end of the portion subsidized by the Act 47 Victoria, chapter 8, to the town of Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
116.	To the Carquet Railway Company, for seven miles of their railway from Lower Carquet to Shippegan, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding in the whole	32,000
117.	To the St. Lawrence and Lower Laurentian and Saguenay Railway Company, for the section of this railway from Grand Piles, on the St. Maurice River, to its junction with the Quebec and Lake St. John Railway, in lieu of the subsidy granted by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, for a line of railway from Grand Piles, on the St. Maurice River, to its junction with the Lake St. John Railway, a distance of about fifty miles, a subsidy of .....	217,600
118.	To the St. John Valley and River du Loup Railway Company, for twenty-two miles of their railway from the village of Prince William towards the town of Woodstock, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
119.	To the Lake Temiscamingue Railway Company, for four short sections of railway, in all about two miles in length, to overcome the rapids of the Ottawa River, known as "La Mi-Charge," "La Cave," "Les Erables," and "La Montagne," and for the construction of wharves and landing stages at these rapids, to connect the Canadian Pacific Railway at Mattawa with Lake Temiscamingue by steam-boats, railways and other works (in lieu of a portion two miles in length, out of the eight miles of railway subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, under which about six miles of railway have already been built from the foot of Long Sault proper to the foot of Lake Temiscamingue, and in lieu also of the subsidy granted by the Act 49 Victoria, chapter 10), a subsidy of.....	12,400
120.	To the Carillon and Grenville Railway Company, for twelve miles of their railway from St. Eustache to Sault au Récollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
121.	To the Minudie Branch Railway Company, for five and a half miles of their railway from its junction with the Joggins Railway, near the River Hébert railway bridge, to the village of Minudie a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	17,600
122.	To the Lake Temiscamingue Colonization and Railway Company, for ten and a half miles of their railway from the Long Sault to Lake Kippewa, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	33,600
123.	To the Leamington and St. Clair Railway Company, for two miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to the village of Comber, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	6,400
124.	To the Cumberland Railway and Coal Company, for fourteen miles of their railway from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the railway between Oxford and New Glasgow, near Oxford village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	44,800



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125.	To the Montreal and Champlain Junction Railway Company, a subsidy of.....	\$ 64,000
126.	To the Quebec and Lake St. John Railway Company, for nine miles of their railway, the distance which the previous subsidies granted are short of covering from the City of Quebec to Lake St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	28,800
127.	To the Temiscouata Railway Company, for thirty miles of a branch of their railway from Edmundston towards the St. Francis River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	96,000
128.	To the Cornwallis Valley Railway Company, for thirteen miles of their railway from Kentville to Kingsport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	41,600
129.	To the Nova Scotia Central Railway Company, for thirty-four miles of their railway, a subsidy not exceeding \$3,200 per mile, not exceeding in the whole.....	108,800
130.	To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, a subsidy of... ..	89,600
131.	For a railway from Woodstock towards Centreville, twenty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	64,000
132.	For a railway bridge over the St. Lawrence River, at Coteau Landing, on the line of the Canada Atlantic Railway, a subsidy of fifteen per cent on the value of the structure, not to exceed.....	180,000
133.	To the Lake Erie, Essex and Detroit River Railway Company, for twenty-seven miles of their railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy nor exceeding.....	118,400

“ For the purpose of granting corporate powers to persons or companies undertaking the construction of railways or parts of railways, mentioned in the next preceding section, for the construction of which no corporate powers exist at the time of the passing of this Act, the Governor in Council may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, as the Governor in Council shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.

“ The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct their railway, shall be granted to such companies as shall be approved by the Governor in Council, as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized, except as regards the subsidy for the bridge over the St. Lawrence River, upon which shall be paid fifteen per

cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

"The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"Notwithstanding anything contained in the Act forty-fifth Victoria, chapter fourteen, or in the Act forty-six Victoria, chapter twenty-five, the balances of the sums granted for a railway from St. Raymond to Lake St. John and to the Quebec and Lake St. John Railway Company by the said Acts respectively, which have not yet been paid by the Government, may be paid at any time within one year from the passing of this Act, subject to the conditions in the said Act contained."

By the Act 51 Vic., cap. 3 (1888). (*Assented to 22nd May, 1888*) :—

134.	To the Ottawa and Parry Sound Railway Company, for 22 miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by 49 Victoria, chapter 10, for a railway from a point on the Canadian Pacific Railway to Eganville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$70,400 00
135.	To the Nova Scotia Central Railway Company, for 46 miles of their railway, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole... ..	147,200 00
136.	To the Montreal and Champlain Junction Railway Company, for 3 miles of their railway from the end of the present subsidized section, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	9,600 00
137.	To the Massawippi Junction Railway Company, for their railway from a point on the Atlantic and North-west Railway, near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of.....	32,000 00
138.	To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of \$31,500, to be paid out monthly as the work progresses, upon the certificate of the Chief Engineer of Government Railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken, and for three miles of their railway extending from a point three miles east of Pembroke to Pembroke, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$9,600, provided that the entire work subsidized upon this railway shall be completed within four years from the passing of this Act, the subsidy granted by this Act not to exceed in the whole.....	41,100 00
139.	To the Port Arthur, Duluth and Western Railway Company, for 84½ miles of their railway from Port Arthur towards Gun Flint Lake, in lieu of the subsidies granted by 48-49 Victoria, chapter 59, and 49 Victoria, chapter 10, for the construction of a railway from Murillo Station to Crooked Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	271,200 00
140.	To the Quebec and Lake St. John Railway Company, for 30 miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, being a transfer made at the request of the Saguenay and Lake St. John Railway Company of the subsidy granted to them by 50-51 Victoria, chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	96,000 00

## Department of Railways and Canals.

141.	To the Temiscouata Railway Company, for 20 miles of their branch railway from Edmundston towards the St. Francis River, in the Province of Quebec, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of.....	\$ 100,000 00
142.	To the Quebec Central Railway Company, for the construction and completion of a line of railway from St. Francis Station to a point on the Atlantic and North-west Railway near Moose River, 90 miles, in lieu of the balance of the subsidy, unearned, granted by 47 Victoria, chapter 8, a subsidy not exceeding \$21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of.....	288,000 00
143.	To the Central Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 4,052 tons of used iron rails and fastenings loaned to the St. Martin's and Upham Railway Company, now forming part of the Central Railway, which rails and fastenings stand in the Public Accounts as an asset for.....	83,612 54
144.	To the Elgin, Petitcodiac and Havelock Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,201 tons of used iron rails and fastenings loaned to the Elgin Branch Railway, now forming part of the Elgin, Petitcodiac and Havelock Railway, which rails and fastenings stand in the Public Accounts as an asset for.....	44,252 82
145.	To the Kent Northern Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,549 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	58,334 27
146.	To the Halifax Cotton Company of Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 233 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	4,335 00
147.	To the Steel Company of Canada, in Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 597 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	11,964 66
148.	To the Albert Railway Company of New Brunswick, a grant as subsidy (the section of road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 726 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	14,665 45

- 149.** To the Chatham Branch Railway of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 958 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for..... \$ 24,439 84

“All the lines, for the construction of which subsidies are granted, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and also the said subsidies respectively, payable in cash, shall be payable out of the Consolidated Revenue Fund of Canada by instalments, on the completion to the satisfaction of the Minister of Railways and Canals of each section of the railway of not less than 10 miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized.

By the Act 52 Vic., cap. 3 (1889). (*Assented to 2nd May, 1889*):—

- 150.** To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Ottawa, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$172,400 00
- 151.** To the Ottawa and Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of sixty-two miles, a subsidy not exceeding in the whole..... 320,000 00
- 152.** To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway, from Lorette *viâ* Cap Rouge to Quebec, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 38,400 00
- 153.** To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, or some other point on the line of the Northern and Pacific Junction Railway, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 128,000 00
- 154.** For a railway from St. Andrew's to the Canadian Pacific Railway, at or at any point east of the town of Lachute, in the County of Argenteuil, in the Province of Quebec, seven miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.... 22,400 00
- 155.** For a railway from Truro, or a point between Truro and Stewiacke, to Newport or to Windsor, in the Province of Nova Scotia, forty-nine miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 156,800 00
- 156.** For a line of the Central Railway from the head of Grand Lake to the Intercolonial Railway, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 128,000 00
- 157.** To the Albert Southern Railway Company, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, nor exceeding in the whole..... 31,771 43
- 158.** To the Baie des Chaleurs Railway Company, the balance remaining unpaid of the subsidy mentioned in the Act 49th Victoria, chapter 17, not exceeding in the whole..... 244,500 00
- 159.** To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria Branch of the Midland Rail-

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	way to the village of Bancroft, in the County of Hastings, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, not exceeding in the whole.....	\$145,000 00
160.	To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callander, the balance remaining unpaid of the subsidies granted by the Acts 45th Victoria, chapter 14, and 46th Victoria, chapter 25, not exceeding in the whole.....	35,000 00
161.	For a railway from some point on the Joggins Railway, near the Hébert River, to Young's Mills, in the Province of Nova Scotia, a distance of five miles, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	16,000 00
162.	To the St. Clair Frontier Tunnel Company, for the construction of a tunnel under the St. Clair River, from a point at or near Sarnia, to a point at or near Port Huron, a subsidy not exceeding in the whole.....	375,000 00
163.	To the Pontiac and Renfrew Railway Company, for six miles of their railway from the north bank of the Ottawa River, opposite Braeside, or from Bristol Iron Mines, to the Pontiac Pacific Junction Railway, near the Quion River, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	19,200 00
164.	To the Quebec, Montmorency and Charlevoix Railway Company, for thirty miles of their railway, from the east bank of the St. Charles River, to or near to Cap Tourmente, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	96,000 00
165.	To the Fredericton and St. Mary's Bridge Company, for a bridge over the St. John River, at Fredericton, in the Province of New Brunswick, a subsidy not exceeding in the whole.....	30,000 00
166.	To the Napauee, Tamworth and Quebec Railway Company, for seven miles of their railway, from a point at or near Yarker to a point at or near Harrowsmith, and to a company for three miles of railway from a point at or near Harrowsmith to a point at or near Sydenham, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	32,000 00
167.	For a railway from a point near Sicamous, on the Canadian Pacific Railway, to a point on Lake Okanagan for fifty-one miles of such railway, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	163,200 00
168.	To the Cornwallis Valley Railway Company, for one mile of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Kingsport, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	3,200 00
169.	To the Lake Témiscamingue Colonization and Railway Company, for fifteen miles of their railway, from Mattawa station on the Canadian Pacific Railway, towards the Long Sault, or from the Long Sault towards the said Mattawa station, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
170.	To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from a point on the Canadian Pacific Railway at or near Maskinongé or Louiseville, towards the Parish of Saint-Michel des Saints, on the River Mattawin, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
171.	To the Kingston, Smith's Falls and Ottawa Railway Company, for twenty miles of their railway, from the city of Kingston	

	towards Smith's Falls, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	\$ 64,000 00
172.	To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway, from Woodstock to Hamilton, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	158,000 00
173.	For a railway from St. Césaire to St. Paul d'Abbotsford, in the Province of Quebec, five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	16,000 00
174.	To the Great Eastern Railway Company, for twenty miles of their railway, from the east end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Grégoire, towards the Chaudière Junction station on the Intercolonial Railway, in the Province of Quebec, a subsidy not exceeding \$3,200 per annum, nor exceeding in the whole.....	64,000 00
175.	To the Drummond County Railway Company, for four and one-half miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Ball's Wharf, on the St. Lawrence River, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	14,400 00
176.	To the St. Catharines and Niagara Central Railway Company, for twenty miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Catharines, towards the city of Hamilton, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	64,000 00
177.	To the Quebec and Lake St. John Railway Company, for twenty miles of their railway, from the end of the section of thirty miles from Lake St. John towards Chicoutimi, subsidized by the Act 51 Victoria, chapter 3, towards Chicoutimi, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
178.	To the Grand Trunk, Georgian Bay and Lake Erie Railway Company, for fifteen miles of their railway, from the village of Tara or some point between Tara and Hepworth, to the Town of Owen Sound, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
179.	To the Hereford Railway Company, for fifteen miles of their railway, from Cookshire to a junction with the Quebec Central Railway at Dudswell, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	48,000 00
180.	To the Massawippi Junction Railway Company, for fifteen miles of their railway, from Ayer's Flat to Coaticook, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
181.	To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro', towards Palmer's Rapids, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
182.	To the Thousand Islands Railway Company, for four miles of their railway, from a point near the St. Lawrence River, in Gananoque village, to Gananoque Junction of the Grand Trunk Railway, and for thirteen miles of their railway, from Gananoque Junction of the Grand Trunk Railway to a junction with the Brockville, Westport and Sault Ste. Marie Railway, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400 00

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- 183.** For a railway from Cape Tourmente towards Murray Bay, twenty miles, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$64,000 00
- 184.** To the Amherstburg, Lake Shore and Blenheim Railway Company, for twenty miles of their railway, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 64,000 00

“So much of the subsidy of three thousand two hundred dollars per mile, which under the provisions of the Act forty-ninth Victoria, chapter seventeen, and of this Act, may be paid to the Baie des Chaleurs Railway Company in respect of the thirty miles of their railway, from the seventieth to the hundredth mile, eastward from Metapediac, shall be applicable to the section of the said railway, comprised between the fortieth and the seventieth mile thereof, eastward from Metapediac, instead of to the said first mentioned section of thirty miles, making six thousand four hundred dollars per mile applicable to the secondly mentioned section of thirty miles; but the foregoing provision shall be subject to the condition that the said company undertake to complete the thirty miles of their railway from the seventieth to the hundredth mile eastward from Metapediac within a reasonable time, not to exceed four years, to be fixed by Order in Council, and without any further subsidy from the Government of Canada, and that they deposit with the Minister of Railways and Canals, as security to the Crown that they will well and truly carry out their undertaking, their bonds to the amount of two hundred thousand dollars.

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized, except as respects the tunnel under the St. Clair River, in which case there shall be paid fifteen per cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

“The granting of such subsidies, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

“And for the removal of doubts it is hereby declared and enacted that the provision in the Act passed in the fifty-first year of Her Majesty's reign, and chaptered three, relating to the Pontiac Pacific Junction Railway Company, extended and extends the several subsidies in aid of the said company for four years from the passing of the said Act, that is to say, from the twenty-second day of May, one thousand eight hundred and eighty-eight.”

By the Special Act, 52 Vic., cap. 5, 1889. (*Assented to 2nd May, 1889*):—

- 185.** In order to enable the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company to complete their railway from Regina to some point on the South Saskatchewan River at or near Saskatoon, and thence northward to Prince Albert, the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and

mails, for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum in manner following, that is to say:—the sum of fifty thousand dollars to be paid annually on the construction of the railway to a point at or near Saskatoon, such payment to be computed from the date of the completion of the railway to such point; and the remaining thirty thousand dollars annually on the extension of the railway to Prince Albert, such payment to be computed from the date of such last mentioned completion: Provided that if the second portion of the said railway is not built and operated to Prince Albert within two years after the completion of the railway to the South Saskatchewan as aforesaid, the payment of fifty thousand dollars shall cease until the whole railway is finished to Prince Albert.

By the Act 53 Vic., cap. 2 (1890). (*Assented to 16th May, 1890*)—:

186.	To the Montreal and Ottawa Railway Company, for 30 miles of their railway, from the western end of the 30 miles subsidized by the Act 50-51 Victoria, chapter 24, towards Ottawa, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	\$96,000
187.	To the Waterloo Junction Railway Company, for 11 miles of their railway, from Waterloo to Elmira, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	35,200
188.	To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callendar, the balance remaining unpaid of the subsidies granted by the Acts 45 Victoria, chapter 14, and 46 Victoria, chapter 25, not exceeding in the whole.....	600
189.	For a railway from Woodstock <i>via</i> London to Chatham, in the Province of Ontario, 80 miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Ingersoll <i>via</i> London to Chatham, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	256,000
190.	To the St. Catharines and Niagara Railway Company, for 14 miles of their railway, from the end of the 20 miles subsidized by the Act 52 Victoria, chapter 3, to Hamilton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	44,800
191.	To a railway from Ottawa to Morrisburg, 52 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	166,400
192.	To the Erie and Huron Railway Company, for 22 miles of their railway from Petrolia <i>via</i> Oil Springs to Dresden, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	70,400
193.	To the Brockville, Westport and Sault Ste. Marie Railway Company, for a railway from Brockville to Westport, the balance remaining unpaid of the subsidy granted by the Act 48-49 Victoria, chapter 59, not exceeding in the whole.....	83,000
194.	To the Manitoulin and North Shore Railway Company, for 30 miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
195.	To the Port Arthur, Duluth and Western Railway Company, for 5 miles of their railway, being a branch from the main line of railway to the Kakabeka Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	16,000
196.	To the Lake Erie and Detroit River Railway Company, for 50 miles of their railway, on a line to be fixed by the Governor in Council, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000



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197. To the Lindsay, Bobcaygeon and Pontypool Railway Company for 16 miles of their railway, from Bobcaygeon to the Midland Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 51,200
198. To the Kingston, Smith's Falls and Ottawa Railway Company, for 36 miles of their railway, from the north east end of the 20 miles subsidized by the Act 52 Victoria, chapter 3, to Smith's Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	115,200
199. To the Ottawa and Parry Sound Railway Company, for 30 miles of their railway, from Eganville to Barry's Bay, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
200. To the Belleville and Lake Nipissing Railway Company, for 30 miles of their railway, from Belleville to Tweed and thence to Bridgewater, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
201. To the Cobourg, Northumberland and Pacific Railway Company, for 30 miles of their railway from Cobourg to the Ontario and Quebec Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
202. To the St. Stephen and Milltown Railway Company, for 3½ miles of their railway, from the town of St. Stephen to the town of Milltown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	11,200
203. To the Woodstock and Centreville Railway Company, for 6 miles of their railway, from the western end of the 20 miles subsidized by the Act 50-51 Vic., chap. 24, to the International boundary between the Province of New Brunswick and the State of Maine, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
204. For a railway from a point at or near Fredericton, <i>via</i> Oromocto and Gagetown, to a point on the New Brunswick Railway west of Westfield station, for 30 miles thereof, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
205. To the Central Railway Company of New Brunswick, for 4½ miles of their railway, the distance which the previous subsidy granted is short of covering, from the head of Grand Lake to the Intercolonial Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	14,400
206. To the Montreal and Western Railway Company, for 70 miles of their railway, from St. Jérôme, north-westerly towards Désert, in the Province of Quebec, in lieu of the subsidy granted by the Act 49 Vic., chap. 10, a subsidy not exceeding \$5,161 per mile, nor exceeding in the whole.....	361,270

“ Provided, that the subsidy hereby granted to the Montreal and Western Railway Company may be paid by instalments on the completion of each section of the railway as follows, that is to say :—

SECTIONS.	Approximate length in miles.
St. Jérôme to Shawbridge.....	8
Shawbridge to St. Sauveur.....	4
St. Sauveur to Ste. Adèle.....	6
Ste. Adèle to Lac à la Fourche.....	6
Lac à la Fourche to Ste. Agathe.....	6½
Ste. Agathe to St. Faustin.....	14
St. Faustin to St. Jovite.....	7½
St. Jovite to Summit Lake.....	8
Summit Lake to La Chute aux Iroquois.....	7
La Chute aux Iroquois towards Désert.....	3

“Such instalments to be proportionate to the value of the portions so completed in comparison with that of the whole work undertaken, to be established as aforesaid.”

<b>207.</b>	For 75 miles of the railway from Shelburne, in the County of Shelburne, and from Liverpool, in the County of Queen's, towards Annapolis, in the Province of Nova Scotia, to be so contracted for as to secure the construction to both Shelburne and Liverpool, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 240,000
<b>208.</b>	To the Inverness and Richmond Railway Company for 50 miles of their railway from Port Hawkesbury to Broadcove, a subsidy not exceeding \$1,000 per mile, nor exceeding in the whole .....	50,000
<b>209.</b>	To the International Railway Company, for a railway from Sherbrooke to the International boundary, the balance remaining unpaid of the subsidy granted by the Act 46 Vic., ch. 25, not exceeding in the whole.....	3,840
<b>210.</b>	For completing the Montreal and Sorel Railway from St. Lambert to Sorel.....	40,000
<b>211.</b>	To the Pontiac Pacific Junction Railway Company, for 7½ miles of their railway, from Hull to Aylmer, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	24,000
<b>212.</b>	To the Montreal and Lake Maskinongé Railway Company, for 3½ miles of their railway, the distance which the subsidy granted by the Act 29 Vic., ch. 10, is short of covering from St. Félix to Lake Maskinongé, in the Parish of St. Gabriel, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	10,200
<b>213.</b>	To the Great Eastern Railway Company, for a bridge over the Nicolet River, and also a bridge on the St. Francis River, a subsidy of 15 per cent on the value of the structures, not to exceed.....	37,500
<b>214.</b>	To the Drummond County Railway Company, for 24 miles of their railway, from Drummondville to Ste. Rosalie, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
<b>215.</b>	To the Great Northern Railway Company, for 15 miles of their railway, from, at or near Montcalm to the Canadian Pacific Railway, between Joliette and St. Félix de Valois, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole...	48,000
<b>216.</b>	To the Lake Temiscamingue Colonization Railway Company, for 20 miles of their railway, from the northern end of the 15 miles subsidized by the Act 52 Victoria, chapter 3, to the Long Sault, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
<b>217.</b>	To the Maskinongé and Nipissing Railway Company, for 15 miles of their railway, from the northern end of the 15 miles subsidized by the Act 52 Victoria, chapter 3, towards the parish of St. Michel des Saints, on the River Mattawa, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
<b>218.</b>	To the St. Lawrence and Adirondack Railway Company, for 18 miles of their railway, from Valleyfield to Huntingdon, on the Montreal and Champlain Junction Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
<b>219.</b>	To the Quebec Central Railway Company, for 90 miles of their railway, from St. Francis Station, on the Quebec Central Railway, to a point on the Atlantic and North-Western Railway, near Moose River, or from a point on the Quebec Central Railway between the Chaudière River and Tring Station, to a point on the International Railway at or near Lake Megantic,	

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	in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding \$21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period, as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of.....	\$288,000
220.	To the Quebec and Lake St. John Railway Company, for a railway bridge over the St. Charles River, to give access to the city of Quebec, a subsidy not to exceed in the whole \$30,000; also for 12 miles of their railway from Lorette <i>via</i> Charlesbourg to Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$38,400.....	68,400
221.	For a railway from Summerside to Richmond Bay, in the Province of Prince Edward Island, 3 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600
222.	To the Columbia and Kootenay Railway Company, for 35 miles of their railway, from the outlet of Kootenay Lake to a point on the Columbia River as near as practicable to the junction of the Kootenay and Columbia Rivers, a subsidy not exceeding \$3,200 per mile, nor to exceed in the whole.....	112,000
223.	For a railway from a point on the Intercolonial Railway through the Stewiacke Valley on a line which will afford facilities of communication with the Iron Mines, Springside, Upper Stewiacke and Mosquodoboit settlements, 25 miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
224.	For a railway from Fredericton to the village of Prince William, in the Province of New Brunswick, 22 miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole...	70,400
225.	To the St. John Valley and Rivière du Loup Railway Company, for 22 miles of their railway from the village of Prince William towards the town of Woodstock, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, a subsidy not exceeding 3,200 per mile, nor exceeding in the whole.....	70,400
226.	To the Témiscouata Railway Company, for 16 miles of their railway, from the west end of the 20 miles of their branch railway from Edmundston, subsidized by the Act 51 Victoria, chapter 3, towards the St. Francis River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200.
227.	For a railway from the north end of the 14 miles for which a subsidy was granted by the Act 50 and 51 Victoria, chapter 24, to the Tobique Valley Railway Company, from Perth Centre towards Plaister Rock Island, 11 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	35,200
228.	To the Orford Mountain Railway Company, for 31 miles of their railway, between Eastman and Kingsbury, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	99,200
229.	For a railway from Lachino Bank, on a line of the Grand Trunk Railway, to a point at or near Rivière des Prairies, a distance of 15 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct its railway, shall be granted to such companies as shall be approved by the Governor in Council as having established to its satisfaction their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of

July next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council,—except the Erie and Huron Railway, which shall be completed within two years from the first day of July next. And they shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specifying an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make. The location, also, of every such line of railway shall be subject to the approval of the Governor in Council. And all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as regards the Erie and Huron Railway Company, upon which payment shall be made only upon the completion of the work,—except, also, as regards the subsidies to the Inverness and Richmond Railway, which shall be paid on the completion of each ten-mile section, in accordance, as nearly as practicable, with the agreement between the company and the municipality of Inverness, and with section four of the Act of the Legislature of Nova Scotia, 1890, intituled: “An Act to enable the County of Inverness to borrow money,”—except, also, as regards the subsidies to the Great Eastern Railway Company for bridges over the Nicolet and St. Francis Rivers, and to the Quebec and Lake St. John Railway for the bridge over the St. Charles River, upon which shall be paid fifteen per cent of the value of work done, on monthly progress estimates certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals,—and except also the subsidy granted to the Quebec Central Railway Company, the first annual payment upon which shall be made at the end of twelve months from the date of the Chief Engineer's certificate of the completion of the work, and each subsequent payment at the end of each twelve months thereafter, for the term of twenty years.

The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing running powers or traffic arrangements or other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those subsidized, as the Governor in Council determines.”

By the Special Act 53 Vic., ch. 5 (1890). (*Assented to 16th May, 1890*):—

**230.** In order to enable the Calgary and Edmonton Railway Company to construct so much of their railway as reaches from a point on the line of the Canadian Pacific Railway Company within the town of Calgary to a point on the North Saskatchewan River near Edmonton, the Governor in Council may enter into a contract with such Company for the transport of men, supplies, materials and mails for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum, in manner following, that is to say: the sum of eighty thousand dollars to be paid annually on the construction of the railway from Calgary to a point on the North Saskatchewan River near Edmonton,—such payment to be computed from the date of the completion of the railway between such points: Provided that the Governor-General in Council may order such sums to be paid in semi-annual instalments, and may permit the Company to assign the same by way of security for any bonds or securities which may be issued by the Company in respect of the Company's undertaking.

By 54-55 Victoria, ch. 8 (1891). (*Assented to 30th Sept., 1891*):—

- 231.** To the Great Northern Railway Company, for a railway from a point at or near New Glasgow or St. Lin to or near to Montcalm, in the Province of Quebec, eighteen miles, the balance remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Act forty-ninth Victoria, chapter ten, nor exceeding in the whole ..... \$28,100 00
- 232.** To the Quebec and Lake St. John Railway Company, for the railway bridge over the St. Charles River to give access to the

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	City of Quebec, the difference between the amount already paid to the Company and the sum of \$30,000 mentioned as not to be exceeded by the Act fifty-third Victoria, chapter two, a subsidy not exceeding.....	\$ 5,250 00
233.	To the Oshawa Railway Company, for seven miles of their railway from Port Oshawa towards Raglan, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	22,400 00
234.	To the St. Lawrence, Lower Laurentian and Saguenay Railway Company, for the section of their railway from Grand Piles, on the St. Maurice River to its junction with the Quebec and Lake St. John Railway, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole....	92,784 00
235.	To the Great Eastern Railway Company, for thirty miles of their railway, from the River St. Francis to the Arthabaska Railway at St. Grégoire station, the balance remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole.....	79,700 00
236.	To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway from Woodstock to Hamilton, in the Province of Ontario, in lieu of the subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	158,400 00
237.	To the Montreal and Ottawa Railway Company (formerly the Vaudreuil and Prescott Railway Company), for thirty miles of their railway from Vaudreuil towards Hawkesbury, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, nor exceeding in the whole.....	46,040 00
238.	To the Tobique Valley Railway Company, for fourteen miles, of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding \$6,400 per mile, nor exceeding in the whole...	89,600 00
239.	To the Kingston, Smith's Falls and Ottawa Railway Company, for fifty-six miles of their railway from the City of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed \$179,200, granted by the Acts fifty-second Victoria, chapter three, and fifty-third Victoria, chapter two, a subsidy not exceeding \$12,534 per annum, to be paid in semi-annual instalments of \$6,267 each, for twenty years, which represents a grant in cash of. ....	179,200 00

“ Provided, that upon the completion of twenty-eight miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole fifty-six miles; Provided also, that the Company may deposit with the Minister of Finance and Receiver-General a sum not exceeding \$1,170,000, in consideration whereof there shall be paid to the Company, for twenty years, a semi-annual annuity calculated on a basis of three and one-half per cent on the amount so deposited; Provided further, that the Governor in Council may permit the Company to assign the said subsidy and annuity to trustees by way

of security for any bonds or securities which may be issued by the Company in respect of their undertaking."

**240.** To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro' towards Palmer's Rapids, in the Province of Ontario, in lieu of a subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$64,000 00

"Provided that the subsidy hereby granted to the Brockville, Westport and Sault Ste. Marie Railway Company may be paid by instalments, on the completion of each section of the railway as follows, that is to say:—

Sections.	Length in miles.
From at or near Newboro' to Westport.....	4
From Westport towards Palmer's Rapids.....	16

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway, shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, the first semi-annual payment upon which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of twenty-eight miles of the railway, and each subsequent payment at the end of each six months thereafter, for the term of twenty years,—except also as to the Quebec and Lake St. John Railway Company, the subsidy to which shall be paid upon the completion of the work,—except also as to the Brockville, Westport and Sault Ste. Marie Railway Company, the subsidy to which shall be paid as follows: on the completion of that portion of the said road from at or near Newboro' to Westport, a distance of four miles, the sum of twelve thousand eight hundred dollars, and on the completion of the remaining sixteen miles from Westport towards Palmer's Rapids, the sum of fifty-one thousand two hundred dollars.

"3. Within one month after the commencement of each session of Parliament, whilst any of the said moneys are being paid out, there shall be laid before Parliament a statement showing all payments of such moneys during the then next preceding year, the names of the respective persons to whom such payments have been made, and the amounts paid them respectively, together with the engineer's report upon which payments have been recommended, and copies of all contracts between the Government and the Company under which the said subsidies are authorized to be paid.

"4. The granting of such subsidies respectively shall be subject to such conditions for securing such running power or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

By the Act 55-56 Victoria, ch. 5 (1892). (*Assented to 9th July, 1892*):—

**241.** To the Lake Erie and Detroit River Railway Company, for 58 miles of their railway from a point at or near Cedar Creek to

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	the town of Ridgeway, in lieu of the subsidies granted to the Lake Erie and Detroit River Railway Company by the Act 53 Victoria, chapter 2, and to the Amherstburg, Lake Shore and Blenheim Railway Company by the Act 52 Victoria, ch. 3.	\$ 224,000 00
242.	To the Ottawa, Arnprior and Parry Sound Railway Company, for 55 miles of their railway from Barry's Bay towards the Northern Pacific Junction Railway, a subsidy not exceeding \$6,400 per mile on the first 27½ miles out from Barry's Bay and not exceeding \$3,200 per mile on the second 27½ miles, nor exceeding in the whole.....	264,000 00
243.	To the Canadian Pacific Railway Company or to the Columbia and Kootenay Railway and Navigation Company, for a railway from a point on the Canadian Pacific Railway at or near Revelstoke to the head of Arrow Lake, for 25 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000 00
244.	To the Tobique Valley Railway Company, for a railway from the north end of the 11 miles for which a subsidy was granted by the Act 53 Victoria, chapter 2, to Plaister Rock Island, for 3 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600 00
245.	To the Monfort Colonization Railway Company, for 21 miles of their railway from Lachute, St. Jérôme or a point at or near St. Sauveur, on the line of the Montreal and Western Railway, to Monfort and westward, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	67,200 00
246.	To the Ontario, Belmont and Northern Railway Company, for 10 miles of their railway from the Belmont iron mines to the Canadian Pacific Railway and the Central Ontario Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000 00
247.	To the Montreal and Champlain Junction Railway Company, the balance remaining unpaid of the subsidies granted by the Acts 50-51 Victoria, chapter 24, and 51 Victoria, chapter 3, a subsidy of.....	15,100 00
248.	To the Buctouche and Moncton Railway Company, for 32 miles of their railway from Moncton to Buctouche, the balance remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Acts 49 Victoria, chapter 10, and 50-51 Victoria, chapter 24, not exceeding in the whole.....	35,480 00
249.	To the Cobourg, Northumberland and Pacific Railway Company, for 19 miles of their railway from Cobourg to the Ontario and Quebec Railway (in addition to the subsidy granted by the Act 53 Victoria, chapter 2), a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	60,800 00
250.	For a railway from the parish of St. Rémi, in the county of Napierville, to St. Cyprien in the said county, for 12 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400 00
251.	To the Inverness and Richmond Railway Company (or any other company undertaking the work), for 25 miles of their railway from a point on the Cape Breton Railway, at or near Orangedale, to Broadcove, a subsidy not exceeding \$3,200 per mile, in lieu of the subsidy of \$50,000 granted to the said railway company by 53 Victoria, chapter 2, and on the same conditions, not exceeding in the whole.....	80,000 00
252.	To the Nicola Valley Railway Company, for 25 miles of their railway from a point on the Canadian Pacific Railway at or near Spence's Bridge towards Nicola Lake.....	80,000 00

<b>253.</b> To the Lotbinière and Megantic Railway Company, for 15 miles of their railway from a point at or near St. Jean Deschailions towards Glen Lloyd, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 48,000 00
<b>254.</b> To the Stewiacke and Lansdowne Railway Company, for a railway from a point on the Intercolonial Railway, through the Stewiacke Valley, on a line which will afford facilities of communication with the iron mines at Springside, Upper Stewiacke and Musquodoboit settlements, 25 miles, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000 00
<b>255.</b> To the Philipsburg Junction Railway and Quarry Company, for 6 <sup>7</sup> / <sub>10</sub> miles of their railway from Stanbridge Station to Philipsburg, in the county of Missisquoi, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	21,600 00
<b>256.</b> To the Kingston, Napanee and Western Railway Company, for three miles of their railway from a point at or near Harrowsmith to a point at or near Sydenham, in lieu of the subsidy granted for this section of road by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	9,600 00
<b>257.</b> For a railway from Cape Tourmente towards Murray Bay, in the Province of Quebec, 20 miles, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
<b>258.</b> To the Stewiacke and Lansdowne Railway Company, for a railway from Truro, or a point between Truro and Stewiacke, to Newport or to Windsor, in the Province of Nova Scotia, for 49 miles of such railway, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole .....	156,800 00
<b>259.</b> To the Restigouche and Victoria Railway Company, for 15 miles of their railway from Campbellton towards Grand Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
<b>260.</b> For a railway from St. John's to Ste. Rosalie, 32 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	102,400 00
<b>261.</b> For a railway from St. Placide to St. Andrews, 8 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	25,600 00
<b>262.</b> For a railway to complete the connection between Sydney and Louisburg, in the county of Cape Breton, for 28 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600 00
<b>263.</b> To the Belleville and Lake Nipissing Railway Company, for 30 miles of their railway from Belleville to Tweed and thence to Bridgewater, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000 00
<b>264.</b> To the Kingston, Smith's Falls and Ottawa Railway Company, for 56 miles of their railway from the City of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed \$179,200, granted by the Acts 53 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of 3½ per cent on the amount of such subsidies so granted, to be paid in semi-annual instalments for such period not exceeding 21 years, as the Company may elect, which represents a grant in cash of.	179,200 00

"Provided, that upon the completion of 28 miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed



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in comparison with that of the whole 56 miles: Provided also, that the Company may deposit with the Minister of Finance and Receiver-General, a sum not exceeding \$1,170,000, in consideration whereof there shall be paid to the Company for such period not exceeding 20 years as the Company may elect, a semi-annual annuity calculated on a basis of  $3\frac{1}{2}$  per cent on the amount so deposited: Provided further, that the Governor in Council may permit the Company to assign the said subsidy and annuity to trustees by way of security for any bonds or securities which may be issued by the Company in respect of their undertaking."

- 265.** To the St. Catharines and Niagara Central Railway Company, for 34 miles of their railway from the City of St. Catharines to the City of Hamilton, in lieu of the subsidies not to exceed \$108,000 granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of  $3\frac{1}{2}$  per cent on the amount of the said subsidies, to be paid in semi-annual instalments for such period, not exceeding twenty years, as the Company may elect, representing a grant in cash of \$108,000: Provided that, upon the completion of 10 miles of said railway, a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole 34 miles: Provided also, that the Company may deposit with the Minister of Finance and Receiver-General a sum not exceeding \$400,000, in consideration whereof there shall be paid by the Government to the Company, for such period not exceeding 20 years, as the Company may elect, a semi-annual annuity, calculated on a basis of  $3\frac{1}{2}$  per cent on the amount so deposited, or a guarantee of a like sum, as interest on the bonds of the Company: Provided further, that the Company, with the approval of the Governor in Council, may assign the said subsidy and annuity to trustees by way of security for principal, or interest of any bonds or securities which may be issued by the Company in respect of their undertaking, and the subsidy last above mentioned to the St. Catharines and Niagara Central Railway Company shall be paid in instalments, the first semi-annual payment upon which shall be made at the end of the six months from the date of the Chief Engineer's certificate of the completion of the first ten miles of railway, and each subsequent payment at the end of six months thereafter, for the term of twenty years or less. It is a condition of this subsidy that the sum not exceeding \$400,000 above mentioned shall be deposited with the Finance Minister before January 1st, 1893.
- 266.** To the Woodstock and Centreville Railway Company, for a railway from Woodstock towards Centreville, 20 miles, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.... \$ 64,000 00
- 267.** To the Brockville, Westport and Sault Ste. Marie Railway Company, for the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding \$3,200 per mile, and also for the balance remaining unpaid of the subsidy granted by the Act 53 Victoria, chapter 2, nor exceeding in the whole ..... 96,800 00
- 268.** To the New Glasgow Iron, Coal and Railway Company, for a railway from Eureka Junction on the Intercolonial Railway to a point at or near Sunnybrae, including a branch line to the charcoal iron furnace at Bridgeville, for  $12\frac{1}{2}$  miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 40,000 00
- 269.** To the Thousand Island Railway Company, for an extension of their railway to connect with the Brockville, Westport and

Sault Ste. Marie Railway, the Kingston, Napanee and Western Railway, the Kingston, Smith's Falls and Ottawa Railway, or the waters of the Rideau Canal, and an extension across the mouth of the Gananoque River, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.....

\$44,000 00

Payable, \$14,000 on the completion of the last named or southern extension, and the balance of said subsidy, being \$30,000, on the completion of the first named or northern extension of their railway.

- 270.** To the Manitoulin and North Shore Railway Company, for 30 miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$ 96,000 00
- 271.** To the Lindsay, Bobcaygeon and Pontypool Railway Company, for 16 miles of their railway from the end of the line subsidized by the Act 53 Victoria, chapter 2, at the junction with the Midland Railway, to Pontypool, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 51,200 00
- 272.** For 75 miles of the railway from Sand Point, Shelburne Harbour, in Nova Scotia, to Annapolis Royal, in the county of Annapolis and to a junction at or near New Germany on the Nova Scotia Central Railway, with a view to future construction to Liverpool, in lieu of the subsidy of a like amount granted by the Act 53 Victoria, chapter 2, for the same length of railway from Shelburne and from Liverpool towards Annapolis, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 240,000 00
- 273.** To the Kingston, Napanee and Western Railway Company, for 20 miles of their railway, being extensions or branches in the counties of Peterborough, Hastings, Addington, Frontenac or Leeds towards iron deposits, a subsidy not exceeding \$3,200 per mile, payable in instalments regulated by the length of each said extensions, additions or branches, the subsidy not exceeding in the whole..... 64,000 00
- 274.** To the St. John Valley and Rivière du Loup Railway Company, for 15 miles of their railway from the north end of the line subsidized by the Act 53 Victoria, chapter 2, towards the town of Woodstock, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 48,000 00
- 275.** To the Cobourg, Northumberland and Pacific Railway Company, for 30 miles of their railway from Cobourg to the Ontario and Quebec Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 96,000 00
- 276.** To the Ottawa, Arnprior and Parry Sound Railway Company, for 30 miles of their railway, from Eganville to Barry's Bay, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 96,000 00
- 277.** To the Ottawa, Arnprior and Parry Sound Railway Company, for 22 miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 70,400 00
- 278.** To the Lake Témiscamingue Colonization Railway Company, for 35 miles of their railway from Mattawa to the Long Sault, in lieu of the subsidies granted by the Acts 52 Victoria, chapter

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	3, and 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$112,000 00
279.	To the Témiscouata Railway Company, for 12 miles of their railway from the north end of the section of the St. François Branch subsidized by the Act 51 Victoria, chapter 3, being the first 12 miles on the section subsidized by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$1,800 per mile, in addition to the subsidy already granted, and not exceeding in the whole.....	21,600 00
280.	To the Tilsonburg, Lake Erie and Pacific Railway Company, for 16 miles of their railway from Port Burwell to Tilsonburg, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200 00
281.	To the Woodstock and Centreville Railway Company, for 6 miles of their railway from the west end of their 20 miles subsidized by the Act 50-51 Victoria, chapter 24, to the international boundary between the Province of New Brunswick and the State of Maine, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200 00
282.	To the Lake Témiscamingue Colonization Railway Company, for 15 miles of their railway from the Long Sault to the crossing of the Kippewa River, a subsidy not exceeding \$3,200 per mile—and a subsidy of 15 per cent on the value of a wooden truss bridge over the Ottawa River near Mattawa, not exceeding \$15,000,—nor exceeding in the whole.....	63,000 00
283.	To the Goderich and Wingham Railway Company, for 31 miles of their railway from Goderich to Wingham, <i>via</i> Port Albert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	99,200 00
284.	To the Joliette and St. Jean de Matha Railway Company, for 8 miles of their railway from St. Félix de Valois to St. Jean de Matha, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,600 00
285.	To the Bracebridge and Baysville Railway Company, for 15 miles of their railway from Bracebridge toward Baysville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	48,000 00
286.	To the Nipissing and James' Bay Railway Company, for 25 miles of their railway from, at or near North Bay station on the Canadian Pacific Railway towards James' Bay, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000 00
287.	For a railway from a point on the Intercolonial Railway between Ste. Flavie and Little Métis station to Matane, for 50 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000 00
288.	To the Ontario and Pacific Railway Company, for 53 $\frac{87}{100}$ miles of their railway from Cornwall to Ottawa, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	172,400 00
289.	For a railway from a point on the line of the Canadian Pacific Railway on Isle Jésus, in the County of Laval, towards St. Eustache, for 12 miles of such railway, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, to the Carillon and Grenville Railway Company, for 12 miles of their railway, from St. Eustache to Sault au Récollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400 00
290.	For a railway from St. Eustache to St. Placide, in the county of Two Mountains, for 18 miles of such railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	57,600 00

<b>291.</b>	To the Port Arthur, Duluth and Western Railway Company, the balance remaining unpaid of the subsidy granted by the Act 51 Victoria, chapter 3, not exceeding, with the amount already paid, \$3,200 per mile, nor exceeding in the whole.....	\$114,125 00
<b>292.</b>	To the Drummond County Railway Company for $4\frac{5}{10}$ miles of their railway from Bull's Wharf, on the St. Lawrence River, near Nicolet, to Ste. Rosalie Junction, an excess of distance by the constructed line over the subsidies heretofore voted for a railway between the said points, \$3,200 per mile, not exceeding in the whole.....	14,720 00
<b>293.</b>	To the St. Lawrence and Adirondack Railway Company, for $5\frac{4}{10}$ miles of their railway, from Huntingdon towards the International boundary, which, with the distance between Valleyfield and Huntingdon, $12\frac{5}{10}$ miles, makes up the distance of 18 miles named in the 53 Vic., chap. 2, granting a subsidy to this Company, and for $2\frac{4}{10}$ miles from the east end of the 18 miles referred to the International boundary, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,024 00

"2. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as to subsidies with respect to which it is hereinbefore otherwise provided, and except also as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, and the subsidy granted to the St. Catharines and Niagara Central Railway Company, the first semi-annual payments upon both of which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of their railways respectively, and each subsequent payment at the end of each six months thereafter, for the term of twenty years or less.

"3. The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"4. Notwithstanding the expiration of the time limited by the Act 47 Victoria, chapter 8, and by the contract entered into with the Pontiac Pacific Junction Railway Company, the Governor in Council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said Company, according as it becomes due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act.

"5. Notwithstanding the expiration of the time limited by the Act 52 Victoria, chapter 3, and by the contract entered into with the Quebec and Lake St. John Railway Company, the Governor in Council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said Company, according as it becomes

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due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act; and, notwithstanding anything contained in the Act 50-51 Victoria, chapter 24, the Governor in Council may also pay to the said Company the balance remaining unpaid of the subsidy granted to the Company by the said Act, amounting to \$12,800, on the four miles of their road from the north end of the main line subsidized towards Roberval."

### LAND SUBSIDIES.

By 47 Vic., chap. 25, clause 7 (1884). (*Assented to 19th April, 1884*):—

1. The Governor in Council is hereby authorized, in aid of the construction of a railway from some point on the Canadian Pacific Railway to Hudson's Bay, to make a free grant of not more than six thousand four hundred acres for each mile of railway within Manitoba, and not more than twelve thousand eight hundred acres for each mile in the North-west Territories.

By 48-49 Vic., cap. 60 (1885). (*Assented to 20th July, 1885*):—

2. To the North-western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding three thousand eight hundred acres for each mile of the company's railway, from Medicine Hat to the coal banks on the Belly River, about one hundred and ten miles.
3. To the Manitoba and South-western Colonization Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from its commencement at Winnipeg to its terminus at Whitewater Lake, about one hundred and fifty miles.
4. To the Manitoba and North-western Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Portage la Prairie to the crossing of the South Branch of the River Saskatchewan, twenty miles from Prince Albert, about four hundred and thirty miles.
5. To the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from its commencement near Regina to the navigable waters of Long Lake.

"The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor."

By 49 Vic., cap. 11 (1886). (*Assented to 2nd June, 1886*):—

6. To the Manitoba and North-western Railway Company, Dominion lands to the extent of six thousand four hundred acres per mile for each mile of the company's branch railway running from a point on the main line of that railway, at or near Todburn, in a north-westerly direction through the County of Russell to the Assiniboine River, near the town of Shellmouth, about twenty-six miles.
7. To the North-west Central Railway Company, or to such other company as may undertake the construction of the railway or a railway from a point on the Manitoba and North-western Railway *via* Rapid City, westward, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Brandon station, on the Canadian Pacific Railway, or from such point on the Manitoba and North-western Railway as aforesaid, to Battleford, in the Provisional District of Saskatchewan, about four hundred and fifty miles.

8. To the Wood Mountain and Qu'Appelle Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway for the whole distance commencing at a point in township number four, in range number thirty, west of the second meridian, in the Dominion lands system of survey, passing through the town of Fort Qu'Appelle, to join the Manitoba and North-western Railway at a point to be fixed for that purpose by the Governor in Council, about two hundred and forty miles.

"The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor."

By section 5 of this Act authority was given for the incorporation by the Governor in Council of a company to construct the line from Brandon, or other point indicated, to Battleford, subsidized by this Act.

By 50-51 Vic., cap. 22 (1887).

9. The subsidy to the North-western Coal and Navigation Company, granted by 49 Vic., chap. 60, was increased from 3,800 acres per mile to 3,840 acres per mile.

By 50-51 Vic., cap. 23 (1887). (*Assented to 23rd June, 1887*):—

10. To the Alberta and Athabasca Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from some point on the Bow River or Canadian Pacific Railway, at or between Calgary and Crowfoot Creek, to a point near the town plot of Edmonton, about three hundred miles.
11. To the Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from a point near the northern terminus of the completed portion of that railway, at or near Long Laketon, on the navigable waters of Long Lake, to a point at or near where the fifty-second parallel of latitude crosses the South Saskatchewan River, thence to a point at or near the elbow of the North Saskatchewan River, with branches to Prince Albert and Battleford, about three hundred and twenty-five miles.
12. To the Medicine Hat Railway and Coal Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from a point at or near Medicine Hat, on the line of the Canadian Pacific Railway, to the coal field in or near townships twelve and thirteen, range six, west of the fourth principal meridian, a distance of about eight miles, to be selected out of such lands as are at the disposal of the Government in the proximity of the line of the company's railway.

"The said grants, and each of them may be, so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.

By 52 Vic., cap. 4 (1889). (*Assented to 2nd May, 1889*):—

13. To the North-western Coal and Navigation Company (Limited), in addition to the grant provided for by section one of the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign and chaptered

sixty, Dominion lands to an extent not exceeding two thousand six hundred acres for each mile of the company's railway from Dunmore station, on the Canadian Pacific Railway, to Lethbridge, on the Belly River, the present terminus of the said railway, a distance of one hundred and nine and one-half miles,—such additional grant to be made only on condition that the gauge of the said railway be made standard width; and also to the said North-western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Lethbridge to the International boundary, a distance of about fifty miles.

14. To the Red Deer Valley Railway and Coal Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Cheadle Station, on the Canadian Pacific Railway, to its terminus at a point in or near township twenty-nine, range twenty-three, west of the fourth meridian, a distance of about fifty-five miles.
15. To the North-western Railway Company of Canada, Dominion lands to an extent not exceeding ten thousand acres for each mile of the company's railway from Calgary, on the Canadian Pacific Railway, northerly to a point on the North Saskatchewan River, at or near Edmonton, a distance of about two hundred and ten miles; and also to the said North-western Railway Company of Canada, Dominion lands to an extent not exceeding ten thousand acres for each mile of the company's railway from Calgary southerly to Lethbridge, a distance of about one hundred and twenty miles.
16. To the Lake Manitoba Railway and Canal Company, Dominion lands to an extent not exceeding six thousand acres for each mile of the company's railway from Portage la Prairie to the southern boundary of Lake Manitoba, a distance of about seventeen miles.

"The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof, and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.

"The Governor in Council may make the grant of land provided for by section three of the Act forty-ninth Victoria, chapter eleven, being for the line of the Wood Mountain and Qu'Appelle Railway, of about two hundred and forty miles in length, applicable to the line of railway of the said company, as authorized by the Act respecting the Wood Mountain and Qu'Appelle Railway Company, passed during the present session of Parliament, upon the like terms and subject to the like conditions as those upon which the grant hereinbefore mentioned was authorized to be made to the said company by the Act in this section first cited."

**By the Act 53 Vic., cap. 4 (1890).** (*Assented to 16th May, 1890*):—

17. To the Canadian Pacific Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a branch line to be constructed from Glenboro' westerly a distance of about sixty miles, to a point on the proposed branch of the said company running from Brandon south-westerly.
18. To the Canadian Pacific Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a branch line of railway from a point at or near Brandon, on the main line of the Canadian Pacific Railway, south-westerly to or near township three, range twenty-seven, west of the first principal meridian, and thence westerly, a total distance of one hundred miles; and also a similar grant, at the same rate per mile, for the said company's proposed branch railway from a point on the line just described at or near township three, range twenty-seven, west of the first principal meridian, easterly to Deloraine, a distance of about twenty-five miles, making the total length of railway to which this grant is applicable one hundred and twenty-five miles.

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19. To the Brandon and South-western Railway Company, Dominion lands to an extent not less than six thousand four hundred acres per mile for the line of railway from a point in township one, in either range twenty-three or twenty-four west of the first principal meridian, to Deloraine, a distance of about seventeen miles.
20. To the Lac Seul Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile for a line of railway from a point at or near Shelly Station, on the main line of the Canadian Pacific Railway, to a point at or near White Mud Lake, on the Winnipeg River, a distance of about eighteen miles.
21. To the Calgary and Edmonton Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from Calgary to a point at or near Edmonton, on the North Saskatchewan River, a distance of about one hundred and ninety miles; and also a grant of six thousand four hundred acres for each mile of the company's railway from Calgary to a point on the International boundary between Canada and the United States, a distance of about one hundred and fifty miles.
22. To the North-western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding three thousand eight hundred and forty acres for each mile of the company's railway from Lethbridge to the Crow's Nest Pass, a distance of about one hundred miles.
23. To the Lake Manitoba Railway and Canal Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile, for a line of railway from Portage la Prairie to Lake Winnipegosis, at or near Meadow Portage, a distance of about one hundred and twenty-five miles.
24. To the Manitoba and South-eastern Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres per mile, for a line of railway from Winnipeg southerly or south-easterly to a point on the west side of the Lake of the Woods, a distance of about one hundred and ten miles.

The said grants and each of them may be made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof, and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash, on the issue of the patents therefor.

The lands by this Act authorized to be granted to the Canadian Pacific Railway Company shall be taken and held, and may be disposed of, free and clear of any incumbrance on the lands or property of the said company created before the passing of this Act.

By the special Act 53 Vic., cap. 3 (1890). (*Assented to 26th March, 1890*):

25. The Act 52 Vic., ch. 4, authorizing, in error, the grant of land to the North-Western Coal and Navigation Company, for 50 miles from Lethbridge to the International boundary, was amended—the said grant being made to the Alberta Railway and Coal Company.

By 54-55 Vic., cap. 9 (1891). (*Assented to 30th September, 1891*):—

26. In lieu of the subsidy in land authorized by the Act fifty-second Victoria, chapter four, to be granted to the Red Deer Valley Railway and Coal Company, and subject to the conditions in the said Act mentioned, the Governor in Council may grant Dominion lands to the said company to an extent not exceeding six thousand four hundred acres for each mile of the said company's railway, from the town of Calgary, in the district of Alberta, in the North-west Territories, to a point in or near township twenty-nine, range twenty-three, west of the fourth meridian, a distance of about fifty-five miles.



By 54-55 Vic., cap. 10 (1891). (*Assented to 30th September, 1891*):—

27. To the Manitoba South-western Colonization Railway Company, in addition to the subsidy for one hundred and fifty miles of railway authorized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter sixty, Dominion lands to the extent of six thousand four hundred acres per mile for the balance of the two hundred and twelve miles of railway which have been constructed and are in operation, that is to say, for a distance of sixty-two miles.
28. Also, to the Manitoba South-western Colonization Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's branch line of railway from Carmen to Barnsley, a distance of about six and one-quarter miles.
29. To the Canadian Pacific Railway Company, in addition to the subsidy authorized by the Act fifty-third Victoria, chapter four, for the company's branch line running in a south-westerly and westerly direction from a point at or near Brandon for a distance of one hundred miles, Dominion lands to the extent of six thousand four hundred acres for each mile of the extension westward of the said branch line, from the western limit of the said one hundred miles to a point at or near La Roche Percée, situated in township one, range six, west of the second meridian, a distance of about sixty miles.

“The said grants and each of them shall be made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof, and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash, on the issue of the patents therefor.”

# CANALS REVENUE



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CANALS.

	Details of Traffic arranged Alphabetically.		Details of Through Traffic arranged Alphabetically.		Details of Traffic arranged Alphabetically.		Details of Way Traffic arranged Alphabetically.		Details of Traffic arranged in Classes.		Details of Traffic under various heads.		Tolls accrued each Month on each Canal.		Vessels passed through the Canals: Number, Tonnage and Nationality of.		Comparative Statement showing total movement of Property, Passengers and Vessels for four years ended 30th June, 1892.		Comparative Statement showing Tonnage of Vessels and Goods for four years ended 30th June, 1892.	
	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Fiscal Year ended 30th June, 1892.	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Fiscal Year ended 30th June, 1892.	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Fiscal Year ended 30th June, 1892.	Fiscal Year ended 30th June, 1892.	Season of Navigation, 1891.	Page.	Page.	Page.	Page.	Page.
Welland Canal.....	16	82	20	86	24	90	56	122	62	128	68	134	70	136	74	76	74	76	74	76
St. Lawrence Canals.....	28	94	32	98	36	102	56	122	62	128	68	134	70	136	74	76	74	76	74	76
Ottawa Canals.....	40	106					57	123	63	129	68	135	71	137	75	77				
Chambly Canal.....	43	110					56	122	62	128	68	134	71	137	74	76				
Rideau Canal.....	46	113					57	123	63	129	68	135	71	137	75	77				
St. Peter's Canal.....	49	116					57	123	63	129	68	135	71	137	74	76				
Trent Valley Canals.....	50	117					57	123	63	129	68	135	72	138	75	77				
Murray Canal.....	53	120					57	123	63	129	68	135	72	138	75	77				

## DEPARTMENT OF RAILWAYS AND CANALS,

OFFICE OF CHIEF ENGINEER,

OTTAWA, 20th December, 1892.

To the Secretary,

Department of Railways and Canals.

SIR,—I have the honour to submit the statement of Canals Revenue collected during the fiscal year ended 30th June, 1892, with the financial statements respecting the source whence the revenues were derived.

The following summary of revenue accrued shows a decrease of \$25,000, after deducting the refunds made under various Orders in Council modifying the tariff:—

	1890-91.	1891-92.	Increase.	Decrease.
	\$	\$	Per cent.	Per cent.
Canal tolls, &c. ....	345,143	347,339	6	
Hydraulic rents. ....	37,995	40,212	5·83	
Minor public works. ....	41	65	58·53	
Total .....	383,179	387,616	1·15	
LESS—Refunds .....	25,511	54,948		
Net revenue .....	357,668	332,668		

The following is a comparative statement of the revenues accrued on the following divisions of the canals for the year 1891 and 1892, showing the increases or decreases as compared with the previous year:—

	1890-91.	1891-92.	Increase.	Decrease.
	\$	\$	Per cent.	Per cent.
Welland Canal .....	188,586	194,581	3·15	
St. Lawrence Canals .....	79,919	85,054	6·42	
Chambly Canal .....	20,187	19,338		4·2
Ottawa Canals .....	47,149	38,565		18·2
Rideau Canal .....	6,153	6,083		1·13
St. Peter's Canal .....	1,707	2,320	35·91	
Trent Valley Canal .....	731	637		12·85
Murray Canal .....	711	761	7·03	
Total .....	345,143	347,339		
LESS—Refunds .....	25,511	54,948		
Net revenue .....	319,632	292,391		

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

	1890-91.	1891-92.	Increase.	Decrease.
	\$	\$	Per cent.	Per cent.
Vessels .....	15,907	17,512	10·08	
Passengers .....	354	430	21·47	
Produce of the forest.	20,157	17,050		15·41
do animals .....	176	282	60·22	
do agriculture .....	94,330	111,755	18·47	
Manufactures and merchandise .....	56,407	46,779		17
Total tolls .....	187,331	193,808		
Fines and damages .....	1,255	799		
Total .....	188,586	194,607		
Less—Refunds .....	24,914	54,387		
Net revenue .....	163,672	140,220		

The increase 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, of the previous year in consequence of an Order in Council of the 18th of May, 1891, authorizing such refunds to be made at the close of navigation for that year, instead of during the season as heretofore, and such refunds are included in the amount for the present year.

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.	Merchan- dise.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland .....	82	109,710	20,789	245,653	568,569	944,753
St. Lawrence .....	924	118,439	57,527	341,833	476,328	995,051
Chambly .....	248	123,661	3,267	97,743	8,909	233,828
Ottawa .....	1,377	542,950	344	9,602	9,359	563,632
Rideau .....	26	73,588	2,980	20,883	4,574	102,051
St. Peter's .....		3,420		23,236	11,449	43,105
Murray .....	64	4,530	669	4,347	2,908	12,518
Trent Valley .....		21,792	7	134	25	21,958

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 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 for 1892 was 488,113 tons.

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 1892, inclusive :—

Years.	Total quantity transported on the Welland Canal, Tons.	Quantity from United States ports to United States ports, Tons.
1867 .....	933,260	458,386
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 .....	838,587	387,109
1888 .....	827,300	387,555
1889 .....	938,254	464,415
1890 .....	1,104,553	550,844
1891 .....	959,502	563,856
1892 .....	944,753	488,113

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,

COLLINGWOOD SCHREIBER,

*Chief Engineer.*



# CANALS

## FINANCIAL STATEMENTS

CANALS,

No. 1.—COLLECTORS of Canal Tolls,

DR.

(For details, see

Balances due by Collectors, &c., 1st July, 1891.	CANAL REVENUE.				Total Canal Revenue accrued.	Hydraulic Rents and Revenue from Public Works, <i>Vide</i> Statements Nos. 3 and 4.	Total.
	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.			
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
390 79	141,745 14		20 00		141,765 14	135 48	142,291 41
118 38	50,410 74		35 82		50,446 56	556 11	51,002 67
	430 77				430 77	615 55	1,164 70
	3 99				3 99		3 99
92 65	618 89			177 69	796 58	812 00	1,701 23
	552 34		538 88		1,091 22	5,043 26	6,134 48
11 03	46 58				46 58		57 61
612 85	193,808 45		594 70	177 69	194,580 84	7,162 40	202,356 09
95 70	1,285 20		35 00		1,320 20	3,206 50	4,622 40
1,071 22	23,361 39				23,361 39	805 00	25,237 61
	757 14		5 00		762 14	698 00	1,460 14
10 17	2,249 12	24 90	5 00	1,495 65	3,774 67		3,784 84
	26,082 20	4,618 43	116 10	13,149 26	43,965 99	19,128 30	63,094 29
183 24	11,869 46				11,869 46		12,052 70
1,360 33	65,604 51	4,643 33	161 10	14,644 91	85,053 85	23,837 80	110,251 98
309 89	7,705 41		13 00	75 30	7,793 71	70 00	8,173 60
48 73	10,853 75				10,853 75	150 00	11,003 75
	690 78				690 78		739 51
358 62	19,249 94		13 00	75 30	19,338 24	220 00	19,916 86
	19,631 01				19,631 01		19,631 01
322 47	17,246 74		10 00		17,256 74	5 00	17,584 21
27 09	115 78			8 00	123 78	20 00	170 87
135 42	1,553 42				1,553 42		1,688 84
484 98	38,546 95		10 00	8 00	38,564 95	25 00	39,074 93
	3,743 93	131 18	20 00	309 70	4,204 81	590 75	4,795 56
	1,275 08				1,275 08	105 00	1,380 08
	598 09			5 00	603 09	53 70	656 79
	5,617 10	131 18	20 00	314 70	6,082 98	749 45	6,832 43
115 08	2,317 03			3 28	2,320 31		2,435 39
46 07	637 01				637 01		683 08

1891-92.

in Account with Revenue.

Appendix A.)

CR.

COLLECTION DIVISIONS.	DEPOSITED TO THE CREDIT OF THE RECEIVER-GENERAL.		Balances due by Collectors, &c., 30th June, 1892.	Total.
	On account of Canal Revenue.	On account of Hydraulic Rents and other Public Works.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Welland Canal.</i>				
Port Colborne.....	141,551 53	147 98	591 90	142,291 41
Port Dalhousie.....	50,282 32	556 11	164 24	51,002 67
Dunnville.....	493 11	615 55	56 04	1,164 70
Port Maitland.....	2 23	.....	1 76	3 99
Port Robinson.....	815 78	812 00	73 45	1,701 23
St. Catharines.....	1,063 53	5,043 26	27 69	6,134 48
Chippawa.....	51 55	.....	6 06	57 61
Totals.....	194,260 05	7,174 90	921 14	202,356 09
<i>St. Lawrence Canals.</i>				
Beauharnois.....	1,340 73	3,206 50	75 17	4,622 40
Cornwall.....	22,810 71	805 00	1,621 90	25,237 61
Cardinal.....	667 54	698 00	94 60	1,460 14
Lachine.....	3,752 50	.....	32 34	3,784 84
Montreal.....	43,965 99	19,128 30	.....	63,094 29
Kingston.....	12,011 23	.....	41 47	12,052 70
Totals.....	84,548 70	23,837 80	1,865 48	110,251 98
<i>Chambly Canals.</i>				
Chambly.....	7,891 19	70 00	212 41	8,173 60
St. John's.....	10,853 55	150 00	0 20	11,003 75
St. Ours.....	697 12	.....	42 39	739 51
Totals.....	19,441 86	220 00	255 00	19,916 86
<i>Ottawa Canals.</i>				
Ottawa.....	19,631 01	.....	.....	19,631 01
Grenville.....	17,331 09	5 00	248 12	17,584 21
Carillon.....	128 29	20 00	22 58	170 87
Ste. Anne's Lock.....	1,515 92	.....	172 92	1,688 84
Totals.....	38,606 31	25 00	443 62	39,074 93
<i>Rideau Canal.</i>				
Ottawa.....	4,204 81	590 75	.....	4,795 56
Kingston Mills.....	1,275 08	105 00	.....	1,380 08
Smith's Falls.....	603 09	53 70	.....	656 79
Totals.....	6,082 98	749 45	.....	6,832 43
St. Peter's Canal.....	2,358 21	.....	77 18	2,435 39
Murray Canal—Brighton.....	613 71	.....	69 37	683 08

CANAL TOLLS IN ACCOUNT WITH REVENUE.

3

CANALS,

No. 1.—COLLECTORS of Canal Tolls,

DR.

(For details, see

Balances due by Collectors, &c., 1st July, 1891.	CANAL REVENUE.				Total Canal Revenue accrued.	Hydraulic Rents and Revenue from Public Works, <i>Vide</i> Statements Nos. 3 and 4.	Total.
	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.			
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
18 76	101 38	.....	.....	.....	101 38	.....	120 14
51 63	357 68	.....	.....	72 00	429 68	.....	481 31
2 25	16 70	.....	.....	.....	16 70	50 00	68 95
4 25	32 82	.....	.....	.....	32 82	40 00	77 07
21 97	140 56	.....	.....	.....	140 56	.....	162 53
20 75	39 70	.....	.....	.....	39 70	.....	60 45
119 61	688 84	.....	.....	72 00	760 84	90 00	970 45
3,097 54	326,469 83	4,774 51	798 80	15,295 88	347,339 02	32,084 65	382,521 21
					54,948 43	.....	.....
					292,390 59	.....	.....

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

1891-92—Continued.

in Account with Revenue.

Appendix A.)

CR.

COLLECTION DIVISIONS.	DEPOSITED TO THE CREDIT OF THE RECEIVER-GENERAL.		Balances due by Collectors, &c., 30th June, 1892.	Total.
	On account of Canal Revenue.	On account of Hydraulic Rents and other Public Works.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Trent Valley Canal.</i>				
..... Burleigh .....	99 12	.....	21 02	120 14
..... Bobcaygeon.....	439 98	.....	41 33	481 31
..... Fenelon Falls.....	11 45	50 00	7 50	68 95
..... Hastings.....	35 14	40 00	1 93	77 07
..... Peterboro'.....	129 42	.....	33 11	162 53
..... Buckhorn.....	51 55	.....	8 90	60 45
..... Totals .....	766 66	90 00	113 79	970 45
..... Grand Total.....	346,678 48	32,097 15	3,745 58	382,521 21
..... LESS—Refunds per Statement .....				
..... Net Revenue.....				

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

**HYDRAULIC AND OTHER RENTS.**  
**No. 2.—SUMMARY Statement of Lessee' Accounts.**  
*(For details, see Appendix A, No. 28.)*

Cr.

Dr.

Balance due 1st July, 1891.	Accrued during the Year ended 30th June, 1892.	Total.	Name of Work.	Abatement authorized.	Paid into hands of Collectors, <i>vide</i> Statement No. 1.	Balance due 30th June, 1892.	Total.
\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.
26,895 74	7,654 00	34,550 64	Welland Canal	186 35	7,097 46	27,268 83	34,550 64
7,169 62	1,024 00	8,193 62	Williamsburg Canal		698 00	7,495 62	8,193 62
807 50	795 00	1,602 50	Cornwall	20 00	805 00	777 50	1,602 50
2,363 00	6,558 00	8,921 00	Beauharnois		3,206 50	5,714 50	8,921 00
23,180 44	22,639 49	45,819 93	Lachine		19,127 30	26,692 63	45,819 93
311 84	145 00	456 84	Chambly		220 00	236 84	456 84
7,472 50	1,275 20	8,747 70	Rideau		749 45	7,998 25	8,747 70
89 00	121 00	210 00	Sundry Canals		116 00	94 00	210 00
			<i>Land Sales.</i>				
354 18		354 18				354 18	354 18
68,643 82	40,212 59	108,856 41		206 35	32,019 71	76,680 35	108,856 41

B. H. TFAKLES,  
*Chief Clerk, Canals Revenue.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 30th September, 1892.

## No. 3.—MINOR PUBLIC WORKS, 1891-92.

Balances due 1st July, 1891.	Accrued Year ended 30th June, 1892.	Total.	Works.	Deposited to the credit of the Receiver-General, <i>vide</i> Statement No. 1.	Balances due 30th June, 1892.	Total.
\$ cts.	\$ cts.	\$ cts.	<i>Harbours.</i>	\$ cts.	\$ cts.	\$ cts.
.....	40 48	40 48	.... Port Colborne.....	40 48	.....	40 48
.....	24 46	24 46	.... Port Dalhousie.....	24 46	.....	24 46
.....	64 94	64 94		64 94	.....	64 94

B. H. TEAKLES,

*Chief Clerk, Canals Revenue.*DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

α No. 4.—STATEMENT of the Amount of Fines and Damages collected, for violation of the Canal Regulations, giving the particular in each case why the penalty was imposed, during the fiscal year ended 30th June, 1892.

Date.	Name of Vessel.	Name of Owner or other person chargeable.	Particulars.	Fines.	Damages.	Totals.
				\$ cts.	\$ cts.	\$ cts.
1891.			<i>Welland Canal.</i>			
Sept. 13	Tug "Genevieve"	Hingston & Woods	For excessive speed in harbour at Port Colborne.	20 00	21 95	
Nov. 9	Barge "Gaskin"	Captain Brooks.	Damages to Bridge No. 8.		75 35	
do 9	Str. "Lakeside"	Captain Wigle	do do Locks Nos. 1 and 2, St. Paul street bridge and Plants.		19 94	
do 9	do "Celtic"	Captain O. Patenaude.	Damages to Lock No. 9		58 59	
Dec. 11	Stm. Barge "Ohio"	Captain A. Lieth.	do to Lock No. 3		*	
1892.						
Feb. 15	Str. "Pentagost"	G. H. Kimball.	Damages to foot gates, Lock No. 19		242 54	
June 9	do "Josephine"	C. E. Little.	do to Bridge No. 15		75 00	
do 9	Schr. "Ogaity"	R. Hagues	do to Lock No. 22		20 00	
do 9	Str. "Peublo"	W. Fitzgerald	do to Lock No. 16.		15 50	
do 9	do "Rosedale"	J. Ewart.	do to ferry float and boat at Port Robinson		10 00	
do 20	do "Northerner"		do done to railroad bridge at Thorold		35 82	
			Total, Welland Canal.	20 00	574 70	594 70
1891.			<i>St. Lawrence Canals.</i>			
Aug. 28	Str. "Greeclands"	H. Dobell & Co.	For violation of Canal Regulations, section 5	20 00		
Sept. 19	do "Mixer"	W. Wade.	For violating Canal Regulations by striking lock gates.	5 00		
Oct. 13	Bge. "Brodeur Demers"	D. Leroux	For violation of section 13 of the Canal Regulations.	10 00		
Nov. 5	Schr. "B. Richard"	C. Richard	For violation of section 5, Canal Regulations	5 00		
do 21	Str. "Acadia"	J. Malcolmson	For damages to flour shed No. 2, Lachine Canal.		22 75	
do 24	Bge. "Star"	Montreal Transportation Co.	For violation of section 5, Canal Regulations	10 00		
do 30	Bge. "Riley"	B. St. Denis	For violation of section 5, Canal Regulations	4 00		
do 30	do	do	Damages to lower lock gates, No. 3.		6 00	
1892.						
May 10	Bge. "Bonaventure"	G. Gohier.	For violation of section 16, Canal Regulations.	5 00		
June 7	Str. "Magnus"	A. E. D. McKay & Son.	For damages done to lock gates, No. 9, Beauharnois Canal.		35 00	
do 17	Bge. "Duluth"	Montreal Transportation Co.	For allowing barge to run into lock gates, No. 24, without checking	5 00		



do 22	Str. "Polino"	Ross & Co	For violation of section 6, Canal Regulations	10 00		
do 23	do "Gertie"	J. Clermont	For violating Canal Regulations, section 5	5 00	18 35	
do 23	do	do	Damages by colliding with Wellington Bridge			
			Total, St. Lawrence Canals	79 00	82 10	161 10
1891.			<i>Chambly Canal.</i>			
Aug. 31	Bge. "H. G. Underwood"	Captain R. Graham	For refusing to obey lock master St. Ours Lock	2 00		
do 31	do "W. Bennett"	Captain J. L. Thatcher	do	2 00		
Oct. 22	Scow "St. Bernard"	Captain Gibbon Gill	For injury to Langelier's Bridge, on Chambly Canal, near St. John's	5 00	4 00	
Nov. 10	Bge. "R. W. Cooper"	R. H. Kirby	Damages to lock gate, No. 3			
			Total, Chambly Canal	9 00	4 00	13 00
1891.			<i>Rideau Canal.</i>			
Aug. 31	Bge. "Young"	R. O'Neil	For violating Canal Regulations, section 38, by neglecting to report	5 00		
Oct. 19	do "Catawaqui"	W. H. Easton	For violating Canal Regulations, section 38, by neglecting to report	5 00		
1891.						
June 30	Str. "Harry Bate"	George A. Harris	For not reporting 15 tons salt, 13th July, 1891	5 00		
do 30	do	do	do 25 do 14th July, 1891	5 00		
			Total, Rideau Canal	20 00		20 00
1893.			<i>Ottawa Canal.</i>			
Aug. 12	Raft	W. R. Mackan	Incorrectly reporting quantity of timber	10 00		
			Total, Ottawa Canal	10 00		10 00
			Total, fines and damages			798 80

\* These amounts were paid to the collector of canal tolls at St. Catharines, by Mr. Ellis, superintendent of the Welland Canal.

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

CANALS,

No. 5.—COLLECTORS of Canal Tolls,

DR.

(For details, see

Amounts received from Department to meet Expenditure.	Deductions from Salaries for Super-annuation.	Balances due to Collectors, 30th June, 1892.	Total.	COLLECTION DIVISIONS.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	
3,428 31	65 00	.....	3,493 31	Welland Canal.
2,171 52	38 00	.....	2,209 52	Port Colborne .....
770 35	15 00	.....	785 35	Port Dalhousie .....
590 00	10 00	.....	600 00	Dunnville .....
738 39	14 40	.....	752 79	Port Maitland .....
196 00	4 00	.....	200 00	Port Robinson .....
128 00	2 00	.....	130 00	St. Catharines .....
8,022 57	148 40	.....	8,170 97	Chippawa .....
				Total .....
				St. Lawrence Canals.
1,442 61	17 00	.....	1,459 61	Beauharnois .....
1,217 50	8 00	.....	1,225 50	Cardinal .....
2,011 24	.....	.....	2,011 24	Cornwall .....
1,169 15	22 00	.....	1,191 15	Kingston .....
2,158 78	34 00	.....	2,192 78	Lachine .....
8,737 88	127 16	.....	8,865 04	Montreal .....
16,737 16	208 16	.....	16,945 32	Total .....
				Chambly Canal.
1,578 70	26 25	.....	1,604 95	Chambly .....
1,673 81	28 25	.....	1,702 06	St. John's .....
622 74	.....	.....	622 74	St. Ours .....
3,875 25	54 50	.....	3,927 75	Total .....
				Ottawa Canals.
833 76	16 00	.....	849 76	Carillon .....
1,163 80	20 00	.....	1,183 80	Grenville .....
1,012 79	16 00	.....	1,028 79	Ste. Anne's Lock .....
3,010 35	52 00	.....	3,062 35	Total .....
				Rideau Canal.
362 03	5 94	.....	367 97	Kingston Mills .....
2,379 27	44 00	.....	2,423 27	Ottawa .....
330 45	6 00	.....	336 45	Smith's Falls .....
3,071 75	55 94	.....	3,127 69	Total .....
				St. Peter's Canal .....
220 70	0 66	.....	221 36	Murray Canal .....
240 51	.....	.....	240 51	Trent Canal .....
60 12	.....	.....	60 12	Inspector of Canals .....
2,613 85	40 00	.....	2,653 85	Printing and Stationery .....
885 44	.....	.....	885 44	General .....
2,921 85	.....	.....	2,921 85	Grand Totals .....
41,659 55	559 66	.....	42,219 21	

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

1891-92.

in Account with Expenditure.

Appendix B.)

CR.

Balances due to Collectors 1st July, 1890.	EXPENDITURE AUTHORIZED BY THE DEPARTMENT.					Total.
	Salaries.	Special Assistance.	Rent.	Travelling Expenses.	Sundries.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
.....	3,250 00	.....	192 00	.....	51 31	3,493 31
.....	1,900 00	.....	.....	142 00	167 52	2,209 52
.....	750 00	.....	.....	.....	35 35	785 35
.....	500 00	.....	100 00	.....	.....	600 00
.....	720 00	.....	.....	2 40	30 39	752 79
.....	200 00	.....	.....	.....	.....	200 00
.....	100 00	.....	25 00	.....	5 00	130 00
.....	7,420 00	.....	317 00	144 40	289 57	8,170 97
.....	1,350 00	.....	.....	.....	109 61	1,459 61
.....	1,150 00	.....	50 00	9 00	16 50	1,225 50
.....	1,600 00	327 00	.....	.....	84 24	2,011 24
.....	1,100 00	.....	45 00	.....	46 15	1,191 15
.....	1,700 00	.....	360 00	31 90	100 88	2,192 78
.....	7,558 27	.....	525 00	.....	781 77	8,865 04
.....	14,458 27	327 00	980 00	40 90	1,139 15	16,945 32
.....	1,500 00	.....	.....	58 50	46 45	1,604 95
.....	1,600 00	.....	.....	.....	102 06	1,702 06
.....	600 00	.....	.....	.....	22 74	622 74
.....	3,700 00	.....	.....	58 50	171 25	3,929 75
.....	800 00	.....	.....	.....	49 76	849 76
.....	1,000 00	.....	50 00	.....	133 80	1,183 80
.....	966 66	.....	.....	.....	62 13	1,028 79
.....	2,766 66	.....	50 00	.....	245 69	3,062 35
.....	296 97	10 00	.....	25 00	33 00	367 97
.....	2,200 00	.....	.....	.....	223 27	2,423 27
.....	300 00	.....	.....	8 70	27 75	336 45
.....	2,799 97	10 00	.....	33 70	284 02	3,127 69
.....	33 32	155 55	.....	25 02	7 47	221 36
.....	200 00	.....	.....	.....	40 51	240 51
.....	.....	25 00	.....	.....	35 12	60 12
.....	2,000 00	.....	.....	578 58	75 27	2,653 85
.....	.....	.....	.....	.....	885 44	885 44
.....	.....	.....	.....	.....	2,921 85	2,921 85
.....	33,378 22	517 55	1,347 00	881 10	6,095 34	42,219 21

B. H. TEAKLES,  
Chief Clerk, Canal's Revenue.

No. 6.—REFUNDS, 1891-92.  
CANAL TOLLS.

Canal.	To whom paid.	Date.	Office.	Refunds of Tolls on	Under what Authority refunded.	Amount.	Total.
						\$ cts.	\$ cts.
Welland ..	Montreal Transportation Co.	1891. Dec.	Port Colborne	(Grain .....	Refunded under Re-vised Statutes, chap. 29, sec. 8....	33,851 16	
do	K. & M. Forwarding Co.	do	do	do	do	10,532 70	
do	do	do	do	do	do	745 92	
do	A. E. D. Mackay's Sons.	do	do	do	do	1,378 08	
do	John Malcolmson	do	do	do	do	315 54	
do	Fred. Elliott	do	do	do	do	119 16	
do	A. M. Robertson.	do	do	do	do	187 56	
do	J. B. Miller	do	do	do	do	216 00	
do	G. E. Jacques & Co.	do	do	do	do	1,407 24	
do	Montreal Transportation Co.	do	do	do	do	106 92	
do	J. B. Fairgrievies & Son.	do	do	do	do	578 88	
do	K. & M. Forwarding Co.	do	do	do	do	216 54	
do	John Malcolmson	do	do	do	do	179 28	
do		1892.					
do	K. & M. Forwarding Co.	April 30	do	do	do	120 42	
do	do	June 30	do	do	do	3,123 72	
do	do	do 30	do	do	do	410 76	
do	do	do 30	do	do	do	908 04	
do	O. A. Thorp & Co.	do 30	do	do	do	52 92	
do	Thomas Myles & Sons.	do 30	do	do	do	119 26	
do		1891.					
do	Beemer & Sullivan	July 4	do	Stand for canal construction		102 48	
do		1892.					
do	H. A. Young	Mar. 24	do	Overpaid tolls on flour		15 15	
				Total refunds, Welland Canal			54,387 73

St. Lawrence.....	Montreal Transportation Co. ....	Sept. 7.....	Kingston.....	Unused portion of pass, 1 section, St. Lawrence.....	19 38
do .....	Captain D. W. Salvail.....	do 7.....	Cornwall.....	Overpaid tolls, 1 sec., St. Lawrence.....	2 66
do .....	Prosper Laplante .....	Oct. 19.....	do .....	do on barge "Ontario," 1 sec., St. Lawrence.....	17 61
		1892.			
do .....	Montreal Transportation Co. ....	Jan. 21.....	Montreal.....	Cement for canal construction .....	77 05
do .....	D. Leroux.....	Mar. 24.....	do .....	Refund of fine.....	10 00
do .....	Wm. Davis & Son.....	June 30.....	Cornwall.....	Timber for canal construction .....	80 07
				Total refunds, St. Lawrence Canals.....	206 77
Ottawa.....	J. R. Ward.....	Oct. —.....	Carillon.....	Overpaid tolls on saw-logs.....	144 00
do .....	Poupore & Fraser.....	June 30.....	Grenville.....	Lumber for canal construction.....	183 03
				Total refund, Ottawa Canal.....	327 03
Rideau.....	J. P. Tett & Bros. ....	Mar. 24.....	Smith's Falls.....	Overpaid tolls on chemical ore.....	26 90
				Total refund, Rideau Canal.....	26 90
				Total refunds.....	54,948 43

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

No. 6.—REFUNDS, 1891-92—RECAPITULATION.  
CANAL TOLLS—Continued.

Canal.	To whom paid.	Office.	Refund of Tolls on	Under what Authority refunded.	Amount.	Total.
					\$ cts.	\$ cts.
Welland	Montreal Transportation Co.	Port Colborne	Grain	Refunded under R. S. cap. 24, sec. 8.	33,958 08	
do	K. & M. Forwarding Co.	do	do	do	15,758 10	
do	A. D. Mackay's Sons	do	do	do	1,378 08	
do	John Malcolmson	do	do	do	494 82	
do	Fred Elliott	do	do	do	119 16	
do	A. M. Robertson	do	do	do	187 56	
do	J. B. Miller	do	do	do	216 00	
do	G. E. Jacques & Co.	do	do	do	1,407 24	
do	J. B. Fairgrave & Son	do	do	do	578 88	
do	O. A. Thorp & Co.	do	do	do	52 92	
do	Thos. Myles & Son	do	do	do	119 26	
do	Beemer & Sullivan	do	Sand for canal construction	do	102 48	
do	H. A. Young	do	Overpaid tolls on flour	do	15 15	
			Total refunds, Welland Canal			54,387 73
St. Lawrence	Montreal Transportation Co.	Kingston	Unused portion of pass, 1 sec. St. Lawrence.		19 38	
do	do	Montreal	Cement for canal construction		77 05	
do	Capt. D. W. Salvail	Cornwall	Overpaid tolls, 1 sec. St. Lawrence		2 66	
do	Prosper Laplante	do	Overpaid tolls on barge "Ontario," 1 sec. St. Lawrence		17 61	
do	D. Leroux	Montreal	Refund of fine		10 00	
do	Wm. Davis & Son	Cornwall	Timber for canal construction		80 07	
			Total refunds, St. Lawrence Canals			206 77
Ottawa	J. R. Ward	Carillon	Overpaid tolls on saw-logs		144 00	
do	Poupore & Fraser	Greenville	Lumber for canal construction		183 03	
			Total refunds, Ottawa Canals			327 03
Rideau	J. P. Tett & Bros.	Smith's Falls	Overpaid tolls on chemical ore		26 90	
			Total refunds, Rideau Canal			26 90
			Total refunds			54,948 43

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

# CANAL STATISTICS

APPENDIX A—CANALS.

No. 7.—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal, and the Amount of Revenue collected, during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl.												\$ cts.	\$ cts.	\$ cts.
Apples		1,101									36		7 20	7 20
Agricultural products not enumerated, vegetables.											1,101	4 63	27 55	32 18
Agricultural products not enumerated, animal.														
Agricultural implements.	1													
Barley														
Bricks	225										225	31 01		31 01
Bones														
Brunstone														
Cement and waterlime.	8													
Clay, lime and sand.	70													
Coal.														
Corn														
Cattle	1													
Cotton, raw														
Crockery and earthenware														
Dye wood and dye stuffs.														
Fish	35													
Flax and hemp														
Flour	4,151													
Furniture	1													
Gypsum														
Glass, all kinds	18													
Hay, pressed	100													
Hogs														
Horses	55													
Hides and skins, horns and hoofs														
Ice														
Iron, railway	127													



do pig	27	559	168	194	10	35	499	424	499	569	499	963	61 12	99 80	99 80
do all other														172 02	172 02
do ore.															
Kryolite, chemical ore and other ore, except iron					1,773		554		2,327	2,327	2,327	2,327		116 35	116 35
Lard and lard oil					9		8		17	17	17	17		3 40	3 40
Meal, all kinds	1				29,428		18		29,447	29,447	29,447	29,447		5,889 30	5,889 30
Meats, other than pork					29		51		80	80	80	80		16 00	16 00
Marble				3,745				3,745					561 75	561 75	561 75
Manilla				179				179					26 85	26 85	26 85
Molasses	66				18		20		38	38	38	38		7 60	7 60
Nails					51,210			75	51,346	51,346	51,346	51,346		10,269 20	10,269 20
Oats, in barrels	5			47	1			54	1	1	1	1		0 20	0 20
Oil cake															
Oil cake															
Peanse	524		240												
Potatoes					73				73	73	73	73		14 60	14 60
Pork			22					22					3 30	3 30	3 30
Paint				49				49					7 85	7 85	7 85
Pitch and tar					60				60	60	60	60		12 00	12 00
Rags						68,566			68,566	68,566	68,566	68,566		13,713 20	13,713 20
Rye															
Resin					494										
Salt	1,188		1	121				122	1,682	1,682	1,682	1,682		354 70	354 70
Stone intended for cutting	251		2				3,523	2	3,774	3,774	3,774	3,774		754 80	754 80
do wrought															
do not suitable for cutting															
unwrought	203				255			203	257	257	257	257		51 40	51 40
Seeds, all kinds															
Sheep															
Soda ash				42				42					6 30	6 30	6 30
Steel				8,420				8,420					1,263 00	1,263 00	1,263 00
Sugar	287		8	78	20			373	20	20	20	20		4 00	4 00
Spirits, beer, &c.	3		6	1	149			10	221	221	221	221		44 05	44 05
Tobacco, raw															
Tallow				102	8			102	17	17	17	17		3 40	3 40
Tin	3			255				258					38 31	38 31	38 31
Turpentine															
Wheat	2,010	46,410		1,070	26,951		143,286	2,010	217,717	217,717	217,717	217,717		43,282 24	43,282 24
White lead															
Whiting															
Wool				6	1,071			6	1,071	1,071	1,071	1,071		215 10	215 10
All other goods and merchan- dise not enumerated	1,169	354	308	43,123	1,454		245	44,600	2,053	2,053	2,053	2,053	6,551 09	348 72	6,899 81
Bark															
Barrels, empty			30	49	20		1	88	21	21	21	21	18 12	3 98	22 10
Boat knees															
Floats	40													1 75	1 75
Firewood, in vessels	960	7,656	705					1,665	7,656	7,656	7,656	7,656	49 26	382 23	431 49
do rafts															

No. 7.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Hoops												\$ cts.	\$ cts.	\$ cts.
Hop poles														
Lumber, sawn, in vessels		1,955												
do rafts			1,641	22,005		41,154		3,567	1,641	68,481	70,122	295 37	12,241 58	12,536 95
Masts, spars and telegraph poles, in vessels														
Masts, spars and telegraph poles, in rafts		127		114							241			13 78
Railway ties, in vessels														
do rafts	129	1,875		1,186						129	3,061	5 88	122 76	128 64
Saw logs		155								155	155		12 40	12 40
Staves and headings, barrel pipe														
do W. India														
Staves, salt barrel														
Shingles		19									19		7 81	7 81
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels		3,696												
do rafts	319	60							319	60	25,752	13 89	3,859 56	3,859 56
Traverses														
Woodenware and wood partly manufactured	2				13					15		6 00		6 00
Total freight paying tolls	5,752	70,399	3,461	25,015	204,669	283,444	14,118	323,320	228,000	702,178	930,178	41,575 40	134,290 81	175,866 21
<i>Free Articles having paid Full Tolls on the St. Lawrence Canal.</i>														
Ashes, pot and pearl										31	31			
Agricultural products, &c., vegetables										29	29			

RAILWAYS AND CANALS.



APPENDIX A—Continued—CANALS.

No. 8.—STATEMENT showing the Quantity of each Article of Through Freight transported on the Welland Canal, and the Amount of Tolls collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.														
Apples.					19			36		19	36	2 85	7 20	7 20
Agricultural products not enumerated, vegetable.														
Agricultural products not enumerated, animal.														
Agricultural implements.	1													
Barley.				42				2			44			8 80
Bricks.	204													
Bones.														
Brimstone.														
Cement and water lime.														
Clay, lime and sand.														
Coal.					147,850	651	14,083	18,491	161,933	19,142	181,075	32,386 60	3,828 40	36,215 00
Corn.					111,636		60,256	171,892	171,892		171,892		34,378 40	34,378 40
Cattle.														
Cotton, raw.														
Crockery and earthenware.														
Dye wood and dye stuffs.														
Fish.					234	1			234	1	235	35 10	0 20	35 30
Flax and hemp.														
Flour.					2	8,811	2,048	2,048	10,859	2	10,861	0 30	2,171 80	2,173 10
Furniture.					1	5	1	1	10	6	16	1 50	1 20	2 70
Gypsum.														
Glass, all kinds.														
Hay, pressed.														
Hogs.														
Horses.														
Hides and skins, horns and hoofs.														
Ice.														
Iron, railway.														
do pig.	127										499			99 80

do all other.....	8	543	768	194	10	370	553	923	55	50	110	60	166	10
do ore.....														
Kryolite, chemical ore and other ore, except iron.....														
Lard and lard oil.....					1,773		2,327	2,327					116	35
Mess, all kinds.....					9	554	17	17					3	40
Meats, other than pork.....					29,428	18	29,446	29,446					5,889	20
Marble.....					23	51	80	80					16	00
Manilla.....							3,745	3,745					561	75
Molasses.....					18	2	179	179					26	85
Nails.....	18				18	20	38	40					7	90
Oats.....					51,210	27	51,210	51,210					10,242	00
Oil, in barrels.....					1	49	1	50					0	20
Oil cake.....													7	85
Pease.....		524					524	524					104	80
Potatoes.....					73		73	73					14	60
Pork.....													3	30
Paint.....			22			22		22					7	35
Pitch and tar.....					49	49	60	60					12	00
Rags.....					60	68,566	68,566	68,566					13,713	20
Rye.....														
Resin.....														
Salt.....		1,188	1		494	122	1,682	1,804					354	70
Stone intended for cutting.....		251	2			2	3,774	3,774					754	80
do wrought.....													0	30
do unwrought.....														
Sheep.....					255		257	257					51	40
Seeds, all kinds.....														
Soda ash.....						42		42					6	30
Steel.....						8,420		8,420					1,263	00
Sugar.....			8		20	86	20	106					16	90
Spirits, beer, &c.....	2	21	6		149	9	219	228					43	80
Tobacco, raw.....													45	15
Tallow.....						102	17	119					18	70
Tin.....						255		255					38	25
Turpentine.....														
Wheat.....		44,700			26,951		214,511	214,511					42,902	20
White lead.....														
Whiting.....														
Wool.....					6		1,071	1,077					214	20
All other goods and merchandise not enumerated.....	73	5	308		43,123		1,694	45,198					338	80
Bark.....														
Barrels, empty.....			39		49	1	21	109					3	98
Boat knees.....														
Boats.....														
Firewood, in vessels.....														
do in rafts.....														
Hoops.....														

CANAL STATISTICS.

No. 8.—STATEMENT showing the Quantity of each Article of Through Freight transported, &c.—*Concluded.*

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Hop poles.....														
Lumber, sawn, in vessels.....		960				41,154		3,367	1,641	67,496	69,077	296 37	12,128 53	12,423 90
do do in rafts.....														
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....														
Railway ties, in vessels.....														
do do in rafts.....														
Saw logs.....														
Staves and headings, barrel do pipe.....								96		96	96		17 60	17 60
do do West India.....								132		132	132		24 68	24 68
Staves, salt barrel.....														
Shingles.....														
Split posts and fence rails, in vessels.....														
do do in rafts.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....		3,660						22,056		25,716	25,716		3,856 18	3,856 18
do do in rafts.....														
Traverses.....														
Woodenware and wood partly manufactured.....	2				13					15		6 00		6 00
Total freight paying tolls.....	553	51,873	2,617	21,955	204,869	283,444	14,063	322,884	221,922	680,156	902,078	41,407 84	133,032 92	174,440 76
<i>Free Articles having paid full Tolls on the St. Lawrence Canals.</i>														
Ashes, pot and pearl.....				31					31		31			
Agricultural products not enumerated, vegetable.....				29					29		29			
Bricks.....				315					315		315			
Cement and water lime.....		1,259		1,680					2,939		2,939			



APPENDIX A—Continued—CANALS.

No. 9.—STATEMENT showing the Quantity of each Article of Way Freight transported on the Welland Canal, and the Amount of Tolls collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl												\$ cts.	\$ cts.	\$ cts.
Apples		1,101	91						91	1,101		1 78	27 55	29 33
Agricultural products not enumerated, vegetable		9		400						409			20 20	20 20
Agricultural products not enumerated, animal														
Agricultural implements														
Barley														
Bricks	21								21			0 41		0 41
Bones														
Brimstone														
Cement and water lime	8		13						21	70		1 97	5 25	1 97 5 25
Clay, lime and sand		70												
Coal														
Corn														
Cattle										1			0 02	0 02
Cotton, raw														
Crockery and earthenware														
Dye wood and dye stuffs														
Fish	35		35						70			5 26		5 26
Flax and hemp														
Flour		4,151								4,151			108 83	108 83
Furniture		1								1			0 02	0 02
Gypsum														
Glass, all kinds														
Hay, pressed														
Hogs														
Horses														
Hides and skins, horns and hoofs	55	16							55	16		1 10	0 36	1 46
Ice														
Iron, railway														





No. 9.—STATEMENT showing the Quantity of each Article of Way Freight transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Hoops.....												\$ cts.	\$ cts.	\$ cts.
Hop poles.....														
Lumber, sawn, in vessels.....		995		50							1,045		113 05	113 05
do rafts.....														
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....		127		114							241		13 78	13 78
Railway ties, in vessels.....														
do rafts.....	129	1,875		1,186					129	3,061	3,190	5 88	122 76	128 64
Saw logs.....		155								155	155		12 40	12 40
Staves and headings, barrel do do pipe do do W. India.....														
Staves, salt barrel.....														
Shingles.....		19								19	19		7 81	7 81
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels do rafts.....	319	36							319	36	36	13 89	3 38	3 38
Traverses.....		60								60	379		1 69	15 58
Woodenware and wood partly manufactured.....														
Total freight paying tolls.....	5,199	18,526	844	3,060			35	436	6,078	22,022	28,100	167 56	1,257 89	1,425 45
Timber passed free from Weland to Port Robinson.....		263								263	263			
Grand total, freight.....	5,199	18,789	844	3,060			35	436	6,078	22,285	28,363			

Total tolls on vessels.....	401 83	360 58	762 41
do passengers.....	142 88	152 88	295 76
do free goods.....	\$ 12 00		
Total way tolls.....	712 27	1,771 35	2,483 62

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

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 30th September, 1892.

APPENDIX A—Continued—CANALS.

No. 10.—GENERAL STATEMENT 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, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to Canadian Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.....	6	60	31						43	60	103	7 69	12 00	19 69
Apples.....	49	5,045			6				55	5,045	5,100	4 87	722 95	727 82
Agricultural products not enumerated, vegetable.....	296	2,102	29						325	2,102	2,427	44 68	133 39	178 07
Agricultural products not enumerated, animal.....	54	1,144					1		55	1,144	1,199	5 32	167 57	172 89
Agricultural implements.....	87	6							87	6	93	12 97	0 95	13 92
Barley.....	220	20,982							220	20,982	21,202	4 40	543 83	548 23
Bricks.....	12,365	76	315				147		12,827	76	12,903	523 94	2 86	526 80
Bones.....		121					13		13	121	134	0 49	16 10	16 59
Brinstone.....	282						9		291		291	27 86		27 86
Cement and water lime.....	3,160	215	1,574						4,734	215	4,949	677 46	8 10	675 56
Clay, lime and sand.....	19,382	8,618	191				3,227		22,800	8,618	31,418	883 81	551 01	1,434 82
Coal.....		42,684		62		935	128,040		171,721	171,721	171,721	0 72	23,696 02	23,696 02
Corn.....	8	859					24		8	859	867	0 72	889 20	889 92
Cattle.....	42	348							42	348	390	2 31	25 94	28 25
Cotton, raw.....	187	16	136						323	16	339	61 92	3 05	64 97
Crockery and earthenware.....	76	13							76	13	89	4 70	2 60	7 30
Dye wood and dye stuffs.....	660	40	57						717	40	757	92 71	2 70	95 41
Fish.....	1								1		1	0 04	0 04	0 04
Flax and hemp.....	589	3,710					74		506	3,784	4,290	41 07	553 36	594 43
Flour.....	331	775	1						332	775	1,107	38 55	133 14	171 69
Furniture.....	1,779	91							1,779	91	1,870	23 61	5 33	29 94
Gypsum.....	342	91	31						373	91	464	73 94	10 55	84 49
Glass, all kinds.....	936	455	35				8		979	455	1,434	39 16	27 46	66 62
Hay, pressed.....		11								11	11		1 65	1 65
Hogs.....	133	289							133	289	422	8 40	19 16	27 56
Horses.....														
Hides and skins, horns and hoofs.....	1	43							1	43	44	0 05	6 38	6 43
Ice.....	3,318	6							3,318	6	3,324	495 84	0 54	496 38
Iron, railway.....	3,639	11	56						3,695	11	3,706	492 66	0 42	493 08
do pig.....														

RAILWAYS AND CANALS.

	12,846	686	383					13,229	686	13,915	727 20	29 34	756 54
do all other.....													
Iron ore.....													
Kryolite, chemical ore and other ore, except iron.....		1,206	16					117	1,206	1,205	12 58	60 25	60 25
Lard and lard oil.....	101	208						54	685	739	5 24	15 37	27 85
Meal, all kinds.....	54	685						33	2	35	3 69	0 30	39 04
Meats, other than pork.....	33	2						15		15	2 94		3 99
Marble.....	15												2 94
Manilla.....													
Molasses.....	700	24		125				825	24	849	81 85	1 20	82 85
Nails.....	1,974	664	327					2,301	664	2,965	443 20	35 15	478 35
Oats.....	752	20,525						752	20,525	21,277	25 47	705 15	730 62
Oil, in barrels.....	738	157	41	48	5			832	161	993	118 57	24 10	142 67
Oil cake.....								12		12	1 10		1 10
Pease.....	860	46,939						860	46,939	47,799	17 36	1,509 75	1,527 11
Potatoes.....	9	139						9	139	148	0 44	9 65	10 09
Pork.....	448	211						448	211	659	43 95	14 49	58 44
Paint.....	263	219	24					287	219	506	54 39	16 65	71 04
Pitch and tar.....	89	33	21	222				332	33	365	28 68	2 75	31 43
Rags.....	6	180						6	180	186	0 90	35 50	36 40
Rye.....	94	1,978						94	1,978	2,072	3 20	84 51	87 71
Sisal.....	754	113		1,049				1,803	113	1,916	91 29	5 65	96 94
Sisal, intended for cutting.....	4,182	39	2,786		2			6,968	41	7,009	896 35	1 97	898 23
Stone, intended for cutting.....	328	1,585	145	2,418				2,891	1,585	4,476	125 31	235 50	360 81
do wrought.....	358			8				366		366	18 75		18 75
do not suitable for cutting.....													
Seeds, all kinds.....	8,058	9,138						8,058	9,138	9,138	301 66	189 15	189 15
Sheep.....		2,023							2,023	10,081		103 34	405 00
Soda ash.....	482	100	213	2				697	30	727	132 71	5 10	137 81
Steel.....	826	14	29					835	14	869	116 42	0 56	116 88
Sugar.....	3,257	26	615					3,872	26	3,898	740 53	1 75	742 28
Spirits, beer, &c.....	381	475	302					683	475	1,158	123 80	92 60	216 40
Tobacco, raw.....	7	1						7	1	8	0 70	0 15	0 85
Tallow.....	3			13				26		26	2 44		2 44
Tin.....	468	43	48					506	43	549	97 66	2 90	100 56
Turpentine.....	11	14		64				75	14	89	5 11	0 70	5 81
Wheat.....	4,113	28,152		7,324				4,113	35,476	40,089	92 03	2,090 34	2,182 37
White lead.....	148							156		156	30 63		30 63
Whiting.....	304	50						354		354	71 50		71 50
Wool.....	9	2						11	2	13	1 65	0 30	1 85
All other goods and unmerchan- dise not enumerated.....	6,157	2,924	763	212	454			7,586	3,453	11,039	1,165 43	472 05	1,637 48
Bark.....	181	13						13	13	13	3 75		3 75
Barrels, empty.....		20	12	2	40			233	22	255	32 15	2 16	34 31
Boat keels.....													
Floats.....	260	3,944						260	3,944	4,204	3 90	70 42	74 32
Firewood in vessels.....	2,985	7,536		1,065	87			3,072	8,601	11,673	51 26	264 62	315 88
do rafts.....													
Hoops.....													

CANAL STATISTICS.

No. 10.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up, Down.		Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		\$	cts.	
Hop poles														
Lumber, sawn, in vessels	25,985	15,186	789	416					26,784	15,601	42,385	932	497	1,429
do do rafts		4								4	4		0	15
Masts, spars and telegraph poles, in vessels.														
Masts, spars and telegraph poles, in rafts.														
Railway ties, in vessels.	496	19,068							496	30	526	9	59	10
do rafts		30												
Saw logs	197	14,380							197	14,380	14,577	4	50	333
Staves and headings, barrel.														
do pipe														
do do West India														
Staves, salt barrel.	4													
Shingles														
Split posts and fence rails, in vessels	434	2,093							434	2,093	2,527	7	13	42
Split posts and fence rails, in rafts	3,732	4,510							3,732	4,510	8,242	96	20	218
Traverses		9,376								9,376	9,376			24
Woodenware and wood, partly manufactured.	42	8							42	8	50	15	90	16
Total freight, aying tolls.	131,109	282,576	9,080	1,545	613	1,559	7,568	141,543	148,310	427,223	575,533	10,237	76	35,449
Free Articles, having paid full Tolls on the Welland Canal.														
All other vegetables														
Ashes														
Barrels, empty														
Corn														
Flour														

RAILWAYS AND CANALS.



APPENDIX A—Continued—CANALS.

No. 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 Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls, Up.	Total Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
Ashes, pot and pearl.....	3	60	31						34	60	94	12 00	18 80
Apples.....		4,736								4,736	4,736	710 40	710 40
Agricultural products not enumerated, vegetable.	231	1,886	20						260	1,886	2,146	125 99	164 99
do do animal	8	1,092							8	1,092	4	1 20	163 80
Agricultural implements		4								4			0 80
Barley.....		12,263							362	12,263	362	352 77	352 77
Bricks.....	47		315										54 30
Bones.....		93								93		13 95	13 95
Brimstone.....	2,314		1,574						3,888		3,888	583 20	583 20
Cement and water lime.....	55	1,982	191						246	1,982	2,228	297 30	334 20
Clay, lime and sand.....		38,588								145,851		21,877 65	21,877 65
Coal.....		845								6,515		887 94	887 94
Corn.....	1	12							1	12	13	1 80	1 80
Cattle.....													0 15
Cotton, raw.....	106	15							242	15	257	48 40	3 00
Crockery and earthenware.....	2	13							2	13	15	0 40	2 00
Dye wood and dye stuffs.....	473		57						530		530	79 50	79 50
Fish.....													
Flax and hemp.....													
Flour.....	84	3,631							85	3,631	3,631	544 65	544 65
Furniture.....		617	1							617	702	17 00	123 40
Gypsum.....	290	37	31						321	37	358	64 20	7 40
Glass, all kinds.....													
Hay, pressed.....													
Hogs.....	11								11		11	1 65	1 65
Horses.....	10	29							10	29	39	1 50	4 35
Hides and skins, horns and hoofs.....		42								42		6 30	6 30
Ice.....													



Iron, railway	3,282	1	3,282	492 30	0 15	492 45
do pig	3,088		3,088	463 20		463 20
do all other	1,446	12	1,831	274 65	1 80	276 45
Iron ore						
Kryolite, chemical ore and other ore, except iron	29	1,205	1,205	60 25	60 25	60 25
Lard and lard oil	18	65	45	6 75	9 75	16 50
Meal, all kinds	7	27	18	2 70	4 05	6 75
Meats, other than pork	9	2	7	1 05	0 30	1 35
Marble			9	1 80		1 80
Manilla						
Molasses	84		84	16 80		16 80
Nails	1,489	13	1,816	363 20	2 60	365 80
Oats	311	2,673	2,673	223 24	223 24	223 24
Oil, in barrels		107	352	70 40	21 40	91 80
Oil cake						
Pease	12,840		12,840	743 00	743 00	743 00
Potatoes		5	5		0 75	0 75
Pork	8	58	8	1 20	8 70	9 90
Paint	187	38	211	42 20	49 80	49 80
Pitch and tar	25	7	46	9 20	1 40	10 60
Rags	3	175	3	178 00	35 60	35 60
Rye	643		643	53 16	53 16	53 16
Salt	1,708	2	4,494	674 10	674 10	674 10
Stone intended for cutting		1,565	1,710	21 75	234 75	256 50
do wrought	3		3	0 60		0 60
do not suitable for cutting, unwrought						
Seeds, all kinds	100		100	8 40	8 40	8 40
Sheep	251		251	37 65	37 65	37 65
Soda ash	2		2	0 30	0 30	0 30
Steel	402	24	615	123 00	4 80	127 80
Sugar	600	29	629	94 35	94 35	94 35
Spirits, beer, &c	2,220	3	2,838	567 00	0 60	567 60
Tobacco, raw	140	458	442	88 40	91 60	180 00
Tallow	13	1	1	0 15	0 15	0 15
Tin	392	5	440	1 95	1 95	1 95
Turpentine	6		6	88 00	1 00	89 00
Wheat	8,588		16,412	1 20	1,661 26	1,661 26
White lead	127	8	135	27 00	27 00	27 00
Whiting	243	50	293	58 60	58 60	58 60
Wool	9	2	11	1 65	0 30	1 95
All other goods and merchandise not enumerated	2,899	1,734	3,653	730 60	346 80	1,077 40
Bark						
Barrels, empty	127	14	128	23 64	1 70	25 34
Boat knees						
Floats						
Firewood, in vessels		435	435		29 00	29 00

CANAL STATISTICS.

No. 11.—STATEMENT showing the Quantity of Through Freight transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Firewood, in rafts.														
Hoops														
Hop poles														
Lumber, sawn, in vessels	243	843							243	843	1,086	21 75	80 25	102 00
do rafts														
Masts, spars and telegraph poles, in vessels														
Masts, spars and telegraph poles, in rafts.														
Railway ties, in vessels														
do rafts.														
Saw logs														
Staves and headings, barrel														
do do pipe.														
do do W. India.														
Staves, salt barrel.														
Shingles														
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts.														
Timber, square, in vessels.														
do rafts.														
Traverses														
Woodenware and wood partly manufactured.	39								39		39	15 60		15 60
Total freight paying tolls.	22,729	97,852	8,186				120,757		30,915	218,609	249,524	5,218 19	28,809 46	34,027 65
Free Articles having paid full Tolls on the Welland Canal.														
All other, vegetable.														
Ashes														



APPENDIX A—Continued—CANALS.

No. 12.—STATEMENT showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl.	3								9		9	0 89		0 89
Apples.	49	369			6				55	369	364	4 87	12 55	17 42
Agricultural products not enumerated, vegetable.	65	216							65	219	281	5 68	7 40	13 08
Agricultural products not enumerated, animal.	46	52					1		47	52	90	4 12	3 77	7 89
Agricultural implements.	87	2							87	2	89	12 97	0 15	13 12
Barley.	220	8,719							220	8,719	8,939	4 40	191 06	195 46
Bricks.	12,318	76					147		12,465	76	12,541	469 64	2 86	472 50
Bones.	28						13		13	28	41	0 49	2 15	2 64
Brimstone.	282						9		291		291	27 86		27 86
Cement and water lime.	846	215							846	215	1,061	84 26	8 10	92 36
Clay, lime and sand.	19,327	6,636					3,227		22,554	6,636	29,190	846 91	253 71	1,100 62
Coal.	4,096								8	38	25,870	1,818 37	1,818 37	1,818 37
Corn.	8	14							8	38	46	0 72	1 26	1 98
Cattle.	41	336							41	336	377	2 16	24 14	26 30
Cotton, raw.	81								81	1	82	13 52	0 06	13 57
Crockery and earthenware.	74								74		74	4 30		4 30
Dye wood and dye stuffs.	187	40							187	40	227	13 21	2 70	15 91
Fish.	1								1		1	0 04		0 04
Flax and hemp.	589				7				596	153	749	41 07	8 71	49 78
Flour.	247	158							247	158	405	21 55	9 74	31 29
Furniture.	1,779	141							1,779	141	1,920	24 61	5 33	24 94
Gypsum.	52	54							52	54	106	9 74	3 15	12 89
Glass, all kinds.	936	455			8				979	455	1,434	39 16	27 46	66 62
Hay, pressed.	123	260							123	260	383	6 90	14 81	21 71
Hogs.	1	1							1	1	2	0 05	0 08	0 13
Hides and skins, horns and hoofs.	36	5							36	5	41	3 54	39	3 93
Iron, railway.														

	607	11	607	11	618	29 46	0 42	29 88
	11,398	674	11,398	674	12,072	452 55	27 54	480 09
do pig.....								
do all other.....								
Iron ore.....	11,398	674	11,398	674	12,072	452 55	27 54	480 09
Kryolite, chemical ore and other ore, except iron.....								
Lard and lard oil.....	72	143	72	143	215	5 83	5 62	11 45
Meal, all kinds.....	36	658	36	658	694	2 54	29 75	32 29
Meats, other than pork.....	26		26		26	2 64		2 64
Marble.....	6		6		6	1 14		1 14
Manilla.....								
Molasses.....	616	24	741	24	765	64 55	1 20	65 75
Nails.....	485	651	485	651	1,136	80 00	32 55	112 55
Oats.....	752	17,852	752	17,852	18,604	25 47	481 91	507 38
Oil, in barrels.....	427	50	480	54	534	48 17	2 70	50 87
Oil cake.....	12		12		12	1 10		1 10
Pease.....	800	34,099	800	34,099	34,959	17 36	766 75	784 11
Potatoes.....	9	134	440	153	134	9 44	8 90	9 34
Pork.....	440	153	440	153	593	42 75	5 79	48 54
Pitch.....	76	181	76	181	257	12 19	9 05	21 24
Pitch and tar.....	64	26	286	26	312	19 48	1 35	20 83
Rags.....	3	5	3	5	8	0 30	0 50	0 80
Rye.....	94	1,335	94	1,335	1,429	3 20	31 35	34 55
Rosin.....	752	113	1,801	113	1,914	90 89	5 65	96 54
Salt.....	2,474	39	2,474	41	2,515	222 16	1 97	224 13
Stone intended for cutting.....	328	20	2,746	20	2,766	103 56	0 75	104 31
do wrought.....	355		363		363	18 15		18 15
do not suitable for cutting, unwrought.....								
Seeds, all kinds.....	8,058	9,038	8,058	9,038	9,038	301 66	180 75	180 75
Sheep.....								
Soda ash.....	80	98	82	6	88	9 71	0 30	10 01
Steel.....	226	14	226	14	240	22 07	0 56	22 63
Sugar.....	1,037	23	1,037	23	1,060	173 53	1 15	174 68
Spirits, beer, &c.....	241	17	241	17	258	35 40	1 00	36 40
Tobacco, raw.....	7		7		7	0 70		0 70
Tallow.....								
Tin.....	66	38	66	38	104	9 66	1 90	11 56
Turpentine.....	5	14	66	14	83	3 91	0 70	4 61
Wheat.....	4,113	19,564	4,113	19,564	23,667	92 03	429 08	521 11
White lead.....	21		21		21	3 63		3 63
Whiting.....	61		61		61	12 90		12 90
Wool.....								
All other goods and merchandise not enumerated.....	3,258	1,190	3,983	1,719	5,662	434 83	125 25	560 08
Bark.....		13	105	8	113	8 51	3 75	3 75
Barrels, empty.....	54	6	105	8	113	8 51	0 46	8 97
Boat knees.....								
Boats.....	260	3,944	260	3,944	4,204	19 44	54 88	74 32
Floats.....	2,985	7,101	3,072	8,166	11,238	51 26	235 62	286 88
Firewood, in vessels.....								
do do.....								
do rafts.....								

No. 12.—STATEMENT showing the Quantity of each Article of Way Freight transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Hoops.....														
Hop poles.....														
Lumber, sawn, in vessels.....	25,752	14,342	789	416					26,541	14,758	41,299	910 26	417 31	1,327 57
do rafts.....		4								4	4		0 15	0 15
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph posts, in rafts.....		19,068							496	30	19,068		476 70	476 70
Railway ties, in vessels.....	496	30									528	9 90	0 59	10 49
do in rafts.....		197							197	14,380	14,577	4 50	328 72	333 22
Saw logs.....		14,380												
Staves and headings, barrel pipe.....														
do W. India.....		8								8	8		0 30	0 30
Staves, salt barrel.....		4							4	6	10	0 50	0 75	1 25
Shingles.....														
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....	434	2,063							434	2,063	2,527	7 13	35 17	42 30
do rafts.....	3,732	4,510							3,732	4,510	8,242	96 20	121 80	218 00
Traverses.....		9,376								9,376	9,376		24 40	24 40
Woodenware and wood partly manufactured.....	3	8							3	8	11	0 30	0 90	1 20
Total freight paying tolls.....	108,380	184,724	844	1,545	613	1,559	7,558	20,786	117,395	208,614	326,009	5,095 11	6,327 09	11,422 20
Free Articles, having paid full tolls on the Welland Canal.														
Corn.....														2,487



APPENDIX A—Continued—CANALS.

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, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
Ashes, pot and pearl.....		20							18	20	3 80
Apples.....	18	26							1	26	44
Agricultural products, not enumerated, vegetable do animal.....	1	440							1,449	441	42 02
Barley.....	3	1,449							3	1,449	120 29
Agricultural implements.....		10								10	2 05
Bricks.....		150								150	11 22
Bones.....		8								8	0 80
Brimstone.....											
Cement and water lime.....	400	20							400	20	1 97
Clay, lime and sand.....		7,302								7,302	211 49
Coal.....		648								648	23 78
Corn.....		4								4	89
Cattle.....	1	759							1	759	50 54
Cotton, raw.....											
Crockery and earthenware.....											
Dye wood and dye stuffs.....	1	6							1	6	0 66
Fish.....											
Flax and hemp.....	6	71							6	71	6 60
Flour.....	8	26							8	26	4 18
Furniture.....											
Gypsum.....		1								1	1
Glass, all kinds.....		208								208	0 19
Hay, pressed.....		9								9	19 17
Hogs.....		9								9	0 72
Horses.....	24	173							24	173	9 87
Hides and skins, horns and hoofs.....		16								16	1 56
Ice.....											
Iron, railway do pig do all other.....	8	58							8	58	2 00
Iron ore.....											





No. 13.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls.												
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.													
Railway ties, in vessels		485								485	\$ cts. 71 97												
do rafts																							
Saw logs		17,888								17,888	410 54												
Staves and headings, barrel																							
do do pipe																							
do do West India																							
Staves, salt barrel		189		445						634	517 31												
Shingles		3		1						4	1 72												
Split posts and fence rails, in vessels																							
do do rafts		2,804								2,804	76 30												
Timber, square, in vessels		3,080								3,080	53 64												
do do rafts		220								220	0 55												
Traverses		2								2	0 47												
Woodenware and wood partly manufactured																							
Total freight paying tolls	326,608	114,807		89,284					326,608	204,091	530,699 34,955 37												
Free, per Order in Council—																							
Firewood		3,180								3,180													
Floats		15,020								15,020													
Lumber, sawn		587								587													
Timber, square		2,160								2,160													
Saw logs		11,986								11,986													
Grand total freight	326,608	147,740		89,284					326,608	287,024	563,632												
<table border="0" style="width: 100%;"> <tr> <td>Total tolls on vessels</td> <td>3,432 93</td> </tr> <tr> <td>do passengers</td> <td>158 65</td> </tr> <tr> <td>do free goods</td> <td>\$463 56</td> </tr> <tr> <td>Fines</td> <td>10 00</td> </tr> <tr> <td>Other receipts</td> <td>8 00</td> </tr> <tr> <td>Total, revenue exclusive of hydraulic rent</td> <td>38,564 95</td> </tr> </table>												Total tolls on vessels	3,432 93	do passengers	158 65	do free goods	\$463 56	Fines	10 00	Other receipts	8 00	Total, revenue exclusive of hydraulic rent	38,564 95
Total tolls on vessels	3,432 93																						
do passengers	158 65																						
do free goods	\$463 56																						
Fines	10 00																						
Other receipts	8 00																						
Total, revenue exclusive of hydraulic rent	38,564 95																						

RAILWAYS AND CANALS.

APPENDIX A—Continued—CANALS.  
 No. 14.—GENERAL STATEMENT showing the Quantity of each Article transported on the Chamby Canal, and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
Ashes, pot and pearl.....	3	909					46		3	955	61 84
Apples.....							1			1	0 10
Agricultural products not enumerated, vegetable do do animal.....											
Agricultural implements.....			504						504	338	44 92
Barley.....	329	100					237		329	337	38 70
Bricks.....			341						341		34 10
Bones.....											
Brimstone.....							31			31	3 10
Cement and water lime.....	410	245					4 092		410	4 337	471 87
Clay, lime and sand.....	40	215					85 048		40	85 863	8 386 61
Coal.....										60	2 00
Corn.....											
Cattle.....											
Cotton, raw.....										15	1 50
Crockery and earthenware.....							62			62	6 20
Dye wood and dye stuffs.....											
Fish.....											
Flax and hemp.....	237	36							237	36	9 10
Flour.....											
Furniture.....										2	0 58
Gypsum.....											
Glass, all kinds.....	625	2,345	133						758	2,345	138 06
Hay, pressed.....											
Hogs.....										9	0 30
Horses.....											
Hides and skins, horns and hoofs.....											
Ice.....											
Iron, railway.....											
do pig.....											
do do all other.....	25								25		0 84
do ore.....											

No. 14.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons		Total Amount of Tolls.	\$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Kryolite, chemical ore and other ore, except iron												
Lard and lard oil												
Meal, all kinds												
Meats, other than pork.												
Marble												
Manilla												
Molasses												
Nails												
Oats		1,391										
Oil, in barrels.		6		484						484	1,391	94 80
Oil cake.										29	35	3 49
Pease		1,513									1,513	50 50
Potatoes	3									3	3	0 24
Pork												
Paint												
Pitch and tar												
Rags												
Rye												
Rosin												
Salt	124											
Stone intended for cutting	1,012											
do wrought.	373											
do not suitable for cutting, unwrought.												
Seeds, all kinds												
Sheep												
Soda ash												
Steel												
Sugar												
Spirits, beer, &c.												
Tobacco, raw												
Tallow												
Tin												
Turpentine												
Wheat												
White lead												
Whiting												
											42	4 20

Wool.....	685	327	443	2,396	685	3,166	3,851	288 33
All other goods and merchandise not enumerated								
Bark.....	5		13		18		18	1 64
Barrels, empty.....								
Boat knees.....	3				3		3	0 25
Floats.....	11,561	594	12,474		24,035	594	24,629	810 05
Firewood, in vessels.....								
do in rafts.....								
Hoops.....								
Hop poles.....	33,538		63,474		97,012		97,012	5,749 70
do in vessels.....			63		63		63	5 00
Lumber, sawn, in rafts.....								
Masts, spars, and telegraph poles, in vessels.....								
do do in rafts.....	1,092		827		1,919		1,919	153 16
Railway ties, in vessels.....								
do in rafts.....								
Saw logs.....								
Staves and headings, barrels.....								
do do pipe.....								
do do West India.....								
Staves, salt barrel.....	7		28		35		35	14 21
Shingles.....								
Split posts and fence rails, in vessels.....								
do do in rafts.....								
Timber, square, in vessels.....								
do in rafts.....								
Traverses.....								
Woodenware and wood partly manufactured								
Total freight paying tolls.....	50,072	8,282	78,341		96,345	105,070	233,488	16,871 12
Coal free.....	345				345		345	
(Grand total freight.....	50,417	8,282	78,341		96,345	105,070	233,828	
Total tolls on vessels.....								
do passengers.....								2,303 63
do free goods.....								75 19
Fines and damages.....								\$30.34
Other receipts.....								13 00
Total revenue exclusive of hydraulic rents.....								75 30
								19,338 24

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

APPENDIX A—Continued—CANALS.

No. 15.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
Ashes, pot and pearl		22							22		2 64
Apples	31	82							31		113
Agricultural products not enumerated, vegetable	363	11							363		3 88
do do animal	46	416							46		17 78
do implements.	48	106							46		15 16
Barley	368	7							368		17 56
Bricks	18	26							7		8 94
Bones	11	11							18		44
Brimstone									11		22
Cement and water lime	186	38							186		6 01
Clay, lime and sand	90	2							2		2 16
Coal		9,319							90		92
Corn	4	24							9,319		410 79
Cattle	4	3							4		28
Cotton, raw									4		7
Crockery and earthenware	43	30							43		7 95
Dye wood and dye stuffs	11	13							11		24
Fish	74	9							74		2 16
Flax and hemp									9		83
Flour	110	466							110		14 70
Furniture	13	26							13		4 10
Gypsum									26		39
Glass, all kinds	51	6							51		5 67
Hay, pressed	506	4							506		12 05
Hogs									4		
Horses	5	9							5		0 50
Hides and skins, horns and hoofs	11	8							11		0 73
Ice									8		
Iron, railway	10	13							10		0 24
do pig-	62	84							62		2 25
do all other	335								335		11 59
do ore.									84		

Kryolite, chemical ore and other ore, except iron	2,049	585	2,049	585	2,049	585	2,049	585	2,564	128 90
Lard and lard oil	22	27	27	27	22	27	27	27	49	1 36
Meal, all kinds	11	35	35	35	11	35	35	35	20	0 83
Meats, other than pork	4	9	9	9	4	9	9	9	6	0 54
Marble										
Marrilla	79	1	1	1	79	1	1	1	80	7 36
Molasses	306	5	5	5	306	5	5	5	311	28 35
Nails	140	770	770	770	140	770	770	770	910	26 28
Oats	177	275	275	275	177	275	275	275	452	42 53
Oil, in barrels		8	8	8		8	8	8	3	0 11
Oil cake	121	28	28	28	121	28	28	28	149	4 57
Pease	16	277	277	277	16	277	277	277	293	7 97
Potatoes	227	57	57	57	227	57	57	57	284	7 44
Pork	25	1	1	1	25	1	1	1	26	2 57
Paint	20				20				20	1 86
Pitch and tar	8	6	6	6	8	6	6	6	14	1 54
Rags	137	25	25	25	137	25	25	25	162	4 11
Rye	5	1,781	1,781	1,781	5	1,781	1,781	1,781	1,957	55 14
Rosin		37	37	37		37	37	37	66	3 00
Salt	20	4	4	4	20	4	4	4	24	2 91
Stone intended for cutting		280	280	280		280	280	280	280	6 61
do wrought		8	8	8		8	8	8	16	0 51
do not suitable for cutting, unwrought		5	5	5		5	5	5	5	0 14
Seeds, all kinds	14				14				14	1 85
Sheep	31				31				31	1 04
Soda ash	580	65	65	65	580	65	65	65	645	63 00
Steel	67	15	15	15	67	15	15	15	82	7 43
Sugar	1				1				1	0 03
Spirits, beer, &c										
Tobacco, raw	14				14				14	1 25
Tallow										
Tin	24	146	146	146	24	146	146	146	170	5 03
Turpentine	23				23				23	2 04
Wheat	34				34				34	3 00
White lead	1	5	5	5	1	5	5	5	6	0 24
Whiting	773	482	482	482	773	482	482	482	1,255	142 07
Wool	20	53	53	53	20	53	53	53	73	2 95
All other goods and merchandise not enumerated	75	27	27	27	75	27	27	27	102	7 57
Bark										
Barrels, empty	440	300	300	300	440	300	300	300	740	11 90
Boat knees	24,508	3,056	3,056	3,056	24,508	3,056	3,056	3,056	27,564	479 90
Floats										
Firewood, in vessels										
do do rafts										
Hoops										
Hop poles	16,469	10,126	10,126	10,126	16,469	10,126	10,126	10,126	33,529	1,337 59
Lumber, sawn, in vessels										
do do rafts										
do do										
Masts, spars and telegraph poles, in vessels										
do do										
do do rafts										

CANAL STATISTICS.

No. 15.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From Canadian to United States Ports.		Tons.		Total Tons.	Amount of Toll.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railway ties, in vessels.		66							5,365	66	5,431	\$ cts.
do do rafts	5,365								815		815	571 27
Saw logs	61	187							61	187	248	86 69
Shingles.	77	61							77	61	138	6 00
Split posts and fence rails, in vessels.	5	9							5	9	14	22 19
do do rafts.												2 51
Timber, square, in vessels												
do do rafts	495	20							495	20	515	21 77
Traverses	83	14							83	14	97	8 26
Woodenware and wood partly manufactured	7	16							7	16	23	2 55
Total freight paying tolls.	57,570	27,988							64,504	27,988	92,492	3,677 93
Coal, free, per Order in Council.	4,275								4,275		4,275	
Firewood do do	4,380								4,380		4,380	
Stone, free, for canal construction.	350								350		350	
Chemical ore, free, having paid full tolls on Welland Canal.		554								554	554	
Grand total freight.	66,575	28,542							73,509	28,542	102,051	
Total tolls on vessel.												1,798 75
do passengers.												140 42
do coal, free.												\$114 11
do firewood, free.												73 00
do stone, free.												8 18
do chemical ore, free.												27 70
Wharfage and storage.												131 18
Fines and damages.												20 00
Other receipts												314 70
Total revenue, exclusive of hydraulic rents.												6,082 98

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

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



APPENDIX A—Continued—CANALS.

No. 16.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's Canal, and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Fish	20	636							20	636	656	\$ cts. 6 56
Flour	1,839	68							1,839	68	1,907	19 07
Coal	220	25,390							220	25,390	25,610	256 10
Lumber	2,376	1,044							2,376	1,044	3,420	34 20
Other agricultural products	3,945	5,597							3,945	5,597	9,542	95 42
Other merchandise	1,461	509							1,461	509	1,970	19 70
Total freight paying tolls	9,861	33,244							9,861	33,244	43,105	431 05
Tolls on vessels												1,885 98
Other receipts												3 28
Total revenue												2,320 31

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

APPENDIX A—Continued—CANALS.

No. 17.—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.												
Apples												
Agricultural products not enumerated, vegetable.												
do do animal												
do implements												
Barley											7	0 68
Bricks												
Bones												
Brimstone												
Cement and water lime.												
Clay, lime and sand												
Coal.												
Corn.												
Cattle												
Cotton, raw												
Crockery and earthenware												
Dye wood and dye stuffs												
Fish.												
Flax and hemp												
Flour										25		0 25
Furniture.												
Gypsum												
Glass, all kinds												
Hay, pressed												
Hogs												
Horses												
Hides and skins, horns and hoofs												
Ice												
Iron, railway												
do pig												
do all other												
do ore												

Kryolite, chemical ore and other ore, except iron.																			
Lard and lard oil.....															57	184	4	02	
Meal, all kinds.....															32	32	0	94	
Meats, other than pork.....																			
Marble.....																			
Manilla.....																			
Molasses.....																			
Nails.....																			
Oats.....																			
Oil, in barrels.....																			
Oil cake.....																			
Pease.....																			
Potatoes.....																			
Fork.....																			
Paint.....																			
Pitch and tar.....																			
Rags.....																			
Eye.....																			
Rosin.....																			
Salt.....																			
Stone intended for cutting.....																			
do wrought.....																			
do not suitable for cutting, unwrought.....																			
Seeds, all kinds.....																			
Sheep.....																			
Soda ash.....																			
Steel.....																			
Sugar.....																			
Spirits, beer, &c.....																			
Tobacco, raw.....																			
Tallow.....																			
Tin.....																			
Turpentine.....																			
Wheat.....																			
White lead.....																			
Whiting.....																			
Wool.....										77									
All other goods and merchandise not enumerated.....										57									
Bark.....											32								
Barrels, empty.....																			
Boat knees.....																			
Floats.....													1,127						12 16
Firewood, in vessels.....													1,288						145 86
do rafts.....												12,915							
Hoops.....																			
Hop poles.....																			
Lumber, sawn, in vessels.....															711				868 15 63
do rafts.....															160				292 3 60
Masts, spars, and telegraph poles, in vessels.....																			
do do rafts.....															166				171 10 10
do do do.....																			

No. 17.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railways ties, in vessels.....	115								115		115	2 39
do rafts.....	170	10							170	10	180	7 46
Saw logs.....	3,089	125							3,089	125	3,214	25 54
Staves and headings, barrel do do pipe do do West India.....												
Staves, salt barrel.....												
Shingles.....	162	9							162	9	171	14 83
Split posts and fence rails, in vessels do do rafts.....												
Timber, square, in vessels do do rafts.....	90	1,143	50						90	50	1,233	0 75
Traverses.....	25	200							25	200	225	15 38
Woodenware and wood partly manufactured.....												4 50
Total freight paying tolls.....	17,717	4,241							17,717	4,241	21,958	204 09
Total tolls on vessels.....												329 10
do passengers.....												95 65
Other receipts.....												72 00
Total revenue exclusive of hydraulic rent.....												700 84

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

APPENDIX A—Continued—CANALS.  
 No. 18.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal and the Amount of Revenue collected during the Fiscal Year ended 30th June, 1892.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl												
Apples	104	54							104	54	158	3 03
Agricultural products not enumerated, vegetable	10	255							10	255	265	5 12
do do animal												
do implements	10	2							10	2	12	0 35
Barley	36	565	360						396	565	961	18 04
Bricks												
Bones	2								2		2	0 04
Brimstone	1								1		1	0 02
Cement and water lime	101								101		101	1 90
Clay, lime and sand												
Coal	3	572						987	3	1,559	1,559	28 33
Corn	3	2							3	2	5	0 06
Cattle												
Cotton, raw												
Crockery and earthenware	11								11		11	0 28
Dye wood and dye stuffs	2								2		2	0 05
Fish	6								6		6	0 12
Flax and hemp												
Flour	9								9		9	0 18
Furniture	72	8	10					3	82	11	93	2 41
Gypsum												
Glass, all kinds	12								12		12	0 32
Hay, pressed												
Hogs	34	11	3						37	12	49	0 98
Horses												
Hides and skins, horns and hoofs	1							1	1		1	0 02
Ice	150								150		150	3 75
Iron, railway												
do pig												
do all other	42	1							42	1	43	0 82
do ore												

CANAL STATISTICS.

No. 18.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
	Kryolite, chemical ore and other ore, except iron.											
Lard and lard oil.	1								1		1	0 02
Mead, all kinds												
Meats, other than pork	8								8		8	0 21
Marble												
Manilla	44								44		44	1 10
Molasses	82						12		94		94	2 88
Nails	17								17	17	34	0 64
Oats	18	57							18	57	75	1 92
Oil, in barrels.	1								1		1	0 02
Oil cake	48	641					12		60	641	701	13 17
Pease	7								7		7	0 14
Potatoes												
Pork	2	5							2	5	7	0 18
Paint												
Pitch and tar.												
Rags	202								202		202	3 80
Rye												
Rosin	1	28							1	28	29	0 99
Salt												
Stone intended for cutting												
do wrought	1,511	30							1,511	30	1,541	15 41
do not suitable for cutting, unwrought.		152								152	152	2 86
Seeds, all kinds	10								10		10	0 02
Sheep	13								13		13	0 83
Soda ash												
Steel	110								110		110	2 79
Sugar	8								8		8	0 21
Spirits, beer, &c		2								2	2	0 04
Tobacco, raw												
Tallow	1								1		1	0 03
Tin												
Turpentine	30	380							30	380	410	7 71
Wheat	43								43		43	1 08
White lead												
Whiting												

Wool	965	50			13	965	63	1,028	25 37
All other goods and merchandise not enumerated									
Bark									
Barrels, empty									
Boat knees						342		342	2 85
Floats	150		192						
Firewood, in vessels									
do rafts									
Hoops									
Hop poles									
Lumber, sawn, in vessels	80	463	309			389	463	852	9 60
do rafts									
Masts, spars, and telegraph poles, in vessels									
do do rafts									
Railway ties, in vessels									
do rafts		27					27	27	0 30
Saw logs									
Staves and headings, barrel									
do do pipe									
do do West India									
Staves salt, barrel	3	1				3	1	4	0 21
Shingles									
Split posts and fence rails, in vessels									
do do rafts									
Timber, square, in vessels		3,305					3,305	3,305	41 25
do rafts									
Traverses	1					1		1	0 05
Woodenware and wood partly manufactured									
Total freight paying tolls	3,963	6,630	874		24	1,027	4,861	12,518	201 30
Total tolls on vessels									255 84
do passengers									179 87
Total revenue exclusive of hydraulic rent									637 01

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

## APPENDIX A—

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

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 1.</i>		\$ cts.		\$ cts.		\$ cts.
Canadian vessels, steam.....	370,883	4,150 94	669,196	3,888 03	68,558	226 70
United States vessels, steam.....	470,308	7,062 68	21,030	166 50	378	5 29
Canadian vessels, sail.....	192,981	3,893 09	1,165,469	12,546 61	44,488	580 36
United States vessels, sail.....	108,348	2,405 72	69,070	516 97	115,086	1,491 28
Total, Class No. 1.....	1,142,520	17,512 43	1,924,765	17,118 11	228,510	2,303 63
<i>Class No. 2.</i>	No.		No.		No.	
Passengers.....	33,996	429 81	64,671	3,036 55	4,298	75 19
<i>Class No. 3.</i>	Tons.		Tons.		Tons.	
Bricks.....	225	31 01	12,903	526 80	666	38 70
Brimstone.....	66	9 90	291	27 86		
Cement and water lime.....	50	6 32	4,949	675 56	31	3 10
Clay, lime and sand.....	70	5 25	31,418	1,434 82	4,747	471 87
Fish.....	305	40 56	757	95 41		
Gypsum.....			1,920	29 94		
Iron, railway.....	127	19 05	3,324	496 38		
do pig.....	499	99 80	3,706	493 08		
do all other.....	993	172 02	13,915	756 54	25	0 84
Steel.....	8,420	1,263 00	869	116 98		
Salt.....	1,804	354 70	7,009	898 23	124	5 18
Stone, for cutting.....	3,774	754 80	4,476	360 81	1,012	101 20
Apples.....	1,211	32 18	5,100	727 82	958	61 84
Barley.....	8,108	1,621 60	21,202	548 23	842	44 92
Corn.....	171,892	34,378 40	6,561	889 92		
Cotton, raw.....						
Flax and hemp.....			1	0 04		
Flour.....	15,012	2,275 93	4,380	594 43	273	9 10
Hay, pressed.....	121	19 20	1,434	66 62	3,103	138 06
Meals, all kinds.....	29,447	5,889 30	739	39 04		
Oil cake.....			12	1 10		
Oats.....	51,346	10,269 20	21,277	730 62	1,875	94 80
Pease.....	764	128 80	47,799	1,527 11	1,513	50 50
Potatoes.....			148	10 09	3	0 24
Rye.....	68,566	13,713 20	2,072	87 71		
Seeds, all kinds.....	257	51 40	10,081	405 00		
Tobacco, raw.....			8	0 85		
Wheat.....	219,727	43,319 99	40,089	2,182 37		
All other agricultural products, vegetable.....	453	29 00	2,427	178 07	1	0 10
Bones.....			134	16 59	341	34 10
Cattle.....	1	0 02	390	28 25	60	2 00
Hogs.....			11	1 65		
Hides and skins, horns and hoofs.....	73	10 95	44	6 43		
Horses.....	81	3 21	422	27 56	9	0 30
Lard and lard oil.....	17	3 40	325	27 95		
Meats, other than pork.....	80	16 00	35	3 99		
Pork.....	73	14 60	659	58 44		
Sheep.....			100	7 82	179	5 97
Tallow.....	119	18 70	26	2 44		
Wool.....	1,077	215 10	13	1 95		
All other agricultural products, animal.....			1,199	172 89		
Total, Class No. 3.....	584,758	114,766 59	252,225	14,257 39	15,762	1,062 82



Continued—CANALS.

Amount of Tolls collected during the Fiscal Year ended 30th June, 1892.

Murray Canal.		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.		\$ cts.
139,696	209 76	163,388	656 17	84,809	768 38	31,556	631 12	29,695	229 87
168	0 50	186	2 29	626	15 08			28	0 75
11,345	43 58	158,129	2,200 92	81,735	831 78	62,743	1,254 86	24,053	98 48
92	2 00	24,817	573 55	12,831	183 51				
151,301	255 84	346,520	3,432 93	180,001	1,798 75	94,299	1,885 98	53,776	329 10
No.		No.		No.		No.		No.	
14,939	179 87	12,426	158 65	5,958	140 42			10,374	95 65
Tons.		Tons.		Tons.		Tons.		Tons.	
1	0 02			44	1 26			7	0 68
101	1 90	20	1 97	224	6 01				
		7,702	211 49	92	2 16				
6	0 12	7	0 66	83	2 16	656	6 56		
				10	0 24				
				75	2 25				
43	0 82	66	2 60	419	11 59				
		17	0 50	31	1 04				
52	0 99	15	1 39	1,957	55 14				
				66	3 00				
158	3 03	44	1 93	113	3 88				
961	18 04	150	11 22	375	8 94				
3	0 06	4	0 39	28	0 75				
9	0 18	77	6 60	576	14 70	1,907	19 07	25	0 25
		208	19 17	510	12 05				
		27	2 47	35	0 83				
1	0 02			3	0 11				
34	0 64	2,901	221 38	910	26 28				
701	13 17	3,141	214 62	149	4 57				
7	0 14	654	57 14	203	7 97				
202	3 80	48	4 42	162	4 11				
152	2 86	33	2 76	16	0 51				
2	0 04			1	0 03				
410	7 71	24	2 19	170	5 03				
265	5 12	441	42 02	374	17 78	9,542	95 42		
2	0 04	8	0 80	22	0 88				
5	0 10	760	50 54	7	0 20				
		9	0 72						
1	0 02	16	1 56	19	0 73				
49	0 98	197	9 87	14	0 50				
1	0 02			49	1 36				
		55	5 27	20	0 55				
		43	2 04	284	7 44				
10	0 02	411	31 00	5	0 14				
		29	2 52						
		7	0 70	6	0 24				
		1,449	120 29	462	15 16				
3,176	59 84	18,563	1,030 23	7,604	219 59	12,105	121 05	32	0 93

## APPENDIX A—

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

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 4.</i>		\$ cts.		\$ cts.		\$ cts.
Ashes, pot and pearl . . . . .	36	7 20	103	19 69		
Agricultural implements . . . . .	1	0 15	93	13 92		
Crockery and earthenware . . . . .			339	64 97	15	1 50
Dye woods and dye stuffs . . . . .			89	7 30	62	6 20
Furniture . . . . .	17	2 72	1,107	171 69	2	0 58
Glass, all kinds . . . . .	36	5 50	464	84 49		
Marble . . . . .	3,745	561 75	15	2 94		
Manilla . . . . .	179	26 85				
Molasses . . . . .	40	7 90	849	82 55	120	12 00
Nails . . . . .	75	4 95	2,965	478 35		
Oil, in barrels . . . . .	55	7 65	993	142 67	35	3 49
Paint . . . . .	22	3 30	506	71 04	4	0 40
Pitch and tar . . . . .	49	7 35	365	31 43	118	11 80
Rags . . . . .	60	12 00	186	36 40		
Rosin . . . . .			1,916	96 94	2,042	204 20
Soda ash . . . . .	42	6 30	727	137 81	149	9 93
Sugar . . . . .	393	22 30	3,898	742 28		
Stone, wrought . . . . .	2	0 30	366	18 75	1,273	102 45
Tin . . . . .	258	38 31	549	100 56		
Turpentine . . . . .			89	5 81	42	4 20
White lead . . . . .			156	30 63		
Whiting . . . . .			354	71 50		
Whiskey and all other spirits . . . . .	231	45 42	1,158	216 40		
Merchandise, not enumerated . . . . .	46,653	6,899 81	11,039	1,637 48	3,851	288 33
Total, Class No. 4 . . . . .	51,894	7,659 76	28,326	4,265 60	7,713	645 08
<i>Class No. 5.</i>						
Bark . . . . .			13	375		
Barrels, empty . . . . .	109	22 10	255	34 31	18	1 64
Boat knees . . . . .						
Floats . . . . .	40	1 75	4,204	74 32	3	25
Firewood, in vessels . . . . .	9,321	431 49	11,673	315 88	24,629	810 05
do in rafts . . . . .						
Lumber, sawn, in vessels . . . . .	70,122	12,536 95	42,385	1,429 57	97,012	5,749 70
do in rafts . . . . .			4	0 15	63	5 00
Hoops . . . . .						
Railway ties, in vessels . . . . .	241	13 78	526	10 49	1,919	153 16
do in rafts . . . . .						
Masts, spars and telegraph poles, in vessels . . . . .						
do do in rafts . . . . .			19,068	476 70		
Square timber, in vessels . . . . .	25,752	3,859 56	2,527	42 30		
do in rafts . . . . .	379	15 58	8,242	218 00		
Woodenware and wood partly manufactured . . . . .	15	6 00	50	16 80		
Shingles . . . . .	19	7 81	10	1 25	35	14 21
Split posts and fence rails, in vessels . . . . .						
do do in rafts . . . . .						
Saw logs . . . . .	3,190	128 64	14,577	333 22		
Staves and headings, barrel . . . . .	155	12 40				
do do pipe . . . . .	96	17 60				
do do West India . . . . .	132	24 68	8	30		
do do salt barrel . . . . .						
Traverses . . . . .			9,376	24 40		
Hop poles . . . . .						
Total, Class No. 5 . . . . .	109,571	17,078 34	112,918	2,981 44	123,679	6,734 01

## Continued—CANALS.

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

Murray Canal.		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.		\$ cts.
		20	3 80	22	2 64				
12	0 35	13	2 05	152	17 56				
11	0 28			73	7 95				
2	0 05			24	2 16				
93	2 41	34	4 18	39	4 10				
12	0 32	1	0 19	57	5 67				
8	0 21			6	0 54				
44	1 10	24	1 42	80	7 36				
94	2 88	11	0 75	311	28 35				
75	1 92	25	2 70	452	42 53				
7	0 18	1	0 19	26	2 57				
				20	1 86				
		6	0 96	14	1 54				
				5	0 45				
13	0 33			14	1 85				
110	2 79	53	10 84	645	63 00				
		3	0 29	24	2 91				
1	0 03	2	0 15	14	1 25				
43	1 08	1	0 19	23	2 04				
		1	0 05	34	3 00				
8	0 21	21	1 53	82	7 43				
1,028	25 57	386	50 29	1,255	142 07	1,970	19 70	134	4 02
1,561	39 71	602	79 58	3,372	348 83	1,970	19 70	134	4 02
				73	2 95			32	0 94
		32	4 03	102	7 57				
		1	0 03						
		30,480	323 75	740	11 90			1,127	12 16
342	2 85	40,472	1,606 47	27,564	479 90			14,204	145 86
		120	120						
852	9 60	413,790	30,707 22	33,529	1,337 59	3,420	34 20	868	15 63
		95	1 11	10	0 38			202	3 60
		4	0 41						
		435	71 97	5,431	571 27			115	2 39
				815	86 69			180	7 46
		40	3 31	34	1 68				
								171	10 10
		2,804	76 30					50	0 75
3,305	41 25	3,080	53 64	515	21 77			1,233	15 38
1	0 05	2	0 47	23	2 55				
4	0 21	634	517 31	138	22 19			171	14 83
		4	1 72	14	2 51				
27	30	17,838	410 54	248	6 00			3,214	25 54
		220	0 55	97	8 26			225	4 50
4,531	54 26	510,051	33,780 03	69,333	2,563 21	3,420	34 20	21,792	259 14

## APPENDIX A—

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

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Special Class.</i>		\$ cts.		\$ cts.		\$ cts.
Coal .....	181,075	36,215 00	171,721	23,696 02	85,903	8,386 61
Kryolite or chemical ore .....	2,327	116 35	1,205	60 25		
Iron ore.....						
Stone, unwrought, not suitable for cutting ..	203	12 67	9,138	189 15	426	42 60
Ice .....	350	17 50				
Total, Special Class. ....	183,955	36,361 52	182,064	23,945 42	86,329	8,429 21
Total freight and tolls.....	930,178	193,808 45	575,533	65,604 51	233,483	19,249 94
Timber and other wood, free .....	263	12 00	5,827	668 64		
Wheat, corn, flour, iron, salt, coal, &c., &c., free.....	14,312	2,092 40	413,691	12,625 94	345	30 34
Grand totals, passengers and tonnage of vessels not included .....	944,753	195,912 85	995,051	78,899 09	233,828	19,280 28

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

*Continued*—CANALS.Canals, and the Amount of Tolls collected, &c.—*Concluded*.

Murray Canal.		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.		\$ cts.
1,559	28 33	648	23 78	9,319	410 79	25,610	256 10	.....	.....
.....	.....	835	41 75	2,584	128 90	.....	.....	.....	.....
1,541	15 41	.....	.....	280	6 61	.....	.....	.....	.....
150	3 75	.....	.....	.....	.....	.....	.....	.....	.....
3,250	47 49	1,483	65 53	12,183	546 30	25,610	256 10	.....	.....
12,518	637 01	530,699	38,546 95	92,492	5,617 10	43,105	2,317 03	21,958	688 84
.....	.....	32,933	463 56	4,380	73 00	.....	.....	.....	.....
.....	.....	.....	.....	5,179	149 99	.....	.....	.....	.....
12,518	637 01	563,632	39,010 51	102,051	5,840 09	43,105	2,317 03	21,958	688 84

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

## APPENDIX A—

No. 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during the  
of Property passed through and the

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chamblly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Vessels of all kinds .....	1,142,520	\$ cts. 17,512 43	1,924,765	\$ cts. 17,118 11	228,510	\$ cts. 2,303 63
Passengers .....	No. 33,996	429 81	No. 64,671	3,036 55	No. 4,298	75 19
<i>Forest, Produce of Wood.</i>						
Bark .....	Tons.		Tons.	13	Tons.	3 75
Boat knees .....						
Floats .....	40	1 75	4,204	74 32	3	0 25
do .....	Free.					
Firewood .....	9,321	431 49	11,673	315 88	24,629	810 05
do .....	Free.					
Hoops and hop poles .....						
Lumber, sawed .....	70,122	12,536 95	42,389	1,429 72	97,075	5,754 70
do .....	Free.		3,738			
Masts, spars, &c. ....			19,068	476 70		
Railway ties .....	241	13 78	526	10 49	1,919	153 16
Saw logs .....	3,190	128 64	14,577	333 22		
do .....	Free.					
Staves, all kinds .....	263					
do .....	Free.		8	0 30		
Shingles .....	19	7 81	10	1 25	35	14 21
Split posts and rails .....			128			
Timber, square .....	26,131	3,875 14	10,769	260 30		
do .....	Free.		1,900			
Traverses .....			9,376	24 40		
Total .....	109,710	17,050 24	118,439	2,930 33	123,661	6,732 37
<i>Farm Stock.</i>						
Cattle .....	1	0 02	390	28 25	60	2 00
Hogs .....			11	1 65		
Horses .....	81	3 21	422	27 56	9	0 30
do .....	Free.		1			
Sheep .....			100	7 82	179	5 97
Total .....	82	3 23	924	65 28	248	8 27
<i>Produce of Animals.</i>						
Bones .....			134	16 59	341	34 10
Horns and hoofs, hides and skins, raw .....	73	10 95	44	6 43		
Lard and lard oil .....	17	3 40	325	27 95		
do .....	Free					
Meats other than pork .....	80	16 00	35	3 99		
do .....	Free		94			
Pork .....	73	14 60	659	58 44		
Tallow .....	119	18 70	26	2 44		
Wool .....	1,077	215 10	13	1 95		
do .....	Free					
Agricultural products not enumer- ated, animal .....			1,199	172 89		
Total .....	1,457	278 75	2,529	290 68	341	34 10

Continued—CANALS.

Fiscal Year ended 30th June, 1892, showing the Total Quantity of each Description Amount of Tolls collected thereon.

Murray Canal.		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.		\$ cts.
151,301	255 84	346,520	3,432 93	180,001	1,798 75	94,299	1,885 98	53,776	329 10
No. 14,939	179 87	No. 12,426	158 65	No. 5,958	140 42	No.		No. 10,374	95 65
Tons.		Tons.		Tons.		Tons.		Tons.	
				73	2 95			32	0 94
		1	0 08						
		30,480	323 75	740	11 90			1,127	12 16
		15,070							
342	2 85	40,592	1,607 67	27,564	479 90			14,204	145 86
		3,180		4,380					
		4	0 41						
852	9 60	413,885	30,708 33	33,539	1,337 97	3,420	34 20	1,070	19 23
		587							
		40	3 31	34	1 68			171	10 10
		435	71 97	6,246	657 96			295	9 85
27	0 30	17,838	410 54	248	6 00			3,214	25 54
		11,986							
4	0 21	634	517 31	138	22 19			171	14 83
		4	1 72	14	2 51				
3,305	41 25	5,884	129 94	515	21 77			1,283	16 13
		2,160							
		220	0 55	97	8 26			225	4 50
4,530	54 21	542,950	33,775 53	73,588	2,553 09	3,420	34 20	21,792	259 14
5	0 10	760	50 54	7	0 20				
		9	0 72						
49	0 98	197	9 87	14	0 50				
10	0 02	411	31 00	5	0 14				
64	1 10	1,377	92 13	26	0 84				
2	0 04	8	0 80	22	0 88				
1	0 02	16	1 56	19	0 73				
1	0 02			49	1 36				
		55	5 27	20	0 55				
		43	2 04	284	7 44				
		29	2 52						
		7	0 70	6	0 24				
		1,449	120 29	462	15 16				
4	0 08	1,607	133 18	862	26 36				

APPENDIX A—

No. 20.—SUMMARY STATEMENT of Traffic on the undermentioned

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Agricultural Products.</i>						
		\$ cts.		\$ cts.		\$ cts.
Agricultural products not enumerated, vegetable	453	29 00	2,427	178 07	1	0 10
do Free	29		2			
Apples	1,211	32 18	5,100	727 82	958	61 84
Barley	8,108	1,621 60	21,202	548 23	842	44 92
Corn	171,892	34,378 40	6,561	889 92		
do Free			57,156			
Flax and hemp			1	0 04		
Flour	15,012	2,275 93	4,380	594 43	273	9 10
do Free			3,357			
Hay, pressed	121	19 20	1,434	66 62	3,103	138 06
Meals, all kinds	29,447	5,889 30	739	39 04		
do Free			18			
Manilla	179	26 85				
Oats	51,346	10,269 20	21,277	730 62	1,875	94 80
Pease	764	128 80	47,799	1,527 11	1,513	50 50
do Free			524			
Potatoes			148	10 09	3	0 24
Rye	68,566	13,713 20	2,072	87 71		
do Free			67,335			
Seeds, all kinds	257	51 40	10,081	405 00		
do Free			2			
Tobacco, raw			8	0 85		
Wheat	219,727	43,319 99	40,089	2,182 37		
do Free			182,087			
Total	567,112	111,755 05	473,799	7,987 92	8,568	399 56
<i>Manufactures.</i>						
Ashes, pot and pearl	36	7 20	103	19 69		
do Free	31		36			
Agricultural implements	1	0 15	93	13 92		
Barrels, empty	109	22 10	255	34 31	18	1 64
do Free			1			
Bricks	225	31 01	12,903	526 80	666	38 70
do Free	315					
Cement and water lime	50	6 32	4,949	675 56	31	3 10
do Free	2,939		469			
Crockery and earthenware			339	64 97	15	1 50
do Free	141					
Furniture	17	2 72	1,107	171 69	2	0 58
do Free	1					
Glass, all kinds	36	5 50	464	84 49		
do Free	31		1			
Iron, railway	127	19 05	3,324	496 38		
do Free	3,028					
Iron, pig	499	99 80	3,706	493 08		
do do Free	56		371			
do all other	993	172 02	13,915	756 54	25	84
do do Free	452		14			
Molasses	40	7 90	849	82 55	120	12 00
Nails	75	4 95	2,965	478 35		
do Free	570					
Oil	55	7 65	993	142 67	35	3 49
do Free	41					
Oil cake			12	1 10		
Paint	22	3 30	506	71 04	4	40
do Free	28					
Fitch and tar	49	7 35	365	31 43	118	11 80
do do Free	21					
Rosin			1,916	96 94	2,042	204 20



## Continued—CANALS.

Canals, and the amount of Tolls collected thereon, &amp;c.—Continued.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canals.		Trent Valley Canals.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
265	5 12	441	42 02	374	17 78	9,542	95 42		
158	3 03	44	1 93	113	3 88				
961	18 04	150	11 22	375	8 94				
3	0 06	4	0 39	28	0 75				
9	0 18	77	6 60	576	14 70	1,907	19 07	25	0 25
		208	19 17	510	12 05				
		27	2 47	35	0 83				
34	0 64	2,901	221 38	910	26 28				
701	13 17	3,141	214 62	149	4 57				
7	0 14	654	57 14	293	7 97				
202	3 80	48	4 42	162	4 11				
152	2 86	33	2 76	16	0 51				
2	0 04			1	0 03				
410	7 71	24	2 19	170	5 03				
2,904	54 79	7,752	586 31	3,712	107 43	11,449	114 49	25	0 25
		20	3 80	22	2 64				
12	0 35	13	2 05	152	17 56				
		32	4 03	102	7 57				
				44	1 26			7	0 68
101	1 90	20	1 97	224	6 01				
11	0 28			73	7 95				
93	2 41	34	4 18	39	4 10				
12	0 32	1	0 19	57	5 67				
				10	0 24				
				75	2 25				
43	0 82	66	2 60	419	11 59				
44	1 10	24	1 42	80	7 36				
94	2 88	11	75	311	28 35				
75	1 92	25	2 70	452	42 53				
1	0 02			3	11				
7	0 18	1	0 19	26	2 57				
				20	1 86				
				5	0 45				

## APPENDIX A—

## No. 20.—SUMMARY STATEMENT of Traffic on the undermentioned

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Manufactures—Concluded.</i>						
Soda ash.....	42	6 30	727	137 81	149	9 93
do Free.....	324					
Spirits, whiskeys, &c..	231	45 42	1,158	216 40		
do do Free.....	330		21			
Steel.....	8,420	1,263 00	869	116 98		
do Free.....	6					
Sugar.....	393	22 30	3,898	742 28		
do Free.....	628					
Tin.....	258	38 31	549	100 56		
do Free.....	48					
Turpentine.....			89	5 81	42	4 20
White lead.....			156	30 63		
do Free.....	6					
Whiting.....			354	71 50		
do Free.....	50					
Woodenware.....	15	6 00	50	16 80		
<b>Total.....</b>	<b>20,739</b>	<b>1,778 35</b>	<b>57,527</b>	<b>5,680 28</b>	<b>3,267</b>	<b>292 38</b>
<i>Merchandise.</i>						
Brimstone, crude.....	66	9 90	291	27 86		
Clay, lime and sand.....	70	5 25	31,418	1,434 82	4,747	471 87
do do Free.....	191		483			
Coal.....	181,075	36,215 00	171,721	23,696 02	85,903	8,386 61
do Free.....			99,139		345	
Dye woods and dye stuffs.....			89	7 30	62	6 20
Fish.....	305	40 56	757	95 41		
do Free.....	433					
Gypsum.....			1,920	29 94		
Ores, all kinds.....	2,327	116 35	1,205	60 25		
do do Free.....	544		1,629			
Marble.....	3,745	561 75	15	2 94		
Rags.....	60	12 00	186	36 40		
Salt.....	1,804	354 70	7,009	898 23	124	5 18
do Free.....	3,367					
Stone, all kinds.....	3,979	767 77	13,980	568 71	2,711	246 25
do do.....			724			
All other goods and merchandise, not enumerated.....	47,003	6,917 34	11,039	1,637 48	3,851	288 33
do do Free.....	684		228			
<b>Total.....</b>	<b>245,653</b>	<b>45,000 59</b>	<b>341,833</b>	<b>28,495 36</b>	<b>97,743</b>	<b>9,404 44</b>
Grand totals, passengers and tonnage of vessels not included....	944,753	193,808 45	995,051	65,604 51	233,828	19,249 94

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September 1892.

## Continued—CANALS.

## Canals, and the Amount of Tolls collected thereon, &amp;c.—Concluded.

Murray Canal.		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.		\$ cts.
13	0 33			14	1 85				
8	0 21	21	1 53	82	7 43				
		17	0 50	31	1 04				
110	2 79	53	10 84	645	63 00				
1	0 03	2	0 15	14	1 25				
43	1 08	1	0 19	23	2 04				
		1	0 05	34	3 00				
1	0 05	2	0 47	23	2 55				
669	16 67	344	37 61	2,980	232 23			7	0 68
1	0 02	7,702	211 49	92	2 16				
1,559	23 33	648	23 78	9,319	410 79	25,610	256 10		
2	0 05			4,275	24				
6	0 12	7	0 66	83	2 16	656	6 56		
		835	41 75	2,584	128 90				
8	0 21			554	6				
		6	0 96	6	0 54				
52	0 99	15	1 39	14	1 54				
1,541	15 41	3	0 29	1,957	55 14				
				370	12 52				
				350					
1,178	29 32	386	50 29	1,255	142 07	1,970	19 70	134	4 02
4,347	74 45	9,602	330 61	20,883	757 98	28,236	282 36	134	4 02
12,518	637 01	563,632	38,546 95	102,051	5,617 10	43,105	2,317 03	21,958	688 84

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

APPENDIX A—  
No. 21.—STATEMENT showing the Amount of Tolls accrued

CANALS AND OFFICES.	1891.				
	July.	August.	September.	October.	November.
<b>WELLAND CANAL.</b>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Chippewa.....	3 79	11 84	9 78	6 02	5 30
Colborne.....	19,048 57	24,780 58	24,832 34	18,785 94	10,127 52
Dalhousie.....	6,407 44	6,852 84	8,199 83	10,952 98	3,694 07
Dunnville.....	40 95	52 81	28 80	106 43	116 57
Maitland.....	1 23			1 00	
Robinson.....	92 81	64 99	8 78	95 91	107 08
St. Catharines.....	87 48	109 84	85 54	65 47	41 48
<b>Total Welland Canal.....</b>	<b>25,622 27</b>	<b>31,872 90</b>	<b>33,165 02</b>	<b>29,963 75</b>	<b>14,092 02</b>
<b>St. LAWRENCE CANALS.</b>					
Beauharnois.....	237 38	235 08	374 20	177 72	115 01
Cardinal.....	211 59	24 04	74 69	91 82	48 61
Cornwall.....	4,866 31	3,160 57	2,729 29	3,108 80	2,506 68
Kingston.....	1,909 78	1,242 03	813 58	1,681 84	1,169 74
Lachine.....	330 29	273 96	457 25	451 94	270 58
Montreal.....	4,371 38	4,605 41	3,961 51	3,146 65	2,622 00
<b>Total St. Lawrence Canals.....</b>	<b>11,926 73</b>	<b>9,541 04</b>	<b>8,410 52</b>	<b>8,658 77</b>	<b>6,732 62</b>
<b>CHAMBLY CANAL.</b>					
Chambly.....	1,196 00	1,281 19	885 01	1,511 46	927 83
St. John's.....	1,875 41	1,401 14	1,192 17	1,353 25	864 50
St. Ours.....	79 38	60 16	103 73	178 20	100 87
<b>Total Chambly Canal.....</b>	<b>3,150 79</b>	<b>2,742 49</b>	<b>2,180 91</b>	<b>2,042 91</b>	<b>1,893 20</b>
<b>OTTAWA CANALS.</b>					
Ottawa.....	3,597 40	2,629 84	2,268 53	2,457 39	1,520 54
Carillon.....	8 98	6 10	5 59	24 82	32 11
Grenville.....	3,017 00	2,542 39	2,078 88	1,863 28	1,697 12
Ste Anne.....	274 81	234 00	245 07	304 48	94 10
<b>Total Ottawa Canals.....</b>	<b>6,898 19</b>	<b>5,412 33</b>	<b>4,598 07</b>	<b>4,649 97</b>	<b>3,343 87</b>
<b>RIDEAU CANAL.</b>					
Kingston Mills.....	329 49	257 00	178 89	153 16	112 96
Ottawa.....	620 32	600 07	539 26	681 64	348 11
Smith's Falls.....	175 69	102 81	85 27	52 56	31 82
<b>Total Rideau Canal.....</b>	<b>1,125 50</b>	<b>959 88</b>	<b>803 42</b>	<b>887 36</b>	<b>492 89</b>
<b>St. PETER'S CANAL.</b>					
St. Peter's Canal.....	102 35	111 36	282 77	438 40	383 37
<b>NEWCASTLE DISTRICT CANALS.</b>					
Burleigh.....	18 60	11 39	21 57	19 93	1 75
Bobcaygeon.....	70 56	91 32	67 38	57 03	10 25
Peterborough.....	21 35	18 74	21 59	16 54	6 55
Hastings.....	8 00	6 25	2 25	1 25	
Fenelon Falls.....	0 50	0 50	3 70		1 25
Buckhorn.....	10 85	9 40	8 75	0 30	
<b>Total Newcastle District Canals.....</b>	<b>129 86</b>	<b>137 60</b>	<b>125 24</b>	<b>95 05</b>	<b>19 80</b>
<b>MURRAY CANAL.</b>					
Brighton.....	146 09	178 74	63 85	46 05	31 28
<b>Grand Total.....</b>	<b>49,101 78</b>	<b>50,956 34</b>	<b>49,629 80</b>	<b>47,782 26</b>	<b>26,989 05</b>

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.  
RAILWAYS AND CANALS.

Continued—CANALS.

each month during the Fiscal Year, ended 30th June, 1892.

December.	1892.					Total.
	January.	March.	April.	May.	June.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
				3 79	6 06	46 58
840 43			6,505 16	20,211 65	16,662 95	141,745 14
24 35			4,878 04	4,581 77	4,819 45	50,410 74
				29 17	56 04	430 77
					1 76	3 99
13 39			71 01	151 52	73 45	618 89
3 24			30 88	65 84	62 57	552 34
831 41			11,485 06	25,043 74	21,682 28	193,808 45
				49 85	96 01	1,285 20
1 45			127 84	61 22	115 88	757 14
66 89				2,859 13	4,063 72	23,361 30
			442 91	1,159 45	3,450 13	11,860 46
4 92				198 51	261 67	2,249 12
				3,321 64	4,053 61	26,082 20
73 26			570 75	7,649 80	12,041 02	65,604 51
				883 85	1,020 07	7,705 42
				2,507 86	1,659 42	10,363 75
			19 45	71 44	77 55	690 78
			19 45	3,463 15	2,757 04	19,249 94
			261 25	3,548 14	3,347 92	19,631 01
			1 25	23 90	13 03	115 78
			156 65	2,839 98	3,051 44	17,246 74
1 00			5 35	114 46	280 15	1,558 42
1 00			424 50	6,526 48	6,692 54	38,546 95
				157 02	36 50	1,275 06
				406 19	548 34	3,748 93
				41 86	108 08	598 09
				605 07	742 98	5,617 10
163 66	30 92	1 06	180 32	254 58	368 24	2,317 03
			2 36	4 76	21 02	101 38
				19 81	41 33	357 68
			6 14	16 54	33 11	140 56
				13 14	1 93	32 82
			1 00	2 25	7 50	16 70
			1 00	0 50	8 90	39 70
			10 50	57 00	113 79	688 84
			24 39	66 32	80 29	637 01
1,119 33	30 92	1 06	12,714 97	43,666 14	44,478 18	326,460 83

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

APPENDIX A—Continued—CANALS.

No. 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality of Vessels passed through all the Canals during the Fiscal Year ended 30th June, 1892.

VESSELS.	Total Number		From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>WELLAND CANAL.</b>														
Canadian vessels, steam.....	1,175	101,036	90,213	79,027	3,661	307	7,574	80,065	187,944	182,939	370,882	4,150 94		
do sail.....	664	36,437	33,133	55,278	6,452	2	6,905	54,774	98,622	94,359	192,981	3,893 09		
Total Canadian.....	1,839	137,473	123,346	134,305	10,113	309	14,479	143,839	286,566	277,298	563,864	8,044 03		
United States vessels, steam.....	502	1	1	16,631	189	218,678	183,056	186	235,496	234,512	470,308	7,062 68		
do sail.....	267	666	20	8,964	3,026	41,556	31,497	2,577	20,042	53,763	54,585	2,405 72		
Total United States.....	769	667	21	25,595	3,215	260,234	214,553	2,703	255,538	288,275	524,893	9,468 40		
Grand Total, Welland Canal.....	2,608	138,140	123,367	159,900	13,328	260,543	214,553	17,242	215,447	575,825	1,142,520	17,512 43		
<b>ST. LAWRENCE CANALS.</b>														
Canadian vessels, steam.....	3,073	348,559	297,246	16,912	608	.....	.....	.....	5,871	365,471	303,725	3,888 03		
do sail.....	5,968	594,878	451,422	47,839	320	.....	.....	.....	71,010	642,717	522,752	12,546 61		
Total Canadian.....	9,041	943,437	748,668	64,751	928	.....	.....	.....	76,881	1,008,188	826,477	16,434 64		
United States vessels, steam.....	508	55	302	4,007	20	7,194	6,892	20	2,540	11,276	9,754	166 50		
do sail.....	609	968	15,989	8,366	1,681	1,107	705	28,722	11,532	39,163	29,907	516 97		
Total United States.....	1,117	1,023	16,291	12,373	1,701	8,301	7,597	28,742	14,072	50,439	39,661	683 47		
Grand Total, St. Lawrence Canals.....	10,158	944,460	764,959	77,124	2,629	8,301	7,597	28,742	90,953	1,058,627	866,138	17,118 11		

CHAMBLEY CANAL.															
Canadian vessels, steam	514	34,159	33,722	94							583	34,253	34,305	68,558	226 70
do sail	585	11,107	10,308	7,798							15,275	18,906	23,383	44,488	580 36
Total Canadian	1,099	45,266	44,030	7,892							15,858	53,158	59,888	113,046	807 06
United States vessels, steam	14	55	92	100							71	215	163	378	5 29
do sail	1,094	969	3,029	43,574							67,514	44,543	70,543	115,086	1,491 28
Total United States	1,108	1,024	3,121	43,734							67,585	44,758	70,706	115,464	1,496 57
Grand Total, Chambly Canal	2,207	46,290	47,151	51,626							83,443	97,916	130,594	228,510	2,303 63
OTTAWA CANALS.															
Canadian vessels, steam	997	51,772	109,386		2,290							51,772	111,616	163,388	656 17
do sail	1,194	8,407	134,629		15,083							8,407	149,722	158,129	2,200 92
Total Canadian	2,191	60,179	244,015		17,323							60,179	261,338	321,517	2,857 09
United States vessels, steam	4	102	33		51							102	84	186	2 29
do sail	251	3,237	751		20,424							3,642	21,175	24,817	573 55
Total United States	255	3,339	784		20,475							3,744	21,259	25,003	575 84
Grand Total, Ottawa Canals	2,446	63,518	244,799		37,798							63,923	282,597	346,520	3,432 93
RIDEAU CANAL.															
Canadian vessels, steam	1,844	40,047	44,609	153								40,200	44,609	84,809	768 38
do sail	1,025	39,907	41,510	318								40,225	41,510	81,735	831 78
Total Canadian	2,869	79,954	86,119	471								80,425	86,119	166,544	1,600 16
United States vessels, steam	62	278	348									278	348	626	15 08
do sail	145	2,012	7,854	2,965								4,977	7,854	12,831	183 51
Total United States	207	2,290	8,202	2,965								5,255	8,202	13,457	198 59
Grand Total, Rideau Canal	2,576	82,244	94,321	3,436								85,680	94,321	180,001	1,798 75
ST. PETER'S CANAL.															
Canadian vessels, steam	168	16,014	15,542									16,014	15,542	31,556	631 12
do sail	1,259	31,744	30,549									32,194	30,549	62,743	1,254 86
Total Canadian	1,427	47,758	46,091									48,208	46,091	94,299	1,885 98

No. 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality, &c.—Concluded.

VESSELS.	Total Number	From Canadian to Canadian Ports.		From United States to United States Ports.		From Canadian to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>ST. PETER'S CANAL—Concluded.</b>													
United States vessels, steam													\$
do sail													cts.
Total United States	1,427	47,756	46,091					450		48,206	46,091	94,299	1,885 98
Grant Total, St. Peter's Canal													
<b>TRENT VALLEY CANALS.</b>													
Canadian vessels, steam	761	14,657	15,098							14,657	15,098	29,695	229 87
do sail	399	12,306	11,747							12,306	11,747	24,063	98 48
Total Canadian	1,160	26,963	26,786							26,963	26,786	53,748	328 35
United States vessels, steam	3	4	24							4	24	28	0 75
do sail													
Total United States	3	4	24							4	24	28	0 75
Grant Total, Trent Valley Canals	1,163	26,967	26,809							26,967	26,809	53,776	329 10
<b>MURRAY CANAL.</b>													
Canadian vessels, steam	796	87,292	31,625										209 76
do sail	175	4,408	5,077			9,678				11,101	42,726	139,696	43 58
Total Canadian	971	91,700	36,702			10,216				12,424	49,126	151,941	253 34
United States vessels, steam	3	163	5							163	5	168	0 50
do sail	6	36	57							36	57	92	2 00
Total United States	8	199	62							199	62	260	2 50
Grant Total, Murray Canal	981	91,898	36,764			10,216				12,424	49,188	151,301	255 84



RECAPITULATION.

CANADIAN VESSELS.														
<i>Steam and Sail.</i>														
Welland	1,839	137,473	123,346	134,305	10,113	309		14,479	143,839	286,566	277,238	563,864	8,044	03
St. Lawrence	9,041	943,437	748,668	64,751	928				76,861	1,008,188	826,477	1,834,665	16,434	64
Chambly	1,069	45,266	44,030	7,892					15,858	53,158	59,868	113,046	807	66
Ottawa	2,191	60,179	244,015		17,323					60,179	261,338	321,517	2,857	09
Rideau	2,369	79,854	86,119	471						80,425	86,119	166,544	1,600	16
St. Peter's	1,427	47,758	46,091			450				48,208	46,091	94,299	1,885	98
Trent Valley	1,160	26,963	26,785							26,963	26,785	53,748	328	35
Murray	1,973	91,700	36,702	10,215					12,424	101,915	49,126	151,041	253	34
Total Canadian	20,099	1,622,730	1,355,756	217,634	28,364	309		14,929	249,002	1,665,602	1,633,122	3,298,724	32,210	65
UNITED STATES VESSELS.														
<i>Steam and Sail.</i>														
Welland	769	667	21	25,595	3,215	260,234	214,553	2,763	71,608	280,259	289,387	578,656	9,463	40
St. Lawrence	1,117	1,033	16,291	12,373	1,701	8,301	7,597	23,742	14,072	50,469	39,661	90,100	683	47
Chambly	1,106	1,024	3,121	43,734					67,956	44,758	70,706	15,464	1,496	57
Ottawa	353	3,339	784		20,475			405		3,744	21,259	25,003	573	84
Rideau	207	2,290	8,202	2,965						5,265	8,202	13,467	198	59
St. Peter's	3	4	24							4	24	28	0	75
Trent Valley	8	198	68							198	62	260	2	60
Murray														
Total United States	3,487	8,545	23,506	84,667	26,301	268,535	222,150	31,910	153,265	393,657	429,311	823,968	12,426	12
Grand Total, Canadian and United States	23,586	1,441,275	1,384,261	302,301	53,755	268,844	222,150	46,839	402,267	2,069,259	2,062,433	4,121,692	44,636	77

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

APPENDIX A—Continued—CANALS.

No. 23.—COMPARATIVE STATEMENT of the Total Movement of Property, Passengers and Vessels on the undermentioned Canals for the Fiscal Year ended 30th June, 1892, and the three preceding Years.

GOODS, WARES AND MERCHANDISE.	Welland Canal.			St. Lawrence Canals.			Chambly Canal.						
	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	
Farm stock . . . . .	9	25	54	82	840	981	1,107	924	183	226	234	248	
Forest . . . . .	156,771	194,144	138,205	169,710	159,430	144,461	126,128	118,439	102,102	88,955	98,968	123,661	
Manufactures . . . . .	23,621	29,082	23,104	20,739	67,173	81,745	67,280	57,527	13,763	7,225	3,218	3,267	
Merchandise . . . . .	288,740	317,150	317,044	245,653	323,049	312,337	346,636	341,833	129,174	91,785	118,830	97,743	
Vegetable food and other agricultural products . . . . .	469,113	564,152	481,095	568,569	292,674	370,577	286,093	476,328	5,423	4,594	3,914	8,909	
Total tons . . . . .	938,254	1,104,553	959,502	944,753	843,216	910,101	829,304	995,051	280,645	192,785	225,064	233,828	
Passengers . . . . .	3,071	9,579	24,089	33,986	48,242	51,519	61,614	64,671	3,713	4,983	3,360	4,298	
Number of vessels of all kinds . . . . .	2,839	3,057	2,547	2,608	9,358	11,188	10,476	10,158	2,305	2,018	2,104	2,207	
Total tonnage of vessels of all kinds . . . . .	939,035	1,144,117	1,030,899	1,142,520	1,575,938	1,750,414	1,720,331	1,924,765	249,367	224,562	240,015	238,510	
	Welland Canal.			St. Lawrence Canals.			Chambly Canal.						
	Percentage of decrease of 1892, compared with 1891, is	Percentage of increase of 1892, compared with 1889, is	Percentage of increase of 1892, compared with 1889, is	Percentage of increase of 1892, compared with 1891, is	Percentage of increase of 1892, compared with 1889, is	Percentage of increase of 1892, compared with 1891, is	Percentage of increase of 1892, compared with 1889, is	Percentage of increase of 1892, compared with 1889, is	Percentage of increase of 1892, compared with 1891, is	Percentage of increase of 1892, compared with 1891, is	Percentage of decrease of 1892, compared with 1889, is	Percentage of decrease of 1892, compared with 1889, is	
	1.53	.69	19.98	18.	3.74	6.7							

GOODS, WARES AND MERCHANDISE.	Murray Canal.				Ottawa Canals.				Rideau Canal.			
	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.
Farm stock .....	22	25	64	1,294	1,028	1,167	1,377	23	25	38	26	
Forest .....	6,832	4,124	4,530	687,353	698,978	622,329	542,954	91,693	105,237	74,530	73,588	
Manufactures .....	34	1,659	669	425	360	844	344	2,566	2,424	2,336	2,980	
Merchandise .....	3,085	4,205	4,347	10,009	7,686	11,483	9,602	19,647	19,311	20,728	20,883	
Vegetable food and other agricultural products .....	621	3,572	2,908	6,051	4,382	5,155	9,359	2,442	2,393	3,055	4,574	
Total tons .....	10,504	13,585	12,518	705,132	712,384	640,978	563,632	116,371	129,390	100,687	102,051	
Passengers .....	1,331	14,437	14,939	14,248	14,284	12,683	12,426	3,527	2,535	4,376	5,958	
Number of vessels of all kinds .....	167	996	981	3,166	3,066	2,890	2,446	2,752	2,407	2,252	2,576	
Total tonnage of vessels of all kinds .....	22,102	118,436	151,301	430,698	410,534	393,525	346,520	184,575	159,559	144,510	180,001	
	Murray Canal.				Ottawa Canals.				Rideau Canal.			
	Percentage of decrease of 1892, compared with 1891, is		Percentage of		Percentage of decrease of 1892, compared with 1891, is		Percentage of decrease of 1892, compared with 1891, is		Percentage of increase of 1892, compared with 1891, is		Percentage of decrease of 1892, compared with 1891, is	
	7.85				12.06		20.06		1.35		1.23	

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

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, 1892.

	Welland Canal.			St. Lawrence Canals.			Chambly Canal.					
	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.
PROPERTY AND VESSELS.												
Tonnage of property, up . . . . .	286,080	315,726	313,480	242,312	280,075	292,857	288,594	248,213	91,226	91,668	101,722	128,758
do down . . . . .	642,164	788,827	646,022	702,441	563,141	610,744	570,710	746,838	159,419	101,117	123,342	105,070
Total tonnage of property, up and down . . . . .	928,254	1,104,553	959,502	944,753	843,216	910,101	829,304	995,051	250,645	192,785	225,064	233,828
Tonnage of vessels, up . . . . .	469,884	564,536	508,144	575,825	915,314	1,009,119	971,281	1,058,627	81,109	84,888	86,934	97,916
do down . . . . .	469,151	579,661	522,786	566,686	680,624	741,285	749,080	866,138	168,238	139,674	133,081	130,594
Total tonnage of vessels, up and down . . . . .	939,035	1,144,197	1,030,930	1,142,511	1,595,938	1,750,404	1,720,361	1,924,765	249,347	224,562	240,015	228,510
Grand total tonnage of property and vessels, up and down . . . . .	1,877,289	2,248,750	1,990,432	2,087,273	2,419,154	2,660,515	2,549,665	2,919,816	500,012	417,347	465,079	462,338

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, 1892—*Concluded.*

PROPERTY AND VESSELS.	Murray Canal.			Ottawa Canal.			Rideau Canal.					
	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.	1889.	1890.	1891.	1892.
Tonnage of property, up. . . . .		3,941	9,108	4,861	172	10,416	639	326,608	86,245	114,513	75,122	73,609
do down. . . . .		6,653	4,477	7,657	704,960	701,968	640,339	237,024	30,126	14,877	25,565	28,542
Total tonnage of property, up and down. . . . .		10,594	13,585	12,518	705,132	712,384	640,978	563,632	116,371	129,390	100,687	102,051
Tonnage of vessels, up. . . . .		11,242	72,863	102,113	77,419	68,222	70,886	63,923	88,721	79,787	67,612	85,680
do down. . . . .		10,860	45,573	49,188	353,279	342,312	322,639	282,597	95,854	79,772	76,398	94,321
Total tonnage of vessels, up and down. . . . .		22,102	118,436	151,301	430,698	410,534	393,525	346,520	184,575	159,559	144,010	180,001
Grand total tonnage of property and vessels, up and down. . . . .		32,696	132,021	163,819	1,135,830	1,122,918	1,034,503	910,152	300,946	288,949	244,697	282,052

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

## 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, 1891 and 1892, and the Amount of Tolls collected thereon.

ARTICLES.	1891.		1892.	
	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.		\$ cts.
Ashes, pot and pearl.....	176	32 07	181	33 33
do ..... Free.	55		67	
Apples.....	4,280	434 47	7,584	830 68
Agricultural products not enumerated, vegetable.....	8,122	228 91	13,503	367 51
do do do Free.	24		31	
do do animal.....	2,527	196 18	3,110	308 34
do do do Free.	14			
Agricultural implements.....	278	33 09	271	34 03
Barley.....	12,549	1,674 43	31,638	2,252 95
Bricks.....	13,453	609 76	13,845	598 45
do ..... Free.	398		315	
Bones.....	186	19 35	507	52 41
Brimstone, crude.....	1,061	151 15	358	37 78
Cement and water lime.....	3,435	459 10	5,375	694 86
do ..... Free.	1,217		3,408	
Clay, lime and sand.....	44,804	2,176 86	44,029	2,125 59
do ..... Free.	730		674	
Coal.....	532,838	79,821 01	475,835	69,016 63
do ..... Free.	98,621		103,759	
Corn.....	264,351	50,858 47	178,488	35,269 52
do ..... Free.	85,527		57,156	
Cattle.....	1,285	85 78	1,223	81 11
Cotton, raw.....	3	0 32		
Crockery and earthenware.....	476	81 72	438	74 70
do ..... Free.	124		141	
Dye woods and dye stuffs.....	358	26 55	177	15 71
Fish.....	1,398	85 52	1,814	145 47
do ..... Free.	69		433	
Flax and hemp.....	5	0 65	1	0 04
do ..... Free.	1			
Flour.....	22,896	2,958 83	22,259	2,920 26
do ..... Free.	1,233		3,357	
Furniture.....	897	136 18	1,292	185 68
do ..... Free.	2		1	
Gypsum.....	839	17 78	1,920	29 94
do crude.....	205	2 56		
Glass, all kinds.....	715	124 48	570	96 17
do ..... Free.	17		32	
Hay, pressed.....	4,357	202 08	5,376	255 10
Hogs.....	59	6 80	20	2 37
Horses.....	628	41 91	772	42 42
do ..... Free.	3		1	
Hides and skins, horns and hoofs.....	146	17 67	153	19 69
Ice.....	15,325	1,015 33	509	21 25
Iron, railway.....	14,934	2,163 05	3,461	515 67
do ..... Free.	14,186		3,028	
Iron, pig.....	3,577	419 87	4,280	595 13
do ..... Free.	76		427	
Iron, all other.....	12,729	949 85	15,461	944 41
do ..... Free.	708		466	
Iron ore.....	5,370	274 89		

No. 25.—COMPARATIVE STATEMENT showing the Quantity of each Article transported on the Canals, &c.—Continued.

ARTICLES.	1891.		1892.	
	Tons.	Tolls. \$ cts.	Tons.	Tolls. \$ cts.
Kryolite or chemical ore, and other ore except iron	12,272	613 25	6,951	347 25
do do do Free.	917		2,727	
Lard and lard oil	473	55 42	392	32 73
do do do Free.	172		16	
Meal, all kinds	27,340	5,322 87	30,248	5,931 64
do do do Free.	233		18	
Meats, other than pork	106	11 71	190	25 81
do do do Free.	1		94	
Marble	4,972	746 70	3,774	565 44
Manilla	141	20 65	179	26 85
Melasses	1,490	177 10	1,157	112 33
Nails	4,974	697 46	3,456	515 28
do do do Free.	457		570	
Oats	32,865	5,919 53	78,343	11,342 92
do do do Free.	9			
Oil	2,189	258 27	1,635	200 96
do do do Free.	38		41	
Oil cake	7	0 66	16	1 23
do do do Free.	2			
Pease	26,198	665 10	54,067	1,938 77
do do do Free.	390		524	
Potatoes	1,052	75 14	1,105	75 58
Pork	1,004	124 79	1,059	82 52
do do do Free.	322			
Paint	791	111 68	566	77 68
do do do Free.	62		28	
Pitch and tar	1,219	148 02	552	52 44
do do do	17		21	
Rags	155	27 24	266	50 90
Rye	3,102	169 20	71,050	13,813 24
do do do Free.			67,335	
Rosin	4,554	336 44	3,963	301 59
do do do Free.	1			
Salt	15,618	1,984 94	10,961	1,315 63
do do do Free.	7,220		3,367	
Stone, intended for cutting	15,723	2,136 97	9,328	1,219 81
do do do Free.	450		1,074	
do wrought	706	67 65	1,668	124 70
do not suitable for cutting, unwrought	22,374	1,042 06	11,588	266 44
do do do Free.	1,470			
Seeds, all kinds	4,431	212 42	10,539	462 53
do do do Free.	101		2	
Sheep	650	41 42	705	44 95
Soda ash	2,739	472 65	945	156 22
do do do Free.	523		324	
Steel	412	56 84	9,337	1,381 52
do do do Free.			6	
Sugar	4,693	760 83	5,099	841 21
do do do Free.	175		628	
Spirits	1,663	285 68	1,500	270 99
do do do Free.	335		351	
Tobacco, raw	34	3 16	11	0 92
do do do Free.	1			
Tallow	173	26 72	174	23 66
do do do Free.	54			

No. 25.—COMPARATIVE STATEMENT showing the Quantity of each Article transported on the Canals, &c.—Continued.

ARTICLES.	1891.		1892.	
	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.		\$ cts.
Tin.....	669	111 92	824	140 30
do..... Free.	37		48	
Turpentine.....	220	17 55	131	10 01
do..... Free.	1			
Wheat.....	177,501	30,518 87	260,420	45,517 29
do..... Free.	108,468		182,087	
White lead.....	225	34 07	223	33 94
do..... Free.	11		6	
Whiting.....	794	141 38	389	74 55
do..... Free.	52		50	
Wool.....	195	35 79	1,103	217 99
do..... Free.			2	
All other goods and merchandise, not enumerated.....	56,158	8,002 98	66,316	9,067 27
do do do do Free.	1,147		912	
Bark.....	63	3 57	118	7 64
Barrels, empty.....	702	79 90	516	69 65
do..... Free.			1	
Boat-knees.....			1	0 03
Floats.....	20,166	246 11	36,594	424 13
do..... Free.	11,340		15,020	
Firewood, in vessels.....	109,200	3,362 76	128,205	3,792 50
do do..... Free.	13,680		4,380	
do do in rafts.....	480	25 47	126	1 20
do do.....	10,166		3,180	
Hoops.....	247	29 00	4	0 41
Lumber, sawn, in vessels.....	735,327	57,331 34	661,978	51,820 46
do do..... Free	2,430		3,738	
do in rafts.....	490	32 04	374	10 24
do do..... Free	1,802		587	
Masts, spars and telegraph poles, in vessels.....	771	15 52	19,313	491 79
do do..... Free	10			
do do in rafts.....	18,669	476 49		
Railway ties, in vessels.....	11,334	1,136 54	8,667	823 06
do do..... Free	25			
do in rafts.....	1,021	91 32	995	94 15
do do..... Free	11,025			
Saw logs.....	28,178	749 63	39,094	904 24
do..... Free	13,629		12,249	
Staves and headings, barrel.....			155	12 40
do pipe.....	114	21 31	96	17 60
do do..... Free			8	
do West India.....	36	6 75	140	24 98
do do..... Free			120	
do salt barrel.....	9	0 17		
Shingles.....	1,019	451 51	1,011	577 81
Split posts and fence rails, in vessels.....	44	6 93		
do do in rafts.....	1	13	18	4 23
do do do..... Free	410			
Timber, square, in vessels.....	66,119	9,609 17	31,133	3,978 91
do do..... Free	360		140	
do in rafts.....	14,480	341 84	16,754	365 62
do do..... Free	4,520		3,980	
Traverses.....	12,676	43 77	9,918	37 71



No. 25.—COMPARATIVE STATEMENT showing the Quantity of each Article transported on the Canals, &c.—*Concluded.*

ARTICLES.	1891.		1892.	
	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.		\$ cts.
Woodenware and wood partly manufactured.....	214	81 13	91	25 87
do do ..... Free	1,742	.....	.....	.....
Total tonnage freight paying tolls.....	2,425,504	280,884 18	2,439,966	277,716 92
Total tonnage freight free.....	396,810	.....	476,930	.....
Grand total—freight.....	2,822,314	.....	2,916,896	.....
Passengers—total number.....	128,560	4,020 73	146,662	4,116 14
Vessels—tonnage.....	3,764,922	40,858 18	4,121,692	44,636 77
Total tolls collected.....	.....	325,763 09	.....	326,469 83
Total tolls free.....	.....	15,699 53	.....	16,115 87
Gross total tolls.....	.....	341,462 62	.....	342,585 70

B. H. TEAKLES,

*Chief Clerk, Canals Revenue.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.

SUPPLEMENTARY APPENDIX A.

No. (A) 7.—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl		5												8 00
Apples		1,101		103	19					122	1,101			27 55
Agricultural products, not enumerated, vegetable.												6 43		33 98
Agricultural products, not enumerated, animal.														
Agricultural implements.														
Barley											8,113			1,622 60
Bricks	18		31						49		49			5 52
Bones														
Brinstone					66				66			9 90		9 90
Cement and water lime				5	413				413	5		61 95	0 63	62 58
Clay, lime and sand	70								70			5 25		5 25
Coal					185,190	1,382	20,698	17,374	202,564	22,080	224,644	40,512 20	4,416 00	44,928 20
Corn			3				57,683	185,177	3		185,180	0 45	37,035 40	37,035 85
Cattle	1								1			0 02		0 02
Cotton, raw.														
Crockery and earthenware.	5								5			0 10		0 10
Dye, wood and dye stuffs.														
Fish	35		35		284				304			40 36	0 50	40 86
Flax and hemp.														
Flour		4,524									13,517		1,911 76	1,911 76
Furniture	1		9		2				11	12	23	1 65	2 23	3 88
Gypsum														
Glass, all kinds	1								30	2	32	4 37	0 40	4 77
Hay, pressed.	100	21							100	21	121	15 00	4 20	19 20
Hogs														
Horses														
Hides and skins, horns and hoofs.	50	7	2		1		4		53	14	67	1 45	1 57	3 02
Ice.				350	87				87		87	13 05		13 05
					800				1,150		1,150	57 50		57 50



No. (A) 7.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Hop poles														
Lumber, sawn, in vessels		2,482	1,641	11,002		45,504		4,248	1,641	63,236	64,877	295 37	11,249 66	11,545 03
do rafts														
Masts, spars and telegraph poles, in vessels														
Masts, spars and telegraph poles, in rafts				264										
Railway ties, in vessels		63												
do rafts											327			
Saw logs	343	1,961		1,462					343	3,423	3,766	19 82	141 05	160 87
Staves and headings, barrel		155								155	155		12 40	12 40
do pipe										8	8		1 50	1 50
do West India														
Staves, salt barrel										19	19		7 81	7 81
Shingles														
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels		2,116								20,354	20,354		3,049 94	3,049 94
do rafts	245	17							245	17	262	14 13	2 36	16 49
Traverses														
Woodenware and wood partly manufactured					11					11	11	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			31							31	31			
Agricultural products not enumerated, vegetable										52	52			



APPENDIX A—Continued.

No. (A) 8.—GENERAL 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 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl														
Apples		5			19			35		31	40	8 00	8 00	8 00
Agricultural products not enumerated, vegetable			12									4 65	4 65	4 65
Agricultural products not enumerated, animal														
Agricultural implements.														
Barley														
Bricks	4		31							35	8,113	5 25	1,622 60	1,622 60
Bones										66	66	9 90	9 90	9 90
Brimstone										413	413	61 95	61 95	61 95
Cement and water lime														
Clay, lime and sand					185,190	1,382	17,368	20,698	202,858	22,080	224,638	40,511 60	4,416 00	44,927 60
Coal			3		127,494		57,688	185,177	3	185,177	185,180	0 45	37,035 40	37,035 85
Corn														
Cattle														
Cotton, raw														
Crockery and earthenware														
Dye woods and dye stuffs					234					234	235	35 10	0 20	35 30
Fish														
Flax and hemp														
Flour														
Furniture			9		2					11	22	1 65	2 20	3 85
Gypsum														
Glass, all kinds			23							20	31	4 35	0 40	4 75
Hay, pressed	100	21								190	121	15 00	4 20	19 20
Hags														
Horses														
Hides and skins, horns and hoofs														
Ice			350		87	800				1,150	87	13 05		13 05
														57 50

	127	1,036	228	10	499	127	1,046	499	127	19 05	19 05
Iron, railway	127									19 05	19 05
do pig										99 80	99 80
do all other		1,036	228	10	499	510	1,046	499	510	76 50	209 20
Iron ore											
Kryolite, chemical ore and other											
ore, except iron.											
Lard and lard oil.				1,773	1,098		2,871	2,871		143 55	143 55
Meal, all kinds.				23,096	116		126	126		25 20	25 20
Meats, other than pork.			16	2	67		26,163	26,163		5,232 60	5,232 60
Marble				3,556	1		3	3		3 00	3 00
Manilla.			139				3,556	3,556		533 40	533 40
Molasses			45	18	20		139	139		20 85	20 85
Nails	13		63				47	47		7 60	7 60
Oats				52,823			76	76		11 40	11 40
Oil, in barrels.			2	1			52,823	52,823		10,564 60	10,564 60
Oil cake.							1	1		0 20	0 20
Pease.							49	49		7 35	7 35
Potatoes.		390					390	390		78 00	78 00
Pork			2				12	12		1 80	1 80
Paint			5	73	201		274	274		54 80	54 80
Pitch and tar.							136	136		20 40	20 40
Resins			264	60			264	264		39 60	39 60
Rye	337						60	60		12 00	12 00
Rosin							65,071	65,071		13,014 20	13,136 75
Salt		1,861	1	494			211	211		31 80	31 80
Stone intended for cutting.		251	2				6,351	6,351		1,320 40	1,320 40
do wrought.							7	7		0 30	0 30
do not suitable for cutting.											
unwrought											
Seeds, all kinds			2,813	256			2,813	2,813		281 30	281 30
Sheep.							258	258		51 60	51 60
Soda ash			97				97	97		14 55	14 55
Steel			6,220				6,220	6,220		933 00	933 00
Sugar			202				2 11	2 11		31 65	31 65
Spirits, beer, &c.		119	14	167	43		329	343		2 10	65 80
Tobacco, raw							1	1		0 20	0 20
Tallow.			60	8	9		17	17		3 40	3 40
Tin			243				243	243		36 45	36 45
Turpentine.				32,097			192,970	192,970		38,594 00	38,594 00
Wheat		32,163					3	3		0 45	0 45
Wheat lead											
Whiting											
Wool			6	1,237			6	6		0 90	247 40
All other goods and merchandise				1,779	279		46,852	2,063		7,027 80	412 60
not enumerated.	99	5	46,355								7,440 40
Bark											
Barrels, empty.			49	4			92	4		18 78	0 78
Boat knees.											
Floats											
Firewood, in vessels.											

88 No. (A) 8.—GENERAL STATEMENT showing the Quantity of each Article of Through Freight transported, &c.—*Concluded.*

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Hoops.....														
Hop poles.....														
Lumber, sawn, in vessels.....														
do do rafts.....	960		1,641	10,952	45,504		4,248		1,641	61,664	63,305	295 37	11,091 15	11,386 52
Masts, spars and telegraph poles, in rafts.....														
Masts, spars and telegraph poles, in rafts.....														
Railway ties, in vessels.....														
do do in rafts.....														
Saw logs.....														
Staves and headings, barrel.....														
do do pipe.....														
do do W.India.....														
Staves, salt barrel.....														
Shingles.....														
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....	2,060						18,238			20,318	20,318		3,046 56	3,046 56
Timber, square, in vessels.....														
do do in rafts.....														
Traverses.....														
Woodenware and wood partly manufactured.....														
Total freight paying tolls.....	680	38,892	3,357	10,952	247,543	306,257	17,368	305,586	268,948	661,687	980,635	50,271 40	129,647 94	179,919 34
Articles having paid full tolls on the St. Lawrence Canals, Free.....														
Ashes, pot and pearl.....														
Agricultural products, not enumerated, vegetable.....														

RAILWAYS AND CANALS.





APPENDIX A—Continued.

No. (A) 9.—GENERAL STATEMENT, showing the Quantity of each Article of Way Freight transported on the Welland Canal and the Amount of Tolls collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.....									1,192	1 78	27 55	29 33
Apples.....		1,101	91				91	1,101				
Agricultural products, not enumerated, vegetable.....									400		20 00	20 00
Agricultural products, not enumerated, animal.....												
Agricultural implements.....												
Barley.....	14						14			0 27		0 27
Bricks.....												
Bones.....												
Brimstone.....									5		0 63	0 63
Cement and water lime.....						5		5		5 25		5 25
Clay, lime and sand.....	70						70			0 60		0 60
Coal.....							6					
Corn.....									1	0 02		0 02
Cattle.....	1						1					
Cotton, raw.....									5	0 10		0 10
Crockery and earthenware.....	5						5					
Dye wood and dye stuffs.....												
Fish.....	35		35				70			5 26		5 26
Flax and hemp.....												
Flour.....		4,524						4,524			113 16	113 16
Furniture.....		1					1				0 03	0 03
Gypsum.....												
Glass, all kinds.....	1						1			0 02		0 02
Hay, pressed.....												
Hogs.....												
Horses.....	50						50			1 00	0 17	1 17
Hides and skins, horns and hoofs.....		7					7					



No. (A) 9.—GENERAL STATEMENT showing the Quantity of each Article of Way Freight, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From Canadian to United States 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.				
Firewood, in vessels.....	1,434	7,032	720						2,154	7,032	9,186	60 33	347 11	407 44
do rafts.....														
Hoops.....														
Hop poles.....														
Lumber, sawn, in vessels.....		1,522	50											
do do rafts.....														158 51
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....														
Railway ties, in vessels.....														
do rafts.....	343	1,961	1,462						343	3,423	3,766	19 82	141 05	160 87
Saw logs.....		155								155	155		12 40	12 40
Staves and headings, barrel pipe do do W. India.....														
Staves, salt barrel.....													7 81	7 81
Shingles.....														
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....														
do do rafts.....	245	17							245	17	262	14 13	2 36	16 49
Traverses.....														
Woodenware and wood partly manufactured.....														
Total freight paying tolls.....	5,773	19,278	846	3,011			41	436	6,660	23,725	29,385	186 01	1,379 33	1,565 34
Timber passed free from Well-land to Port Robinson.....		389								389	389			
Grand total freight.....	5,773	19,667	846	3,011			41	436	6,660	23,114	29,774			

Total way tolls on vessels.....	436 99	350 98	787 97
do passengers.....	141 72	157 14	298 86
do free goods.....			\$17.76
Total way tolls.....	764 72	1,887 45	2,652 17

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

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

APPENDIX A—Continued.

No. (A) 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl	8	67	31	6			45	67	112	8 07	13 40	21 47		
Apples	47	5,035		6			53	5,035	5,088	4 64	721 45	726 09		
Agricultural products, not enumerated, vegetable	297	278	52				349	278	627	48 41	40 70	89 11		
Agricultural products, not enumerated, animal	58	895					78	895	973	6 26	131 20	137 46		
Agricultural implements	81	6			20		81	6	87	12 19	0 95	13 14		
Berley	220	17,386					220	17,386	17,606	4 40	347 94	352 34		
Bricks	13,691	6	391		222		13,704	6	13,710	573 93	0 23	574 16		
Bones	1	135			13		14	135	149	0 53	17 85	18 38		
Brimstone	150	20	1,463		9		159	22	169	14 98	0 93	14 98		
Cement and water lime	3,124	20	1,463		2		4,587	22	4,609	646 64	0 93	647 57		
Clay, lime and sand	19,383	9,299	206				22,860	9,299	32,259	893 17	624 72	1,517 89		
Coal	4	43,814		62	1,040		4	12,335	164,100	0 40	22,780 77	22,780 77		
Corn	35	367			68		35	367	402	1 88	1,830 95	1,831 35		
Cattle	2						2		2	0 30	27 71	29 59		
Cotton, raw	187	26	251				438	26	464	85 47	5 65	90 52		
Crockery and earthenware	49	13					87	13	100	5 80	2 60	8 40		
Dye wood and dye stuffs	280	41	7		38		287	41	328	28 29	2 88	31 27		
Flax and hemp	2						2		2	0 19	0 19	0 19		
Flour	693	3,992		7	107		700	4,099	4,799	49 57	605 52	655 09		
Furniture	316	696	1				317	696	1,013	38 44	123 19	161 63		
Gypsum	1,531	187					1,531	187	1,718	21 59	7 06	28 65		
Glass, all kinds	352	82	30				382	82	464	74 90	12 20	87 10		
Hay, pressed	999	557	35				1,042	557	1,599	52 85	33 64	86 49		
Hops		27						27	27		4 05	4 05		
Horses	124	266					124	266	390	8 18	18 36	26 54		
Hides and skins, horns and hoofs	2	31					2	31	33	0 09	4 43	4 52		
Ice														

Iron, railway.....	3,294	6	3,294	476 74	0 54	477 28
do pig.....	4,352	11	4,464	547 35	0 42	547 77
do all other.....	10,577	644	11,057	651 60	28 02	679 62
Iron ore.....						
Kryolite, chemical ore and other ore, except iron.....	92	2,083	92	10 52	104 15	104 15
Lead and lead oil.....	68	244	68	6 26	21 90	32 42
Meal, all kinds.....	32	765	33	3 56	33 62	3 56
Meats, other than pork.....	20		20	3 93		3 93
Marble.....				0 19		0 19
Manilla.....	1		1			
Molasses.....	719	147	844	90 96	7 35	98 31
Nails.....	2,111	878	2,474	476 03	45 10	521 13
Oats.....	1,246	363	2,246	46 93	196 87	243 80
Oil.....	7,600	7,677	8,892	130 09	20 70	150 79
Oil-cake.....	11	65	11	1 08		1 08
Pease.....	565	35,660	565	11 41	737 48	748 89
Potatoes.....	18	109	18	1 81	8 34	10 15
Pork.....	349	232	349	33 81	17 53	51 34
Paint.....	280	289	343	632 40	23 90	89 30
Pitch and tar.....	118	25	365	32 42	2 30	34 72
Rags.....	4	177	4	181	34 70	35 20
Rye.....	77	1,862	77	1 54	37 50	39 04
Rosin.....	610	109	1,840	1,989	5 45	98 54
Salt.....	4,440	21	8,437	1,949	1 48	1,288 66
Stone intended for cutting.....	344	3,997	3,701	1,27 18	211 73	352 16
do wrought.....	352		3,65	18 70		18 70
do not suitable for cutting.....						
Seeds, all kinds.....	8,043	11,028	8,043	302 00	226 95	226 95
Sheep.....	429	96	781	149 67	7 34	389 84
Soda ash.....	782	12	805	0 48	0 30	7 34
Steel.....	2,640	22	3,079	108 84	0 28	109 32
Sugar.....	405	527	688	580 09	1 45	581 34
Spirits, beer, &c.....	9	3	9	123 70	103 00	226 70
Tobacco, raw.....	13		26	0 95	0 45	1 40
Tallow.....	456	72	480	2 44		2 44
Tin.....	6	13	92	92 96	3 90	96 86
Turpentine.....	5,635	19,775	5,635	5 48	6 13	6 13
Wheat.....	123	11	126	122 22	1,242 70	1,304 92
White lead.....	278	2	330	24 67	0 55	25 22
Whiting.....	9		11	65 32		65 32
Wool.....	2,822	13	7,911	1 65	0 30	1 95
All other goods and merchan- dise, not enumerated.....	6,368	475	7,911	1,228 16	445 70	1,673 86
Barik.....	228	24	291	42 12	2 82	3 75
Barrels, empty.....	460	4,280	460	7 40	74 90	44 94
Boat knees.....	7,992	75	2,331	38 91	291 36	82 30
Floats.....	2,256					330 27
Firewood, in vessels.....						

CANAL STATISTICS.

No. (A) 10.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Firewood, in rafts.														
Hoops														
Hop poles														
Lumber, sawn, in vessels.	27,383	15,586	1,025	416					28,408	16,002	44,410	1,032 52	485 93	1,518 45
do rafts.		4								4			0 15	0 15
Masts, spars and telegraph poles, in vessels.														
Masts, spars and telegraph poles, in rafts.		20,986							715	20,986	20,986		524 65	524 65
Railway ties, in vessels.	715	30							197	15,401	15,598	14 28	0 59	14 87
do rafts.												4 50	351 44	355 94
Saw logs.	197	15,401												
Staves and headings, barrel do pipe.														
do West India.														
Staves, salt barrel		9								9			0 17	0 17
Shingles		6							10	6	16	2 51	0 75	3 26
Split posts and fence rails, in vessels	10													
Split posts and fence rails, in rafts														
Timber, square, in vessels	250	1,933							250	1,933	2,183	3 25	33 53	36 78
do rafts	3,422	3,348							3,422	3,348	6,770	85 70	84 00	169 70
Traverses.		10,280								10,280	10,280		26 75	26 75
Woodenware and wood party manufactured	29	7								29	7		0 80	12 40
Total freight paying tolls.	131,622	252,036	10,625	1,545	637	1,701	9,008	137,013	151,892	392,295	544,187	10,603 74	32,909 86	43,513 60
<i>Free articles having paid full tolls on the Welland Canal.</i>														
All other products, vegetable.		2								2				
Ashes.		38								40				

RAILWAYS AND CANALS.



Com.	55,264									55,264												
Flour	3,324	2								3,324												
Furniture	1	1								1												
Glass	1	1								1												
Horses	1									2												
Iron, pig	371	1								371												
do all other	14									14												
Lard and lard oil	100									100												
Meals, all kinds	389	28								67												
Pease	380									380												
Pork	201									201												
Rye	64,978									64,978												
Seeds, all kinds	2	2								2												
Tobacco	1	1								1												
Wheat	159,305	480								159,785												
Whiskey and other spirits	105									105												
Merchandise	278	2								278												
Lumber, in vessels	2,891	400								2,891												
do rafts	917									917												
Square timber, in vessels	140									140												
do do rafts	140									140												
Coal, free per Order in Council	5,680									5,680												
Material for Canal Construction.	70,276	8								94,690												
Cement and water lime, free, per Order in Council	539																					
Clay, lime and sand, free, per Order in Council	563									563												
Stone for cutting	750									750												
Kryolite free, having paid full tolls on the Rideau Canal	1,410									1,410												
Grand total freight	203,211	10,725	1,545	645	1,701	33,314	137,926	247,895	688,899	936,794												

Total tolls on vessels.  
do passengers..... 9,222 60  
do free goods..... 2,334 68  
Fines and damages..... \$13,145 38  
Wharfage and storage..... 689 95  
Other receipts.....

Total revenue exclusive of hydraulic rents..... 20,516 29

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

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

APPENDIX A—Continued.

No. (A) 11.—GENERAL 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 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian United States 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.		\$	cts.		
Ashes, pot and pearl	3	67					34	67	101	6 80	13 40	20 20	
Apples		4,726	31					4,726	4,726		708 90	708 90	
Agricultural products, not enumerated, vegetable	236		52				288	267	555	43 20	40 05	83 25	
Agricultural products, not enumerated, animal	5	853					5	853	858	0 75	127 95	128 70	
Agricultural implements	4	8,871					4	8,871	8,871		0 80	0 80	
Barley		8,871					513	8,871	8,871	76 95	177 42	177 42	
Bricks	43		394		76		103	103	103		15 45	15 45	
Bones		103											
Brimstone							3,713		3,713	556 95		556 95	
Cement and water lime	2,250		1,463				296	2,452	2,718	39 90	367 80	407 70	
Clay, lime and sand	60	40,901	206				141,701	141,701	141,701		21,255 15	21,255 15	
Coal		84					12,253	12,253	12,253		1,827 68	1,827 68	
Corn		14					14	14	14		2 10	2 10	
Cattle	2						2		2	0 30		0 30	
Cotton, raw	106	25	251				357	25	382	71 40	5 00	76 40	
Crockery and earthenware	5	13					5	13	18	1 00	2 60	3 60	
Dye wood and dye stuffs	97		7				104		104	15 60		15 60	
Fish							1		1	0 15		0 15	
Flax and hemp		3,980	1				3,980	3,980	3,980		597 00	597 00	
Flour		580					87	580	667	17 40	116 00	133 40	
Furniture	86		1										
Gypsum		52					314	52	366	62 80	10 40	73 20	
Glass, all kinds	284		30				100		100	15 00		15 00	
Hay, pressed	100						27		27		4 05	4 05	
Hogs		27					10	35	45	1 50		6 75	
Horses	10	35											
Hides and skins, horns and hoofs		29						29	29		4 85	4 85	
Ice													

Iron, railway.....	3,118	1	3,118	1	3,119	467 70	0 15	467 85
do pig.....	3,226	112	3,338		3,338	500 70		500 70
do all other.....	1,437	478	1,915	20	1,935	287 25	3 00	290 25
Iron ore.....								
Kryolite, chemical ore and other ore, except iron.....	2,065			2,065	2,065		103 25	103 25
Lard and lard oil.....	28		28	111	139	4 20	16 65	20 85
Meat, all kinds.....	18		18	1	19	2 70	0 15	2 85
Meats, other than pork.....	5		6		6	0 90		0 90
Marble.....	13		13		13	2 60		2 60
Manilla.....								
Molasses.....	109		109		109	21 80		21 80
Nails.....	1,006	363	1,369	8	1,377	393 80	1 60	395 40
Oats.....	140		140	140	140		2 93	2 93
Oil, in barrels.....	357	65	422	90	512	84 40	18 00	102 40
Oil cake.....								
Pease.....	10,367		10,367	10,367	10,367		215 01	215 01
Potatoes.....	9		9	8	17	1 35	1 20	2 55
Pork.....	10		10	78	88	1 50	11 70	13 20
Paint.....	224	56	280	63	343	56 00	12 60	68 60
Pitch and tar.....	23	22	45	7	52	9 00	1 40	10 40
Rags.....	1		1	170	171	0 20	34 00	34 20
Rye.....	883		883	883	883		16 92	16 92
Rosin.....	1		1		1	0 20		0 20
Salt.....	2,138	3,997	6,135		6,135	920 25		920 25
Stone intended for cutting do wrought.....	3		3	1,406	1,406	0 60	210 90	210 90
do not suitable for cutting, do unwrought.....	1							0 60
Seeds, all kinds.....								
Sheep.....								
Soda ash.....	364	350	714		714	142 80		142 80
Steel.....	555	23	578		578	86 70		86 70
Sugar.....	1,839	439	2,278	1	2,279	455 60	0 20	455 80
Spirits, beer, &c.....	177	510	687	510	968	91 60	102 00	193 60
Tobacco, raw.....	1		1	3	4	0 15	0 45	0 60
Tallow.....	13		13		13	1 95		1 95
Tin.....	392	23	415	2	417	83 00	0 40	83 40
Turpentine.....	4		4		4	0 80		0 80
Wheat.....								
White lead.....	97		100	11,591	11,591	20 00	966 06	966 06
Whiting.....	249	50	299		299	59 80		59 80
Wool.....	9		11	2	13	1 65	0 30	1 95
All other goods and merchan- dise not enumerated.....	3,169	847	4,016	1,641	5,657	803 20	328 20	1,131 40
Bark.....								
Barrels, empty.....	165	1	166	17	183	31 18	2 26	33 44
Boat knees.....								
Floats.....								
Firewood, in vessels.....				987	987		65 80	65 80

No. (A) 11.—GENERAL STATEMENT showing the Quantity of each Article of Through Freight transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Firewood, in rafts.....														
Hoops.....														
Hop poles.....														
Lumber, sawn, in vessels.....	243	843							243	843	1,086	21 75	80 25	102 00
do rafts.....														
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....														
Railway ties, in vessels.....														
do rafts.....														
Saw logs.....														
Staves and headings, barrel do pipe.....														
do do W. India.....														
Staves, salt barrel.....														
Shingles.....														
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....														
do rafts.....														
Travewes.....														
Woodenware and wood partly manufactured.....	29								29		29	11 60		11 60
Total freight paying tolls.....	22,920	88,729	9,549		76		118,617		32,545	207,346	239,891	5,476 78	27,519 48	32,996 26
<i>Free Articles having paid Full Tolls on the Welland Canal.</i>														
Agricultural products, &c., vegetable.....										2	2			

RAILWAYS AND CANALS

Ashes.....	38							40	
Corn.....	52,539							52,539	
Flour.....	3,324							3,324	
Furniture.....	2							2	
Glass.....	1							1	
Horses.....	1							2	
Iron, pig.....	371							371	
Lard and lard oil.....	100							100	
Lumber, sawn, in vessels.....	2,591							2,991	
do do rafts.....	917							917	
Meal, all kinds.....	39							67	
Merchandise.....	276							278	
Pease.....	390							390	
Pork.....	201							201	
Rye.....	64,978							64,978	
Seeds, all kinds.....	2							2	
Tobacco.....	1							1	
Timber, square, in rafts.....	5,690							5,690	
Wheat.....	159,905							159,785	
Whiskey, &c.....	105							105	
Coal, free, per Order in Council.....	7,851							7,951	
Kryolite, having paid full toll on the Rideau Canal, free.....	1,410							1,410	
Grand total freight.....	30,771							500,532	
Total through tolls on vessels.....									
do passengers.....									5,359 14
do free goods.....									292 90
Total through tolls.....									\$11,128 82
Grand total freight.....									34,590 20
Total through tolls on vessels.....									10,723 36
do passengers.....									1,939 40
do free goods.....									\$8,444 47
Grand total freight.....									541,028

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

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

APPENDIX A—Continued.

No. (A) 12.—GENERAL STATEMENT showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.	5								11		11	1 27		1 27
Apples.	47	309			6	6			53	309	362	4 64	12 55	17 19
Agricultural products not enumerated, vegetable.	61	11							61	11	72	5 21	0 65	5 86
Agricultural products not enumerated, animal.	53	42					20		73	42	115	5 51	3 25	8 76
Agricultural implements.	81	2							81	2	83	12 19	0 15	12 34
Barley.	230	8,515							220	8,515	8,735	4 40	170 52	174 92
Bricks.	12,969	6					222		13,191	6	13,197	496 98	0 23	497 21
Bones.	1	32					13		14	32	46	0 53	2 40	2 93
Brimstone.	150						9		159		159	14 98		14 98
Cement and water lime.	874	20				2		874	22		896	89 69		90 62
Clay, lime and sand.	19,323	6,847					3,371		22,694	6,847	29,541	853 27	256 92	1,110 19
Coal.	2,913	62			1,040		18,384		22,399		22,399	1,525 62	1,525 62	1,525 62
Corn.	4	14			68			4	82		86	0 40	3 27	3 67
Cattle.	35	353						35	353		388	1 88	25 61	27 49
Cotton, raw.														
Crockery and earthenware.	81	1							81	1	82	14 07	0 05	14 12
Dye wood and dye stuffs.	44						38		82		82	4 80		4 80
Fish.	183	41						183	41		224	12 79	2 88	15 67
Flax and hemp.	1							1			1	0 04		0 04
Flour.	693	12			7	107		700	119		819	49 57	8 52	58 09
Furniture.	230	116						230	116		346	21 04	7 19	28 23
Gypsum.	1,531	187						1,531	187		1,718	21 59	7 06	28 65
Glass, all kinds.	68	30						68	30		98	12 10	1 80	13 90
Hay, pressed.	899	557			8			942	557		1,499	37 85	33 64	71 49
Hogs.														
Horses.	114	231						114	231		345	6 68	13 11	19 79
Hides and skins, horns and hoofs.	2							2			2	0 09	0 08	0 17

Ice.....	176	5	176	5	181	9 04	0 39	9 43
Iron, railway..	1,126	11	1,126	11	1,137	46 65	0 42	47 07
do pig.....	9,140	624	9,142	624	9,766	364 35	25 02	389 37
do all other.....		2						
Iron ore.....								
Kryolite, chemical ore and other ore, except iron		18		18	18		0 90	0 90
Lard and lard oil.....	64	133	64	133	197	6 32	5 25	11 57
Meal, all kinds.....	50	761	50	764	814	3 56	33 47	37 03
Meats, other than pork	27		27		27	2 66		2 66
Marble.....	7		7		7	1 33		1 33
Manilla.....	1				1	0 19		0 19
Molasses.....	610	147	735	147	882	69 16	7 35	76 51
Nails.....	505	870	505	870	1,375	82 23	43 50	125 73
Oats.....	1,246	7,537	1,246	7,537	8,783	46 93	193 94	240 87
Oil, in barrels.....	403	50	470	54	524	45 69	2 70	48 39
Oil cake.....	11		11		11	1 08		1 08
Pease.....	565	25,293	565	25,293	25,858	11 41	522 47	533 88
Potatoes.....	9	101	9	101	110	0 46	7 14	7 60
Pork.....	339	154	339	154	493	32 31	5 83	38 14
Paint.....	56	226	63	226	289	9 40	11 30	20 70
Pitch and tar.....	95	18	320	18	338	23 42	0 90	24 32
Rags.....	3	7	3	7	10	0 30	0 70	1 00
Rye.....	77	1,029	77	1,029	1,106	1 54	20 58	22 12
Rosin.....	609	109	1,839	109	1,948	92 89	5 45	98 34
Salt.....	2,302	21	2,302	20	2,332	206 93	1 48	208 41
Stone intended for cutting.....	344	22	3,701	22	3,723	140 43	0 83	141 26
do wrought.....	349		3,367		3,62	18 10		18 10
do not suitable for cutting, unwrought.....								
Seeds, all kinds.....	8,042	1,601	8,042	1,601	10,928	301 85	218 55	365 34
Sheep.....	65	6	67	6	96	6 87	7 34	7 34
Soda ash.....	227	12	227	12	239	22 14	0 48	22 62
Steel.....	801	21	801	21	822	124 49	1 05	125 54
Sugar.....	228	17	230	17	247	32 10	1 00	33 10
Spirits, beer, &c.....	8		8		8	0 80		0 80
Tobacco, raw.....			13		13	0 49		0 49
Tallow.....	64	70	65	70	135	9 96	3 50	13 46
Tin.....	2	13	88	13	101	4 68	0 65	5 33
Turpentine.....	5,635	13,832	5,635	13,832	19,467	122 22	27 64	398 86
Wheat.....	26	11	26	11	37	4 67	0 55	5 22
White lead.....	29		31		31	5 52		5 52
Whiting.....								
Wool.....								
All other goods and merchandise not enumerated.....	3,199	1,181	3,805	1,661	5,556	424 96	117 50	542 46
Bark.....	63	7	125	9	134	10 94	0 56	3 75
Barrels, empty.....								11 50
Boat knees.....	460	4,280	460	4,280	4,740	7 40	74 90	82 30
Floats.....								

No. (A) 12.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Total.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Firewood, in vessel.....	2,256	7,005		1,065		75			2,331	8,070	10,401	38 91	225 56	264 47
do rafts.....														
Hoops.....														
Hop poles.....														
Lumber, saws, in vessels.....	27,140	14,743	1,025	416					28,165	15,159	43,324	1,010 77	405 68	1,416 45
do rafts.....		4								4			0 15	0 15
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....														
Masses, spars and telegraph poles, in rafts.....														
Railway ties, in vessels.....	715	30							715	30	20,986	14 28	0 59	14 87
do rafts.....														
Saw logs.....	187	15,401							197	15,401	15,598	4 50	351 44	355 94
Staves and headings, barrel.....														
do pipes.....														
do W. India.....														
Staves, salt barrel.....														
Shingles.....	10	6							10	6	9	2 51	0 75	3 26
Split posts and fence rails, in vessels.....														
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....	250	1,933							250	1,933	2,183	3 25	33 53	36 78
do rafts.....	3,422	3,348							3,422	3,348	6,770	85 70	26 75	169 70
Traverses.....											10,280		26 75	26 75
Woodenware and wood partly manufactured.....		7								7	7		0 80	0 80
Total freight paying tolls.....	108,622	163,307	1,080	1,545	637	1,701	9,008	18,396	119,347	184,949	304,296	5,126 96	5,300 38	10,517 34
Free articles having paid full Tolls on the Welland Canal.....														
Corn.....											2,725			2,725

RAILWAYS AND CANALS.



Coal, free, per Order in Council.....	62,425			8		24,306		85,739		
<i>Free articles for Canal construction, per Order in Council, 1884.</i>										
Cement and water lime.....	539						539	539		
Clay, lime and sand.....	563						563	563		
Iron, all other.....	14						14	14		
Stone, for cutting.....	750						750	750		
Timber, square, in vessels.....	140						140	140		
Grand total freight.....	172,360	1,080	1,545	645	1,701	33,314	18,396	207,399	183,367	395,706
Total way tolls on vessels.....										3,863 46
do passengers.....										1,601 51
do free goods.....										636 18
										397 06
Total way tolls.....										9,887 47
										7,630 07
										5,464 97
										1,695 23
										17,017 64

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

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

APPENDIX A—Continued.

No. (A) 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa Canals, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.....		28								28		5 32
Apples.....	18	26							18	26		1 83
Agricultural products, vegetable.....	1	432							1	432		40 79
do do animal.....	6	1,407							6	1,407		117 02
Agricultural implements.....	3	13							3	13		2 62
Barley.....		150								150		11 22
Bricks.....		18								18		1 80
Bones.....												
Brimstone.....		24								24		2 36
Cement and water lime.....		7,689							402	7,689		229 22
Clay, lime and sand.....	402	648								648		23 78
Coal.....												
Corn.....		750								750		48 96
Cattle.....												
Cotton, raw.....												
Crockery and earthenware.....												
Dye wood and dye stuffs.....												
Fish.....	1	2							1	2		0 26
Flax and hemp.....												
Flour.....	6	106							6	106		10 05
Furniture.....	6	27							6	27		4 44
Gypsum.....		4								4		0 76
Glass, all kinds.....		263								263		25 23
Hay, pressed.....		8								8		0 60
Hogs.....		18							18	166		10 51
Horses.....		37								37		3 33
Hides and skins, horns and hoofs.....												
Ice.....												
Iron, railway.....												
do pig.....	8	64							8	64		3 15
do all other.....												

Iron ore .....	1,784	1,784	80 20
Kryolite, chemical ore and other ore, except iron	4	4	0 39
Lard and lard oil .....	17	17	1 37
Meal, all kinds .....	81	81	7 83
Meats, other than pork .....	.....	.....	.....
Marble .....	.....	.....	.....
Manilla .....	24	24	1 42
Molasses .....	10	10	0 75
Nails .....	1	1	0 75
Oats .....	1,038	1,038	82 86
Oil, in barrels .....	13	12	2 70
Oil cake .....	.....	.....	.....
Pease .....	2,749	2,749	191 78
Potatoes .....	14	451	38 00
Pork .....	25	27	2 85
Paint .....	1	1	0 19
Pitch and tar .....	3	3	0 44
Rags .....	47	47	4 32
Rye .....	.....	.....	.....
Rosin .....	16	1	0 50
Salt .....	1	1	0 22
Stone intended for cutting	3	3	0 29
do wrought .....	.....	.....	.....
do not suitable for cutting, unwrought .....	37	37	3 46
Seeds, all kinds .....	431	431	32 59
Sheep .....	.....	.....	.....
Soda ash .....	.....	.....	.....
Steel .....	16	2	1 24
Sugar .....	17	3	1 34
Spirits, beer, &c. .....	.....	.....	.....
Tobacco, raw .....	24	24	2 27
Tallow .....	2	2	0 15
Tin .....	.....	.....	.....
Turpentine .....	18	18	1 76
Wheat .....	1	1	0 05
White lead .....	9	9	0 90
Whiting .....	317	317	53 30
Wood .....	85	85	.....
All other goods and merchandise not enumerated.	.....	.....	.....
Bark .....	38	38	4 60
Barrels, empty .....	.....	.....	.....
Beet knees .....	.....	.....	.....
Floats .....	31,600	31,600	335 18
Firewood, in vessels	43,849	45,391	1,812 71
do rafts .....	235	235	27 88
Hoops .....	.....	.....	.....
Hop poles .....	.....	.....	.....
Lumber, sawn, in vessels	317,993	423,471	32,352 80
do rafts .....	159	159	9 15
Masts, spars and telegraph poles, in vessels.	19	19	1 57

No. (A) 13.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Masts, spars and telegraph poles, in rafts.		435								435	435	71 97
Railway ties, in vessels.												
do rafts.		12,662								12,662	12,662	282 24
Saw logs.												
Staves and headings, barrel.												
do pipe.												
do West India.												
Staves, salt barrel.		253		344						597	597	465 49
Shingles.		3		1						4	4	1 72
Spit posts and fence rails, in vessels.												
do rafts.		2,684								2,684	2,684	103 90
Timber, square, in vessels.		3,240								3,240	3,240	55 32
do rafts.		200								200	200	0 50
Traverses.		2								2	2	1 01
Woodenware and wood partly manufactured.	4											
Total freight paying tolls.	771	432,225		107,435					771	539,660	540,431	36,601 56
<i>Articles Free per Order in Council.</i>												
Lumber, sawn, in rafts.	100	386							100	386	486	
Timber square do		2,220								2,220	2,220	
Floats.		16,440								16,440	16,440	
Saw logs.		10,678								10,678	10,678	
Railway ties, in rafts.		10,000								10,000	10,000	
Firwood do		4,786								4,786	4,786	
Grand total freight.	871	476,735		107,435					871	584,170	585,041	

Total tolls on vessels .....	3,675 92
do passengers .....	162 91
do free goods .....	\$515 72
Wharfage and storage .....	
Fines and damages .....	10 00
Other receipts .....	
Total revenue, exclusive of hydraulic rents. ....	40,450 39

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

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

APPENDIX A—Continued.

No. (A) 14.—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.....												
Apples.....	3	909					46		3	955	958	61 84
Agricultural products, vegetable do , animal.....							1			1	1	0 10
Agricultural implements.....												
Barley.....	150	338	504						504	338	842	44 92
Bricks.....		100					217		150	317	467	30 72
Bones.....			341						341		341	34 10
Brimstone.....							140		140		140	27 65
Cement and water lime.....	410						31		655	31	81	3 10
Clay, lime and sand.....	76	215	245				3,948		76	3,948	4,603	462 74
Coal.....							85,995			86,210	86,286	8,455 12
Corn.....												
Cattle.....		57								57	57	1 90
Cotton, raw.....												
Crockery and earthenware.....		23								23	23	2 30
Dye wood and dye stuffs.....							55			55	55	5 50
Fish.....												
Flax and hemp.....	201	27							201	27	228	7 60
Flour.....							7			7	7	1 08
Furniture.....												
Gypsum.....												
Glass, all kinds.....												
Hay, pressed.....	329	2,323	133						462	2,323	2,785	113 81
Hags.....												
Horses.....		6								6	6	0 20
Hides and skins, horns and hoofs.....												
Ice.....												
Iron, railway.....												
do pig.....												
do all other.....	25								25		27	1 04
do ore.....												



No. (A) 14.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railway ties, in vessels		189								\$ cts.
do rafts							2,604	189	2,793	218 93
Saw logs										
Staves and headings, barrel										
do do pipe										
do do West India										
Staves, salt barrel										
Shingles	118									
Split posts and fence rails, in vessels										
do do rafts									146	17 35
Timber, square, in vessels										
do do rafts										
Traverses										
Woodenware and wood partly manufactured										
Total freight paying tolls	56,418	7,547					123,299	105,620	228,919	16,842 15
Coal, free, per Order in Council	345						345		345	
Grand total freight	56,763	7,547					123,644	105,620	229,264	
Total tolls on vessels..... do passengers..... do free goods..... Fines and damages..... Other receipts.....										2,437 84 66 89 9 00 75 30
Total revenue exclusive of hydraulic rents										19,430 88

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

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



APPENDIX A—Continued.

No. (A) 15.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.		28							31	28	28	2 99
Apples	31	76							353	76	107	3 60
Agricultural products not enumerated, vegetable.	353	7							27	7	360	17 26
do do animal		370							99	370	397	12 60
Agricultural implements	32	99							32	99	131	15 95
Barley	366	7							366	7	373	8 89
Bricks	15	25							15	25	40	1 20
Bones	11	21							11	21	32	1 26
Brimstone												
Cement and water lime	180	42							180	42	222	5 90
Clay, lime and sand.	90	2							90	2	92	2 16
Coal	11,391	22							11,391	22	11,391	483 88
Corn		22								22	22	0 61
Cattle	4	3							4	3	7	0 19
Cotton, raw												
Crockery and earthenware.	37	30							37	30	67	8 68
Dye wood and dye stuffs	11	14							11	14	25	2 25
Fish	70	3							70	3	73	1 90
Flax and hemp												
Flour	141	549							141	549	690	17 51
Furniture	16	24							16	24	40	4 56
Gypsum												
Glass, all kinds.	73	5							73	5	78	8 55
Hay, pressed	879	1							879	1	880	20 72
Hogs												
Horses	5	4							5	4	9	0 33
Hides and skins, horns and hoofs	14	8							14	8	22	0 82
Ice												
Iron, railway.	54	6							54	6	60	1 78
do pig	50	13							50	13	63	1 96
do all other	242	53							242	53	295	8 08
do ore.												

CANAL STATISTICS.

No. (A) 15.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Kryolite, chemical ore and other ore, except iron												
Lard and lard oil	1,815	888							1,815	888	2,703	135 15
Meat, all kinds	19	23							19	23	42	1 24
Meats, other than pork	1	6							1	6	7	0 18
Marble	10	7							10	7	17	0 48
Manilla	4								4		4	0 36
Molasses	97	5							97	5	102	9 55
Nails	314	5							314	5	319	30 06
Oats	63	61							63	61	124	3 27
Oil, in barrels	147	269							147	269	416	39 12
Oil cake		3								3	3	0 10
Pease	131	9							131	9	140	4 20
Potatoes	83	100							83	100	183	5 56
Pork	178	61							178	61	239	6 28
Paint	33	3							33	3	36	4 25
Pitch and tar	28								28		28	2 99
Rags	6								6		6	0 54
Rye	149	21							149	21	170	4 51
Rosin	5								5		5	0 45
Salt	1,544	189							1,544	189	1,733	47 33
Stone intended for cutting	35	678							35	678	713	33 36
do wrought	19	4							19	4	23	2 82
do not suitable for cutting, unwrought		7								7	15	0 48
Seeds, all kinds	8								8		15	0 29
Sheep	10								10		10	0 29
Soda ash	15								15		15	1 94
Steel	30								30		30	1 01
Sugar	447	54							447	54	501	49 53
Spirits, beer, &c.	62	26							62	26	88	8 86
Tobacco, raw												
Tallow												
Tin	12								12		12	1 17
Turpentine												
Wheat	27	263							27	263	290	8 90
White lead	24	1							24	1	25	2 31

Whiting	33	6	33	6	3 00
Wood	747	499	747	499	0 19
All other goods and merchandise not enumerated	20	31	20	31	146 37
Bark	64	13	64	13	1 92
Barrels, empty	300	300	300	300	6 28
Floats	1,115	2,363	1,115	2,363	24 85
Firewood, in vessels	14,067	14,067	14,067	14,067	320 85
Lumber, sawn, in vessels	17,957	29,406	17,957	29,406	1,685 15
do rafts	5	5	5	5	0 19
Masts, spars and telegraph poles, in vessels	34	34	34	34	1 68
Railway ties, in vessels	5,634	66	5,634	66	601 15
do rafts	815	815	815	815	86 69
Saw logs	385	187	385	187	13 40
Shingles	110	47	110	47	31 08
Split posts and fence rails, in vessels	5	9	5	9	3 74
do do rafts					
Timber, square, in vessels	299	20	299	20	18 41
do rafts	700	700	700	700	5 44
Traverses	9	9	9	9	2 55
Woodenware and wood partly manufactured					
Total freight paying tolls	49,977	28,142	61,434	28,142	3,192 86
Coal, free, per Order in Council	4,313		4,313		
Firewood, free	14,520		14,520		
Stone, free, for canal construction	350		350		
Kryolite, free, having paid full tolls on Welland Canal	554		554		
Grand total freight	69,160	28,696	80,617	28,696	
Total tolls on vessels					1,786 69
do passenger					130 86
do free coal					
do do firewood					\$ 115 13
do do stone					242 00
do do kryolite					8 18
Wharfage and storage					27 70
Fines and damages					39 98
Other receipts					10 00
Total revenue exclusive of hydraulic rents					185 50
					6,145 89

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

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

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 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Fish .....	35	413							35	413	448	\$ 4 48
Flour .....	1,161	138							1,161	138	1,299	12 89
Coal .....	530	22,071							530	22,071	22,601	226 01
Lumber .....	1,523	1,304							1,523	1,304	2,827	28 27
Other agricultural products.	2,592	3,597							2,592	3,597	6,189	61 89
Other merchandise.....	671	485							671	485	1,156	11 56
Total freight paying tolls . . . . .	6,512	28,008							6,512	28,008	34,520	345 20
Tolls on vessels.....												1,433 28
Other receipts.....												3 28
Total revenue.....												1,781 76

RAILWAYS AND CANALS.

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

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

APPENDIX A—Continued.  
 No. (A) 16.—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.	Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.			
Ashes, pot and pearl									
Apples									
Agricultural products not enumerated, vegetable, do									
do do animal									
Agricultural implements							7	7	0 88
Barley									
Bricks									
Bones									
Brimstone									
Cement and water lime									
Clay, lime and sand									
Coal									
Corn									
Cattle									
Cotton, raw									
Crockery and earthenware									
Dye wood and dye stuffs									
Fish									
Flax and hemp									
Flour	25						25	25	0 25
Furniture									
Gypsum									
Glass, all kinds									
Hay, pressed									
Hogs									
Horses									
Hides and skins, horns and hoofs									
Ice									
Iron, railway-									
do pig									
do do all other									
ron ore	3						3	3	0 09

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

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Kryolite, chemical ore and other ore, except iron.												
Lard and lard oil.												
Meal, all kinds												
Meats, other than pork												
Marble												
Manilla												
Molasses												
Nails												
Oats.												
Oil, in barrels												
Oil cake.												
Pease.												
Potatoes												
Pork.												
Rain												
Pitch and tar.												
Rags												
Rye												
Rosin												
Salt												
Stone intended for cutting												
do wrought												
do not suitable for cutting, unwrought												
Seeds, all kinds												
Sheep												
Soda ash												
Steel												
Sugar												
Spirits, beer, &c												
Tobacco, raw												
Tallow												
Tin												
Turpentine												
Wheat												
White lead												



APPENDIX A—Continued.

No. (A) 18.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal, and the Amount of Revenue collected during the Season of Navigation in 1891.

ARTICLES.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
	Ashes, pot and pearl.											
Apples.	92	54							92	54	146	2 80
Agricultural products not enumerated, vegetable.	12	255							12	255	267	5 16
do do animal												
Agricultural implements.	2	2							2	2	4	0 11
Barley	36	360							396	360	756	14 19
Bricks												
Bones.												
Brimstone	1								1		1	0 02
Cement and water lime.	102								102		102	1 92
Clay, lime and sand												
Coal	3	372					1,237		3	2,059	2,069	37 70
Corn	3								3		3	0 06
Cattle	3								3		3	0 06
Cotton, raw												
Crockery and earthenware.	9								9		9	0 23
Dye wood and dye stuffs.	2								2		2	0 05
Fish	6								6		6	0 12
Flax and hemp												
Flour	4	10							4	10	14	0 27
Furniture	58	6					1		65	7	72	1 86
Gypsum												
Glass, all kinds.	13								13		13	0 35
Hay, pressed												
Hogs												
Horses	30	7							30	7	37	0 74
Hides and skins, horns and hoofs.	1								1		1	0 02
Ice	150								150		150	3 75
Iron, railway												
do pig.	1								1		1	0 02
do all other	60	1							60	1	61	1 18





## APPENDIX

## No. (A) 19.—STATEMENT of Traffic on the undermentioned Canals, and

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 1.</i>		\$ cts.		\$ cts.		\$ cts.
Canadian vessels, steam.....	353,971	3,952 11	676,266	3,920 31	64,052	206 74
United States vessels, steam.....	478,656	7,187 03	23,980	184 98	1,025	10 54
Canadian vessels, sail.....	173,921	3,460 34	1,075,155	11,565 42	44,782	632 22
United States vessels, sail.....	103,608	2,306 06	66,228	517 62	115,871	1,588 34
Total, Class No. 1.....	1,110,156	16,905 54	1,841,629	16,188 33	225,730	2,437 84
<i>Class No. 2.</i>	No.		No.		No.	
Passengers.....	35,080	433 66	63,283	3,024 63	3,783	66 59
<i>Class No. 3.</i>	Tons.		Tons.		Tons.	
Bricks.....	49	5 52	13,710	574 16	467	30 72
Brimstone.....	66	9 90	159	14 98	140	27 65
Cement and water lime.....	418	62 58	4,609	647 57	31	3 10
Clay, lime and sand.....	70	5 25	32,259	1,517 89	4,603	462 74
Fish.....	305	40 56	328	31 27		
Gypsum.....			1,718	28 65		
Iron, railway.....	127	19 05	3,300	477 28		
do pig.....	499	99 80	4,475	547 77		
do all other.....	1,610	291 31	11,701	679 62	27	1 04
Salt.....	2,567	502 80	8,467	1,128 66	187	7 46
Steel.....	6,220	933 00	817	109 32		
Stone, for cutting.....	6,602	1,320 40	5,129	352 16	1,304	130 40
Apples.....	1,223	35 98	5,088	726 09	958	61 84
Barley.....	8,113	1,622 60	17,606	352 34	842	44 92
Corn.....	185,180	37,035 85	12,339	1,831 35		
Cotton, raw.....			2	0 30		
Flax and hemp.....			2	0 19		
Flour.....	13,517	1,911 76	4,799	655 09	228	7 60
Hay, pressed.....	121	19 20	1,599	86 49	2,785	113 81
Meals, all kinds.....	26,164	5,232 70	833	39 88		
Oil cake.....			11	1 08		
Oats.....	52,959	10,591 80	8,923	243 80	1,239	41 33
Pease.....	630	102 00	36,225	748 89	1,509	50 35
Potatoes.....	25	2 33	127	10 15	7	0 70
Rye.....	65,888	13,136 75	1,939	39 04		
Seeds, all kinds.....	258	51 60	9,963	399 84		
Tobacco.....	1	0 20	12	1 40		
Wheat.....	198,658	39,092 84	31,053	1,364 92		
All other agricultural products, vegetable.....	444	28 80	627	89 11	1	0 10
Bones.....			149	18 38	341	34 10
Cattle.....	1	0 02	402	29 59	57	1 90
Hogs.....			27	4 05		
Hides and skins, horns and hoofs.....	87	13 05	33	4 52		
Horses.....	67	3 02	390	26 54	6	0 20
Lard and lard oil.....	126	25 20	336	32 42		
Meats, other than pork.....	19	3 00	33	3 56		
Pork.....	276	55 10	581	51 34	3	0 10
Sheep.....			96	7 34	152	5 07
Tallow.....	77	12 40	26	2 44		
Wool.....	1,243	248 30	13	1 95		
All other agricultural products, animal.....			973	137 46		
Total, Class No. 3.....	573,610	112,512 67	220,884	13,018 88	14,887	1,025 13

A—Continued.

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
167,576	682 17	78,137	762 11	23,150	463 00	29,593	223 59	134,369	226 93
186	2 29	711	16 83	.....	.....	8	0 50	168	0 50
161,026	2,274 15	68,965	766 05	48,514	970 28	22,975	93 33	13,002	51 69
30,939	717 31	16,644	241 70	.....	.....	.....	.....	92	2 00
359,727	3,675 92	164,457	1,786 69	71,664	1,433 28	52,576	317 42	147,631	281 12
No.		No.		No.		No.		No.	
12,569	162 91	5,423	130 86	.....	.....	9,547	88 85	16,651	197 02
Tons.		Tons.		Tons.		Tons.		Tons.	
.....	.....	40	1 20	.....	.....	7	0 68	.....	.....
24	2 36	222	5 90	.....	.....	.....	.....	1	0 02
8,091	229 22	92	2 16	.....	.....	.....	.....	102	1 92
3	0 26	73	1 90	448	4 48	.....	.....	6	0 12
.....	.....	60	1 78	.....	.....	.....	.....	.....	.....
.....	.....	63	1 96	.....	.....	.....	.....	1	0 02
72	3 15	295	8 08	.....	.....	.....	.....	61	1 18
17	0 50	1,683	47 33	.....	.....	.....	.....	28	0 54
.....	.....	30	1 01	.....	.....	.....	.....	.....	.....
1	0 02	713	33 36	.....	.....	.....	.....	1	0 02
44	1 93	107	3 60	.....	.....	.....	.....	146	2 80
150	11 22	373	8 89	.....	.....	.....	.....	756	14 19
.....	.....	22	0 61	.....	.....	.....	.....	3	0 06
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
112	10 05	690	17 51	1,299	12 99	25	25	14	0 27
263	25 23	880	20 72	.....	.....	.....	.....	.....	.....
17	1 57	7	0 18	.....	.....	.....	.....	.....	.....
.....	.....	3	0 10	.....	.....	.....	.....	.....	.....
1,038	82 86	124	3 27	.....	.....	.....	.....	17	0 32
2,749	191 78	140	4 20	.....	.....	.....	.....	366	6 87
465	38 00	183	5 56	.....	.....	.....	.....	7	0 14
47	4 32	170	4 51	.....	.....	.....	.....	527	9 91
37	3 46	15	0 48	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	1 76	290	8 90	.....	.....	.....	.....	2	0 04
433	40 79	360	17 26	6,189	61 89	.....	.....	816	15 32
18	1 80	32	1 26	.....	.....	.....	.....	267	5 16
750	48 96	7	0 19	.....	.....	.....	.....	.....	.....
8	0 60	.....	.....	.....	.....	.....	.....	3	0 06
37	3 33	22	0 82	.....	.....	.....	.....	1	0 02
184	10 51	9	0 33	.....	.....	.....	.....	37	0 74
4	0 39	42	1 24	.....	.....	.....	.....	3	0 06
81	7 83	17	0 48	.....	.....	.....	.....	.....	.....
52	2 85	239	6 28	.....	.....	.....	.....	1	0 02
431	32 59	10	0 29	.....	.....	.....	.....	10	0 02
24	2 27	.....	.....	.....	.....	.....	.....	2	0 04
9	0 90	6	0 19	.....	.....	.....	.....	.....	.....
1,413	117 02	397	12 60	.....	.....	.....	.....	.....	.....
16,592	877 53	7,416	224 15	7,936	79 36	32	0 93	3,178	59 86

## No. (A) 19.—STATEMENT of Traffic on the undermentioned

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 4.</i>		\$ cts.		\$ cts.		\$ cts.
Ashes, pot and pearl.....	40	8 00	112	21 47		
Agricultural implements.....			87	13 14		
Crockery and earthenware.....	5	0 10	464	90 52	23	2 30
Dye woods and dye stuffs.....			100	8 40	55	5 50
Furniture.....	23	3 88	1,013	161 63	7	1 08
Glass, all kinds.....	32	4 77	464	87 10	1	0 10
Marble.....	3,556	533 40	20	3 93		
Manilla.....	139	20 85	1	0 19		
Molasses.....	85	14 65	991	98 31	120	12 00
Nails.....	129	12 40	3,352	521 13		
Oil, in barrels.....	56	7 67	1,036	150 79	39	3 89
Paint.....	144	20 56	632	89 30	1	0 10
Pitch and tar.....	264	39 60	390	34 72	114	11 40
Rags.....	60	12 00	181	35 20		
Rosin.....			1,949	98 54	1,978	196 30
Soda ash.....	99	14 59	787	149 97		
Sugar.....	393	35 08	3,101	581 34		
Stone, wrought.....	9	1 70	365	18 70	1,273	102 45
Tin.....	246	36 51	552	96 86		
Turpentine.....			105	6 13	62	6 20
White lead.....	3	0 45	137	25 22		
Whiting.....			330	65 32		
Whiskey and all other spirits.....	346	67 96	1,215	226 70		
Merchandise, not enumerated.....	50,202	7,472 07	11,213	1,673 86	3,690	279 51
Total, Class No. 4.....	55,831	8,306 24	28,597	4,258 47	7,363	620 83
<i>Class No. 5.</i>						
Bark.....			13	3 75		
Barrels, empty.....	96	19 56	317	44 94	18	1 64
Boat knees.....						
Floats.....	40	1 75	4,740	82 30	3	0 25
Firwood, in vessels.....	9,186	407 44	11,388	330 27	19,296	649 54
do rafts.....						
Lumber, sawn, in vessels.....	64,877	11,545 03	44,410	1,518 45	97,498	5,791 76
do rafts.....			4	0 15	63	5 00
Hoops.....						
Railway ties, in vessels.....	327	28 03	745	14 87	2,793	218 93
do in rafts.....						
Masts, spars and telegraph poles, in vessels.....						
Masts, spars and telegraph poles, in rafts.....			20,986	524 65		
Square timber, in vessels.....	20,354	3,049 94	2,183	36 78		
do rafts.....	262	16 49	6,770	169 70		
Woodenware and wood partly manufactured.....	11	4 40	36	12 40		
Shingles.....	19	7 81	16	3 26	146	17 35
Split posts and fence rails, in vessels.....						
Split posts and fence rails, in rafts.....						
Saw logs.....	3,766	160 87	15,598	355 94		
Staves and headings, barrel.....	135	12 40				
do do pipe.....	8	1 50				
do do West India.....						
do do salt barrel.....			9	0 17		
Traverses.....			10,280	26 75		
Hop poles.....						
Total, Class No. 5.....	99,101	15,255 22	117,495	3,124 38	119,817	6,684 47

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
28	5 32	28	2 99						
16	2 62	131	15 95					4	0 11
		67	8 68					9	0 23
		25	2 25					2	0 05
33	4 44	40	4 56					72	1 86
4	0 76	78	8 55					13	0 35
		4	0 36					10	0 26
								7	0 18
24	1 42	102	9 55					44	1 10
11	0 75	319	30 06					122	3 59
25	2 70	416	39 12					85	2 17
1	0 19	36	4 25						
		28	2 99						
3	0 44	6	0 54					5	0 13
		5	0 45						
		15	1 94					13	0 33
18	1 24	501	49 53					99	2 53
3	0 29	23	2 82						
2	0 15	12	1 17					1	0 03
		25	2 31					25	0 64
1	0 05	33	3 00						
20	1 34	88	8 86					12	0 32
402	53 30	1,246	146 37	1,156	11 56	129	3 87	965	24 04
591	75 01	3,228	346 30	1,156	11 56	129	3 87	1,488	37 92
		51	1 92			32	0 94	5	0 10
38	4 60	77	6 28						
31,600	335 18	1,415	24 85			1,162	12 12		
45,466	1,812 71	16,430	320 85			12,378	121 90	945	7 89
423,471	32,352 80	38,519	1,685 15	2,827	28 27	592	9 67	825	9 64
159	9 15	5	0 19			202	3 60	9	0 19
235	27 88								
435	71 97	5,700	601 15			165	4 39		
		815	86 69			180	7 46		
19	1 57	34	1 68						
						171	10 10		
2,684	103 90							80	0 50
3,240	55 32	319	18 41			1,188	21 25	1,480	18 50
6	1 01	22	2 55					41	0 75
597	465 49	157	31 08			155	13 39	5	0 31
4	1 72	22	3 74			3	0 15		
12,662	292 24	572	13 40			3,742	30 10	27	0 30
200	0 50	700	5 44			705	5 50		
520,816	35,536 04	64,838	2,803 38	2,827	28 27	20,675	240 57	3,417	38 18

## No. (A) 19.—STATEMENT of Traffic on the undermentioned

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Special Class.</i>		\$ cts.		\$ cts.		- cts.
Coal .....	224,644	44,928 20	164,100	22,780 77	86,286	8,455 12
Kryolite or chemical ore.....	2,871	143 55	2,083	104 15		
Iron ore.....						
Stone, unwrought, not suitable for cutting.....	2,813	281 30	11,028	226 95	566	56 60
Ice.....	1,150	57 50				
Total, Special Class.....	231,478	45,410 55	177,211	23,111 87	86,852	8,511 72
Total freight and tolls.....	960,020	198,823 88	544,187	62,726 56	228,919	19,346 58
Timber and other wood, free.....	389	17 76	9,728	1,056 98		
Wheat, corn, flour, iron, salt, coal, &c., free.....	14,604	2,136 20	382,879	12,188 40	345	30 34
Grand totals, passengers and tonnage of vessels not included....	975,013	200,977 84	936,794	75,971 94	229,264	19,376 92

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

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
648	23 78	11,391	483 88	22,601	226 01			2,059	37 70
1,784	89 20	2,703	135 15						
							3	0 09	
								1,450	14 50
								150	3 75
2,432	112 98	14,094	619 03	22,601	226 01	3	0 09	3,659	55 95
540,431	40,440 39	89,576	5,910 41	34,520	1,778 48	20,839	651 73	11,742	670 05
44,610	515 72	14,520	242 00						
		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.*

## APPENDIX

No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during each description of Property passed through

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Vessels of all kinds .....	1,110,156	\$ cts. 16,905 54	1,841,629	\$ cts. 16,188 33	225,730	\$ cts. 2,437 84
Passengers .....	No. 35,080	433 66	No. 63,283	3,024 63	No. 3,783	66 59
<i>Forest—Produce of Wood.</i>						
Bark .....			Tons. 13	3 75		
Boat knees .....						
Floats .....	40	1 75	4,740	82 30	3	0 25
do Free .....						
Firewood .....	9,186	407 44	11,388	330 27	19,296	649 54
do Free .....						
Hoops and hop poles .....						
Lumber, sawed .....	64,877	11,545 03	44,414	1,518 60	97,561	5,796 76
do Free .....			3,908			
Masts, spars, &c. ....			20,986	524 65		
Railway ties .....	327	28 03	745	14 87	2,793	218 93
do Free .....						
Saw logs .....	3,766	160 87	15,598	355 94		
do Free .....	389					
Staves, all kinds .....	163	13 90	9	0 17		
Shingles .....	19	7 81	16	3 26	146	17 35
Split posts and rails .....						
Timber, square .....	20,616	3,066 43	8,953	206 48		
do Free .....			5,820			
Traverses .....			10,280	26 75		
Total .....	99,383	15,231 26	126,870	3,067 04	119,799	6,682 83
<i>Farm Stock.</i>						
Cattle .....	1	0 02	402	29 59	57	1 90
Hogs .....			27	4 05		
Horses .....	67	3 02	390	26 54	6	0 20
do Free .....			2			
Sheep .....			96	7 34	152	5 07
Total .....	68	3 04	917	67 52	215	7 17
<i>Produce of Animals.</i>						
Bones .....			149	18 38	341	34 10
Horns and hoofs, hides and skins, raw .....	87	13 05	33	4 52		
Lard and lard oil .....	126	25 20	336	32 42		
do Free .....			100			
Meats, other than pork .....	19	3 00	33	3 56		
do Free .....	1					
Pork .....	276	55 10	581	51 34	3	0 10
do Free .....			201			
Tallow .....	77	12 40	26	2 44		
Wool .....	1,243	248 30	13	1 95		
do Free .....	2					
Agricultural products not enumerated, animal .....			973	137 46		
Total .....	1,831	357 05	2,445	252 07	344	34 20



A—Continued.

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
359,727	3 675 92	164,457	1,786 69	71,664	1,433 28	52,576	317 42	147,631	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.		Tons.		Tons.		Tons.	
.....		51	1 92	.....		32	0 94	5	0 10
31,600	335 18	1,415	24 85	.....		1,162	12 12	.....	
16,440				.....				.....	
45,466	1,812 71	16,430	320 85	.....		12,378	121 90	945	7 89
4,786		14,520		.....				.....	
235	27 88			.....				.....	
423,630	32,361 95	38,524	1,685 34	2,827	28 27	794	13 27	834	9 83
486				.....				.....	
19	1 57	34	1 68	.....		171	10 10	.....	
435	71 97	6,515	687 84	.....		345	11 85	.....	
10,000				.....				.....	
12,662	292 24	572	13 40	.....		3,742	30 10	27	0 30
10,678				.....				.....	
597	465 49	157	31 08	.....		155	13 39	5	0 31
4	1 72	22	3 74	.....		3	0 15	.....	
5,924	159 22	319	18 41	.....		1,188	21 25	1,560	19 00
2,220				.....				.....	
200	0 50	700	5 44	.....		705	5 50	.....	
565,382	35,530 43	79,259	2,794 55	2,827	28 27	20,675	240 57	3,576	37 43
750	48 96	7	0 19	.....		.....		3	0 06
8	0 60	.....		.....		.....		.....	
184	10 51	9	0 33	.....		.....		37	0 74
431	32 59	10	0 29	.....		.....		10	0 02
1,373	92 66	26	0 81	.....		.....		50	0 82
18	1 80	32	1 26	.....		.....		.....	
37	3 33	22	0 22	.....		.....		1	0 02
4	0 39	42	1 84	.....		.....		3	0 06
81	7 83	17	0 48	.....		.....		.....	
52	2 85	239	6 28	.....		.....		1	0 02
24	2 27			.....		.....		2	0 04
9	0 90	6	0 19	.....		.....		.....	
1,413	117 02	397	12 60	.....		.....		.....	
1,638	136 39	755	22 87	.....		.....		7	0 14

## No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chamblly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Agricultural Products.</i>						
Agricultural products not enumerated, vegetable.		\$ cts.		\$ cts.		\$ cts.
do Free	444	28 80	627	89 11	1	0 10
Apples	1,223	33 98	5,088	726 09	958	61 84
Barley	8,113	1,622 60	17,606	352 34	842	44 92
Cotton, raw			2	0 30		
Corn	185,180	37,035 85	12,339	1,831 35		
do Free			55,264			
Flax and hemp			2	0 19		
do Free	1					
Flour	13,517	1,911 76	4,799	655 09	228	7 60
do Free			3,324			
Hay, pressed	121	19 20	1,599	86 49	2,785	113 81
Meal, all kinds	26,164	5,232 70	833	39 88		
do Free			67			
Manilla	139	20 85	1	0 19		
Oats	52,959	10,591 80	8,923	243 80	1,239	41 33
Pease	630	102 00	36,225	748 89	1,509	50 35
do Free			390			
Potatoes	25	2 33	127	10 15	7	0 70
Rye	65,888	13,136 75	1,939	39 04		
do Free			64,978			
Seeds, all kinds	258	51 60	9,963	399 84		
do Free			2			
Tobacco, raw	1	0 20	12	1 40		
do Free			1			
Wheat	198,658	39,092 84	31,058	1,364 92		
do Free			159,785			
Total	553,373	108,883 26	414,956	6,589 07	7,569	320 65
<i>Manufactures.</i>						
Ashes, pot and pearl	40	8 00	112	21 47		
do Free	31		40			
Agricultural implements			87	13 14		
Barrels, empty	96	19 56	317	44 94	18	1 64
Bricks	49	5 52	13,710	574 16	467	30 72
do Free	469					
Cement and water lime	418	62 58	4,609	647 57	31	3 10
do Free	2,380		539			
Crockery and earthenware	5	0 10	464	90 52	23	2 30
do Free	251					
Furniture	23	3 88	1,013	161 63	7	1 08
do Free	1		2			
Glass, all kinds	32	4 77	464	87 10	1	0 10
do Free	30		1			
Iron, railway	127	19 05	3,300	477 28		
do Free	2,855					
Iron, pig	499	99 80	4,475	547 77		
do Free	112		371			
Iron, all other	1,610	291 31	11,701	679 62	27	1 04
do Free	595		14			
Molasses	85	14 65	991	98 31	120	12 00
Nails	129	12 40	3,352	521 13		
do Free	560					
Oil, in barrels	56	7 67	1,036	150 79	39	3 89
do Free	64					
Oil cake			11	1 08		
Paint	144	20 56	632	89 30	1	0 10
do Free	61					

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
433	40 79	360	17 26	6,189	61 89			267	5 16
44	1 93	107	3 60					146	2 80
150	11 22	373	8 89					756	14 19
		22	0 61					3	0 06
112	10 05	690	17 51	1,299	12 99	25	0 25	14	0 27
263	25 23	880	20 72						
17	1 57	7	0 18						
1,038	82 86	124	3 27					7	0 18
2,749	191 78	140	4 20					17	0 32
								366	6 87
465	38 00	183	5 56					7	0 14
47	4 32	170	4 51					527	9 91
37	3 46	15	0 48						
								2	0 04
18	1 76	290	8 90					816	15 32
5,373	412 97	3,361	95 69	7,488	74 88	25	0 25	2,928	55 26
28	5 32	28	2 99						
16	2 62	131	15 95					4	0 11
38	4 60	77	6 28						
		40	1 20			7	0 68		
24	2 36	222	5 90					102	1 92
		67	8 68					9	0 23
33	4 44	40	4 56					72	1 86
4	0 76	78	8 55					13	0 35
		60	1 78						
		63	1 96					1	0 02
72	3 15	295	8 08					61	1 18
24	1 42	102	9 55					44	1 10
11	0 75	319	30 06					122	3 59
25	2 70	416	39 12					85	2 17
		3	0 10						
1	0 19	36	4 25						

## No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals

ARTICLES.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Manufactures—Con.</i>				\$ cts.		\$ cts.
Pitch and tar.....	264	39 60	390	34 72	114	11 40
do Free.....	22					
Rosin.....			1,949	98 54	1,978	196 30
Soda ash.....	99	14 59	787	149 97		
do Free.....	377					
Spirits, whiskey, &c.....	346	67 96	1,215	226 70		
do Free.....	294		105			
Steel.....	6,220	933 00	817	109 32		
Sugar.....	393	35 08	3,101	581 34		
do Free.....	412					
Tin.....	246	36 51	552	96 86		
do Free.....	23					
Turpentine.....			105	6 13	62	6 20
White lead.....	3	0 45	137	25 22		
do Free.....	3					
Whiting.....			330	65 32		
do Free.....	50					
Woodenware.....	11	4 40	36	12 40		
Total.....	19,485	1,701 44	56,765	5,612 33	2,888	269 87
<i>Merchandise.</i>						
Brimstone.....	66	9 90	159	14 98	140	27 65
Clay, lime and sand.....	70	5 25	32,259	1,517 89	4,603	462 74
do Free.....	206		563		345	
Coal.....	224,644	44,928 20	164,100	22,780 77	86,286	8,455 12
do Free.....			94,690			
Dye woods and dye stuffs.....			100	8 40	55	5 50
Fish.....	305	40 56	328	31 27		
do Free.....	7					
Gypsum.....			1,718	28 65		
Ores, all kinds.....	2,871	143 55	2,083	104 15		
do Free.....	544		1,410			
Marble.....	3,556	533 40	20	3 93		
Rags.....	60	12 00	181	35 20		
Salt.....	2,567	502 80	8,467	1,128 66	187	7 46
do Free.....	4,391					
Stone, all kinds.....	9,424	1,603 40	16,522	597 81	3,143	289 45
do Free.....			750			
All other goods and merchandise, not enumerated.....	51,352	7,529 57	11,213	1,673 86	3,690	279 51
do Free.....	810		278			
Total.....	300,873	55,308 63	334,841	27,925 57	98,449	9,527 43
Grand totals (passengers and tonnage of vessels not included).....	975,013	198,823 88	936,794	62,726 56	229,264	19,346 58

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

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

Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Murray Canal.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
		23	2 99						
		5	0 45						
		15	1 94					13	0 33
20	1 34	88	8 86					12	0 32
		30	1 01						
18	1 24	501	49 53					99	2 53
2	0 15	12	1 17					1	0 03
		25	2 31					25	0 64
1	0 05	33	3 00						
6	1 01	22	2 55					41	0 75
323	32 10	2,736	222 82			7	0 68	704	17 13
								1	0 02
8,091	229 22	92	2 16						
648	23 78	11,391	483 88	22,601	226 01			2,059	37 70
		4,313							
		25	2 25					2	0 05
3	0 26	73	1 90	448	4 48			6	0 12
1,784	89 20	2,703	135 15			3	0 09		
		554							
		4	0 36					10	0 26
3	0 44	6	0 54					5	0 13
17	0 50	1,683	47 33					28	0 54
4	0 31	736	36 18					1,451	14 52
		350							
402	53 30	1,246	146 37	1,156	11 56	129	3 87	1,115	27 79
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

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

APPENDIX A—Continued.  
 No. (A) 21.—STATEMENT showing the Amount of Tolls accrued each month during the Season of Navigation, ended 31st December, 1891.

CANALS AND OFFICES.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Tolls.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>WELLAND CANAL.</b>										
Chippewa .....	1 44	22 24	11 03	3 79	11 84	9 78	6 02	5 30	840 43	70 00
Colborne .....	7 80	17,236 94	18,331 79	19,048 57	24,780 58	24,832 34	18,735 94	10,127 52	840 43	138,280 78
Dalhousie .....	.....	11,465 72	8,606 53	6,407 44	6,852 84	8,199 83	10,952 98	3,694 07	24 35	58,824 55
Dunnville .....	.....	30 19	118 38	40 95	52 81	28 80	106 43	116 57	.....	494 13
Maitland .....	.....	0 65	.....	1 23	.....	.....	1 00	.....	.....	11 63
Robinson .....	.....	49 46	71 93	32 81	64 89	8 73	95 91	107 08	13 39	549 83
St. Catharines .....	.....	64 32	54 76	87 48	109 84	85 54	65 47	41 48	3 24	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
<b>St. LAWRENCE CANALS.</b>										
Beauharnois .....	.....	45 14	117 04	237 38	235 03	374 20	177 72	115 01	.....	1,392 96
Cardinal .....	.....	151 68	100 24	211 59	24 04	74 69	91 82	48 61	1 45	711 92
Cornwall .....	.....	2,047 43	4,297 33	4,866 31	3,160 57	2,729 29	3,108 80	2,506 68	66 80	22,783 80
Kingston .....	.....	1,687 13	1,969 31	1,969 78	1,242 03	813 58	1,681 84	1,169 74	.....	10,473 41
Leschene .....	.....	19 19	252 74	330 29	273 96	457 25	451 94	270 58	4 92	2,427 20
Montreal .....	.....	140 79	3,300 96	4,371 38	4,605 41	3,961 51	3,146 65	2,622 00	.....	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
<b>CHAMBLEY CANAL.</b>										
Chambly .....	.....	648 74	1,098 87	1,196 00	1,281 19	885 01	1,511 46	927 83	.....	7,549 10
St. John's .....	.....	2,613 46	1,856 57	1,875 41	1,401 14	1,192 17	1,353 25	864 50	.....	11,156 50
St. Ours .....	.....	47 87	70 77	79 38	60 16	103 73	178 20	106 87	.....	640 98
Total, Chambly Canal .....	.....	3,310 07	3,026 21	3,150 79	2,742 49	2,180 91	3,042 91	1,893 20	.....	19,346 58

RAILWAYS AND CANALS.

OTTAWA CANALS.										
Ottawa.....	190 03	5,129 73	3,941 19	3,597 40	2,629 84	2,268 53	2,457 39	1,220 54	21,734 65	
Carillon.....	9 67	21 92	9 64	8 98	6 10	5 59	24 82	32 11	118 83	
Grenville.....	325 09	2,757 48	2,784 31	3,017 00	2,542 39	2,078 88	1,863 28	1,697 12	17,065 55	
Ste. Anne's.....	17 09	147 77	203 04	274 81	284 00	245 07	304 48	94 10	1,521 36	1 00
Total Ottawa Canals.....	541 88	8,056 90	6,938 18	6,898 19	5,412 33	4,598 07	4,649 97	3,343 87	40,440 39	1 00
RIDEAU CANAL.										
Kingston Mills.....		165 94	282 46	329 49	257 00	178 89	153 16	112 96	1,479 90	
Ottawa.....	9 14	393 84	706 02	620 32	600 07	539 26	681 64	348 11	3,898 40	
Smith's Falls.....		29 05	54 91	175 69	102 81	82 27	52 56	31 82	532 11	
Total Rideau Canal.....	9 14	588 83	1,043 39	1,125 50	959 88	803 42	887 36	492 89	5,910 41	
ST. PETER'S CANAL.										
St. Peter's.....	28 89	154 70	112 98	102 35	111 36	282 77	438 40	383 37	1,778 48	163 66
NEWCASTLE DISTRICT CANALS.										
Bobcaygeon.....		9 50	45 63	70 56	91 32	67 38	57 03	10 25	351 67	
Buckhorn.....			20 75	10 85	9 40	8 75	0 30		50 05	
Burleigh.....			18 83	18 60	11 39	21 57	19 93	1 75	96 00	
Fenelon Falls.....			0 50	0 50	0 50	0 50		1 25	8 70	
Hastings.....			4 25	8 00	6 25	2 25	1 25		23 50	
Peterborough.....	2 70	12 10	22 24	21 35	18 74	21 59	16 54	6 55	121 81	
Total, Newcastle District Canals.....	2 70	27 53	113 95	129 86	137 60	125 24	95 05	19 80	651 73	
MURRAY CANAL.										
Brighton.....	13 52	54 85	135 67	146 09	178 74	63 85	46 05	31 28	670 05	
Grand total.....	7,255 34	48,108 17	49,406 01	49,101 78	50,956 34	49,629 80	47,882 26	26,889 05	330,348 08	1,119 33

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

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 1st March, 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, 1891, and the Amount of Tolls collected thereon.

VESSELS.	Total Number.		From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>WELLAND CANAL.</b>														
Canadian vessels, steam	1,147	86,418	74,643	2,352	262	292	7,294	89,946	174,963	179,008	353,971	3,952	11	
do sail	641	28,405	48,708	4,835	288		9,056	52,624	88,057	85,864	173,921	3,460	34	
Total Canadian	1,788	114,823	123,351	7,187	550	292	16,350	142,570	263,020	264,872	527,892	7,412	45	
United States vessels, steam	522	1	9,180	204	227,752	195,905	201	45,412	237,134	241,522	478,556	7,187	03	
do sail	284	40	3,887	576	48,252	35,005	457	15,300	52,687	50,921	103,608	2,306	06	
Total United States	806	41	13,067	780	276,004	230,910	658	60,712	289,821	292,443	582,264	9,493	09	
Grand total, Welland Canal	2,594	122,861	136,418	7,967	276,554	231,202	17,008	203,282	552,841	557,315	1,110,156	16,905	54	
<b>ST. LAWRENCE CANALS.</b>														
Canadian vessels, steam	3,041	353,192	17,127	608				5,347	370,319	305,947	676,266	3,920	31	
do sail	5,706	550,410	46,487	320				70,129	596,897	478,258	1,075,155	11,565	42	
Total Canadian	747	903,602	63,614	928				75,476	967,216	784,205	1,751,421	15,485	73	
United States vessels, steam	582	307	3,761	75	6,134	6,965	63	5,298	10,265	13,715	23,980	184	98	
do sail	604	517	7,949	1,602	875	943	30,362	10,497	39,103	27,125	66,228	517	62	
Total United States	1,186	824	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	1,933	904,426	74,724	2,605	7,009	7,908	30,425	91,271	1,016,584	825,045	1,841,629	16,188	33	
<b>CHAMBLY CANAL.</b>														
Canadian vessels, steam	464	32,206	94					746	32,300	31,752	64,052	206	74	



do sail	555	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	50,050	58,784	108,834	838 96
United States vessels, steam	28	352	309	134				250	486	539	1,025	10 54
do sail	1,006	1,471	2,660	41,875				69,865	43,346	72,525	115,871	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)	2,053	44,440	43,767	49,442				88,081	93,882	131,848	225,730	2,437 84
OTTAWA CANALS.												
Canadian vessels, steam	1,025	52,480	112,784		2,312				52,480	115,096	167,576	682 17
do sail	1,123	8,699	134,287		18,040				8,699	132,327	161,026	2,274 15
Total Canadian	2,148	61,179	247,071		20,352				61,179	247,423	328,602	2,956 32
United States vessels, steam	4	102	33		51				102	84	186	2 20
do sail	312	4,677	1,043		25,219				4,677	26,262	30,939	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	66,958	248,147		45,622				65,958	293,769	359,727	3,675 92
RIDEAU CANAL.												
Canadian vessels, steam	1,299	35,585	42,426	126					35,711	42,426	78,137	762 11
do sail	945	32,446	35,649	871					33,316	35,649	68,965	766 06
Total Canadian	2,244	68,030	78,075	997					69,027	78,075	147,102	1,528 16
United States vessels, steam	69	323	388						323	388	711	16 83
do sail	181	2,314	9,851	4,479					6,793	9,851	16,644	241 70
Total United States	250	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						11,167	11,983	23,150	463 00
do sail	992	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

No. (A) 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—Continued.

VESSELS.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>TRENT VALLEY CANALS.</b>													
Canadian vessels, steam	747	14,749	14,844							14,749	14,844	29,593	223 59
do sail	385	11,904	11,071							11,904	11,071	22,975	93 33
Total Canadian	1,132	26,653	25,915							26,653	25,915	52,568	316 92
United States vessels, steam	2	4	4							4	4	8	50
do sail													
Total United States	2	4	4							4	4	8	50
Grand total, Trent Valley Canals.	1,134	26,657	25,919							26,657	25,919	52,576	317 42
<b>MURRAY CANAL.</b>													
Canadian vessels, steam	859	90,376	31,985							95,701	38,688	134,389	226 93
do sail	188	5,375	4,403	5,325	175			6,733	1,411	7,013	5,989	13,002	51 69
Total Canadian	1,047	96,351	36,388	6,363	175			8,144		102,714	44,657	147,371	278 62
United States vessels, steam	2	163	5							163	5	168	0 50
do sail	6	35	57							35	57	92	2 00
Total United States	8	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

APPENDIX A—Continued.  
No. (A) 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—Concluded.  
RECAPITULATION.

VESSELS.	Total Number.		From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>CANADIAN VESSELS.</b>														
<i>Steam and Sail.</i>														
Welland	1,788	122,769	114,823	123,351	7,187	292	550	142,570	263,020	264,872	527,892	7,412 45		
St. Lawrence	747	903,602	707,801	63,614	928			75,476	967,216	784,205	1,751,421	15,485 73		
Chambly	1,019	42,617	40,798	7,433	20,352			17,986	50,050	58,784	108,834	838 96		
Ottawa	2,148	61,179	247,071	997					61,179	267,423	328,602	2,956 32		
Rideau	2,244	68,080	78,075						69,027	78,075	147,102	1,528 16		
St. Peter's	1,121	35,317	36,347						35,317	36,347	71,664	1,433 28		
Trent Valley	1,432	26,533	25,915						26,533	25,915	52,568	316 92		
Murray	1,047	96,351	36,338	6,363	175			8,144	102,714	44,657	147,371	278 62		
Total Canadian	11,246	1,356,518	1,287,168	201,758	28,642	550	292	16,350	1,575,176	1,560,278	3,135,454	30,250 44		
<b>UNITED STATES VESSELS.</b>														
<i>Steam and Sail.</i>														
Welland	806	92	41	13,067	780	276,004	230,910	60,712	289,821	292,443	582,264	9,493 09		
St. Lawrence	1,186	824	15,460	11,110	1,677	7,009	7,908	15,795	49,368	40,840	90,208	702 60		
Chambly	1,034	1,923	2,969	42,009				70,095	43,832	73,064	116,896	1,598 88		
Ottawa	316	4,779	1,076		23,270				4,779	36,346	31,125	719 60		
Rideau	250	2,637	10,239	4,479					7,116	10,239	17,355	258 53		
St. Peter's	2	4	4						4	4	8	0 50		
Trent Valley	8	198	62						198	62	260	2 50		
Murray														
Total United States	3,002	10,357	29,851	70,665	27,727	283,013	238,818	146,602	395,118	442,968	838,116	12,775 70		
Grand total, Canadian and United States	14,848	1,386,875	1,317,019	272,423	56,369	283,563	239,110	390,778	1,970,294	2,003,276	3,973,570	43,026 14		

APPENDIX A—Continued.

No. (A) 22½.—COMPARATIVE STATEMENT of Grant Total Freight passed through the undermentioned Canals during the Seasons of Navigation of 1890 and 1891, and the Amount of Tolls collected on the same, including Tolls on Vessels and Passengers.

	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1890.												
Welland Canal	30,274	56,535	35,959	10,283	215,698	318,259	17,358	331,799	298,289	716,876	1,016,165	194,089 53
St. Lawrence Canals	216,557	476,196	11,652	3,233	1,115	2,065	41,351	102,264	270,075	583,778	853,853	60,720 30
Chambly Canal	8,224	4,118	86,113	6,085				98,867	93,337	109,070	202,407	18,171 00
Rideau Canal	81,219	26,289	6,086	8					87,285	26,289	113,574	6,145 21
Ottawa Canals	527	537,253		113,567					535	650,320	651,355	48,226 36
St. Peter's Canal	5,889	26,342							5,889	26,342	32,231	1,742 01
Trent Valley Canals	22,297	2,382							22,297	2,382	24,679	1,708 94
Murray Canal	4,606	7,896	6,190					91	10,798	7,985	18,783	707 03
1891.												
Welland Canal	11,415	58,559	13,845	13,963	247,543	306,257	17,409	306,022	290,212	684,801	975,013	198,823 88
St. Lawrence Canals	203,211	547,727	10,725	1,545	645	1,701	33,314	137,926	247,895	688,899	986,794	62,726 56
Chambly Canal	56,763	7,647	66,881					98,073	123,634	105,620	229,264	19,346 58
Rideau Canal	69,714	28,142	11,457						81,171	28,142	109,313	5,910 41
Ottawa Canals	871	476,735		107,435					871	584,170	585,041	40,440 39
St. Peter's Canal	6,512	28,008							6,512	28,008	34,520	1,778 48
Trent Valley Canals	16,632	4,207							16,632	4,207	20,839	651 73
Murray Canal	5,002	4,322	906	250			24	1,238	5,932	5,810	11,742	670 05

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

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

## APPENDIX A—Continued.

No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the season of Navigation in 1891.

## WELLAND CANAL.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
5	7	35	12	60	9	45	4	20
10	1	10	4	40	3	30		
15	2	30			1	15	1	15
20	2	40	12	240	4	80	4	80
25	6	150	2	50				
30	9	270	2	60	1	30		
35	3	105			1	35		
40	2	80	2	80	1	40	5	200
45			1	45				
50	1	50	1	50	1	50		
65			2	130				
70	1	70	1	70				
75					1	75		
80	2	160	2	160				
85	1	85	1	85			1	85
90	1	100	3	270				
100					1			
105					3	105		
110						330	2	220
115							2	230
120			1	120			2	240
125			1	125			2	250
130	1	130					2	260
135							1	135
145			2	290				
150	1	150	2	300	1	150		
165								
170			1	170				
175	1	175	1	175				
180	1	180	1	180				
185			1	185				
190			2	380				
200			2	400				
210	1	210	1	210	1	210		
215	1	215			1	215		
220	2	440						
225			1	225				
230			2	460			2	460
235			1	235				
240	1	240						
245	1	245	1	245			1	245
255			2	510				
260							3	780
265							1	265
270			1	270				
275			2	550	1	275		
280	1	280	1	280	1	280	1	280
285			5	1,425			5	1,425
290	1	290	2	580				
300	1	300					3	900
305	2	610	1	305			1	305
310			3	930			3	930
315			1	315			6	1,890
320	1	320	5	1,600			4	1,280
325			5	1,625			3	975
330			3	990			1	330
335	2	660	2	670			2	670

## No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals, &amp;c.—Continued.

## WELLAND CANAL—Continued.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage	Number.	Total Tonnage.	No.	Total Tonnage.	Number.	Total Tonnage.
340							1	340
355							2	710
360	1	360	1	360	1	360		
365							1	365
370							1	370
375			1	375				
380					1	380		
385					1	385		
390					1	390	1	390
395	1	395						
400	2	800			1	400		
405	1	405						
410	1	410	1	410				
425	1	425						
440	2	880	1	440				
450			1	450				
455	1	455	1	455				
460			1	460				
470					2	940	2	940
480							1	480
485	1	485					2	970
490			1	490	1	490	1	490
495							1	495
500	1	500	1	500			2	1,000
510	1	510					2	1,020
515							1	515
520			1	520			1	520
525							2	1,050
530	1	530						
540	2	1,080			1	540		
550			1	550				
555	1	555						
565							1	565
575	1	575						
580	1	580					1	580
590					1	590	1	590
600	1	600			1	600	2	1,200
610							1	610
615					1	615		
620					1	620		
630			1	630			1	630
640					2	1,280	2	1,280
650					1	650		
655					1	655		
660					1	660		
695							1	695
770	1	770						
800							1	800
805							1	805
840					2	1,680		
850					2	1,700		
870							1	870
880					1	880		
908			1	908				
910					1	910		
915					1	915		
920					1	920		

No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—*Concluded.*

WELLAND CANAL—*Concluded.*

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
929	1	929						
940					1	940		
950					1	950		
977	1	977						
980					1	980		
985					1	985		
990					1	990		
1,001			1	1,001				
1,013					1	1,013		
1,022					1	1,022		
1,024					1	1,024		
1,029					1	1,029		
1,035					1	1,035		
1,038					1	1,038		
1,041			1	1,041				
1,053					1	1,053		
1,054					1	1,054		
1,075					1	1,075		
1,168							1	1,168
1,172	1	1,172						
1,203					1	1,203		
1,267	1	1,267						
1,425					1	1,425		
1,441					1	1,441		
1,547					1	1,547		
1,548					1	1,548		
1,550					1	1,550		
1,553					2	3,106		
2,004					1	2,004		
<b>Total.....</b>	<b>81</b>	<b>29,290</b>	<b>113</b>	<b>23,680</b>	<b>80</b>	<b>46,537</b>	<b>97</b>	<b>31,918</b>

APPENDIX A—Continued.

No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals, during the Season of Navigation in 1891.

ST. LAWRENCE CANALS.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
5	37	185	17	85	6	30	1	5
10	8	80	3	30	3	30		
15	6	90	7	165	1	15	1	15
20	13	260	5	100	3	60	2	40
25	16	400	3	75	2	50		
30	5	150	2	60				
35	13	455	3	105	2	70	4	140
40	6	240	8	320			1	40
45	3	135	5	225				
50	4	200	8	400	2	100		
55	4	220	4	220				
60	3	180	26	1,560				
65	1	65	7	455			1	65
70	2	140	4	280				
75	1	75	8	600	1	75	1	75
80	1	80	8	640				
85	3	255	5	425			8	680
90	1	90	12	1,080			10	900
95	3	285	16	1,520			56	5,320
100	2	200	27	2,700			52	5,200
105	8	840	16	1,680			16	1,680
110			8	880			10	1,540
115	1	115	12	1,381			7	805
120	1	120	5	600			2	240
125	2	250	11	1,375			1	125
130			8	1,040				
135	1	135	7	945				
140			10	1,400				
145	2	290	11	1,595				
150			18	2,700				
155	3	465	37	2,635				
160	3	480	11	1,760			2	320
165			14	2,310	1	165		
170			5	850				
175			3	525				
180			4	720				
185			6	1,110				
190			1	190				
195			5	975				
200	2	400	3	600				
205			3	615				
220	1	220	1	220				
230	1	230	4	920				
235			2	470			1	235
240			1	240	1	240		
250			1	250				
255			1	255				
260			2	520				
270							1	270
275			1	275				
280							1	280
285			1	285				
295	1	295	1	295				
300			1	300			2	600
305	2	610	4	1,220				
310			2	620				
315			3	945				



## APPENDIX A—Continued.

No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—Continued.

ST. LAWRENCE CANALS—Continued.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
320			3	960			1	320
325	1	325					1	325
330			1	330				
335	2	670	3	1,005				
340			5	1,700				
345			2	690				
350			2	700				
360	1	360	1	360				
365			4	1,460				
370			1	370				
375			2	750				
385			1	385				
405	1	405						
410			1	410				
415			1	415				
435			1	435				
440	1	440	2	890				
450			1	450				
455	1	455						
475			1	475				
485			1	485				
500	1	500	1	500				
510	2	1,020						
515			1	515				
520			1	520				
545			1	545				
565			1	565				
575	1	575						
580	1	580						
585			2	1,170				
595	1	595						
600	1	600						
615	1	615	1	615				
630			1	630				
675	1	675						
690	1	690						
715	1	715						
836	1	836						
910					1	910		
1,068	1	1,068			1	1,068		
1,167							1	1,167
2,004					1	2,004		
Total....	180	19,359	443	60,906	25	4,817	183	20,387

## APPENDIX A—Continued.

No. 24.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals, &c.—Concluded.

## RIDEAU, OTTAWA AND CHAMBLY CANALS.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
5	33	165	158	790	8	40	13	65
10	19	190	25	250	9	90	1	10
15	9	135	8	120	4	60		
20	5	100	3	60	4	60		
25	8	200	5	125				
30	6	180	3	90				
35	4	130	7	245				
40	3	120	6	240	1	40	1	40
45	2	90	2	90				
50	4	200	4	200				
55	5	275	2	110				
60	4	240	3	180	1	60	3	180
65	1	65	3	195			5	325
70			4	280			2	140
75	3	225	3	225			1	75
80	2	160	6	480				
85			3	255			4	340
90	1	90	13	1,170			24	2,160
95			15	1,425			57	5,415
100	3	300	24	2,400			142	14,200
105	1	105	10	1,000	1	105	39	4,095
110			8	880			22	2,420
115			4	460			20	2,300
120	2	240	6	720			7	840
125	1	125	7	875			3	375
130			8	1,040			1	130
135			1	135				
140	1	140	7	980				
145	2	290	10	1,450				
150			16	2,400				
155	1	155	30	4,650				
160			14	2,240			1	160
165			13	2,145				
170			5	850				
175			2	350				
180			2	360				
185			2	370				
195			2	390				
205			1	205				
210			1	210				
230	1	230	1	230				
245			1	245				
270			1	270				
332	2	664						
338			2	676				
344	1	344						
368	2	736						
397	1	397						
Total.	127	6,291	451	32,061	28	455	346	33,270

APPENDIX A—Continued—CANALS.  
 No. 25.—STATEMENT showing the Classified Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1891.

WELLAND CANAL.

CANADIAN.				UNITED STATES.					
Class.	Steam Vessels.	No.	Tonnage.	Sailing Vessels.	No.	Tonnage.	No. Tonnage.		
1	250 to 1,267 tons	33	17,120	1 250 to 1,041 tons	48	18,640	1 250 to 1,168 tons	68	29,478
2	200 to 249 "	6	1,350	2 200 to 249 "	8	1,775	2 200 to 249 "	3	705
3	150 to 199 "	3	505	3 150 to 199 "	8	1,390	3 150 to 199 "	11	1,335
4	100 to 149 "	2	230	4 100 to 149 "	4	535	4 100 to 149 "	1	85
5	50 to 99 "	5	365	5 50 to 99 "	10	765	5 50 to 99 "	14	315
6	Under 50 "	32	720	6 Under 50 "	35	575	6 Under 50 "	97	31,918
	Total	81	20,230	Total	113	23,680	Total	46,537	

ST. LAWRENCE CANALS.

1	250 to 1,068 tons	23	12,029	1 250 to 630 tons	59	23,285	1 250 to 2,004 tons	3	3,982	7	2,962
2	200 to 249 "	4	850	2 200 to 249 "	14	3,065	2 200 to 249 "	1	240	1	235
3	150 to 199 "	6	945	3 150 to 199 "	86	10,975	3 150 to 199 "	1	165	2	320
4	100 to 149 "	17	1,950	4 100 to 149 "	133	16,296	4 100 to 149 "	3	150 to 199 "	88	9,590
5	50 to 99 "	23	1,590	5 50 to 99 "	98	7,180	5 50 to 99 "	5	50 to 99 "	76	7,040
6	Under 50 "	107	1,995	6 Under 50 "	53	1,105	6 Under 50 "	6	Under 50 "	9	240
	Total	180	19,359	Total	443	60,906	Total	4,817	20,387		

RIDEAU, OTTAWA AND CHAMBLEY CANALS.

1	250 to 397 tons	6	2,141	1 250 to 388 tons	3	946	1 250 to 300 tons	1	250 to 300 tons		
2	200 to 249 "	1	230	2 200 to 249 "	4	890	2 200 to 249 "	2	200 to 249 "		
3	150 to 199 "	11	1,355	3 150 to 199 "	70	11,355	3 150 to 199 "	3	150 to 199 "		
4	100 to 149 "	20	1,255	4 100 to 149 "	101	12,340	4 100 to 149 "	4	100 to 149 "		
5	50 to 99 "	89	1,310	5 50 to 99 "	217	4,520	5 50 to 99 "	5	50 to 99 "		
6	Under 50 "	127	6,291	6 Under 50 "	451	32,061	6 Under 50 "	6	Under 50 "		
	Total	260	12,372	Total	866	62,022	Total	455	33,270		

No. 26.—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 are per ton, unless otherwise specified.	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chamblly 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.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Class No. 1.</i>								
Vessels, steam . . . . . per ton.	0 01½	0 01½	0 02½	0 00¾	0 00¾	0 01½	0 00½	0 01½
do sail and other . . . . . do	0 02¼	0 02¼	0 03¾	0 01½	0 01¼	0 02¼	0 01	0 02½
<i>Class No. 2.</i>								
Passengers, 21 years of age and upwards	0 10	0 10	0 20	0 10	0 05	0 08	0 02½	0 09½
Passengers, under 21 years each . .	0 05	0 05	0 10	0 05	0 02	0 04	0 01¼	0 04½
<i>Class No. 3.</i>								
Bricks, cement and water lime . . . . .	0 15	0 20	0 20	0 15	0 10	0 07	0 06	0 19½
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, animal, not enumerated . . . . .								
Stone, for cutting . . . . .								
Wheat . . . . .								
<i>Class No. 4.</i>								
All other articles, not enumerated.	0 15	0 20	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.	THROUGH.	Whitlaw's to Hastings.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
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.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
0 00 <sup>3</sup> / <sub>5</sub> 0 00 <sup>1</sup> / <sub>4</sub>	0 00 <sup>3</sup> / <sub>5</sub> 0 00 <sup>1</sup> / <sub>4</sub>	0 00 <sup>3</sup> / <sub>5</sub> 0 00 <sup>1</sup> / <sub>4</sub>	0 00 <sup>3</sup> / <sub>5</sub> 0 00 <sup>1</sup> / <sub>4</sub>	0 00 <sup>3</sup> / <sub>5</sub> 0 01	0 00 <sup>3</sup> / <sub>5</sub> 0 00 <sup>1</sup> / <sub>4</sub>
0 01 0 00 <sup>1</sup> / <sub>2</sub>	0 01 0 00 <sup>1</sup> / <sub>2</sub>	0 01 0 00 <sup>1</sup> / <sub>2</sub>	0 01 0 00 <sup>1</sup> / <sub>2</sub>	0 04 0 02	0 01 0 00 <sup>1</sup> / <sub>2</sub>
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. 26.—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.	Chamblly 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.
<i>Class No. 5.</i>	¢ cts.	¢ cts.	¢ cts.	¢ cts.	¢ cts.	¢ cts.	¢ cts.	¢ cts.
Bark	0 20	0 20	0 20	0 15	0 10	0 07	0 06	0 19½
Barrels, empty, each	0 02	0 02	0 02	0 02	0 02	0 02	0 01	0 03½
Boat knees, each	0 05	0 05	0 05	0 02	0 02	0 02	0 01	0 03½
Floats, per 1,000 lineal feet	1 40	1 40	1 40	1 40	1 20	1 05	0 50	2 05½
Firewood, per cord, in vessels	0 20	0 20	0 20	0 20	0 10	0 15	0 08	0 23
do rafts	0 25	0 25	0 25	0 25	0 15	0 19	0 09	0 30½
Hoops	0 25	0 25	0 25	0 20	0 15	0 15	0 10	0 30
Masts and spars, telegraph poles, per ton of 40 cubic ft., in vessels	0 15	0 15	0 15	0 05	0 05	0 08	0 07	0 13½
Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts	0 20	0 20	0 20	0 10	0 10	0 15	0 10	0 22½
Railway ties, in vessels, each	0 01	0 01	0 01	0 00½	0 00½	0 00½	0 00½	0 01½
do rafts, each	0 02	0 02	0 02	0 01	0 01	0 02	0 01	0 02½
Sawed stuff, boards, planks, scantling and sawed timber, per M. feet, board measure, in vessels	0 30	0 30	0 30	0 15	0 10	0 11½	0 06½	0 20
Sawed stuff, boards, plank, scantling and sawed timber, per M. feet, board measure, in rafts	0 60	0 60	0 60	0 30	0 20	0 19	0 09	0 36½
Square timber, per M. cubic feet, in vessels	3 00	3 00	3 00	1 00	1 00	0 56	0 44	1 69
Square timber, per M. cubic feet, in rafts	4 50	4 50	4 50	2 00	2 00	1 12	0 63	3 13
Wagon stuff, woodenware and wood, partly manufactured, per ton of 40 cubic feet	0 40	0 40	0 40	0 40	0 25	0 30	0 20	0 55
Shingles, per M.	0 06	0 06	0 06	0 06	0 04	0 04½	0 02½	0 08
Split posts and fence rails per M., in vessels	0 40	0 40	0 40	0 40	0 20	0 23	0 12	0 42
Split posts and fence rails per M., in rafts	0 80	0 80	0 80	0 80	0 40	0 38	0 17	0 77
Saw-logs, each standard log	0 08	0 08	0 08	0 08	0 05	0 06	0 06	0 13
Staves and headings, brls. per M.	0 40	0 40	0 40	0 20	0 15	0 15	0 10	0 30
do pipe do	1 50	1 50	1 50	1 00	1 00	0 75	0 50	1 75
do W. India, per M.	0 75	0 75	0 75	0 60	0 25	0 45	0 25	0 65
do salt barrel, sawn or cut, per M.	0 08	0 08	0 08	0 04	0 03	0 03	0 02	0 06
Traverses, per 100 pieces	0 50	0 50	0 50	0 50	0 40	0 38	0 15	0 67½
Hop poles, per 1,000 pieces	2 00	2 00	2 00	2 00	1 50	1 50	0 65	2 65
<i>Special Class.</i>								
Gypsum, crude (per O. C., 28th October, 1882)	0 15	0 05		0 05	West ward			
Coal	0 20	0 20	0 20	0 15	0 10	0 08	0 05	0 17½
Stone, unwrought, corded and not suitable for cutting, per cord	0 75	0 75	0 75	0 60	0 37½	0 28	0 24	0 77½
Kryolite, iron ore or chemical ore.	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Ice	0 05	0 05	0 05					

of the Dominion—Continued.

TRENT VALLEY CANAL.

1ST SECTION.	2ND SECTION.	3RD SECTION.	4TH SECTION.	THROUGH.	Whitlaw's to Hastings.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
Tolls Chargeable at Fenelon Falls.	Tolls Chargeable to Bobcaygeon.	Tolls Chargeable to Buckhorn.	Tolls Chargeable at Burleigh.	Tolls Chargeable at Fenelon Falls.	Tolls Chargeable to Whitlaw's.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
0 01	0 01	0 01	0 01	0 04	0 01
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
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 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{1}{2}$	0 00 $\frac{3}{4}$
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
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 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
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 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
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 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 22	0 05 $\frac{1}{2}$
0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 02	0 00 $\frac{1}{2}$
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 03 $\frac{1}{2}$	0 03 $\frac{1}{2}$	0 03 $\frac{1}{2}$	0 03 $\frac{1}{2}$	0 14	0 03 $\frac{1}{2}$
0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
Free.	Free.	Free.	Free.	Free.	Free.

Sec. 76.—Standard for estimating weights, for canal tolls.

	Tons.		Tons.
2,000 lbs. avoirdupois	1	Stone, 12 cubic feet	1
Per M. is per thousand feet		Stone, 1 cord	7½
Per Mille, is per thousand pieces		Whiskey, 4 barrels or 215 gallons	1
Green fruit, 9 barrels are	1	Empty barrels, 10	1
Ashes, 3 barrels are	1	Barrel hoops, 10 Mille	1
Bark, 4 cords	1	Board and other sawed lumber, 600 feet board measure	1
Beef, 7 barrels	1	Boat knees, 4	1
Biscuit and crackers, 9 barrels	1	Firewood, 1 cord	3
Bricks, common, 1,000	2	Hop poles, 60 or 40 cubic feet	1
Butter, 22 kegs or 7 barrels	1	Shingles, 12 M. or bundles	1
Cattle, 3	1	Split posts and fence rails, 1 Mille	1
Cement and water lime, 7 barrels	1	Staves and headings, pipe, 1 Mille	8
Fire bricks, 1,000	3	do W. India, 1 Mille	4
Fish, 7 barrels	1	do barrel, 1 Mille	2½
Flour, 9 barrels	1	do salt barrel, 1 Mille	1
Gypsum and manganese, 6 barrels	1	Saw-logs, standard, 1	1
Horses, 2	1	Square timber, 50 cubic feet	1
Lard and tallow, 7 barrels or 2½ kegs	1	Telegraph poles, 10 or 40 cubic feet	1
Liquors and spirits, 215 gallons	1	Masts and spars, 40 cubic feet	1
Liquors, all others, 215 gallons	1	Railroad ties, 16 or 50 cubic feet	1
Nuts, 9 barrels	1	All other woodenware, or partly manufactured wood, 40 cubic feet as per tariff	1
Oysters, 6 barrels	1	Traverses, 40 cubic feet or 5 pieces	1
Pork, 7 barrels	1	Floats, 50 lineal feet	1
Salt, 7 barrels	1		
Seed, 9 barrels	1		
Sheep, 20	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 :—

	Rate.
<b>WELLAND CANALS.</b>	
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	
<b>ST. LAWRENCE CANALS.</b>	
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.	
<b>CHAMBLY CANAL.</b>	
Sec. 79. Vessels and property passing from Sorel to Chambly, to pay	
Vessels and property passing from Chambly to St. John's, to pay	



## 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. 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 saw-logs 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 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. 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 Lock, 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 reshipped 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
Mcal	do per barrel	4
Pork, beef, butter and lard	do	5
Muscovado sugar	do per hhd, 10 cents; per brl.	5
Liquors	{ do per pipe, 15 cents; per pun.	12
Iron, bars	{ do per hhd, 10 cents; per qr. cask	7
Iron, pig	do per ton	24
Salt, except at the St. Gabriel sheds	do	12
Salt at the St. Gabriel sheds, Montreal, after the first 48 hours	do per 100 minots	36
Coals, crates, cases, &c.	do per bag	$\frac{1}{2}$
Coals	do per ton weight or measurement	24
	do per chaldron	12

Sec. 91. (a) No charge shall be made for property stored in the sheds of the Lachine Canal basin for the first 48 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 48 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 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 VESSELS TRADING TO LOWER PORTS AND ENTERING THE LACHINE CANAL AT MONTREAL HARBOUR.

Sec. 93. 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 48 hours for discharge of cargo before the following be incurred; and said discharge to be made below the St. Gabriel Lock.

	Mills.
Steam-boats measuring 50 tons or upwards, per ton register, per day of 24 hours.	8
All other vessels measuring 50 tons or upwards, per ton register, per day of 24 hours.	4
	Cents.
Steam-boats 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, and additional charge of four cents per cord. O. C. August 7, 1860.

(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 th 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 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.

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 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 24 hours, or part of a day they remain in the harbour, reckoned from the hour of their arrival to that of their departure.....	Per ton register.
	1 cent.
On all other vessels, per day, as aforesaid.....	½ do

Sec. 100. *Wharfage Dues.*

All goods, wares and merchandise, not elsewhere specified.....	Per ton.
	25 cents.
Hay, straw, pig and scrap iron, pot and pearl ashes.....	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.....	7½ 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 cannot be conveniently ascertained, it shall be lawful for the Harbour Commissioners to levy a rate of ¼ of 1 per cent on the value thereof.

(b.) Each entry shall pay not less than five cents.

(c.) All property landed on the wharves for reshipment 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.....	3 brls. to 1 ton.
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, &amp;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 Tim-	For each succeed-	For wintering in
	ber, &c., to include use of Basin and Wharf for one Month.	ing month during the Season of Navigation.	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
Plank and boards to include all kinds of sawed lumber in rafts, per M feet, board measure. ....	3	2	3
Saw-logs, 12 feet long, if longer in same proportion per log. ....	1	1	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. ....	8	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, Ottawa, steamers per season. ....	\$ 8 00
do do barges do. ....	4 00
Inside locks do steamers do. ....	50 00
do other stations do do. ....	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 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. 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 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 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 29th 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 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  $\frac{1}{4}$  of Rideau Canal rates.

From Perth to Kingston, 2 sections, or  $\frac{1}{2}$  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.

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
15 tons and under . . . . .	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 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, 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. Transshipment, 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 of the 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 of the 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's 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. MCGEE,  
*Clerk of the 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.

(Signed,) JOHN J. MCGEE,  
*Clerk of the 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.

(Signed,) JOHN J. MCGEE,  
*Clerk of the 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 ;

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. 4th April, 1892.

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, intitled: "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.:—

That a refund be made of a portion of the Canal tolls collected on wheat, Indian corn, pease, barley, rye, oats, flax seed and buckwheat which have been carried through the Welland Canal, and the St. Lawrence Canals to Montreal or to any port east of Montreal in all cases where the said products so carried are exported, and in such cases only.

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

That the products aforesaid on which the rebate of tolls may be claimed shall be shown to have been originally shipped for Montreal or for some port east of Montreal and shall be shown to have been carried to Montreal or to some port east of Montreal, and actually sent out of the country.

That the right to this rebate shall not be lost by reason of intermediate transshipment, provided that the place of such transshipment is one within the Dominion of Canada.

That the right of this rebate shall extend to any portions of cargoes lightered at Port Colborne and re-shipped at Port Dalhousie, and also to shipments of the above named products made from any Canadian Lake Ontario Port.

That payment of the amount to be refunded be made, from time to time, as cargoes of the said products are despatched for export from Montreal or from some port east of Montreal.

That this Order in Council remain in force for the present year, 1892, only.

(Signed) JOHN J. MCGEE,  
Clerk of the Privy Council.

The 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, 1892.

On a memorandum dated 19th April, 1892, from the Minister of Railways and Canals, submitting a memorandum, copy herewith, from the proper officers of the Department of Railways and Canals upon certain objections raised by the Montreal Board of Trade, by forwarders and others to the existing tonnage and wharfage charges on vessels and freight using the basins of the Lachine Canal at Montreal.

From such memorandum, which is of a detailed and explanatory character, it appears that the complaints made are well founded, the complications shown being due to the fact that various Orders in Council have from time to time been passed, fixing and changing rates and charges to meet particular cases as they arose; and pending a general revision of the whole matter of canal regulations, tolls, and charges which seems to be desirable, it is expedient that the subject of these complaints should be dealt with at once.

The Minister, accordingly, on the advice of the Canal Revenue Officers, endorsed by the Superintending Engineer of the Lachine Canal, and the Deputy Head of the Department of Railways and Canals, recommends the adoption of the following:—

1st. The cancellation of Section No. 93 of Consolidated Orders in Council of the 26th October, 1889, Chapter 115, and the substitution therefor of the following:—

*Wharfage Dues on Coal for local consumption in Montreal.*

Sec. 93. Coal for local consumption in Montreal, landed on Canal property between Montreal Harbour and Côte St. Paul, from vessels other than sea-going, and entering the Lachine Canal from Montreal Harbour, shall be charged wharfage dues at the rate of 5 cents a ton.

Coal screenings shall be charged 3 cents a ton.

2nd. The cancellations of Sections Nos. 98, 99, 100 and 101 and the substitution of the following:—

*Wharfage Dues in all basins of the Lachine Canals on Sea-going vessels.*

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 basin of said canal and of the revenue that may be derived from their use.

All property delivered or received by sea going vessels in the Lachine Canal basins at Montreal (except the old lower basin) shall be charged wharfage dues as follows:—

All goods, wares and merchandise, not elsewhere specified.....	25 cents per ton.
Hay, straw, pig and scrap iron, pot and pearl ashes.....	20 " "
Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep and swine.....	15 " "
Ballast, clay, fire bricks, gypsum, lime, marble, phosphate, sand salt, coal and coke, grain and seeds of all kinds.....	7½ " "
Special. Bricks, 10 cents per 1,000; cordwood, 5 cents per cord; lumber, 10 cents per 1,000 feet, board measure.	
Bullion specie.....	Free.
Coal screenings.....	3 " "

Each entry shall pay not less than 5 cents.

All property landed on the canal wharves for reshipment, or transhipped in canal waters shall pay one wharfage only.



Lumber upon which tolls have been paid for passage down the Lachine Canal and which is reshipped from the wharves or vessels into sea-going vessels shall pay wharfage dues equal to one section of canal tolls, viz., 3 $\frac{3}{4}$  cents per 1,000 feet, board measure.

The Committee submit the above recommendation for Your Excellency's approval.

(Signed) JOHN J. MCGEE,  
*Clerk of the Privy Council.*

To the Honourable  
The Minister of Railways and Canals.

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AT THE GOVERNMENT HOUSE AT OTTAWA.

MONDAY, 6th day of June, 1892.

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 Order in Council of the 29th day of April, 1891, 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, and excursion parties leaving St. Catharines for Toronto or Hamilton, shall be, and the same are hereby continued in force for the present season of navigation only.

(Signed) JOHN J. MCGEE,  
*Clerk of the Privy Council.*

The Honourable  
The Minister of Railways and Canals.

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AT THE GOVERNMENT HOUSE AT OTTAWA.

FRIDAY, the 15th day of July, 1892.

PRESENT :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

Whereas, by a clause of the Order in Council of the 4th April, 1892, respecting the rebate to be allowed on certain food products traversing the Welland and St. Lawrence Canals bound for Montreal or some port east of Montreal for exportation, it was provided that the right to such rebate should extend to shipments of the said products made "from any Canadian Lake Ontario Port," this provision being taken from the Order in Council of the 29th April, 1891.

And whereas, it was not intended that the restriction in favour of Canadian Lake Ontario Ports should be continued,—

His Excellency, under 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 said Order in Council of the 4th April, 1892, shall be and the same is hereby amended by the omission of the word "Canadian" from the clause in question; and that such amendment shall have force and effect from the 4th day of April last.

(Signed) JOHN J. MCGEE,  
*Clerk of the Privy Council.*

O. C., 2nd August, 1892.

His Excellency, under the authority conferred upon him by chapter 37 of the Revised Statutes, 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 6th June, 1892, reducing by one-half the usual passenger tolls on the Lachine Canal (such reduction applying to cases where excursion parties are conveyed in steamers specially chartered for that purpose, going and returning the same day), shall be and the same are hereby extended to the Beauharnois Canal for the present season of navigation only.

(Signed) JOSEPH POPE,  
*Asst. Clerk of the Privy Council.*

The Honourable  
The Minister of Railways and Canals.

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1891.		Accrued, year ended 30th June, 1892.		Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$	cts.	\$	cts.	\$				
374	60	187	30	561	90	1 Welland Canal....	Wood & Green.....	R. Laurie .....
1,320	00	240	00	1,560	00	do .....	S. Neelon .....	R. & J. Laurie .....
110	00	20	00	130	00	do .....	do .....	do .....
88	00	176	00	264	00	do .....	do .....	A. Muir .....
1,050	00			1,050	00	do .....	Andrews & Son.....	Donaldson, Andrews & Ross.....
1,270	50			1,270	50	do .....	do .....	do .....
300	00	50	00	350	00	do .....	do .....	Wm. Hutchison.....
1,170	00	260	00	1,430	00	do .....	Tuttle, Date & Rodden..	J. L. Ranney.....
75	00	150	00	225	00	do .....	S. Neelon .....	C. Phelps.....
140	00	40	00	180	00	do .....	Norris & Neelon.....	do .....
167	66	167	66	335	32	do .....	Whitman & Barnes Manu- facturing Co.....	R. Collier.....
420	00	140	00	560	00	do .....	J. B. Smith.....	Thomas Towers.....
250	00	500	00	750	00	do .....	do .....	St. Catharines Water Power Co.....
		20	00	20	00	do .....	do .....	St. Catharines and Wel- land Gas-light Co.....
825	00	75	00	900	00	do .....	do .....	J. C. & J. Gillespie.....
35	00			35	00	do .....	do .....	St. Catharines Street Railway Co.....
100	50			100	50	do .....	do .....	John F. Rees.....
		10	00	10	00	do .....	do .....	Duncan Dittrick.....
		75	00	75	00	do .....	do .....	Whitman & Barnes Ma- nufacturing Co.....
10	00	10	00	20	00	do .....	do .....	H. Jarvis.....
		2	00	2	00	do .....	do .....	St. Catharines & Niagara Central Ry. Co.....
756	00	216	00	972	00	do .....	McLeary & McLean...	Wm. Beatty .....
480	00	240	00	720	00	do .....	Lybster Cotton Co.....	Gordon & McKay.....
120	00	240	00	360	00	do .....	do .....	John Riordon .....
100	00	200	00	300	00	do .....	do .....	do .....
200	00	400	00	600	00	do .....	Merritton Cotton Co....	King & Dolan.....
800	00	400	00	1,200	00	do .....	do .....	Corporation of Village of Merritton.....
90	00	60	00	150	00	do .....	do .....	James Wilson .....
150	00	50	00	200	00	do .....	do .....	Lybster Cotton Mills...
		145	00	145	00	do .....	do .....	F. T. Walton.....
31	80	63	60	95	40	do .....	Thorold & W. C. Co....	Wm. Beatty .....
100	00	50	00	150	00	do .....	John McDonagh.....	W. H. Ward.....
		15	00	15	00	do .....	do .....	Capt. N. J. Wiggle.....
		114	00	114	00	do .....	do .....	Lock Houses.....
726	00	146	00	872	00	do .....	John McDonagh.....	W. H. Ward.....
3	00	1	00	4	00	do .....	do .....	St. Catharines & Niagara Central Ry. Co.....
240	00	80	00	320	00	do .....	do .....	John Battle.....
222	00	222	00	444	00	do .....	Howland, Jones & Co....	P. Howland.....
65	00	130	00	195	00	do .....	Jas. Norris.....	Brown & Ross.....
120	00	80	00	200	00	do .....	Arch. Dobie.....	Welland Canal Loan Co.
165	00	110	00	275	00	do .....	C. J. Jones.....	McPherson & Wier.....

A—Continued.

Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which the Account is made up.	Abatement authorized.		Paid during Fiscal Year.	Balance due, 30th June, 1892.	Total.
			\$	cts.			
Grist-mill, waste weir No. 1, Port Dalhousie. ....	1	June 30, 1892	78	05	93 65	390 20	561 90
Mill lot do do	2	do	100	00		1,460 00	1,560 00
Lot near do do	3	do	8	30		121 70	130 00
Docks near do do	4	do			88 00	176 00	264 00
Dry dock, part of lock No. 1 do	5	Jan. 1, 1882				1,050 00	1,050 00
Saw-mill, waste weir, No. 1 do	6	do				1,270 50	1,270 50
Wharf lot, east end east pier do	7	Jan. 1, 1892			350 00		350 00
Union mill, near lock No. 2, St. Catharines. ....	8	do			1,170 00	260 00	1,430 00
Merchant red mill do	9	do				225 09	225 00
Wharf at lock No. 4 do	10	do				180 00	180 00
Saw-mill at lock No. 5 do	11	do			167 66	167 66	335 32
Grist-mill at new lock No. 10 do	12	do				560 00	560 00
Water power from locks 3 to 11 do	13	do			500 00	250 00	750 00
Wharf lot at lock No. 4 do	14	Jan. 1, 1893			20 00		20 00
Lot near at lock No. 5 do	15	Oct. 1, 1892				900 00	900 00
Privilege of placing bridge over water way, St. Catharines	16	do 1886				35 00	35 00
16½ acres of lot 11, con. 7, ground, for pasture, St. Catharines.	17	Mar. 1, 1885				100 50	100 50
Lot for wood and coal yard.	18	do			10 00		10 00
Old lock-house at lock No. 6, St. Catharines. ....	19	Oct. 1, 1892			75 00		75 00
Part of lot 16, con. 4, ground, for sail loft, St. Catharines	20	July 1, 1893				20 00	20 00
Swing bridge over canal, Thorold	21	Oct. 1, 1891				2 00	2 00
Saw-mill at lock No. 20, Merritton	22	June 30, 1892				972 00	972 00
Cotton factory at lots 12, 13 and 14 do	23	do			460 00	260 00	720 00
Water lots at lots 16, 18, 19 and 21 do	24	do			240 00	120 00	360 00
Paper factory, lot 17 do	25	do			200 00	100 00	300 00
Water supply to cotton mills do	26	do			500 00	100 00	600 00
Lot between lock No. 25 and guard-gates, Merritton.	27	do				1,200 00	1,200 00
Water supply at Merritton	28	do			90 00	60 00	150 00
Part of lots 11 and 12, con. 10, ground, Merritton	29	Feb. 1, 1893				200 00	200 00
Part of lots 9 and 10, con. 10, ground, Merritton.	30	Jan. 1, 1892			145 00		145 00
Tannery at lock No. 22, Thorold	31	June 30, 1892			63 60	31 80	95 40
Factory at lock No. 23 do	32	do				150 00	150 00
Wharf lot near lock No. 2 do	33	June 30, 1893			15 00		15 00
Lock-houses do	34	do			114 00		114 00
Saw-mill at lock No. 23, Thorold.	35	June 30, 1893				872 00	872 00
Tracks through the towns of Thorold and Merritton	36	Oct. 1, 1892				4 00	4 00
Plaster mills at lock No. 25, Thorold	38	June 30, 1892			280 00	40 00	320 00
Grist-mills at lock No. 25, Thorold	39	do			333 00	111 00	444 00
Merchants' mill do 23 do	40	do			130 00	65 00	195 00
Machine shop do 22 do	41	do			120 00	80 00	200 00
do do 23 do	42	do			220 00	55 00	275 00

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1891.	Accrued, year ended 30th June, 1892.	Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ cts.	\$ cts.	\$ cts.				
5 00	5 00	10 00	43	Welland Canal.		Corporation of Thorold..
180 00	120 00	300 00	44	do	J. Davey, jun	John Battle.
5,007 46		5,007 46	45	do		Wright & Duncan
80 00	20 00	100 00	46	do		P. H. Musson
940 00		940 00	47	do	J. & J. Abbey	McFarland & Lemnon..
129 00	86 00	215 00	48	do		John Hill.
710 00		710 00	49	do		Port Robinson Dry Dock Co.
141 15		141 15	50	do	Henderson Bros.	Eli Mead.
151 30		151 30	51	do	do	A. Sherwood.
300 00		300 00	52	do	do	Henderson Bros.
40 00		40 00	53	do		F. O. White.
1 00	1 00	2 00	54	do		Grand Trunk Ry.
1 00	1 00	2 00	55	do		Corporation County of Welland
90 00	45 00	135 00	56	do		Phelp Brothers.
100 00	20 00	120 00	57	do		James Bridges.
5 00	1 00	6 00	58	do		H. A. Rose
	120 00	120 00	59	do		C. J. Page & Co.
40 00	80 00	120 00	60	do		Corporation of Town of Welland
	5 00	5 00	61	do		Caleb Swayze
	240 00	240 00	62	do		T. F. Brown Bros
	68 00	68 00	63	do		W. H. Crowe
	125 00	125 00	64	do		H. G. Gonder
37 50	25 00	62 50	65	do	L. G. Carter	A. K. Schofield.
	20 00	20 00	66	do		Welland Railway Co.
	25 00	25 00	67	do	J. & F. Conlin	John Gordon
	1 00	1 00	68	do		Corporation of Port Colborne.
	24 00	24 00	69	do		L. McGlashan.
382 19	160 00	542 19	70	do	Edward Lee	John Graybiel.
60 00	10 00	70 00	71	do		Alex. Lattimore.
1,129 97	143 00	1,272 97	72	do	A. McDonald.	Wm. Melanby.
750 00	180 00	930 00	73	do	R. Chambers.	H. & N. Davis.
743 94	130 00	873 94	74	do	S. & J. Haney	S. Darling
395 61	80 00	475 61	75	do	S. Walthe & Co.	L. J. Weatherly
922 72	113 00	1,035 72	76	do	S. & J. Haney	Brown & Merritt.
383 34	153 34	536 68	77	do	Wm. Schofield	L. Brocklebank
1,259 50	208 00	1,467 50	78	do	M. A. Smith	Chisholm & Miner
70 00		70 00	79	do		John Taylor
60 00		60 00	80	do		Geo. Wallace.
345 00		345 00	81	do		Rolston & Haskins
360 00	360 00	720 00	82	do	Moody & Son	R. F. Lattimore.
26,895 74	7,654 90	34,550 64				
123 00	246 00	369 00	1	Williamsburg Canal		Wm. Gibson.
4,960 00	160 00	5,120 00	2	do	Edwardsburg Starch Fac.	Benson & Aspden
1,702 62	140 00	1,842 62	3	do	P. O'Keef	P. Carmen
50 00	500	550 00	4	do		J. C. Irvine
	12 00	12 00	5	do		W. T. Benson
	5 00	5 00	6	do	E. E. Gilbert	Wm. Clegg
	5 00	5 00	7	do		John Reid

A—Continued.

Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which Ac- count is made up.	Abatement author- ized.		Paid during Fiscal Year.		Balance due on 30th June, 1892.		Total.	
			¢	cts.	¢	cts.	¢	cts.	¢	cts.
Part lot No. 17, near lock No. 24, Thorold	43	Oct. 1, 1892			10	00			10	00
Water lot, Thorold	44	June 30, 1892			180	00	120	00	300	00
Grist-mill, Allanburg	45	Jan. 1, 1882					5,007	46	5,007	46
Storehouse do	46	April 1, 1892					100	00	100	00
Saw-mill, Port Robinson.	47	Feb. —, 1876					940	00	940	00
Grist-mill do	48	June 30, 1892			129	00	86	00	215	00
Water to float vessels, Port Robinson.	49	do					710	00	710	00
Wharf lot, Welland	50	Dec. 31, 1866					141	15	141	15
do do	51	do					151	30	151	30
do do	52	June 30, 1878					300	00	300	00
Lot for pasture, Welland	53	April 1, 1884					40	00	40	00
Water supply through 10 in. pipe, Welland	54	Dec. 1, 1892					2	00	2	00
do to court-house do	55	June 30, 1892					2	00	2	00
Surplus water, in winter only, near aqueduct, Welland	56	Jan. 1, 1893			45	00	90	00	135	00
Lot on west main street, Welland	57	Aug. 1, 1891					120	00	120	00
Lot for building purposes	58	Mar. 1, 1892					6	00	6	00
Water power for town of Welland	59	Oct. 1, 1892					120	00	120	00
do for pump-house, &c., Welland	60	Jan. 1, 1893			80	00	40	00	120	00
Building lot, Welland	61	July 1, 1893			5	00			5	00
Grist-mill do	62	Oct. 1, 1892			240	00			240	00
Lot for piling lumber, Welland	63	July 1, 1892			68	00			68	00
Lot for general purposes	64	Nov. 21, 1892			125	00			125	00
Wharf lot, Port Colborne	65	June 30, 1892			37	50	25	00	62	50
Lot for elevator, Port Colborne	66	Jan. 1, 1892			20	00			20	00
Lot for coal and wood yard, Port Colborne	67	June 30, 1892			12	50	12	50	25	00
Roadway across canal lands to G.T.R. crossing, Port Colborne.	68	Nov. 1, 1893			1	00			1	00
Lots for factory at village of Petersburg	69	Mar. 1, 1893			24	00			24	00
Grist-mill, Marshville	70	June 30, 1892			462	21	79	98	542	19
Part of lots 18 and 19, con. 4, Wainfleet, Mars- ville	71	July 1, 1893					70	00	70	00
Saw-mill, Broad Creek	72	June 30 1892					1,272	97	1,272	97
Grist and saw-mill, Dunnville	73	do					930	00	930	00
Grist-mill, do	74	do					873	94	873	94
Carding-mill, do	75	do					475	61	475	61
Plaster-mill, do	76	do					1,035	72	1,035	72
Grist-mill, do	77	do			153	34	383	34	536	68
Saw-mill, do	78	do					1,467	50	1,467	50
Wharf lot, do	79	Jan. 1, 1882					70	00	70	00
Lot for tannery do	80	Mar. 1, 1884					60	00	60	00
Water power for electric light, Dunnville	81	Jan. 1, 1893					345	00	345	00
Water lot, do	82	Jan. 1, 1892					720	00	720	00
					186	35	7,097	46	27,266	83
									34,550	64
Grist-mill, Mill street, Cardinal	1	June 30, 1892			246	00	123	00	369	00
Starch factory, Edwardsburg	2	do					5,120	00	5,120	00
Tannery do	3	do					1,842	62	1,842	62
Part of lot, 6, con. 1, Edwardsburg	4	July 1, 1891					55	00	55	00
Pasture grounds, Galops Canal	5	Mar. 1, 1893			12	00			12	00
do do	6	Aug. 1, 1893					5	00	5	00
Lot near, do	7	do					5	00	5	00

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July 1891.	Accrued, year ended 30th June, 1892.	Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ cts.	\$ cts.	\$ cts.				
70 00	140 00	210 00	8	Williamsburg Canal		
70 00	140 00	210 00	9	do	Cameron & McInnis.	M. T. Beach.
100 00	20 00	120 00	10	do		J. Molson, jun.
48 00		48 00	11	do		W. M. Doran.
35 00	70 00	105 00	12	do		J. H. Ross.
1 00	1 00	2 00	13	do		Municipality of Iroquois.
10 00	10 00	20 00	14	do		School Trustees.
	70 00	70 00	15	do		Sydney Shaver.
						Corp. Village of Morrisburg.
7,169 62	1,024 00	8,193 62				
120 00	240 00	360 00	1	Cornwall Canal		Andrew Hodge.
75 00	150 00	225 00	2	do	Permanent Loan Co.	A. F. Gault
	135 00	135 00	3	do		Geo. Stephen.
	120 00	120 00	4	do		Stormont Cotton Co.
	25 00	25 00	5	do		Flack Bros
	120 00	120 00	6	do		Toronto Paper Co
15 00	5 00	20 00	7	do		do
270 00		270 00	8	do		W. D. & G. C. Wood
80 00		80 00	9	do		Henry Harrison
247 50		247 50	10	do		J. & C. H. Wood.
807 50	795 00	1,602 50				
60 00		60 00	1	Beauharnois Canal		St. Amour & Co.
100 00		100 00	2	do	N. Papineau	D. P. Pease
80 00	20 00	100 00	3	do		J. Demers & Co
60 00	20 00	80 00	4	do		M. Julien.
	1,500 00	1,500 00	5	do		A. Buntin.
20 00	20 00	40 00	6	do		do
60 00	120 00	180 00	7	do	T. & W. Bolduc.	F. H. Poitras
120 00	120 00	240 00	8	do	J. Wattie.	P. Poulin.
400 00	3,900 00	4,300 00	9	do		Montreal Cotton Co
20 00	20 00	40 00	10	do		do
40 00	40 00	80 00	11	do		Jas. T. Anderson.
35 00	35 00	70 00	12	do		Lake St. Francis Navigation Co
46 00	23 00	69 00	13	do	Valleyfield Caning Co.	R. N. Walsh
92 00	23 00	115 00	14	do		Jas. Anderson.
100 00	20 00	120 00	15	do	E. Dion	C. E. Wilson.
160 00	40 00	200 00	16	do		O. Trempe.
60 00	20 00	80 00	17	do	J. T. Anderson	J. Cardinal.
	10 00	10 00	18	do		O. Longtin.
20 00	20 00	40 00	19	do		O. P. Dennie.
15 00	15 00	30 00	20	do		Estate A. Hodge.
	14 00	14 00	21	do		Alex. Coburn
40 00	40 00	80 00	22	do		Robt. Steele.
	30 00	30 00	23	do		Louis Leduc.
40 00		40 00	24	do		E. French.
40 00	8 00	48 00	25	do		S. A. Brodeur
	40 00	40 00	26	do		J. H. Wilson.
60 00	15 00	75 00	27	do		Col. McPhee.
30 00	10 00	40 00	28	do	F. H. Barbeau.	J. Laroque
80 00	20 00	100 00	29	do		Jas. Wattie.

## A—Continued.

## Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which the Accounts is made up.	Abatement authorized.	Paid during Fiscal Year.	Balance due June, 1892.	Total.
Grist-mill at Matilda Lock .....	8	June 30, '93		140 00	70 00	210 00
do do .....	9	do		140 00	70 00	210 00
Wharf lot No. 2, Point Iroquois .....	10	Aug. 30, '92			120 00	120 00
do do 1, do .....	11	Dec. 1, 1892			48 00	48 00
Water lot and surplus water for pumping engine. Lot for school purposes No. 4, Matilda .....	12	June 30, '91		70 00	35 00	105 00
Part of lot No. 23, con. 1, do .....	13	May 1, 1893			2 00	2 00
Water lot & water power for pumping machine .....	14	do		10 00	10 00	20 00
	15	Jan. 1, 1893		70 00		70 00
				698 00	7,495 62	8,193 62
Flour and grist-mill, lots 3 and 4 .....	1	June 30, 1892		240 00	120 00	360 00
Hydraulic lot No. 6, south side .....	2	do		150 00	75 00	225 00
do No. 7 .....	3	June 1, 1892		135 00		135 00
do No. 6 .....	4	do		120 00		120 00
Lot on south side, Water street, for coal yard .....	5	July 1, 1892		25 00		25 00
Surplus water for paper-mill, lock No. 18 .....	6	Jan. 1, 1892		120 00		120 00
Pipe under canal at lock No. 18 .....	7	April 1, 1893		15 00	5 00	20 00
Hydraulic lots Nos. 1 and 2, north side .....	8	June 30, 1878			270 00	270 00
Wharf lot, Moulinette .....	9	May 1, 1893	20 00		60 00	80 00
do near lock No. 20 .....	10	June 30, 1881			247 50	247 50
			20 00	805 00	777 50	1,602 50
Wharf lot, Ste. Cécile, Valleyfield, old bal. ....	1	July 1, 1868			60 00	60 00
do St. Timothy do do .....	2	June 1, 1864			100 00	100 00
do Ste. Cécile do do .....	3	May 1, 1892			100 00	100 00
Lot for shed above St. Timothy bridge, Valleyfield. ....	7	June 1, 1893			80 00	80 00
Lots 1, 2, 3, 4 and 5, below lower dam, Valleyfield .....	5	Jan. 1, 1892		1,000 00	500 00	1,500 00
Lot on corner of St. Timothy and lower dam, Valleyfield. ....	6	May 1, 1893		20 00	20 00	40 00
Saw-mill, lot 1, building lot, Valleyfield .....	7	June 30, 1892		120 00	60 00	180 00
Woollen-mill, lot 2, building lot do .....	8	do		240 00		240 00
Lots at head of canal do .....	9	do		800 00	3,500 00	4,300 00
Cadastral lot 845, for public park do .....	10	June 1, 1893		40 00		40 00
do 846, Grande Isle do .....	11	July 1, 1892		40 00	40 00	80 00
Wharf and shed above guard lock do .....	12	May 1, 1893		35 00	35 00	70 00
do and storehouse do do .....	13	Aug. 30, 1893		46 00	23 00	69 00
do guard lock, Valleyfield. do .....	14	June 30, 1891			115 00	115 00
do do do .....	15	Nov. 1, 1892		100 00	20 00	120 00
Part of lot 830 do .....	16	Sept. 1, 1892		80 00	120 00	200 00
Lot 101 and 116 do .....	17	June 1, 1893		40 00	40 00	80 00
Reserve, guard lock, Valleyfield. ....	18	Dec. 1, 1892		10 00		10 00
do do .....	19	do 1, 1892		20 00	20 00	40 00
do do .....	20	do 1, 1892			30 00	30 00
do do .....	21	do 1, 1892		14 00		14 00
Lot above guard lock do .....	22	May 1, 1893		40 00	40 00	80 00
Lot for shipyard above guard lock, Valleyfield. ....	23	Sept. 1, 1892		30 00		30 00
Part of lot 1 for piling ground do .....	24	do 1, 1892			40 00	40 00
Lot above guard lock, Valleyfield. ....	25	Oct. 1, 1892		16 00	32 00	48 00
Part lot 1 for coal yard, guard lock, Valleyfield. ....	26	July 1, 1892			40 00	40 00
Wharf lot, south side canal do .....	27	Nov. 15, 1892			75 00	75 00
Reserve, head of canal, Valleyfield. ....	28	Sept. 1, 1892		10 00	30 00	40 00
Lot, rear of lots 1 and 2 do .....	29	July 1, 1892		100 00		100 00

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1891.		Accrued, year ended 30th June, 1892.		Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
%	cts.	%	cts.	\$	cts.			
		20 00		20 00	30	Beauharnois Canal	Estate Jas. McDonald.	Jas. McDonald.
30 00		15 00		45 00	31	do		Estate Jas. McDonald
105 00		105 00		210 00	32	do		Corp. Town of Salisbury.
105 00		105 00		210 00	33	do		Valleyfield Electric Co.
60 00		20 00		80 00	34	do		Lake St. Francis Navigation Co.
40 00				40 00	35	do		A. McPhee & Co.
40 00		10 00		50 00	36	do		A. D. Doust.
30 00		10 00		40 00	37	do		A. Lespérance.
2 00		1 00		3 00	38	do		Can. Mutual Tel. Co.
5 00		5 00		10 00	39	do		A. Crevier.
8 00		4 00		12 00	40	do		Wm. Hood.
120 00		120 00		240 00	41	do	S. Vieau.	J. Meloche.
40 00		40 00			42	do		E. Bergin.
2,363 00		6,558 00		8,921 00				
		30 00		30 00	1	Lachine Canal		Beauhr. Steam Nav. Co.
		60 00		60 00	2	do		Jas. Wilson, jun.
		75 00		75 00	3	do		Richelieu Navigation Co.
196 00		392 00		588 00	4	do		Frothingham & Workman
132 00		264 00		396 00	5	do	H. McLennan	do
564 00		1,128 00		1,692 00	7	do	Maltby & King.	W. P. Bartley
322 50		645 00		967 50	8	do	Wm. Johnson & Co.	do
322 50		645 00		967 50	9	do	Peck, Benny & Co.	do
		430 00		430 00	10	do		Peck, Benny & Co.
		1,080 00		1,080 00	11	do		do
		1,296 00		1,296 00	12	do		Ira Gould & Sons.
430 00		860 00		1,290 00	13	do		Pillow, Hersey & Co.
215 00		430 00		645 00	14	do		do
430 00		860 00		1,290 00	15	do	Ogilvie & Co.	Mont. Warehousing Co.
		1 00		1 00	16	do		Corporation of Montreal.
6,000 00		1,000 00		7,000 00	17	do		G. & W. Tait
		25 00		25 00	18	do		G. E. Jacque & Co.
		10 00		10 00	19	do		A. W. Ogilvie.
		40 00		40 00	20	do		Can. Meat Packing Co.
		100 00		100 00	21	do		Royal Electric Co.
		800 00		800 00	22	do		Mont. Coal & Elevatg Co.
		100 00		100 00	23	do		Dominion Line Co.
		1 00		1 00	24	do		Montreal Street Ry. Co.
		1 00		1 00	25	do		Corporation of Montreal.
		1 00		1 00	26	do		do
		1 00		1 00	27	do		do
		450 00		450 00	28	do		Mont. Warehousing Co.
		120 00		120 00	29	do		Grand Trunk Railway
		500 00		500 00	30	do		Hurteau Bros
		1,066 66		1,066 66	31	do		Dobell, Becket & Co.
800 00				800 00	32	do		J. Burstall & Co.
		150 00		150 00	33	do		Acer & Kennedy
		600 00		600 00	34	do		C. M. Acer.
		380 92		380 92	35	do		P. Poulin
3,308 79		1,102 93		4,411 72	36	do		H. Bulmer, jun., & Bros.



## A—Continued.

## Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which the Account is made up.	Abatement authorized.	Paid during Fiscal Year.	Balance due on 30th June, 1892.	Total.
Part lot 830 for grist-mill, Vallyfield	30	July 1, 1892		20 00		20 00
do 830 for mill yard, &c., Valleyfield	31	Oct. 1, 1892		30 00	15 00	45 00
do 830 and privilege to construct flume to Grand Isle, Valleyfield	32	June 30, 1892		105 00	105 00	210 00
do 830 Valleyfield	33	Jan. 1, 1892		157 50	52 50	210 00
Wharf and lot above guard lock, Valleyfield	34	July 1, 1892		20 00	60 00	80 00
Wharf and storehouse below St. Timothy bridge, Valleyfield	35	May 1, 1893			40 00	40 00
Lot for store and wharf above St. Timothy bridge, Valleyfield	36	do 1, 1893			50 00	50 00
Lot for store and wharf below St. Timothy Bridge, Valleyfield	37	do 1, 1893			40 00	40 00
Privilege of placing poles on canal bank	38	Oct. 1, 1892			3 00	3 00
Lot for public scales above St. Timothy bridge, Valleyfield	39	do 1, 1892		5 00	5 00	10 00
Lot on Grand Isle, east end of dam, Valleyfield	40	Apr. 1, 1893		8 00	4 00	12 00
Lot at lock 7, Melocheville	41	June 30, 1892		60 00	180 00	240 00
Lot near St. Timothy bridge, Valleyfield	42	Sept. 30, 1880			40 00	40 00
				3,206 50	5,714 50	8,921 00
Freight shed at basin No. 1	1	May 1, 1893		30 00		30 00
Store at do	2	do 1, 1893		60 00		60 00
Freight shed at do	3	do 1, 1893		75 00		75 00
Warehouse and coal yard, lot No. 1	4	June 30, 1892		392 00	196 00	588 00
Grain elevator on ½ lot No. 2	5	do 30, 1892		264 00	132 00	396 00
Lots 3 and 4 and ½ lot No. 2, Basin No. 2	7	June 30, 1892		1,128 00	564 00	1,692 00
Flour-mill, lots 5 and ½ No. 6 do	8	do do		645 00	322 50	967 50
Nail factory lots 7 do do	9	do do		645 00	322 50	967 50
do do do	10	May 1, 1892		430 00		430 00
Elevator and store, lots 9, 10 and 11	11	April 1, 1892		1,080 00		1,080 00
Flour-mill and store, lots 12 13 and 14	12	do do		1,296 00		1,296 00
Spike and nail factory, lot 15	13	June 30, 1892		860 00	430 00	1,290 00
Paint mill, lot 17	14	do do		430 00	215 00	645 00
Flour and mill, lots 18 and 19	15	do do		860 00	430 00	1,290 00
Lots on S.W. side, waste weir	16	Sept. 1, 1892		1 00		1 00
Dry dock, shipyard and mill, Basin No. 2	17	June 30, 1892		1,000 00	6,000 00	7,000 00
Lot for office, Colborne street, Montreal	18	July 1, 1892		25 00		25 00
Strip, N.W. side Mill street, Basin No. 2	19	Sept. 1, 1892		10 00		10 00
Water supply through 4-inch pipe to factory, Wellington st	20	do do		40 00		40 00
Water supply through 10-inch pipe to factory, Basin No. 2	21	July 1, 1892		100 00		100 00
Part lot 384 north, Wellington Basin	22	Nov. 1, 1892		800 00		800 00
Lot for shed, west do	23	Oct. 1, 1892		100 00		100 00
Double track over Wellington street bridge	24	Jan. 1, 1893		1 00		1 00
Floating bath near Wellington bridge	25	July 1, 1892		1 00		1 00
Park lot do	26	Sept. 1, 1892		1 00		1 00
2nd pipe under canal	27	July 1, 1892		1 00		1 00
Land at Basin No. 4	28	do do		450 00		450 00
Siding west side Wellington bridge	29	Aug. 1, 1892		120 00		120 00
Lots 1, 2 and 3 West Basin, for piling lumber	30	May 1, 1892			500 00	500 00
Lots 4, 5, 6 and 7 do do	31	do do			1,066 66	1,066 66
Lots 8, 9 and 18 do do	32	do do			800 00	800 00
Lot for a cattle yard, Point St. Charles	33	Feb. 1, 1893		150 00		150 00
do an hotel do	34	Dec. 1, 1892		600 00		600 00
Lots 1 and 2 west, St. Gabriel, Basin No. 4	35	Jan. 1, 1893		380 92		380 92
Lots 3, 4, 5, 6 and 7 do do	36	May 1, 1893			4,411 72	4,411 72

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1891.	Accrued, year ended 30th June, 1892.	Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ cts.	\$ cts.	\$ cts.				
420 75	420 75	841 50	37	Lachine Canal.....		O. Dufresne & Bro.....
1,798 32	684 44	2,482 76	33	do		Bourgoin & Thibault....
5,108 24		5,108 24	39	do		Henderson Lumber Co....
	412 33	412 33	40	do		D. Pariseau .....
	174 40	174 40	41	do		P. McCrory .....
	600 00	600 00	42	do		Standard Agency Co....
	100 00	100 00	43	do		Waren Scraf Asphalt Paving Co.....
253 68	84 56	338 24	44	do		R. Ready .....
	1 00	1 00	45	do		A. Cantin .....
	100 00	100 00	46	do		Mont Transportation Co.
	180 00	180 00	47	do	P. McCrory.....	V. Paradis.....
150 60	300 00	450 00	48	do		Henderson Bros.....
	169 12	169 12	49	do		P. McCrory .....
1,088 16	362 72	1,450 88	50	do		H. Bulmer, jun. & Bros..
	500 00	500 00	51	do		Dobell, Beckett & Co....
	40 00	40 00	52	do		B. Ethier.....
	1 00	1 00	53	do		S. Delisle.....
	200 00	200 00	54	do		Merchants Manuftg. Co.
	100 00	100 00	55	do		J. & C. Hodson.....
	25 00	25 00	56	do		Dominion Abattoir Co..
	10 00	10 10	57	do		E. V. Mosely & Co.....
840 00	1,680 00	2,520 00	58	do		Ira Gould & Son.....
800 50	1,601 00	2,401 50	59	do		Est. J. Frothingham ..
	10 00	10 00	60	do		Albert Fox .....
	50 00	50 00	61	do		Dominion Bridge Co....
	30 00	30 00	62	do		E. Ouellette & Co.....
	10 00	10 00	63	do		Canadian Pac. Railway.
	20 00	20 00	64	do		Wm. Davis & Son.....
	40 00	40 00	65	do		Dominion Barb Wire Co.
	33 82	33 82	66	do		G. W. Cameron .....
	33 84	33 84	67	do		Henderson Bros.....
	10 00	10 00	68	do		Parent Filion .....
	10 00	10 00	69	do		R. Latimer .....
23,180 44	22,639 49	45,819 93				
7 50		7 50	1	Chambly Canal.....		J. A. Maurice.....
	60 00	60 00	2	do		South Eastern Ry.....
10 00	10 00	20 00	3	do	H. Riendeau.....	Catelli Bros .....
19 34		19 34	4	do		J. C. Pierce .....
125 00	25 00	150 00	5	do		Bisset & Donaghy.....
125 00	25 00	150 00	6	do		Simard & Godin.....
25 00	25 00	50 00	7	do		Jas. O' Cain .....
311 84	145 00	456 84				
	40 00	40 00	1	Rideau Canal.....		G. Sterling.....
3 00	1 00	4 00	2	do		Ottawa Canoe Club.....
	80 00	80 00	3	do		Thos. McKay .....
240 00	60 00	300 00	4	do		G. W. McCulloch .....
80 00	80 00	160 00	5	do		J. G. Butterworth .....
	80 00	80 00	6	do		Dey Bros .....
120 00		120 00	7	do		J. W. McRae & Bros....
2 00	1 00	3 00	8	do		Corp. City of Ottawa ..
	4 00	4 00	9	do		do .....
250 00		250 00	10	do		Wm. Little.....

## A—Continued.

## Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which the Account is made up.	Abatement authorized.	Paid during Fiscal	Balance due on 30th	Total.
				Year.	June, 1892.	
			\$ cts.	\$ cts.	\$ cts.	\$ cts.
Lots 8 and 9, St. Gabriel, Basin No. 3.	37	May 1, 1893		420 75	420 75	841 50
Lots 12 west and 15 and 16 do do	38	do			2,482 76	2,482 76
Lots 19 and 22 west St. Gabriel Basin, No. 3, and 13 and 14 east do do	2 39	do 1892			5,108 24	5,108 24
Lots 13 and 14 do do	2 40	do		412 33		412 33
Lot 21 do do	2 41	do 1893		174 40		174 40
Lots 7, 8 and 9 S. E. side Wellington Basin.	42	do		600 00		600 00
Lot at St. Gabriel, near Atwater Ave. Montreal.	43	Oct. 1, 1892		100 00		100 00
Lot 17 east, St. Gabriel Basin No. 3	44	May 1, 1893		338 24		338 24
Water lot in front of his dry dock.	45	April 1, 1892		1 00		1 00
Part of island No. 5, for a shipyard, at St. Gabriel	46	July 1, 1892		100 00		100 00
Wharf lot, at St. Gabriel.	47	Jan. 1, 1893		180 00		180 00
Two lots on Ottawa street, Montreal.	48	Nov. 1, 1892		450 00		450 00
Lot 20, St. Gabriel Basin, No. 2, Montreal.	49	May 1, 1893			169 12	169 12
Lots 10 and 11 west, St. Gabriel Basin, No. 3	50	do			1,450 88	1,450 88
Shed, No. 1, St. Gabriel Basin.	51	June 30, 1892		500 00		500 00
Lot for a coal shed, Brewster's bridge.	52	May 1, 1893		40 00		40 00
Floating bath near do	53	Aug. 1, 1892		1 00		1 00
Water supply through a 10-in. pipe, basin No. 1.	54	Jan. 1, 1892		200 00		200 00
do do St. Henri.	55	Nov. 1, 1893		100 00		100 00
do establishment, do	56	July 1, 1892		25 00		25 00
do at Grand Trunk Railway Crossing.	57	Oct. 1, 1892		10 00		10 00
Supply water at lock No. 3.	58	June 30, 1892		1,680 00	840 00	2,520 00
Water power, Côte St. Paul, lock No. 4	59	do		1,601 00	800 00	2,401 50
do supply do do	60	Nov. 1, 1892		10 00		10 00
do do below guard lock, Lachine.	61	July 1, 1892		50 00		50 00
Lot above regulating weir, do	62	May 1, 1893			30 00	30 00
Privilege to lay a track on Spoil Bank, Lachine.	63	do		10 00		10 00
Lot above new upper entrance to lock, do	64	do		20 00		20 00
Water supply below guard lock, No. 5.	65	Sept. 1, 1892		40 00		40 00
Lot 19 do 22, at Côte St. Paul.	66	June 30, 1892		33 82		33 82
Using shed No. 4, for skating rink	67	do		33 84		33 84
Space in shed	68	May 1, 1892		10 00		10 00
	69	do		10 00		10 00
				19,127 30	26,692 63	45,819 93
Two lots of land, Chambly.	1	May 1, 1878			7 50	7 50
Wharf lot at St. Joseph.	2	July 1, 1892		60 00		60 00
Lot in village, Chambly	3	May 1, 1893		10 00	10 00	20 00
Wharf, at St. John's	4	Nov. 19, 1881			19 34	19 34
Part of canal wharf, at St. John's.	5	June 30, 1892			150 00	150 00
do do do	6	do		125 00	25 00	150 00
do do do	7	do		25 00	25 00	50 00
				220 00	236 84	456 04
Water lot, foot of Major's Hill, Ottawa	1	Jan. 1, 1892		40 00		40 00
do do do	2	June 1, 1892			4 00	4 00
Green Island, above Rideau Falls, Ottawa.	3	Jan. 1, 1892		80 00		80 00
Lot for coal shed, canal basin, Ottawa.	4	June 30, 1893			300 00	300 00
Lots 1 and 2 for coal shed, canal basin, Ottawa.	5	do 1, 1893		80 00	80 00	160 00
Lots 4, 5, 6 and 7, boathouse, E. C. basin, Ottawa	6	May 1, 1893		80 00		80 00
Lot 1, S. E., canal basin, Ottawa.	7	April 1, 1892			120 00	120 00
Lot for a weigh-house, W. C. C. basin, Ottawa	8	May 1, 1893		2 00	1 00	3 00
Permission to lay main sewer under W. C. C. basin	9	Dec. 1, 1892			4 00	4 00
Lot for a dwelling, east side deep cut, Ottawa.	10	April 1, 1891			250 00	250 00

APPENDIX

No. 27.—HYDRAULIC and other Rents, &c.—

DR.

Balance due on 1st July, 1891.		Accrued, year ended 30 June, 1892.		Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$	cts.	\$	cts.	\$				
		40 00		40 00	11	Rideau Canal		J. & T. Ballantyne
5 00		1 00		6 00	12	do	Robt. Hastey	John Heney
14 00		2 00		16 00	13	do		John Neville
1 00		1 00		2 00	14	do		Corp. City of Ottawa
		100 00		100 00	15	do		Bronson & Weston
		1 00		1 00	16	do		R. W. Baxter
2 00		2 00		4 00	17	do		Andrew Hickey
		13 50		13 50	18	do		H. Patterson
		1 00		1 00	19	do		John Graham
2 00		2 00		4 00	20	do		Thos. Kingston
		2 00		2 00	21	do		W. D. Morris
14 00		2 00		16 00	22	do		Robt. McCloy
		1 00		1 00	23	do		Estate Thos. McKay
1 00		1 00		2 00	24	do	Canada Atlantic Ry. Co.	H. Jackson
		10 00		10 00	25	do		Tem. Com. St. Andrew's Church
13 00		13 00		26 00	26	do		Michael Keily
		9 50		9 50	27	do		P. O'Donnell
36 00		9 00		45 00	28	do		Jas. Marks
1 00		1 00		2 00	29	do		Henry Hartney
		1 00		1 00	30	do		L. Duhamel
		2 00		2 00	31	do		Wm. Miller
		2 00		2 00	32	do		Geo. May
		5 00		5 00	33	do	Canada Pacific Ry	St. L. & Ottawa Ry. Co.
108 00		12 00		120 00	34	do		R. E. Hardey
62 50		8 25		70 75	35	do		M. Kilroe
22 00		2 00		24 00	36	do		Francis Abbott
30 00		3 00		33 00	37	do		do
30 00		3 00		33 00	38	do		do
		25 00		25 00	39	do		J. R. Booth
22 00		2 00		24 00	40	do		Widow A. Howlett
21 00		3 00		24 00	41	do		Wm. Rowland
		3 75		3 75	42	do		Geo. Rickey
202 50		22 50		225 00	43	do		W. Dawson
168 75		11 25		180 00	44	do		Thos. Paget
157 50		11 25		168 75	45	do		Chas. McCaffrey
39 00		9 75		48 75	46	do		Geo. Morris
49 50		8 25		57 75	47	do		Wm. Powell
33 00		8 25		41 25	48	do		Philip Kennedy
77 25		7 50		84 75	49	do		Daniel Delaney
		7 50		7 50	50	do		Denis Bergin
		3 00		3 00	51	do		Thos. May
22 50		2 25		24 75	52	do		D. Cameron
8 00		4 00		12 00	53	do		T. & P. Collins
50 00		50 00		100 00	54	do		London & Can. Loan Co.
50 00		10 00		60 00	55	do		Stafford Merrifield
		4 50		4 50	56	do		Geo. Shepherd
25 00		5 00		30 00	57	do		A. C. White
		5 00		5 00	58	do		Alfred Chester
10 00		10 00		20 00	59	do		Jessie Miner
1 00		1 00		2 00	60	do		Josiah Payne
12 00		12 00		24 00	61	do		H. Easton
40 00		5 00		45 00	62	do		H. Merrick
4,740 00		120 00		4,860 00	63	do	Estate R. Ward	Joshua Bates
		0 20		0 20	64	do		A. Wood
		4 00		4 00	65	do		Wm. Lavender
3 00		3 00		6 00	66	do		W. W. Berford, sen
		3 00		3 00	67	do		J. B. & B. Tett
		10 00		10 00	68	do		W. H. Whealey

A—Continued.

Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which the Account is made up.	Abatement authorized.	Paid during Fiscal Year.	Balance due 30th June, 1892.	Total.	
						\$ cts.	\$ cts.
Lot for mill and coal yard at C. A. R. bridge	11	Jan. 1, 1893		40 00		40 00	
Reserve on east side Deep Cut, Ottawa	12	Sept. 1, 1892		6 00		6 00	
Reserve in front of his property do	13	Jan. 1, 1893			16 00	16 00	
Strip of reserve at exhibition grounds, Ottawa	14	do 1, 1893		2 00		2 00	
Lots for piling ground, Stewarton do	15	Aug. 30, 1892		100 00		100 00	
Reserve in front of lot G, con. C, Nepean	16	Jan. 1, 1893		1 00		1 00	
do do do	17	Dec. 1, 1892		4 00		4 00	
do S $\frac{1}{2}$ do do	18	Jan. 1, 1893		13 50		13 50	
do N $\frac{1}{2}$ do do	19	do 1, 1893		1 00		1 00	
do front of lot F con. C do	20	Nov. 1, 1892		4 00		4 00	
do do K do	21	Aug. 30, 1892		2 00		2 00	
do do K do	22	Nov. 1, 1892			16 00	16 00	
do boathouse K do	23	Sept. 1, 1892		1 00		1 00	
do front of lot B do	24	Jan. 1, 1893		2 00		2 00	
do do H do	25	do 1, 1893		10 00		10 00	
do do E con. D do	26	May 1, 1893		13 00	13 00	26 00	
do do E do	27	do 1, 1893		9 50		9 50	
do do No. 1 con. B do	28	do 1, 1893			45 00	45 00	
do front of sub-lots 64 & 65, lt. 1 c. B, Nep.	29	do 1, 1893		2 00		2 00	
do front of lot K con. B, Nepean	30	do 1, 1893		1 00		1 00	
do front of sub-lot 5, con. B do	31	do 1, 1893			2 00	2 00	
Wharf, privileges on sub-lots 29 & 30, c. B, Nep.	32	do 1, 1893		2 00		2 00	
Right of way over lots 8 and 9 (Dow's swamp) con. B, Nepean	33	do 1, 1893		5 00		5 00	
Reserve on lots 22 and 23, con. A, Nepean	34	Jan. 1, 1892			120 00	120 00	
do N $\frac{1}{2}$ lot 8, con. 1, Nepean	35	do 1, 1893			70 75	70 75	
do part lot 40, con. 1, O.F., Nepean	36	do 1, 1892			24 00	24 00	
do do do	37	Nov. 1, 1892			33 00	33 00	
do do do	38	do 1, 1892			33 00	33 00	
do 5 $\frac{1}{2}$ acres do	39	Sept. 1, 1892		25 00		25 00	
do do do	40	July 1, 1892			24 00	24 00	
do lot N, con 1 do	41	June 1, 1893			24 00	24 00	
do 1 2 do	42	Jan. 1, 1893		3 75		3 75	
do 3 2 do	43	do 1, 1893			225 00	225 00	
do N $\frac{1}{2}$ lot 4 2 do	44	do 1, 1893			180 00	180 00	
do S $\frac{1}{2}$ 4 2 do	45	do 1, 1893			168 75	168 75	
do S $\frac{1}{2}$ 5 2 do	46	do 1, 1893			48 75	48 75	
do N $\frac{1}{2}$ 5 2 do	47	Dec. 1, 1892			57 75	57 75	
do S $\frac{1}{2}$ 6 2 do	48	Jan. 1, 1893			41 25	41 25	
do S $\frac{1}{2}$ 8 2 do	49	Dec. 1, 1892			84 75	84 75	
do N $\frac{1}{2}$ 6 2 do	50	Jan. 1, 1893			7 50	7 50	
do do 23, river front do	51	do 1, 1893		3 00		3 00	
do N $\frac{1}{2}$ 22 do do	52	do 1, 1893			24 75	24 75	
do do 9, con. 1 do	53	June 1, 1893		8 00	4 00	12 00	
Surplus water at Bulkhead, Long Island	54	do 1, 1892		50 00	50 00	100 00	
Reserve in front of lot No. 40, con. 1, Oxford	55	July 1, 1892			60 00	60 00	
do do do	56	Jan. 1, 1893		4 50		4 50	
do on W $\frac{1}{2}$ lot 27, con. 1, Marlboro'	57	do 1, 1893			30 00	30 00	
do lot 3, con. B, Wolford	58	July 1, 1892		5 00		5 00	
do 2 B do	59	do 1, 1892		10 00	10 00	20 00	
Part 9 A do	60	April 1, 1893		1 00	1 00	2 00	
Lot above old lock, Merrickville	61	Dec. 1, 1891			24 00	24 00	
Reserve near swing bridge, Merrickville	62	June 1, 1892			45 00	45 00	
Lots A and B, old Sly's	63	May 1, 1892			4,860 00	4,860 00	
Part reserve on lot 1, con. 4, Smith's Falls	64	June 30, 1892		0 20		0 20	
do 1 4, Elmsley	65	Jan. 1, 1892		4 00		4 00	
Part lot 21, con. 5, S. Elmsley, Oliver's Ferry	66	May 1, 1893		3 00	3 00	6 00	
Strip of land and warehouse, north Isthmus lock station, Newboro'	67	do 1, 1893			3 00	3 00	
Part of lot 21, con. 5, north Crosby, Newboro'	68	Sept. 1, 1892		10 00		10 00	

APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &c.—

Balance due on 1st July, 1891.	Accrued, year ended 30th June, 1892.	Total.	Number.	Name of Work.	Present Occupant.	Original Lessee.
\$ cts.	\$ cts.	\$ cts.				
1 00	1 00	2 00	69	Rideau Canal.....		W. J. Webster.....
5 00	10 00	15 00	70	do .....		T. H. Hughes.....
228 00	76 00	304 00	71	do .....		Wm. Anglin.....
367 50	105 00	472 50	72	do .....		M. J. Foster.....
52 50	105 00	157 50	73	do .....		John Rourk.....
50 00	10 00	60 00	74	do .....		John Brannigan.....
<b>7,472 50</b>	<b>1,275 20</b>	<b>8,747 70</b>				
5 00	5 00	10 00	1	Grenville Canal...		A. J. Grier.....
	10 00	10 00	2	Carillon Canal .....		Hy. E. Masson.....
	10 00	10 00	3	do .....		John Brophy.....
3 00		3 00	4	Ste. Anne's Lock..		Delphus Lebeau .....
1 00		1 00	5	do .....		Can. Mutual Tel. Co.....
	1 00	1 00	6	do .....	G. N. W. Telegraph Co.	Dominion Tel. Co .....
50 00	50 00	100 00	7	Trent River Works		Francis Sandford.....
2 00	1 00	3 00	8	do .....		R. C. Smith.....
20 00	40 00	60 00	9	do .....		Jas. Cummings.....
5 00	1 00	6 00	10	do .....		Bell Telephone Co .....
	1 00	1 00	11	do .....		Lakefield Lumber Co. ..
	1 00	1 00	12	do .....		John Hull.....
3 00	1 00	4 00	13	Cape Breton.....		Neil MacNeill.....
<b>89 00</b>	<b>121 00</b>	<b>210 00</b>				

## A—Continued.

## Lessees' Accounts, 1891-92.

CR.

Description of Property.	Number.	Date to which Account is made up.	Abatement authorized.		Paid during Fiscal Year.	Balance due 30th June, 1892.	Total.
			¢ cts.	¢ cts.			
Part lot 21, con. 5, North Crosby, Newboro'	69	May 1, '93		1 00		1 00	2 00
Water lot at Chaffy's lock	70	June 30, '92		15 00			15 00
Water power at Brewer's upper mills (old lease)	71	Jan. 1, '92				304 00	304 00
do do lower mills	72	do 1, '92				472 50	472 50
do lot 48, con. 1, Kingston	73	July 1, '92		105 00		52 50	157 50
Reserve on lots 35 and 36, con. 1, Kingston	74	Aug. 1, '92				60 00	60 00
				749 45		7,998 25	8,747 70
House and ground on lot No. 8	1	May 1, '93		5 00		5 00	10 00
Lot for pasture	2	June 30, '93		10 00			10 00
do	3	do 30, '93		10 00			10 00
Lots 112 and 113, Ste. Anne's Parish	4	Sept. 1, '91				3 00	3 00
Placing poles on Government reserve	5	July 1, '84				1 00	1 00
do do	6	May 1, '93		1 00			1 00
Lot at Fenelon Falls	7	Dec. 1, '92		50 00		50 00	100 00
Water power at Buckhorn Rapids	8	Jan. 1, '93				3 00	3 00
Lot and lockhouse, Chisholm Rapids	9	June 30, '92		40 00		20 00	60 00
Poles on various canals	10	Jan. 1, '93				6 00	6 00
Water power, Lakefield	11	do 1, '92				1 00	1 00
do do	12	do 1, '92				1 00	1 00
Lot at Long Island, Barachois	13	Feb. 1, '93				4 00	4 00
				116 00		94 00	210 00

## APPENDIX

DR.

No. 27.—HYDRAULIC and other Rents, &amp;c.—

Balance due on Purchase, 1st July, 1891.		Accrued, year ended 30th June, 1892.		Total.	Number.	Name of Work.	Name of Proprietor.
\$	cts.	\$	cts.	\$	cts.		
54	38	54	38	54	38	1 Intercolonial Railway.	John and William Sproule.
50	59	50	59	50	59	2	John Ferguson.
59	15	59	15	59	15	3	Joseph Graham.
13	06	13	06	13	06	4	Paul Foster.
14	21	14	21	14	21	5	Donald McArthur.
4	00	4	00	4	00	6	Cornelius Dyer.
33	59	33	59	33	59	7	John Foster.
0	35	0	35	0	35	8	William and John T. Ives.
96	66	96	66	96	66	9	Christie Family.
4	90	4	90	4	90	10	A. W. Tanner.
23	29	23	29	23	29	11	William and Alexander Scott.
354	18	354	18	354	18		

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 30th September, 1892.



A—Concluded.

Land Sales, 1891-92—Concluded.

CR.

Description of Property.	Number.	Abatement authorized.		Paid during Fiscal Year.		Balance due 30th June, 1892.		Total.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
1 <sup>1</sup> / <sub>4</sub> acres of land, Pictou, Nova Scotia.....	1					54	38	54	38
3 <sup>3</sup> / <sub>100</sub> do do .....	2					50	59	50	59
2 <sup>5</sup> / <sub>100</sub> do do .....	3					59	15	59	15
4 <sup>3</sup> / <sub>100</sub> do do .....	4					13	06	13	06
9 <sup>9</sup> / <sub>100</sub> do do .....	5					14	21	14	21
1 <sup>1</sup> / <sub>100</sub> do do .....	6					4	00	4	00
8 <sup>8</sup> / <sub>100</sub> do do .....	7					33	59	33	59
1 <sup>0</sup> / <sub>100</sub> do do .....	8					0	35	0	35
3 <sup>3</sup> / <sub>100</sub> do do .....	9					96	66	96	66
1 <sup>1</sup> / <sub>100</sub> do do .....	10					4	90	4	90
1 <sup>1</sup> / <sub>100</sub> do do .....	11					23	29	23	29
						354	18	354	18

C. E. CHUBBUCK,  
Clerk of Hydraulic Rents.

DEPARTMENT OF RAILWAYS AND CANALS—CANALS REVENUE  
BRANCH.OFFICE OF INSPECTOR OF CANALS REVENUE,  
HAMILTON, 21st November, 1892.

SIR,—I have the honour to report that during the fiscal year ending 30th June, 1892, I inspected all offices for the collection of tolls on the Dominion canals.

At date of inspection detailed returns showing particulars of the revenue collected at each of the respective offices were submitted to the department.

The aggregate receipts on account of canal revenue for the fiscal year 1891–92, are \$317,339.02.

For hydraulic and other rents the receipts for the fiscal year are \$32,084.65.

Classified by districts, and offices, the subdivisions of canal revenue are as follows :—

## WELLAND CANAL.

Collection Divisions.	CANAL REVENUE.				Total Canal Revenue.	Hydraulic and other Rents.
	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Port Colborne .....	141,745 14		20 00		141,765 14	135 48
Port Dalhousie .....	50,410 74		35 82		50,446 56	556 11
Dunnville .....	430 77				430 77	615 55
Port Maitland .....	3 99				3 99	
Port Robinson .....	618 89			177 69	796 58	812 00
St. Catharines .....	552 34		538 88		1,091 22	5,043 26
Chippewa .....	46 58				46 58	
Totals .....	193,808 45		594 70	177 69	194,580 84	7,162 40

## ST. LAWRENCE CANALS.

Beauharnois .....	1,285 20		35 00		1,320 20	3,206 50
Cornwall .....	23,361 39				23,361 39	805 00
Cardinal .....	757 14		5 00		762 14	698 00
Lachine .....	2,249 12	24 90	5 00	1,495 65	3,774 67	
Montreal .....	26,082 20	4,618 43	116 10	13,149 26	43,965 99	19,128 30
Kingston .....	11,869 46				11,869 46	
Totals .....	65,604 51	4,643 33	161 10	14,644 91	85,053 85	23,837 80

## CHAMBLY CANAL.

Chambly .....	7,705 41		13 00	75 30	7,793 71	70 00
St. John's .....	10,853 75				10,853 75	150 00
St. Ours .....	690 78				690 78	
Totals .....	19,249 94		13 00	75 30	19,338 24	220 00

## OTTAWA CANALS.

Collection Divisions.	CANAL REVENUE.				Total Canal Revenue.	Hydraulic and other Rents.
	Tolls.	Wharfage and Storage.	Fines and Damages.	Other Receipts.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Ottawa.....	19,631 01	.....	.....	.....	19,631 01	.....
Grenville.....	17,246 74	.....	10 00	.....	17,256 74	5 00
Carillon.....	115 78	.....	.....	8 00	123 78	20 00
St. Anne's Lock.....	1,553 42	.....	.....	.....	1,553 42	.....
Totals .....	38,546 95	.....	10 00	8 00	38,564 95	25 00

## RIDEAU CANAL.

Ottawa.....	3,743 93	131 18	20 00	309 70	4,204 81	590 75
Kingston Mills.....	1,275 08	.....	.....	.....	1,275 08	105 00
Smith's Falls.....	598 09	.....	.....	5 00	603 09	53 70
Totals.....	5,617 10	131 18	20 00	314 70	6,082 98	749 45

## ST. PETER'S CANAL.

St. Peter's.....	2,317 03	.....	.....	3 28	2,320 31	.....
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## MURRAY CANAL.

Brighton.....	637 01	.....	.....	.....	637 01	.....
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## TRENT VALLEY CANAL.

Burleigh.....	101 38	.....	.....	.....	101 38	.....
Bobcaygeon.....	357 68	.....	.....	72 00	429 68	.....
Fenelon Falls.....	16 70	.....	.....	.....	16 70	50 00
Hastings.....	32 82	.....	.....	.....	32 82	40 00
Peterborough.....	140 56	.....	.....	.....	140 56	.....
Buckhorn.....	39 70	.....	.....	.....	39 70	.....
Totals.....	688 84	.....	.....	72 00	760 84	90 00
Grand totals..	326,469 83	4,774 51	798 80	15,295 88	347,330 02	32,084 65

The receipts, as above, were balanced by bank remittances in favour of the Receiver-General.

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

H. B. WITTON,  
*Inspector of Canals.*

T. TRUDEAU, Esq.,  
Deputy Minister, Railways and Canals.



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Supplement to the Annual Report of the Department of Railways and Canals  
FOR THE YEAR ENDED 30<sup>TH</sup> JUNE, 1892.

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# CANAL STATISTICS

FOR

SEASON OF NAVIGATION

1892



OTTAWA

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

1893



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## SUPPLEMENT

TO THE

# ANNUAL REPORT OF THE DEPARTMENT OF RAILWAYS AND CANALS.

OFFICE OF THE CHIEF ENGINEER OF RAILWAYS AND CANALS,  
OTTAWA, 27th April, 1893.

SIR,—I have the honour to submit the statistics of the operations of the canals for the season of 1892.

The tables have been compiled and the information prepared by Mr. Teakles, a very careful, painstaking, trustworthy officer, so that I consider they may be accepted as reliable and correct.

I have the honour to be, sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,

*Chief Engineer.*

J. H. BALDERSON, Esq.,  
Secretary, Dept. Railways and Canals.

### REVENUE.

The total revenue, exclusive of hydraulic rents for two years, is as follows:—

For 1891.....	\$350,351 97
1892.....	358,711 04

By comparing the statistics of 1891 with 1892, it will be seen that the gross revenue has increased \$8,359.07.

The increases and decreases are as follows:—

	Increase.	Decrease.
On the Welland Canal.....		\$ 3,925 38
“ St. Lawrence Canals.....	\$ 7,471 32	
“ Chambly Canal.....	1,445 97	
“ Rideau Canals.....		646 75
“ Ottawa Canals.....	2,626 29	
“ St. Peter's Canal.....	1,374 10	
“ Trent Valley Canals.....	98 28	
“ Murray Canal.....		84 76
Total.....	\$13,015 96	\$ 4,656 89
Total increase.....	\$ 8,359 07	

## Canal Statistics.

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

There were refunded, Welland and St. Lawrence Canal tolls, on grain in 1891, to the amount of \$49,834.98, and in 1892, \$40,030.83, including the amount of \$1,279.62, refunds of Welland Canal tolls on wheat which was ground and the flour exported out of the country, which makes an actual increase of revenue for 1892 of \$18,163.22.

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 4th of April, 1892, authorized a refund of canal tolls as follows, viz. :—

That a refund be made of a portion of the canal tolls collected on wheat, Indian corn, pease, barley, rye, oats, flax seed and buckwheat which have been carried through the Welland Canal, and the St. Lawrence Canals to Montreal or to any port east of Montreal, in all cases where the said products so carried are exported, and in such cases only.

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

That the products aforesaid on which the rebate of tolls may be claimed shall be shown to have been originally shipped for Montreal or for some port east of Montreal and shall be shown to have been carried to Montreal or to some port east of Montreal, and actually sent out of the country.

That the right to this rebate shall not be lost by reason of intermediate transshipment, provided that the place of such transshipment is one within the Dominion of Canada.

That the right to this rebate shall extend to any portions of cargoes lightered at Port Colborne and re-shipped at Port Dalhousie, and also to shipments of the above named products made from any Canadian Lake Ontario port.

That payment of the amount to be refunded be made, from time to time, as cargoes of the said products are despatched for export from Montreal or from some port east of Montreal.

That this Order in Council remain in force for the present year, 1892, only.

This refund was made applicable by Order in Council of the 15th July, 1892, to the above named products when shipped from any Lake Ontario ports.

There were 195,224 tons of grain passed down the Welland Canal and transhipped at Canadian ports to Montreal, and exported out of the country, during the season of 1892, upon which a refund was made of 18 cents a ton, Welland Canal tolls to the amount of \$35,140.32.

## 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 eleven years, is as follows:—

QUANTITY PASSED DOWN TO MONTREAL.		QUANTITY ON WHICH FULL TOLLS WERE PAID.	
		To Ports in Ontario.	Quantity from U. S. Ports to U. S. Ports.
	Tons.	Tons.	Tons.
1882.....	180,694		63,881
1883.....	136,814	10,650	121,876
1884.....	142,194	12,153	104,537
1885.....	96,569	11,909	117,346
1886.....	203,940	9,881	151,551
1887.....	185,034	11,838	134,868
1888.....	160,358	25,599	169,664
1889.....	267,769	19,075	213,766
1890.....	228,513	16,899	245,932
1891.....	* 295,509	6,805	202,710
1892.....	† 261,954	8,942	201,540

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, and 18 cents a ton on the quantity passed down to Montreal and exported out of the country during the season of 1892.

During the last decade the quantity of agricultural products, as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 186,814 tons to 261,954 tons; and the quantity passed down the Welland Canal, from United States ports to United States ports, has increased from 121,876 to 201,540 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 11 years, is reported as follows:—

	Tons.
For 1882.....	75,026
1883.....	98,672
1884.....	142,231
1885.....	160,821
1886.....	165,613
1887.....	191,760
1888.....	113,794
1889.....	94,943
1890.....	119,208
1891.....	184,410
1892.....	291,680

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

† Of this quantity 4,341 tons of wheat were transhipped at Ogdensburg.

## Canal Statistics.

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

	Tons.
For 1882 .....	230,055
1883 .....	263,368
1884 .....	174,496
1885 .....	134,824
1886 .....	272,133
1887 .....	237,881
1888 .....	166,191
1889 .....	275,414
1890 .....	242,571
1891 .....	320,434
1892 .....	302,899

Comparative shipments of grain by the St. Lawrence route, and rail and 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 St. Lawrence Canals to Montreal, is as follows:—

	Tons.
For 1891 .....	320,434
1892.....	302,899
Showing a decrease of.....	17,535

The quantity of grain and pease carried to Montreal *via* Canadian Pacific and Grand Trunk Railways, is reported as follows:—

	Tons.
For 1891.....	184,410
1892.....	291,680
Showing an increase of.....	107,270

The quantity of grain arrived at tidewater by New York Canals, is reported as follows:—

	Tons.
For 1891.....	1,055,278
1892.....	899,313
Showing a decrease of.....	155,965

The quantity of grain carried to tide-water by the New York railways, is reported as follows:—

	Tons.
For 1891.....	2,356,660
1892. ....	4,515,041
Showing an increase of.....	2,158,381



The increases and decreases for 1892, as compared with 1891 on the several routes, competing for the carrying trade to the seaboard, are as follows:—

	Increase.	Decrease.	Increase.	Decrease.
	Tons.	Tons.	Per cent.	Per cent.
On the St. Lawrence Canals.....		17,535		5.48
do Canadian Pacific and Grand Trunk Railways.....	107,270		58.16	
do New York Canals.....		155,965		14.78
do do Railways.....	2,158,381		91.58	

By reference to Appendix U, it will be seen that the quantity of freight from ports west of Port Colborne to United States ports, on the south of Lake Ontario, has increased from 175,455 tons in 1883, to 330,403 tons in 1892; and the quantity to Ontario ports, between Port Dalhousie and Cornwall, has decreased from 184,502 tons in 1883, to 69,886 tons in 1892. The quantity passed down to Montreal shows an increase from 205,394 tons in 1883, to 267,485 tons in 1892.

#### TRANSHIPMENT OF GRAIN.

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

In Canadian vessels, there were in—

	Tons.
1886, 244 cargoes, with an aggregate quantity of.....	143,330
1887, 284 do do .....	178,233
1888, 182 do do .....	143,025
1889, 208 do do .....	165,117
1890, 203 do do .....	184,275
1891, 209 do do .....	190,664
1892, 158 do do .....	159,018

In United States vessels, there were in—

	Tons.
1886, 97 cargoes, with an aggregate quantity of.....	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
1892, 89 do do .....	109,812

Two Canadian vessels took their cargoes of 924 tons of grain through to Montreal intact in 1892, against three in 1891 with 1,441 tons, and three in 1890 with 1,281 tons.

Twenty-five Canadian vessels lightened their cargoes at Kingston in 1892, against 44 in 1891, and 63 in 1890.

Two hundred and twenty discharged the whole of their cargoes at Kingston in 1892, against 293 in 1891, and 172 in 1890.

## Canal Statistics.

The quantity of grain transhipped at Port Colborne in 1892 and the three previous years is given below. The total number of grain laden vessels lightened at this port in 1892, was 74, against 81 the previous year :—

Variety.	1889.	1890.	1891.	1892.
	Bush.	Bush.	Bush.	Bush.
Wheat .....	37,222	4,310	16,665	68,736
Corn .....	254,690	773,687	482,302	576,289
Rye .....	Nil.	Nil.	1,330	2,467
Oats .....	8,218	44,294	130,276	102,529

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

Variety.	1889.	1890.	1891.	1892.
	Bush.	Bush.	Bush.	Bush.
Wheat .....	8,608	Nil.	16,628	Nil.
Corn .....	Nil.	Nil.	Nil.	Nil.
Rye .....	Nil.	Nil.	Nil.	Nil.
Oats .....	Nil.	Nil.	Nil.	Nil.

The total quantity of freight moved on the Welland Canal during the season of 1892, was 955,554 tons; of this quantity 929,946 tons was through freight, and 25,608 tons were way or local freight.

### WELLAND CANAL.

#### *East and West-bound Freight.*

There were 685,348 tons of freight passed eastward, and 270,206 passed westward.

The total quantity of freight passed through the whole length of the Welland Canal during the season of 1892 was 929,946 tons.

Of this quantity 263,680 tons were west bound and 666,266 tons east-bound freight.

Of the through east-bound freight Canadian vessels carried 245,739 tons and United States vessels carried 420,527 tons; and of the west-bound freight Canadian vessels carried 22,267 tons and United States vessels carried 241,413 tons.

Of the total quantity of through freight Canadian vessels carried 268,006 tons, and United States vessels carried 661,940 tons.

The total quantity of freight moved on the St. Lawrence Canal during the season of 1892 was 966,755 tons. Of this quantity 518,273 tons were through freight, and 448,482 tons were (way) or local freight.

## ST. LAWRENCE CANALS.

*East and West-bound Freight.*

Of the total quantity of freight passed through the canals during 1892, there were 720,580 tons passed eastward and 246,175 tons passed westward.

The total quantity of through freight was 518,273 tons; of this quantity 486,314 tons was east bound and 31,959 tons was west bound.

Of the total quantity of (way) or local freight, 234,266 tons were east bound and 214,216 tons west bound freight.

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

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

	Eastward, to Montreal. Tons	Westward, from Montreal. Tons.
1881 .....	169,213	37,190
1882 .....	108,835	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 .....	309,593	14,060
1892 .....	263,144	9,452

## 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 twelve years, is as follows:—

	Eastward. Tons.	Westward. Tons.	Total.
1881.....	96,266	97,907	— 194,173
1882.....	110,286	172,520	— 282,806
1883.....	174,912	257,699	— 432,611
1884.....	163,998	243,081	— 407,079
1885.....	168,212	216,297	— 384,509
1886.....	244,916	239,562	— 484,478
1887.....	189,427	151,074	— 340,501
1888.....	221,062	213,689	— 434,751
1889.....	297,353	266,231	— 563,584
1890.....	318,259	215,698	— 533,957
1891.....	306,257	247,543	— 553,800
1892.....	300,733	240,332	— 541,065

The total quantity of freight passed through the Welland Canal from United States ports to United States ports, shows a decrease of 12,735 tons as compared with the previous year; and an increase of 346,892 tons as compared with 1881.

## Canal Statistics.

### *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 937,999 tons in 1892, against 1,092,355 in 1891 and 1,167,901 in 1890.

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

	Tons.		Tons.
In 1892.....	5,913,013	In 1885.....	4,105,594
1891.....	3,565,381	1884.....	3,639,805
1890.....	4,336,199	1883.....	4,422,461
1889.....	3,654,984	1882.....	3,888,557
1888.....*	3,197,634	1880.....	4,732,385
1887.....	3,847,766	1869.....	1,087,809
1886.....	3,802,262		

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-two years:—

	Canals.	Railways.	Total.	Proportions by Canals.
	Tons.	Tons.	Tons.	
1869.....	1,302,613	1,087,809	2,390,342	·545
1870.....	1,295,010	1,766,457	3,061,467	·423
1871.....	1,850,198	2,205,589	4,055,787	·456
1872.....	1,674,320	1,870,614	3,544,934	·472
1873.....	1,745,171	2,036,992	3,782,163	·461
1874.....	1,767,598	2,791,517	4,559,115	·387
1875.....	1,305,550	2,343,241	3,648,791	·357
1876.....	1,064,293	2,875,803	3,940,096	·270
1877.....	1,498,984	2,493,683	3,992,667	·375
1878.....	1,912,734	3,695,764	5,608,498	·341
1879.....	1,833,399	4,353,617	6,187,016	·296
1880.....	2,371,090	4,732,385	7,103,475	·333
1881.....	1,116,561	4,983,722	6,100,283	·183
1882.....	1,118,776	3,885,557	5,004,333	·223
1883.....	1,379,000	4,422,461	5,801,461	·237
1884.....	1,236,986	3,639,805	4,876,791	·253
1885.....	1,063,310	4,105,594	5,168,904	·205
1886.....	1,489,886	3,802,262	5,292,148	·281
1887.....	1,539,403	3,847,766	5,387,169	·285
1888.....	1,166,958	3,197,734	4,364,692	·267
1889.....	1,296,896	3,654,984	4,951,880	·262
1890.....	1,167,901	4,336,199	5,504,100	·212
1891.....	1,092,355	3,565,381	4,657,736	·234
892.....	937,999	5,913,013	6,851,012	·137

\*Flour and grain only.

The total quantity of freight passed through the several divisions of the canals during the season of 1892 is as follows:—

	Farm Stock.	Forest, Produce of Wood.	Manu- factures.	Merchandise	Agricultural Products.	Total.
Welland .....	92	140,175	15,182	271,536	528,569	955,554
St. Lawrence.....	913	112,523	51,052	337,595	464,672	966,755
Chambly .....	255	162,216	3,833	96,370	8,092	270,766
Ottawa.....	1,070	628,449	320	8,010	9,162	647,011
Rideau .....	33	73,443	2,916	16,154	3,820	96,366
St. Peter's.....		4,572		41,684	12,786	59,042
Murray.....	52	6,203	660	3,057	3,757	13,729
Trent Valley.....		22,317	26	170		22,513

The total quantity of freight moved on the Welland was 955,554 tons, of which 528,569 tons were agricultural products.

On the St. Lawrence Canals, the total quantity of freight moved was 966,755 tons, of which 464,672 tons were agricultural products, and 337,595 tons were merchandise.

On the Ottawa Canals, the total quantity of freight moved was 647,011 tons, of this quantity 628,449 tons were the produce of the forest.

The total quantity of freight moved on all the canals for the season of 1892 was 3,031,736 tons.

#### NORWAY TO CHICAGO.

During the month of May the steam-ship "Wergerland," of Bergen, Norway, passed up the St. Lawrence and Welland Canals with a cargo of fish from Norway to Chicago, and returned on the 6th of June with a cargo consisting of 176 tons of flour, 294 tons of wheat and 29 tons of meat.

#### 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 1881.....	18·5
1869.....	47·0	1882.....	19·0
1870.....	38·9	1883.....	18·7
1871.....	38·9	1884.....	19·0
1872.....	40·1	1885.....	17·1
1873.....	34·9	1886.....	16·9
1874.....	31·7	1887.....	16·3
1875.....	28·4	1888.....	18·8
1876.....	24·6	1889.....	15·1
1877.....	28·3	1890.....	13·9
1878.....	27·1	1891.....	13·4
1879.....	23·7	1892.....	9·8
1880.....	25·1		

## Canal Statistics.

The quantity of freight carried by the canals and railways was greater in 1892 by 5,094,390 tons than the quantity carried in 1891 and an increase of 31,165,395 tons over 1869.

The quantities carried were as follows:—

	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
1874 .....	18,283,547	·3174
1875 .....	17,101,758	·2841
1876 .....	16,948,627	·2462
1877 .....	17,489,770	·2833
1878 .....	19,017,301	·2719
1879 .....	22,590,766	·2373
1880 .....	25,706,586	·2512
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
1892 .....	43,618,569	·0982

Average freight rates, grain, Chicago to Buffalo:—

Year.	Wheat.	Year.	Wheat.
1878.....	3·1	1886.....	3·6
1879.....	4·7	1887.....	4·1
1880.....	5·7	1888.....	2·7
1881.....	3·2	1889.....	2·5
1882.....	2·5	1890.....	1·9
1883.....	3·5	1891.....	2·5
1884.....	2·1	1892.....	2·2
1885.....	2·0		
		Average fifteen years...	3·1

Handling charge to vessel on grain, \$3.50 to \$4.00 per 1,000 bushels.

"Wheat was shipped from Duluth to Kingston, Ont., during the season of 1887, at  $6\frac{1}{2}$  to  $7\frac{3}{4}$  cents; in 1888, at 4 to 5 cents; in 1889, at —; in 1890, at  $5\frac{3}{4}$ ,  $5\frac{1}{2}$ ,  $4\frac{1}{2}$ ,  $4\frac{1}{4}$ , 4 cents; in 1891, during May,  $3\frac{3}{4}$ ,  $3\frac{1}{2}$ , 3,  $2\frac{1}{2}$  cents; during June, 3 cents; and on 25th July,  $2\frac{1}{2}$  cents; and in 1892, 5 cents in April;  $5\frac{1}{2}$  cents in May; 4 cents in June;  $4\frac{1}{2}$  cents in July; 3 cents in August; and 6,  $6\frac{1}{2}$  in October, per bushel."

## SAULT STE. MARIE CANAL.

The following is the comparative statement showing the trade through the Sault Ste. Marie Canal, for the years 1891 and 1892 :—

Items.		1891.	1892.
Steam and sail vessels.....	Number.	10,191	12,580
Lockages.....	"	4,891	5,867
Tonnage, registered.....	net tons.	8,400,385	10,647,203
do freight.....	"	8,888,759	11,214,333
Passenger.....	Number.	26,190	25,896
Coal.....	net tons.	2,507,532	2,904,266
Flour.....	barrels.	3,780,143	5,418,135
Grain.....	bushels.	39,848,674	42,661,470
Manufactured, and pig iron.....	net tons.	69,741	59,772
Salt.....	barrels.	234,528	41,748
Copper.....	net tons.	69,190	64,993
Iron ore.....	"	3,560,213	4,901,132
Lumber.....	feet.	366,305,000	512,844,000
Silver ore, bullion.....	net tons.	1,731	1,930
Building stone.....	"	44,080	39,698
Unclassified freight.....	"	417,039	459,146

Total valuation of property, 1886.....	\$	69,080,071	95
do do 1887.....		79,031,757	78
do do 1888.....		82,156,019	97
do do 1889.....		83,732,527	15
do do 1890.....		102,214,948	70
do do 1891.....		128,178,208	51
do do 1892.....		135,117,267	10

## ERIE CANAL.

Mr. Hannan, Superintendent of Public Works, Albany, reports on the traffic through the Erie Canal, for 1892, as follows :—

## TONNAGE.

"The whole number of tons of freight carried upon the canals of this state for the season of 1892 was 4,281,995 tons, and was composed of the following described classes of articles :—

	Tons.
Produce of the forest.....	1,249,381
Agriculture.....	1,038,851
Manufactures.....	125,781
Merchandise.....	292,468
Other articles.....	1,575,514
Total.....	4,281,995

Of the total tonnage moved 2,404,484 tons were through freight, and 1,877,511 tons were way freight, and 2,986,070 tons went east, 1,295,925 tons went west.

"Comparing the tonnage of the past season with that of 1891 there is shown to be a loss of 281,447 tons, which is attributable to the fact that the railroads have advanced their equipments to such a degree that they are able to carry freight as cheaply by rail as it can be done by canal. This is especially so in such articles as grain, stone and clay, anthracite and bituminous coal, and iron and other ores, which, together with lumber, make up ninety per cent of the merchandise usually transported by canal.

## Canal Statistics.

“In my annual report submitted to the legislature in 1891 I directed attention to the improvements made by railroads as compared with the improvements made to the canals of this state for the past several years. The statements made then have since been corroborated by the fact that the railroads have been able to carry freight at a rate which would have been unprofitable to the canal boatmen, and in consequence the canal did not get its share of the carrying trade.

“This was the case during the early part of the season of navigation, and was continued for two months. With the ripening of the crops and the consequent shipment of grain to the seaboard, prices became remunerative to the boatmen and the volume of shipments increased.

“It will be noted, however, that as the railway improvements are perfected, the tonnage of the competing railroads increases, while there is a decrease in canal shipments to a greater or less degree.

“The following is the tonnage of the canals and the principal competing lines each year since the abolition of tolls on the canals :—

Year.	Canals.	New York Central Railway.	Erie Railway.
	Tons.	Tons.	Tons.
1883.....	5,664,056	10,892,440	13,610,623
1884.....	5,009,488	10,212,418	16,219,598
1885.....	4,731,784	10,733,499	10,253,489
1886.....	5,293,982	12,636,435	18,668,235
1887.....	5,553,805	14,531,726	13,949,260
1888.....	4,942,948	15,162,812	15,174,009
1889.....	5,370,369	15,011,541	15,084,132
1898.....	5,246,102	16,108,441	16,269,656
1891.....	4,563,472	16,621,567	17,339,140
1892.....	4,281,995	20,721,752	18,334,716

### IMPROVEMENTS.

“What improvements can be made to the canal to meet its wants and place it on a footing to compete with other carrying routes, so as to continue its use as a great freight regulator and to place it in such a condition that it will remain a benefit to the people of the state? This question has agitated the ingenious minds of a great many people. Various methods have been proposed and considered. Among them one method has been to lengthen the locks so as to permit two boats to be locked at once, thereby saving expense to boatmen in transportation by enabling them to tow two boats by using a less number of horses and men, also reducing the time of transportation between Buffalo and tide water. This improvement has been tried, and while it has been of some benefit, it is still inadequate for the occasion.

“There are two other propositions for improvement being offered, one to increase the speed by power other than horses, and the other to increase the capacity of boats by either deepening the canal or raising its banks, thereby enabling it to get a greater depth of water.

“The question of deepening the canal would require a great expenditure of money, as it would cause the rebuilding of all its structures. The proposition of



raising the banks would be the most feasible of either of these suggestions, as the present structures could be utilized by increasing their height. The other proposition is to increase the motive power and thereby increase the speed of boats; this should be considered very favourably. The power to be considered is electricity, for the great natural facilities for generating such power along the line of the canal are very favourable."

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

(From Reports of Geo. F. Stone, Secretary, Board of Trade, Chicago.)

QUANTITY and Value of Exports from Chicago to Canada, by Lake, 1892.

	UNITED STATES VESSELS.		CANADIAN VESSELS.		TOTALS.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		\$ cts.		\$ cts.		\$ cts.
Wheat..... Bush.	1,453,677	1,077,964 48	641,562	494,153 75	2,095,239	1,572,118 23
Corn..... "	1,502,528	712,679 03	748,566	377,647 59	2,251,094	1,090,326 62
Oats..... "	35,925	11,855 00			35,925	11,855 00
Rye..... "	156,870	123,792 60	181,780	132,418 97	338,650	256,211 57
Flax seed..... "	31,675	32,774 08			31,675	32,774 08
Timothy seed..... "			141	185 00	141	185 00
Flour..... Brls.			1,795	8,000 00	1,795	8,000 00
Corn meal..... "	50	150 00			50	150 00
Pork..... "	50	612 50			50	612 50
Beef..... "	20	142 50	709	6,950 00	729	7,092 50
Lard..... "	20	235 12			20	235 12
Gen'l merchandise.. Pkgs.			87	870 00	87	870 00
Total value.....		1,960,205 31		1,020,225 31		2,980,430 62

SHIPMENTS of Grain (in transit and export) from Chicago, by Lake, during 1892.

Shipped to	CORN.		OATS.		WHEAT.	RYE.	TOTALS.
	Export.	In Transit.	Export.	In Transit.	Export.	Export.	
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Christianssand, Norway and Sweden.....					9,800		9,800
Collingwood, Ont.....		21,519					21,519
Kingston, Ont.....	1,786,202		35,925	465,193	2,041,002	230,246	4,057,450
Midland, Ont.....	265,917	1,179,286					1,946,320
Montreal, Que.....	107,662				44,437	108,404	260,503
Point Edward, Ont.....		595,003		212,607			807,610
Prescott, Ont.....	66,313						66,313
Sarnia, Ont.....		395,936		1,016,391			1,412,327
Toronto, Ont.....	25,000						25,000
Totals.....	2,251,094	2,191,744	35,925	1,694,191	2,095,239	338,650	8,606,848

# Canal Statistics.

## GRAIN FREIGHT 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 1892:—

(From Report, Board of Trade, Chicago.)

WEEK ENDING.	TO BUFFALO.		TO KINGSTON.		TO MONTREAL (STREAM).		ERIE CANAL, BUFFALO TO NEW YORK.		CHICAGO TO NEW YORK, LAKE AND CANAL, INCLUDING BUFFALO CHARGES.	
	Wheat per Bushel	Corn per Bushel	Wheat per Bushel	Corn per Bushel	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 16.	3 $\frac{3}{4}$	3 $\frac{1}{2}$								
do 23.	2	1 $\frac{1}{2}$								
do 30.	2 $\frac{1}{4}$	2			2 $\frac{3}{4}$	6				
May 7.	2	1 $\frac{3}{4}$			3 $\frac{1}{4}$	6	3 to 4	2 $\frac{5}{8}$ to 3 $\frac{3}{8}$	5 $\frac{1}{4}$ to 6 $\frac{1}{4}$	5 $\frac{1}{4}$ to 6 $\frac{1}{4}$
do 14.	2	1 $\frac{3}{4}$				6	2 to 3	1 $\frac{1}{8}$ to 2 $\frac{1}{8}$	4 $\frac{1}{8}$ to 5 $\frac{1}{8}$	4 $\frac{1}{8}$ to 5 $\frac{1}{8}$
do 21.	2	1 $\frac{3}{4}$				6	2	2 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
do 28.	1 $\frac{3}{4}$	1 $\frac{3}{4}$				6	2 $\frac{1}{4}$	2 $\frac{1}{4}$	5 $\frac{1}{4}$	4 $\frac{1}{4}$
June 4.	1 $\frac{1}{2}$	1 $\frac{1}{2}$					2 $\frac{1}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
do 11.	1 $\frac{1}{2}$	1 $\frac{1}{2}$			2 $\frac{3}{4}$		2 $\frac{1}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$
do 18.	2	1 $\frac{3}{4}$	3		2 $\frac{3}{4}$		2 $\frac{1}{4}$	2	5 $\frac{1}{2}$	4 $\frac{1}{2}$
do 25.	2	1 $\frac{3}{4}$	3		2 $\frac{3}{4}$		2 $\frac{1}{4}$	2	5 $\frac{1}{2}$	4 $\frac{1}{2}$
July 2.	2	1 $\frac{3}{4}$	3				2 $\frac{1}{4}$	2	5 $\frac{1}{2}$	4 $\frac{1}{2}$
do 9.	2	1 $\frac{3}{4}$	3		5		2 $\frac{1}{4}$ to 2 $\frac{3}{4}$	2 to 2 $\frac{1}{2}$	5 $\frac{1}{4}$ to 5 $\frac{1}{2}$	4 $\frac{1}{4}$ to 4 $\frac{1}{2}$
do 16.	2	1 $\frac{3}{4}$	3 $\frac{1}{2}$				2 $\frac{1}{4}$	2 $\frac{1}{4}$	5 $\frac{1}{4}$	4 $\frac{1}{4}$
do 23.	2 $\frac{1}{4}$	2	3 $\frac{1}{2}$		5 $\frac{1}{4}$		2 $\frac{1}{4}$	2 $\frac{1}{4}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$
do 30.	2 $\frac{1}{4}$	2	3 $\frac{3}{8}$		5 $\frac{1}{4}$		2 $\frac{3}{8}$	2 $\frac{3}{8}$	5 $\frac{3}{8}$	5 $\frac{3}{8}$
Aug. 6.	2	1 $\frac{3}{4}$	3 $\frac{3}{8}$	3 $\frac{1}{2}$			2 $\frac{3}{8}$	2 $\frac{3}{8}$	5 $\frac{3}{8}$	4 $\frac{3}{8}$
do 13.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	3 $\frac{3}{4}$				3	3	6	5 $\frac{1}{2}$
do 20.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	4	3 $\frac{1}{2}$	6		3	3 $\frac{1}{4}$	6 $\frac{1}{4}$	5 $\frac{1}{4}$
do 27.	2 $\frac{1}{4}$	2	3 $\frac{3}{8}$	3 $\frac{1}{4}$	6		3	3 $\frac{1}{4}$	6 $\frac{1}{4}$	5 $\frac{1}{4}$
Sept. 3.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	3 $\frac{3}{8}$	3 $\frac{3}{4}$	6		3	3 $\frac{3}{8}$	6 $\frac{3}{8}$	6 $\frac{1}{4}$
do 10.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	3 $\frac{3}{4}$		6		3 $\frac{1}{4}$	4	6 $\frac{1}{4}$	6 $\frac{1}{4}$
do 17.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	4				3 $\frac{3}{8}$	3 $\frac{3}{8}$	7 $\frac{1}{4}$	6 $\frac{3}{8}$
do 24.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{4}$				3 $\frac{3}{8}$	3 $\frac{3}{8}$	7 $\frac{1}{4}$	6 $\frac{3}{8}$
Oct. 1.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					4	4	7 $\frac{1}{4}$	6 $\frac{3}{8}$
do 8.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{4}$						7 $\frac{1}{4}$	7 $\frac{1}{4}$
do 15.	2 $\frac{1}{4}$	2 $\frac{1}{4}$	4 $\frac{1}{4}$				4 $\frac{3}{8}$	4 $\frac{3}{8}$	7 $\frac{3}{8}$	7 $\frac{3}{8}$
do 22.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					5 $\frac{1}{4}$	5 $\frac{1}{4}$	8 $\frac{1}{4}$	8 $\frac{1}{4}$
do 29.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					5 $\frac{1}{4}$	6	8 $\frac{1}{4}$	8 $\frac{1}{4}$
Nov. 5.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					5	6	8 $\frac{1}{4}$	8 $\frac{1}{4}$
do 12.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					4	5	7 $\frac{3}{8}$	8 $\frac{1}{4}$
do 19.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					4	4	7 $\frac{3}{8}$	8 $\frac{1}{4}$
do 26.	2 $\frac{1}{4}$	2 $\frac{1}{4}$					4	5	7 $\frac{3}{8}$	8 $\frac{1}{4}$
Dec. 3.	2 $\frac{1}{4}$	2 $\frac{1}{4}$							7 $\frac{3}{8}$	8 $\frac{1}{4}$

Lake Freight from Chicago to Buffalo on Wheat and Corn, reported as follows, by William Thurstone, Secretary Merchants' Exchange, Buffalo.

STATEMENT showing the dates of the changes in the ruling rates of lake freights on wheat and corn from Chicago to Buffalo during 1892.

1892.	Wheat, bush.	Corn, bush.	1892.	Wheat, bush.	Corn, bush.
	Cts.	Cts.		Cts.	Cts.
April 4.....	3	2 $\frac{3}{4}$	July 27.....	2	1 $\frac{3}{4}$
do 6.....	2 $\frac{3}{4}$	2 $\frac{1}{2}$	Aug. 1.....	2 to 2 $\frac{1}{2}$	1 $\frac{3}{4}$ to 2
do 8.....	2 $\frac{3}{4}$	2 $\frac{1}{2}$	do 2.....	2 $\frac{1}{2}$	2
do 9.....	2 $\frac{1}{2}$	2	do 5.....	2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 11.....	2	.....	do 11.....	2 $\frac{3}{8}$ to 2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 12.....	2	1 $\frac{3}{4}$	do 12.....	2 $\frac{1}{2}$	2
do 18.....	1 $\frac{3}{4}$	1 $\frac{1}{2}$	Sept. 9.....	2 $\frac{1}{2}$	2 to 2 $\frac{1}{4}$
do 20.....	1 to 1 $\frac{1}{4}$	1	do 10.....	2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 21.....	1 $\frac{1}{4}$	1	do 24.....	2 $\frac{1}{2}$	2
do 22.....	1 $\frac{1}{4}$ to 1 $\frac{3}{4}$	1 to 1 $\frac{1}{4}$	Oct. 10.....	2 $\frac{3}{8}$	2 $\frac{1}{8}$
do 23.....	1 $\frac{3}{4}$	1 $\frac{3}{4}$	do 11.....	2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 26.....	2	1 $\frac{3}{4}$	do 19.....	2 $\frac{1}{2}$	2
do 29.....	2 $\frac{1}{4}$	2	Nov. 2.....	2 $\frac{3}{8}$ to 2 $\frac{1}{2}$	2 $\frac{1}{4}$
May 5.....	2	1 $\frac{3}{4}$	do 4.....	2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 21.....	1 $\frac{3}{4}$	1 $\frac{1}{2}$	do 5.....	2 $\frac{3}{8}$	2 $\frac{1}{4}$
do 26.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$	do 11.....	3	2 $\frac{3}{8}$
June 6.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$	do 12.....	2 $\frac{1}{2}$ to 3	2 $\frac{1}{2}$
do 11.....	2	1 $\frac{1}{2}$	do 14.....	2 $\frac{3}{8}$	2 $\frac{1}{2}$
do 30.....	1 $\frac{7}{8}$ to 2	1 $\frac{3}{4}$	do 15.....	2 $\frac{3}{8}$	2 $\frac{1}{2}$ to 2 $\frac{3}{4}$
July 1.....	2	1 $\frac{3}{4}$	do 17.....	2 $\frac{1}{2}$	2 $\frac{1}{2}$
do 23.....	2 to 2 $\frac{1}{2}$	1 $\frac{3}{4}$ to 2	do 21.....	2 $\frac{1}{2}$	2
do 25.....	2 $\frac{1}{4}$	2	do 25 to Dec. 4.....	2 $\frac{1}{2}$	2 $\frac{1}{4}$
do 26.....	2 to 2 $\frac{1}{2}$	1 $\frac{3}{4}$ to 2			

NOTE.—Rates from Milwaukee about the same as from Chicago. As a rule oats one-quarter cent less than corn.

# Canal Statistics.

## AVERAGE LAKE FREIGHTS.

The following statement shows the average rates of lake freights on wheat and corn between Chicago and Buffalo during each month in the past ten years, the highest and lowest rate on wheat in each year, and the average rate on wheat each year, in cents, per bushel:—

Grain.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
1883 { Wheat.....	3.0	2.5	2.5	3.8	4.6	3.8	4.0
{ Corn.....	2.7	2.2	2.2	3.5	4.3	3.5	3.7
Highest rate, wheat, 1883, 5½c. ; lowest, 2.2c. ; average for the season, 3½c.							
1884 { Wheat.....	2.2	2.2	2.0	1.9		2.0	2.3
{ Corn.....	2.0	2.0	1.7	1.6	1.9	1.6	2.1
Highest rate, wheat, 1884, 3c. ; lowest, 1.6c. ; average for the season, 2.1c.							
1885 { Wheat.....	2.1	1.3	1.3	1.8	1.6	3.1	3.2
{ Corn.....	1.8	1.2	1.1	1.5	1.4	2.2	2.8
Highest rate, wheat, 1885, 3½c. ; lowest, 1.1c. ; average for the season, 2c.							
1886 { Wheat.....	3.1	2.7	2.7	3.2	4.5	4.8	4.3
{ Corn.....	2.8	2.5	2.5	2.9	4.2	4.6	4.0
Highest rate, wheat, 1886, 5½c. ; lowest, 2c. ; average for the season, 3.6c.							
1887 { Wheat.....	3.4	5.1	3.8	3.5	4.1	4.7	3.9
{ Corn.....	3.1	4.7	3.5	3.3	3.8	4.4	3.6
Highest rate, wheat, 1887, 6c. ; lowest, 3c. ; average for the season, 4.1c.							
1888 { Wheat.....	2.1	1.9	2.2	3.2	3.5	2.4	2.5
{ Corn.....	1.8	1.7	1.9	2.9	3.2	2.1	2.3
Highest rate, wheat, 1888, 4c. ; lowest, 1.7c. ; average for the season, 2.7c.							
1889 { Wheat.....	2.2	2.0	2.1	2.7	3.0	3.0	2.5
{ Corn.....	2.0	1.8	1.9	2.4	2.7	2.7	2.3
Highest rate, wheat, 1889, 3.6c. ; lowest, 2c. ; average for the season, 2.5c.							
1890 { Wheat.....	1.8	2.2	2.3	1.5	2.0	1.8	2.0
{ Corn.....	1.6	2.0	2.0	1.3	1.8	1.6	1.8
Highest rate, wheat, 1890, 2½c. ; lowest, 1.5c. ; average for the season, 1.9c.							
1891 { Wheat.....	1.4	1.2	2.1	2.7	3.3	2.2	4.1
{ Corn.....	1.2	1.1	2.0	2.5	3.0	2.1	3.8
Highest rate, wheat, 1891, 5½c. ; lowest, 1c. ; average for the season, 2.4c.							
1892 { Wheat.....	1.9	1.8	2.0	2.3	2.3	2.3	2.6
{ Corn.....	1.7	1.6	1.8	2.1	2.1	2.1	2.3
Highest rate, wheat, 1892, 3c. ; lowest, 1c. ; average for the season, 2.2c.							

### LAKE FREIGHTS FROM DULUTH TO BUFFALO ON WHEAT.

The following statement shows the dates of the changes in the ruling rates on wheat from Duluth to Buffalo during the season of 1892, on the dates specified:—

Date, 1892.	Rate.	Date, 1892.	Rate.
	Cents.		Cents.
Opening to May 7.....	3½	Aug. 27.....	3
May 16.....	3½	Oct. 1.....	3½
June 4.....	2½	do 15.....	3½
do 18.....	2½	do 22.....	4
do 25.....	3	Nov. 5.....	3½
July 9.....	3½	do 12.....	4
do 16.....	3 to 3½	do 17.....	3½
Aug. 2.....	3	do 26.....	3½
do 6.....	3½	do 30.....	4
do 20.....	2½		

In 1885 the range of freight on wheat, Duluth to Buffalo, was  $1\frac{1}{2}$  to 5 cents; in 1886,  $3\frac{1}{4}$  to 8 cents; in 1887, 5 to 8 cents; in 1888, 2 to 5 cents; in 1889, 2 to 5 cents; in 1890, 2 to 5 cents; in 1891,  $1\frac{1}{4}$  to  $9\frac{1}{2}$  cents; and in 1892,  $2\frac{1}{4}$  to 4 cents per bushel.

The first arrival by lake at Duluth, in 1892 on 21st April, in 1891 on 30th April, in 1890 on 23rd April, in 1889 on 20th April, in 1888 on 12th May, in 1887 on 8th May, and in 1886 on 4th May.

The following statement shows the average rates of canal freights on wheat and corn, between Buffalo and New York, during each month in the past ten years, and the highest and lowest rates on wheat, and average rate on wheat in each year:

Grain.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
1883 { Wheat .....	5.0	4.3	3.9	4.6	6.3	5.5	4.6
{ Corn .....	4.5	3.9	3.6	4.3	5.9	5.0	4.1
Highest rate, wheat, 1883, 6.5c.; lowest, 3.5c.; average for the season, 4.9c.							
1884 { Wheat .....	3.8	3.4	3.6	4.2	4.7	5.0	4.7
{ Corn .....	3.4	3.1	3.2	3.8	4.2	4.4	4.2
Highest rate, wheat, 1884, 5.5c.; lowest, 3.2c.; average for the season, 4.2c.							
1885 { Wheat .....	4.2	3.1	3.0	3.7	3.5	4.2	5.0
{ Corn .....	3.8	2.9	2.8	3.3	3.2	3.9	4.5
Highest rate, wheat, 1885, 6c.; lowest, 3c.; average for the season, 3.8c.							
1886 { Wheat .....	5.7	3.8	4.0	5.4	6.0	5.5	4.8
{ Corn .....	5.1	3.4	3.6	4.8	5.5	5.0	4.5
Highest rate, wheat, 1886, 6.5c.; lowest, 3c.; average for the season, 5c.							
1887 { Wheat .....	5.1	4.5	3.8	4.0	4.5	4.8	5.8
{ Corn .....	4.6	4.1	3.4	3.6	4.1	4.4	5.3
Highest rate, wheat, 1887, 7c.; lowest, 3.5c.; average for the season, 4.6.							
1888 { Wheat .....	3.4	2.5	2.5	4.1	3.9	3.7	3.5
{ Corn .....	3.1	2.3	2.3	3.8	3.6	3.4	3.2
Highest rate, wheat, 1888, 4.5c.; lowest, 2c.; average for the season, 3.4.							
1889 { Wheat .....	4.0	3.8	4.0	4.4	5.0	5.0	5.0
{ Corn .....	3.6	3.4	3.6	3.9	4.5	4.5	4.4
Highest wheat, rate, 1889, 5c.; lowest, 3.7c.; average for the season, 4.8.							
1890 { Wheat .....	3.9	3.8	3.6	3.8	3.9	4.0	3.5
{ Corn .....	3.5	3.4	3.2	3.4	3.5	3.6	3.1
Highest rate, wheat, 1890, 4.2c.; lowest, 3c.; average for the season, 3.8.							
1891 { Wheat .....	2.8	2.9	2.8	3.8	4.2	4.6	4.0
{ Corn .....	2.5	2.6	2.5	3.5	3.8	4.2	3.6
Highest rate, wheat, 1891, 4.2c.; lowest, 2.5c.; average for the season, 3.5c.							
1892 { Wheat .....	2.7	2.2	2.4	3.0	3.8	4.7	4.6
{ Corn .....	2.4	2.0	2.2	2.6	3.4	4.4	4.3
Highest rate, wheat, 1892, 6c.; lowest, 2.2c.; average for the season, 3.5c.							

NOTE.—Canal free of tolls.

# Canal Statistics.

## FREIGHTS, TOLLS, ELEVATING AND STORAGE RATES COMPARED.

The following statement shows the receipts of grain and flax-seed at Buffalo, the average canal freight on wheat, and the tolls on wheat to New York, and the elevating and storage rates at Buffalo for a series of years:—

Year.	Grain received.	Average Canal Freight on Wheat.	Tolls on Wheat.	Elevating, including Storage. †
	Bush.	Cts.	Cts.	Cts.
1870.....	32,208,039	11·2	3·1	1½
1871.....	61,319,313	12·6	3·1	1½
1872.....	58,703,666	13·0	3·1	1½
1873.....	65,498,955	11·4	3·1	1½
1874.....	55,660,198	10·0	3·1	1½
1875.....	52,833,451	7·9	2·0	1
1876.....	44,207,121	6·6	2·0	1
1877.....	61,822,292	7·4	1·0	1
1878.....	78,828,443	6·0	1·0	1
1879.....	75,089,768	6·8	1·0	1
1880.....	106,133,009	6·5	1·0	1
1881.....	56,389,827	4·7	1·0	1
1882.....	51,501,503	5·4	1·0	1
1883.....	65,722,080	4·9	.....	.....
1884.....	58,071,800	4·2	.....	.....
1885.....	52,671,090	3·8	.....	.....
1886.....	75,570,850	5·0	.....	.....
1887.....	87,073,570	4·6	.....	.....
1888.....	78,977,390	3·4	.....	.....
1889.....	*92,290,550	4·8	.....	.....
1890.....	91,994,680	3·8	.....	.....
1891.....	135,315,510	3·5	.....	.....
1892.....	138,872,560	3·5	.....	.....

NOTE.—Prior to 1870 tolls were 6·21 cents a bushel, and the elevating charges 2 cents a bushel.

\* Including flax-seed.

† Storage varied; five or ten days' limit.

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 1892.

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

Shipped to	Articles.	1892.	1891.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1881.	1880.
Liverpool	Grain	3287	4075	3187	3958	3490	3487	3672	2943	4428	3647	3718	4922
do	Sacked flour	3625	4187	3625	4162	3371	3491	3420	2887	2982	4030	3499	5423
Glasgow	Provisions	4875	5631	5109	5746	3747	4073	4415	3606	4674	5183	4670	6871
do	Grain	3550	4425	3660	4075	3606	3705	3910	3228	2641	.....	3932	.....
do	Sacked flour	3906	4469	4188	4426	3679	3968	3951	3443	2811	.....	4400	5051
London	Provisions	3462	5953	5833	6142	4658	4855	5329	4086	4789	.....	5361	6732
do	Grain	3550	4250	3550	3902	3945	3945	4086	2921	2783	.....	3620	.....
do	Sacked flour	3681	4328	4047	4510	3776	3784	4021	3171	3625	.....	4276	.....
do	Provisions	4188	5853	5813	6186	4670	4781	5471	4046	4891	.....	5560	.....
Antwerp	do	5025	5250	4688	6084	4472	4961	5219	4327	5373	6295	5708	7385
Hamburg	do	5000	5500	5250	6262	5426	5229	5154	3842	5434	6279	5471	.....
Amsterdam	do	5500	6000	5000	6500	5426	5525	5562	4383	5434	6683	.....	.....
Rottterdam	do	5500	6000	5000	6500	5426	5508	5562	4383	4354	6683	.....	.....
Copenhagen	do	6094	6375	5813	6482	5483	5508	5169	4951	5434	7168	.....	.....
Stockholm	do	7219	6938	6094	7500	6671	5965	5468	5908	5908	8255	.....	.....
Stetin	do	6094	6375	6813	6492	5483	5508	5833	5210	5422	7420	.....	.....
Bordeaux	do	6200	7500	6650	7491	5821	6021	5708	5066	5603	6432	.....	.....

## Canal Statistics.

### THE UNITED STATES IN TRANSIT TRADE.

(Foreign Commerce, Bureau of Statistics, Washington, U.S.)

The in-transit and transshipment transactions of 1892 were distributed as to countries and ports as follows:—

Of the value of merchandise received from British North America, amounting to \$23,928,255, \$19,005,704 came from the provinces of Quebec, Ontario, Manitoba and the North-west Territory, and \$4,922,551 from other British possessions.

The receipts from Europe amounted to \$27,598,909, of which \$21,334,783 came from the United Kingdom, and \$6,264,126 from other parts of Europe. The receipts from the West Indies were valued at \$12,604,194, of which those from Cuba amounted to \$11,054,445.

Merchandise valued at \$1,260,421 was received from Asia and Oceanica.

Of the shipments from the United States, articles valued at \$26,704,114 were destined for British North America, \$24,189,181 worth of which were shipped to the provinces of Quebec, Ontario, Manitoba and the North-west Territory. The value of shipments to Europe was \$30,317,164, of which merchandise valued at \$20,141,862 was destined for the United Kingdom. The value of shipments to Mexico was \$4,953,911, and of those to the West Indies, \$4,309,014.

The value of receipts of in-transit merchandise at leading ports of entry was as follows:—At New York, \$33,812,074; Portland, Maine, \$5,987,065; Boston, \$1,853,428; New Orleans, \$2,563,336; San Francisco, \$841,198; Galveston, \$199,841; and at northern border and lake ports, \$16,949,263.

### THE CARRYING TRADE.

Values of the imports and exports of merchandise, by geographical divisions and of merchandise in the in-transit and transshipment trade, carried in cars and other land vehicles, in American and in foreign steam and sailing vessels, respectively, during the year ending 30th June, 1892, with the percentages of the total value of such merchandise carried in American vessels.

### IMPORTS and Exports.

Geographical Divisions.	In Cars and other Vehicles.	In American Vessels.		In Foreign Vessels.		Total.	Per cent of American Vessels.
		Steam.	Sailing.	Steam.	Sailing.		
		\$	\$	\$	\$		
Europe.....	23,842,568	9,634,223	5,932,021	1,146,124,815	76,717,992	1,242,251,619	1.25
North America..	64,835,838	65,642,632	39,844,178	87,112,450	22,185,267	279,620,365	37.72
South America...		39,721,598	20,176,046	107,457,299	16,520,430	183,875,373	32.58
Asia.....	4,268,818	9,202,553	7,115,088	61,003,808	18,138,384	99,728,601	16.36
Oceanica.....		3,581,860	16,433,955	8,287,870	10,427,092	88,730,577	51.68
Africa.....		81,993	2,631,579	4,833,581	2,807,416	10,354,569	26.21
All other countries			176,259	2,769,168	174,079	3,119,506	5.65
<b>Total.....</b>	<b>72,947,224</b>	<b>127,864,659</b>	<b>92,309,076</b>	<b>1,417,588,991</b>	<b>146,970,660</b>	<b>1,857,680,610</b>	<b>11.85</b>

### IN-TRANSIT and Transshipment Trade.

Total received and shipped.....	48,385,275	20,218,417	503,040	54,373,624	552,756	139,135,474	14.89
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a. Transported through adjacent foreign territory.

b. Includes \$15,102,362 merchandise carried in vessels of which the nationality and motive power are not known.



"Of the total value of merchandise, amounting to \$827,402,462, imported during the fiscal year 1892, \$39,726,595 came overland, \$139,139,891 in United States vessels, and \$648,535,976 in foreign vessels; of the total value of merchandise exported, amounting to \$1,030,278,148 there was shipped by land vehicles \$33,220,629, by United States vessel, \$81,033,844, and by foreign vessels, \$916,023,675.

It thus appears that, of the imports, only 16·82 per cent of the total value, and of the exports only 7·87 per cent, were shipped in United States vessels.

Analysing the carrying trade in our foreign commerce by geographical divisions, we find the following percentages of total values carried in United States vessels, to wit:—

Geographical Divisions.	Imports from.	Exports to.
	Per cent.	Per cent.
Europe.....	·98	1·38
North America.....	38·05	37·19
South America.....	28·42	51·46
Asia.....	16·10	17·41
Oceanica.....	55·00	46·76
Africa.....	9·31	44·05
All other countries.....	4·09	10·89

It will be observed that over \$3,000,000 worth of merchandise is returned as imported and exported from and to Europe and Asia "in cars and other land vehicles." This apparent inconsistency is explained by the fact that this merchandise was received and shipped through adjacent foreign territory, and the merchandise having crossed the border of the United States in land vehicles, the transportation is necessarily so returned.

Of the total value of merchandise shipped in the in-transit and transshipment trade, viz., \$139,135,474, \$18,385,275 was carried in cars and other land vehicles, \$20,721,457 in United States vessels, \$54,926,380 in foreign vessels, and \$15,102,362 in vessels, the nationality and motive power of which were not known. Of the total value of merchandise in the trade only 14·89 per cent was carried in United States vessels. The merchandise valued \$15,102,362, returned as shipped in vessels, nationality and motive power not known, is such merchandise as was shipped across the territory of the United States, the transportation by which the same left the last port of the United States for the foreign countries of destination not being known."

## Canal Statistics.

### 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 ending 30th June, 1892, as compared with 1891 was as follows :—

	1891.		1892.		INCREASE + DECREASE—	
	Number.	Tons.	Number.	Tons.	Tons.	Per Cent.
<i>Entered at Sea Ports.</i>						
American—						
Sailing.....	3,152	1,336,468	3,126	1,427,976	+91,508	+6.84
Steam.....	2,626	2,333,904	2,501	2,318,675	-15,229	- .65
Total.....	5,578	3,670,372	5,627	3,746,651	+76,279	+2.08
Foreign—						
Sailing.....	6,812	2,942,115	6,413	3,044,504	+102,479	+ .35
Steam.....	5,607	8,782,124	7,210	11,389,235	+2,607,111	+29.69
Total.....	12,419	11,724,239	13,623	14,433,829	+2,709,590	+23.11
Total entered at sea ports.	18,197	15,394,611	19,250	18,180,480	+2,785,869	+18.10
<i>Entered at Lake Ports.</i>						
American.....	5,268	710,432	5,285	723,304	+12,872	+1.81
Foreign.....	9,113	2,099,252	8,609	2,109,640	+10,388	+ .49
Total entered at lake ports	14,381	2,809,684	13,894	2,832,944	+23,260	+ .83

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

Mr. Thurstone, Secretary of Board of Trade, Buffalo, reports as follows :—

1892.

Opening of navigation to 10th November. Elevating, receiving, weighing and discharging sound grain,  $\frac{5}{8}$  cent per bushel; for storing each ten days or parts thereof,  $\frac{1}{4}$  cent per bushel. Above charge to be paid by the consignee of the grain. No grain will be received for transfer. The vessel paying only the shovelling.

November 10th to close of navigation. For elevating, receiving, weighing and discharging sound grain, per bushel,  $\frac{5}{8}$  cent; storing first ten days or parts thereof, per bushel,  $\frac{1}{4}$  cent; storing each succeeding ten days or parts thereof, per bushel,  $\frac{1}{4}$  cent, until such charge (accumulated after the first ten days) shall amount to 2 cents per bushel, then the grain shall be free of storage until five days after the opening of canal navigation in 1893. On all grain in store before 10th November, 1892, the charge for winter storage will be  $\frac{1}{4}$  cent per bushel for each ten days or parts thereof, until such charge (accumulated after 10th November, 1892) shall amount to 2 cents per bushel, then the grain shall be free of storage until five days after the opening of canal navigation in 1893. Above charge to be paid by the grain. No grain will be received for transfer.

The following are about the charges made by elevators for handling sound car grain :—

Elevating from cars, including shovelling and storing, five or ten days, or parts thereof, one-half of one cent per bushel. Storage each succeeding ten days, or parts thereof, one-quarter of one cent per bushel. Running to side-bin for delivery to

cars and wagons, one-quarter of one cent per bushel. Blowing and cleaning, one-quarter of one cent per bushel.

"The following statement shows the names and storage capacity of the several grain elevators, transfers and floaters of the port of Buffalo:"—

Names of Elevators.	Capacity.	Names of Elevators.	Capacity.
	Bushels.		Bushels.
Bennett.....	801,000	Swiftsun (unused).....	
Brown.....	250,000	Union.....	130,000
City A.....	600,000	Watson.....	600,000
City B.....	800,000	Wheeler.....	350,000
C. J. Wells.....	550,000	Wilkeson.....	400,000
Coatsworth.....	1,200,000	William Wells (unused).....	
Connecting terminal.....	950,000		
Dakota.....	850,000	Total, 36 elevators.....	15,130,000
Erie Basin (unused)			
Erie Canal (Black Rock).....	140,000	Transfer Towers—	
Evans.....	400,000	Horton.....	
Exchange.....	500,000	Hefford.....	
Frontier.....	650,000	Chicago.....	
Flax Seed.....	65,000	Fulton.....	
International (Black Rock).....	650,000	Merchants'.....	
Kellogg.....	600,000	North-west.....	
Lake Shore (unused)		Western Transit.....	
Lyon (unused)			
Marine.....	125,000	Total, 7 transfers.....	
National and Globe Mills.....	100,000		
N. Y. L. E. & Western.....	720,000	Floaters—	
Niagara A.....	800,000	Cyclone.....	
Niagara B.....	1,200,000	Buffalo.....	
Niagara C.....	200,000	Free Canal.....	
Ontario.....	450,000	Free Trade.....	
Queen City, A., B. and C.....	450,000	Iva. Y. Munn.....	
Richmond.....	250,000	Marquette.....	
Schreck.....	50,000		
Sternberg (unused).....		Total, 6 floaters.....	
Sturges.....	300,000		

Showing a total elevator storage capacity of 15,130,000 bushels of grain ; but it may be noted that about twenty per cent should be deducted from this capacity for storage of remnants, working room, and elevators out of repair. The estimated cost of the elevators, transfers and floaters, over \$9,000,000. The transfer capacity for each twenty-four hours would probably aggregate 4,500,000 bushels—that is to say, there are facilities for receiving from lake vessels and railroads, and transporting to canal boats and cars, daily, the quantity named from forty-nine elevators, transfers and floaters.

Of the above list, the connecting terminals, Kellogg, Ontario, Bennett, Niagara B, Dakota, Wilkeson and Evans each have two legs. The terminal, Kellogg and Bennett each have one portable leg, which enables them to work in two hatches of any vessel at the same time. The City B. also has a portable leg, which can be worked in connection with the stationary leg of City A.

## Canal Statistics.

(Circular.)

### TOLLS TO BE PAID BY VESSELS PASSING THROUGH THE ST. MARY'S FALLS CANAL.

1892.  
Department No. 145.  
Bureau of Navigation.

TREASURY DEPARTMENT,  
WASHINGTON, D.C., 20th August, 1892.

To Collectors of Customs and others—

For your information and guidance, I append hereto a copy of instructions of this date, addressed to the collector of customs at Marquette, Michigan, relative to tolls to be exacted, under the proclamation of the president, dated the 18th instant, from vessels passing through the St. Mary's Falls Canal.

O. L. SPAULDING,  
*Acting Secretary.*

TREASURY DEPARTMENT,  
WASHINGTON, D.C., 20th August, 1892.

Collector of Customs, Marquette, Mich.—

SIR,—Your attention is invited to the following proclamation by the president, dated the 18th instant, viz. :—

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

#### A PROCLAMATION.

Whereas, by an Act of Congress, approved 26th July, 1892, entitled "An Act to enforce reciprocal commercial relations between the United States and Canada, and for other purposes," it is provided: "That, with a view of securing reciprocal advantages for the citizens, ports and vessels of the United States, on and after the first day of August, eighteen hundred and ninety-two, whenever and so often as the president shall be satisfied that the passage through any canal or lock connected with the navigation of the St. Lawrence River, the great lakes or the water ways connecting the same, of any vessels of the United States, or of cargoes or passengers in transit to any port of the United States, is prohibited or is made difficult or burdensome by the imposition of tolls or otherwise which, in view of the free passage through the St. Mary's Falls Canal, now permitted to vessels of all nations, he shall deem to be reciprocally unjust and unreasonable, he shall have the power, and it shall be his duty, to suspend, by proclamation to that effect, for such time and to such extent (including absolute prohibition) as he shall deem just, the right of free passage through the St. Mary's Falls Canal, so far as it relates to vessels owned by the subjects of the government so discriminating against the citizens, ports or vessels of the United States, or to any cargoes, portions of cargoes, or passengers in transit to the ports of the government making such discrimination, whether carried in vessels of the United States or of other nations.

"In such case and during such suspension tolls shall be levied, collected and paid as follows, to wit: Upon freight of whatever kind or description, not to exceed two dollars per ton; upon passengers, not to exceed five dollars each, as shall be, from time to time, determined by the president: *Provided*, That no tolls shall be charged or collected upon freight or passengers carried to or landed at Ogdensburg, or any port west of Ogdensburg and south of a line drawn from the northern boundary of the State of New York through the St. Lawrence River, the great lakes and their connecting channels to the northern boundary of the State of Minnesota.

"Sec. 2. All tolls so charged shall be collected under such regulations as shall be prescribed by the secretary of the treasury, who may require the master of such vessel to furnish a sworn statement of the amount and kind of cargo and the number of passengers carried and the destination of the same, and such proof of the actual delivery of such cargo or passengers at some port or place within the limits above

named as he shall deem satisfactory; and until such proof is furnished such freight and passengers may be considered to have been landed at some port or place outside of those limits, and the amount of tolls which would have accrued if they had been so delivered shall constitute a lien, which may be enforced against the vessel in default wherever and whenever found in the waters of the United States," and

Whereas the government of the Dominion of Canada imposes a toll amounting to about 20 cents per ton on all freight passing through the Welland Canal in transit to a port of the United States, and also a further toll on all vessels of the United States and on all passengers in transit to a port of the United States, all of which tolls are without rebate. And

Whereas, the government of the Dominion of Canada, in accordance with an order in Council of 4th April, 1892, refunds 18 cents per ton of the 20 cent toll at the Welland Canal on wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, upon condition that they are originally shipped for and carried to Montreal or some port east of Montreal for export, and that, if transhipped at an intermediate point, such transshipment is made within the Dominion of Canada, but allows no such nor any other rebate on said products when shipped to a port of the United States, or when carried to Montreal for export if transhipped within the United States. And

Whereas, the government of the Dominion of Canada, by said system of rebate and otherwise, discriminating against the citizens of the United States in the use of said Welland Canal in violation of the provisions of article 27 of the treaty of Washington, concluded 8th May, 1871. And

Whereas, said Welland Canal is connected with the navigation of the great lakes, and I am satisfied that the passage through it of cargoes in transit to ports of the United States is made difficult and burdensome by said discriminating system of rebate and otherwise, and is reciprocally unjust and unreasonable;

Now, therefore, I, Benjamin Harrison, President of the United States of America, by virtue of the power to that end conferred upon me by said act of congress, approved 26th July, 1892, do hereby direct that from and after 1st September, 1892, until further notice, a toll of 20 cents per ton be levied, collected and paid on all freight of whatever kind or description passing through the St. Mary's Falls Canal in transit to any port of the Dominion of Canada, whether carried in vessels of the United States or of other nations; and to that extent I do hereby suspend from and after said date the right of free passage through said St. Mary's Falls Canal of any and all cargoes or portions of cargoes in transit to Canadian ports.

In testimony whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the city of Washington this 18th day of August, in the year of our Lord one thousand eight hundred and ninety-two, and of the independence of the United States of America the one hundred and seventeenth.

BENJ. HARRISON.

[SEAL.]

By the President,  
JOHN W. FOSTER,  
*Secretary of State.*

On the passage through the canal at St. Mary's Falls, in your district, from and after the 1st proximo, of any vessel with cargo, you will exact tolls as provided for above. But no tolls will be charged or collected as regards freight carried to and landed at Ogdensburg, or any port west of Ogdensburg and south of a line drawn from the northern boundary of the State of New York through the St. Lawrence River, the great lakes and their connecting channels to the northern boundary of the State of Minnesota.

The master of every such vessel will be required to furnish a sworn statement, substantially in the form of a manifest, showing the date, the name of the vessel, its destination, the name of the master, and the number of tons and the kind of merchandise carried. If the destination be such as to exempt the vessel from the tolls,

## Canal Statistics.

you will make entry of the fact in a book with columns exhibiting the particulars specified in the master's statement, and also the amounts chargeable and the amounts paid. On the next arrival of the vessel you will exact the tolls, unless on or before that time, and within one month from her passage through the canal, there shall be furnished to you proof of the actual delivery of the cargo at some port or place within the limits of the United States above specified. Such proof will consist of the certificate of the collector of customs at the port of destination, showing the entry of the vessel and the landing of the merchandise there. The certificate will be in the following form:—

### CERTIFICATE OF LANDING OF CARGO TRANSPORTED THROUGH THE ST. MARY'S FALLS CANALS.

CUSTOM-HOUSE, PORT OF \_\_\_\_\_,  
COLLECTOR'S OFFICE, \_\_\_\_\_, 189 .

These are to certify, that there have been delivered at this port from on board the \_\_\_\_\_, whereof \_\_\_\_\_ is master, from the port of \_\_\_\_\_, the following merchandise, \*\_\_\_\_\_ transported through the St. Mary's Falls Canal, viz. :

Witness my hand and seal, this \_\_\_\_\_ day of \_\_\_\_\_, 189—.

\_\_\_\_\_  
Collector.

\*Specify number of tons.

Should the prescribed evidence not be furnished within a period of one month after the passage of the canal by the vessel, you will report the facts to the department, to the end that measures may be taken by it for the recovery of the amounts due.

The tolls collected will be deposited as miscellaneous receipts, and included in a special account forwarded to the first auditor, in which the total amount received each month will be credited, and the amount deposited debited, and will be entered on stub book (Cat. No. 399), with other collections, as "tolls for passage of vessels through St. Mary's Falls Canal, \_\_\_\_\_ tons of freight, \$\_\_\_\_\_."

An abstract will accompany each account, showing the name of the vessel and of the master, the number of tons of merchandise, the date of the master's statement, and the date of payment.

Receipts for the amounts paid will be given to the payers.

Respectfully yours,

O. L. SPAULDING,  
Acting Secretary.

(Circular.)

### TOLLS, ST. MARY'S FALLS CANAL.

1892.  
Department No. 161.  
Bureau of Navigation.

TREASURY DEPARTMENT,  
WASHINGTON, D.C., 10th September, 1892.

To Collectors of Customs, Northern, North-eastern and North-western Frontiers:

"Tolls, as prescribed by the department's circular No. 145, of 1892, will be collected in the case of vessels passing through St. Mary's Falls Canal, consigned to American ports, but whose manifests state that the cargo is to be exported to Canada, either to be retained there or for export therefrom to a foreign country other than the United States.

When the manifest shows that the final destination of the cargo is the United States, or a foreign place other than Canada, via the United States, whether the merchandise be subject to "shippers' orders" or otherwise, the collector will issue landing certificate accordingly, unless upon investigation he shall find that the

manifest was made out with intent to defraud the United States, or to conceal the true final destination, and that tolls were properly payable, in each case he will withhold his certificate and take measures for the collection of the tolls due."

(Sgd.) O. L. SPAULDING,  
*Acting Secretary.*

(Circular.)

TOLLS, ST. MARY'S FALLS CANAL.

1892.  
Department No. 166.  
Bureau of Navigation.

TREASURY DEPARTMENT, 19th September, 1892.

To Collectors of Customs :

Circular No. 161, of 10th September, 1892, relative to tolls on freight shipped in certain cases to ports in the United States *via* St. Mary's Falls Canal, is hereby suspended, pending further investigation.

O. L. SPAULDING,  
*Assistant Secretary.*

# Canal Statistics.

**No. 1.—Total Values of Merchandise received from British North America for Immediate Transit across United States Territory, for Immediate Transhipment in Ports of the United States to British North America, and so shipped, during each year from 1873 to 1892, inclusive.**

YEAR ENDING JUNE 30TH.	COUNTRIES FROM WHICH RECEIVED.					COUNTRIES TO WHICH SHIPPED.				
	British North America.					British North America.				
	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, and the North-west Territories.	British Columbia.	Newfoundland and Labrador.	Total.	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, and the North-west Territories.	British Columbia.	Newfoundland and Labrador.	Total.
1873.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1874.	495,289	12,894,164	5,240	.....	13,394,693	5,282,290	21,320,174	181,730	.....	25,784,184
1875.	449,655	13,616,344	97,691	.....	14,163,690	7,150,036	19,843,169	317,584	.....	27,310,739
1876.	443,570	17,312,933	256,074	.....	18,042,577	8,999,596	20,283,639	517,060	.....	24,800,295
1877.	261,443	22,134,375	195,047	1,137	22,591,902	9,102,600	14,658,358	658,836	94	24,419,888
1878.	160,658	12,092,619	218,418	.....	12,471,695	2,879,422	15,551,298	544,018	2,475	18,977,153
1878.	163,978	11,627,114	412,966	.....	12,204,058	951,268	11,436,470	524,013	934	13,912,685
1879.	194,129	11,606,852	290,079	55	12,081,095	889,539	11,520,877	476,824	2,347	12,869,587
1880.	215,131	16,782,315	137,271	.....	17,134,717	1,613,716	14,866,663	531,436	.....	17,042,103
1881.	171,393	16,758,108	72,555	.....	17,092,046	1,778,836	20,857,827	719,268	.....	23,356,264
1882.	164,990	28,265,083	113,018	87	28,543,178	2,732,665	34,005,845	855,784	1,190	37,595,484
1883.	561,791	29,294,031	30,973	25	29,302,820	2,455,557	35,878,389	971,307	7,335	39,312,568
1884.	656,233	12,574,953	189,041	.....	13,419,227	1,740,900	19,717,466	1,475,833	5,186	22,893,385
1885.	933,806	12,280,483	308,691	633	13,523,618	1,635,442	16,448,942	1,615,293	781	19,700,458
1886.	1,165,973	9,303,864	359,104	32,079	10,861,020	2,040,298	16,360,429	1,825,178	6,174	20,241,079
1887.	1,684,730	9,606,175	213,816	.....	11,504,721	1,621,738	19,930,296	635,841	70	22,187,955
1888.	1,525,048	6,417,701	372,934	27,134	8,542,817	1,781,028	13,451,169	370,322	1,137	13,611,656
1889.	2,596,233	8,356,178	294,859	59,853	11,336,123	2,484,787	18,993,957	665,627	2,704	22,146,375
1890.	3,070,657	12,449,772	306,897	174,584	16,001,910	5,277,210	21,140,198	913,106	4,690	27,385,204
1891.	3,859,079	15,310,945	422,806	187,640	19,780,470	5,005,614	21,695,992	547,144	34,273	27,883,023
1892.	4,393,062	19,005,704	201,373	328,116	23,928,255	2,079,733	24,189,181	428,188	6,962	25,704,114



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, 1892.

COUNTRIES FROM WHICH RECEIVED.				COUNTRIES TO WHICH SHIPPED.			
CUSTOMS DISTRICTS INTO WHICH RECEIVED.	Nova Scotia, New Brunswick and Prince Edward Island.	Quebec, Ontario and the Northwest Territories.	British Columbia.	Newfoundland and Labrador.	British Columbia.	Quebec, Ontario and the Northwest Territories.	British West Indies.
Alaska							\$
Baltimore, Md			18,274		18,274		
Boston, Me	\$5,435,694	163,380	81,070			3,435,894	
Boston and Charlestown, Mass.	210,922					4,307,155	13,615
Buffalo Creek, N. Y.		53,856				1,705	98,798
Champlain, N. Y.		1,453,286				1,300	628
Detroit, Mich.		1,922,680				20,458	
Duluth, Minn.		29,986				350	
Huron, Minn.		665,366				560,656	34,649
New York, N. Y.	711,456	947,569				709,119	238,480
Niagara, N. Y.		841	2,969	323,516		9,705,473	73,259
North and South Dakota.		4,616,859				550,807	1,129,308
Oswegatchie, N. Y.		580,807					11,682
Pasamaquoddy, Me.	83,722	600,102					528
Philadelphia, Pa.		383,183					1,830
Portland and Falmouth, Me.		1,506,091					734
Puget Sound, Wash.			282			4,475,548	
San Francisco, Cal.			98,748			6,000	
Vermont						137,275	
Totals	4,393,992	19,605,764	201,873	323,116	774,869	24,186,181	7,583
						428,188	1,269,766

# Canal Statistics.

**No. 3.—TOTAL VALUES OF MERCHANDISE RECEIVED FROM THE PRINCIPAL AND OTHER FOREIGN COUNTRIES FOR IMMEDIATE TRANSIT ACROSS UNITED STATES TERRITORY OR FOR IMMEDIATE TRANSHIPMENT IN PORTS OF THE UNITED STATES TO OTHER FOREIGN COUNTRIES, AND SO SHIPPED, FOR EACH YEAR FROM 1868 TO 1892, INCLUSIVE.**

Year ending June 30.	Countries from which Received.							Countries to which Shipped.					Total Value of Merchandise Received and Shipped.
	Great Britain and Ireland.	Germany.	British North American Possessions.	Mexico.	Cuba.	Other Countries.	Great Britain and Ireland.	Germany.	British North American Possessions.	Mexico.	Cuba.	Other Countries.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1868	10,664,576	132,074	4,864,209	14,967	4,363,621	1,576,167	2,025,023	3,212,123	481,643	116,521	1,304,875	21,515,604	
1869	10,491,638	150,362	5,852,678	60,715	2,373,474	1,767,037	2,693,526	1,647,602	448,300	72,875	1,289,861	21,045,984	
1870	10,210,455	302,806	7,215,973	103,977	3,309,227	2,049,422	2,946,053	2,116,249	321,331	135,915	983,275	23,191,860	
1871	13,473,915	322,110	7,954,060	344,179	1,367,573	1,913,200	4,031,319	1,033,307	346,872	345,224	1,211,840	25,375,037	
1872	17,631,231	227,232	9,276,169	174,104	2,227,422	1,847,162	2,743,494	2,253,319	358,151	179,570	1,737,496	31,385,320	
1873	19,144,815	250,704	13,394,633	246,607	5,737,904	1,284,462	5,134,175	5,622,325	26,784,184	319,771	1,983,617	40,099,185	
1874	18,832,900	211,907	14,163,690	151,920	4,563,869	926,360	5,391,201	3,866,642	665,214	520,493	1,096,387	38,630,676	
1875	18,657,276	325,648	18,042,577	115,527	1,759,303	1,795,947	7,229,912	1,495,285	27,310,739	248,358	757,429	40,666,283	
1876	14,304,197	290,489	22,591,902	226,315	2,962,963	1,696,780	11,791,200	2,968,558	29,800,295	1,155,004	1,163,508	42,062,655	
1877	13,732,085	337,897	12,471,695	158,852	1,095,451	1,480,793	7,758,501	1,108,298	329,577	306,311	776,933	29,256,773	
1878	10,064,510	378,768	12,204,068	146,822	3,041,957	1,431,063	9,977,030	2,906,280	316,664	319,611	1,305,908	27,337,148	
1879	8,795,340	521,917	12,011,095	222,330	1,954,042	1,521,153	8,175,931	2,282,572	330,968	174,757	1,272,032	23,045,867	
1880	10,311,139	620,704	17,134,747	239,555	3,606,059	1,942,405	10,856,579	3,558,457	300,148	224,848	1,775,594	33,367,749	
1881	14,898,052	721,844	17,002,045	217,444	2,612,550	2,222,129	9,122,079	2,739,246	23,356,261	177,340	1,648,121	37,704,046	
1882	19,911,637	755,560	28,543,178	380,100	5,662,926	3,812,088	11,592,806	5,336,361	840,025	319,257	2,421,526	58,065,459	
1883	20,242,222	1,149,196	29,802,820	281,303	3,126,061	4,276,712	11,089,865	2,758,994	2,282,473	352,532	3,081,875	62,578,327	
1884	14,035,691	948,991	13,419,227	408,124	3,655,568	4,315,978	5,283,369	2,960,468	2,748,439	221,061	2,606,635	36,814,392	
1885	11,064,186	1,140,548	13,523,613	308,293	4,853,354	3,545,544	7,235,519	3,771,531	1,262,515	119,376	1,346,146	34,486,538	
1886	13,142,644	1,462,614	10,961,020	216,078	6,797,879	4,558,223	8,510,079	3,903,566	20,241,079	462,700	2,751,423	37,039,264	
1887	17,977,200	1,670,852	11,504,721	111,635	6,780,853	4,720,760	10,052,219	4,853,992	22,187,955	698,121	3,561,358	42,766,121	
1888	13,107,541	1,817,511	8,342,817	120,497	4,620,946	4,934,288	6,363,139	2,551,043	2,551,043	892,158	3,997,596	35,443,200	
1889	19,080,647	2,952,546	11,386,123	296,554	9,054,736	5,032,610	9,253,536	4,561,494	22,146,975	4,781,110	5,708,267	55,699,426	
1890	20,664,327	2,735,546	16,002,384	639,050	9,759,256	5,898,713	10,656,465	5,097,484	4,944,149	1,215,369	6,490,301	67,497,917	
1891	20,879,851	2,819,288	19,780,470	563,338	6,977,901	6,475,119	11,968,308	3,640,940	5,052,315	968,851	7,985,977	57,497,917	
1892	21,384,783	2,830,571	23,928,255	1,363,455	11,054,445	8,936,228	20,141,862	6,895,419	4,953,911	1,472,980	9,299,451	69,567,737	

FOREIGN COMMERCE OF THE UNITED STATES.

No. 4.—STATEMENT showing the Total Value of Imports and Exports and of Gold and Silver Coin in Bullion into and from the United States, by Countries and Customs Districts, during the year ending 30th June, 1892.

IMPORTS AND EXPORTS OF MERCHANDISE BY COUNTRIES.

Order by magnitude of ports.	COUNTRIES.	IMPORTS.			EXPORTS.				TOTAL IMPORTS AND EXPORTS.			
		Value.	Per cent of total group.	Per cent of total Im-ports.	Domestic.	Foreign.	Total value.	Per cent of total group.	Per cent of total Exports.	Value.	Per cent of total group.	Per cent of total of Im-ports and Ex-ports.
1	<i>Europe.</i> United Kingdom of Great Britain and Ireland.....	\$ 156,300,881	39.91	18.89	\$ 493,957,868	\$ 5,357,464	\$ 499,315,332	58.70	48.46	\$ 655,616,213	62.77	35.29
2	<i>British North American Possessions.</i> Nova Scotia, New Brunswick and Prince Edward Island..... Quebec, Ontario, Manitoba, Ruperts' Land and the North-west Territory British Columbia..... Newfoundland and Labrador..... Total.....	5,163,218 26,999,366 2,781,619 880,344 35,334,547	2.97 15.51 1.60 .22 20.30	.62 3.26 .34 .05 4.27	3,387,712 35,827,559 1,790,849 1,574,458 42,580,578	280,178 1,854,067 159,432 11,743 2,305,410	3,667,890 37,681,616 1,950,281 1,586,201 44,885,988	3.48 35.70 1.84 1.50 42.52	.86 3.66 .19 .15 4.36	8,836,108 64,680,982 4,736,900 1,966,545 80,220,535	3.16 23.13 1.69 .71 28.69	.48 3.48 .25 .11 4.32

# Canal Statistics.

## FOREIGN CARRYING TRADE.

No. 5.—VALUE 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 1892, 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 merchandise cannot be separately stated.

Year ending June 30.	IMPORTS.			EXPORTS.			TOTAL IMPORTS AND EXPORTS.					Percentage carried in American 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.	In cars and other land vehicles	In American vessels.	In Foreign vessels.	Total.		
											\$	
1857	259,116,170	101,773,971	111,745,825	251,214,857	111,745,825	22,985,510	510,331,027	353,669,401	638,927,488	991,896,889	723,850,823	70.5
1858	203,700,016	78,913,134	81,158,133	248,491,268	81,158,133	7,798,156	447,191,304	353,664,172	756,822,576	1,132,472,288	607,257,571	73.7
1859	216,123,428	122,644,702	107,171,509	249,617,953	107,171,509	10,015,089	465,741,881	346,341,101	839,346,362	1,212,328,283	695,557,592	66.9
1860	228,161,855	134,001,399	134,106,968	279,082,902	121,039,394	27,869,978	507,247,757	346,306,592	966,723,651	1,340,899,221	762,288,560	66.5
1861	201,544,055	134,106,968	179,972,783	179,972,783	69,372,180	23,022,540	381,516,788	350,451,994	939,206,106	1,312,680,640	584,995,066	65.2
1862	92,274,100	113,497,629	125,421,318	125,421,318	104,517,667	20,388,285	241,872,471	314,237,792	884,788,517	1,119,434,544	435,710,714	50.0
1863	109,744,580	143,175,340	132,127,891	132,127,891	109,880,691	18,473,154	167,402,872	311,076,171	813,364,987	1,142,904,312	584,928,502	41.4
1864	81,212,077	243,350,818	102,849,409	102,849,409	237,442,730	22,985,510	184,061,486	352,869,401	638,927,488	991,896,889	669,855,034	27.7
1865	74,385,116	174,170,336	98,017,766	98,017,766	262,839,588	27,650,770	167,402,872	353,669,401	756,822,576	1,132,472,288	604,412,996	27.7
1866	112,040,395	333,471,763	213,671,466	213,671,466	351,754,928	27,869,978	325,711,861	685,226,691	1,010,938,552	1,501,938,552	1,010,938,552	32.2
1867	117,909,536	300,622,035	180,625,368	180,625,368	290,708,368	29,981,573	297,834,904	550,546,074	848,527,647	1,197,054,291	879,165,307	33.9
1868	122,966,225	248,659,883	175,106,348	175,106,348	301,886,491	8,509,200	297,834,904	586,492,012	876,448,784	1,197,054,291	879,165,307	33.9
1869	136,802,024	300,512,231	158,154,748	158,154,748	285,979,781	6,324,487	289,956,772	352,869,401	638,927,488	991,896,889	669,855,034	35.6
1870	153,237,077	309,140,510	199,732,324	199,732,324	329,786,972	7,798,156	352,869,401	353,669,401	756,822,576	1,132,472,288	723,850,823	31.2
1871	163,295,710	363,020,644	309,140,510	309,140,510	329,786,972	10,015,089	329,786,972	353,669,401	756,822,576	1,132,472,288	723,850,823	31.2
1872	177,286,302	445,416,783	363,020,644	363,020,644	329,786,972	10,015,089	329,786,972	353,669,401	756,822,576	1,132,472,288	723,850,823	31.2
1873	17,070,548	471,806,785	471,806,785	471,806,785	171,566,758	10,739,430	27,869,978	346,306,592	966,723,651	1,340,899,221	762,288,560	25.8
1874	14,513,335	176,027,778	406,320,135	406,320,135	174,494,216	8,509,200	23,022,540	350,451,994	939,206,106	1,312,680,640	584,995,066	26.7
1875	13,083,859	147,872,726	382,949,568	382,949,568	166,385,066	7,304,356	167,686,467	501,888,949	884,788,517	1,119,434,544	435,710,714	25.8
1876	12,148,667	143,889,704	321,139,500	321,139,500	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1877	10,697,640	151,834,067	321,139,500	321,139,500	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1878	12,965,989	146,499,282	307,407,565	307,407,565	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1879	11,983,823	143,790,353	310,439,589	310,439,589	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1880	15,142,465	149,317,368	503,394,913	503,394,913	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1881	17,193,213	133,631,146	491,840,269	491,840,269	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1882	22,854,946	130,256,826	571,517,802	571,517,802	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1883	23,003,048	136,002,290	664,175,576	664,175,576	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1884	20,140,294	135,046,207	512,511,192	512,511,192	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1885	21,149,476	112,864,052	443,513,801	443,513,801	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2
1886	24,555,683	118,942,817	491,987,696	491,987,696	116,956,324	6,324,487	123,281,811	492,215,487	813,364,987	1,142,904,312	435,710,714	27.2

1887	27,562,069	121,365,498	648,392,216	21,389,666	72,991,253	621,802,292	48,951,725	194,356,746	1,165,194,508	1,408,502,979	13 80
1888	32,209,459	123,525,298	568,222,357	22,137,368	67,332,175	606,474,964	54,356,827	190,857,473	1,174,697,821	1,419,911,621	13 44
1889	33,227,861	120,732,910	586,120,861	28,436,517	83,022,198	690,942,060	66,664,378	203,805,108	1,217,063,541	1,487,533,027	13 70
1890	40,621,361	124,948,948	623,740,100	32,949,902	77,502,138	747,376,644	73,576,263	202,451,086	1,371,116,744	1,647,139,093	12 29
1891	40,932,755	127,471,678	676,511,763	31,923,439	78,968,047	773,589,324	72,866,194	206,439,725	1,450,101,067	1,729,397,006	11 94
1892	39,725,995	139,139,891	648,535,976	33,220,629	81,033,844	916,023,675	72,947,224	220,173,735	1,564,599,651	1,857,680,610	11 85

NOTES.—1. The amounts carried in cars and other land vehicles, were not separately stated prior to July 1, 1870. 2. Exports are stated in mixed gold and currency values from 1862 to 1879, inclusive.

## Canal Statistics.

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

Year ending 30th June.	Received for transit and transshipment from British North American Possessions.			Shipped in transit to or transshipment for British North American Possessions.		
	By Land.	By Water.	Total.	By Land.	By Water.	Total.
	\$	\$	\$	\$	\$	\$
1871.	6,035,585	1,918,475	7,954,060	15,624,591	2,781,884	18,406,475
1872.	8,237,859	1,038,310	9,276,169	19,357,342	4,685,448	24,042,790
1873.	11,700,787	1,693,906	13,394,693	20,178,696	6,605,518	26,784,214
1874.	12,695,590	1,468,100	14,163,690	20,572,299	6,938,430	27,510,739
1875.	16,890,022	1,152,555	18,042,577	23,794,129	6,006,166	29,800,295
1876.	21,301,262	1,290,640	22,591,902	19,369,958	5,049,930	24,419,888
1877.	10,835,642	1,636,053	12,471,695	17,066,855	1,910,298	18,977,153
1878.	10,314,534	1,899,524	12,204,058	11,914,321	998,364	12,912,685
1879.	10,098,998	1,982,097	12,081,095	12,030,635	858,052	12,888,687
1880.	15,265,177	1,869,570	17,134,747	16,388,673	653,430	17,042,003
1881.	15,200,967	1,801,079	17,002,046	22,828,270	527,994	23,356,264
1882.	24,665,029	3,878,149	28,543,178	36,613,465	982,019	37,595,484
1883.	26,382,370	3,420,450	29,802,820	38,389,318	923,250	39,312,568
1884.	13,043,498	375,729	13,419,227	22,120,587	818,798	22,939,385
1885.	12,755,686	767,927	13,523,613	19,105,476	594,982	19,700,458
1886.	9,593,344	1,267,676	10,861,020	19,428,867	812,212	20,241,079
1887.	9,377,041	2,127,680	11,504,721	20,178,365	2,009,590	22,187,955
1888.	6,309,024	2,033,793	8,342,817	13,347,876	2,063,789	15,411,665
1889.	8,303,171	3,032,952	11,336,123	19,299,966	2,849,263	22,149,229
1890.	13,524,298	2,477,612	16,001,910	24,788,152	2,547,052	27,335,201

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 ending 30th June, 1892.

(From Reports furnished by the Canadian Pacific Railway, Treasury Department, Washington.)

Articles.	EXPORTED AT PORT OF						
	Neche, N. Dakota.	Ogdensburg, N. Y.	Portland, Oregon.	Richford, Vt.	San Francisco, Cal.	Tacoma, Wash.	Total.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Beans					14,160		14,160
Books		14,460		580			15,040
Cotton		685,703		4,252,390			4,938,093
Canned goods		90,840			24,490		115,330
Flour			15,451,330		887,800	1,060,000	18,066,130
Ginseng	15,560	58,720					74,280
Glass				6,690			6,690
Hoops	86,520		9,400		15,000		110,920
Leather					31,320		31,320
Machinery	113,825	101,025		7,440			222,290
Personal effects	3,730	7,065		200			10,995
Old glass and iron					284,214		284,214
Soap					29,610		29,610
Tallow					22,980		22,980
Woolens		8,000		20,260			28,260
Wire				4,220			4,220
Merchandise, not specified	2,550	85,982	22,770	16,580	33,550		161,432
Electric goods				43,882			43,882
<b>Totals</b>	<b>222,185</b>	<b>1,051,795</b>	<b>15,483,500</b>	<b>4,351,742</b>	<b>1,293,124</b>	<b>1,066,000</b>	<b>24,068,346</b>

**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, 1892.**

(From Reports furnished by the Canadian Pacific Railway; Treasury Department, Washington.)

Articles.	IMPORTED AT PORT OF										Total.
	Buffalo, N.Y.	Detroit, Mich.	Neche, N. Dakota.	Ogdensburg, N.Y.	Puget Sound, Wash.	Portland, Oregon.	Rouse Point, N.Y.	Richford, Vt.	San Francisco, Cal.	Lbs.	
Beans	Lbs.			7,238		38,620				Lbs.	45,848
Coffee								17,400			17,400
Curios				941,125	131,690	51,266		27,350			649,468
Gunites			98,682		265,250	1,926,200					2,691,430
Hemp						418,860					418,860
Jute				93,658		260,000					353,658
Misting					10,578						10,578
Oil				1,050		28,210					29,260
Personal effects			1,329	1,050					652,000		653,379
Rice			905,473	252,977	639,585	1,916,172					4,364,784
Silks			2,644	1,036,160				16,860			1,664,784
Straw braid				15,978							15,978
Sugar			5,307,645	3,741,313	525,000	901,670					10,475,628
Tea	31,680	248,612	28,610	3,741,313	99,791	501,730	31,770	47,364			10,006,895
Merchandise, not specified		1,500		336,184	755,173	1,640,154		46,928			2,806,769
Totals.	31,680	250,112	6,344,433	5,824,673	2,306,867	7,582,212	31,770	198,642	669,400		23,533,680

## Canal Statistics.

No. 9.—STATEMENT showing the kinds and weights of merchandise shipped over the Canadian Pacific Railway from Eastern Ports of the United States to United States ports on the Pacific Coast during the year ending 30th June, 1892.

(From reports furnished by the Canadian Pacific Railway, Treasury Department, Washington.)

Articles.	PORTS FROM WHICH SHIPPED.						Total.
	Buffalo, N. Y.	Detroit, Mich.	Neché, N. Dak.	Ogdens- burg, N. Y.	Rouse's Point, N. Y.	Richford, Vt.	
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	
Agricultural implements			47,400				47,400
Advertising matter				21,860			21,860
Blacking						2,712	2,712
Boots and shoes	100		39,023	12,128	850	312,017	364,118
Baking powder			20,636				20,636
Bricks			725,528				725,528
Books						100	100
Canned goods			1,212,115	24,690		69,290	1,306,095
Candles			24,000				24,000
Castings		28,000		26,140			54,140
Clothing				4,060			4,060
Coffee						40,830	40,830
Dairy products			43,040				43,040
Dry goods			140,809	367,454	2,960	266,240	777,463
Drugs			160	9,420			9,580
Earthen, China and glass- ware			215,388	24,260		2,130	241,778
Electric supplies		24,000	28,400	595		23,520	76,515
Furniture			148,535	10,120	9,026	5,649	173,330
Glucose			69,310				69,310
Grain			26,940				26,940
Hardware	452	5,440	473,211	55,370	4,338	34,783	573,594
Hoops			24,433				24,433
Household goods	560	25,130	148,296	1,820	1,000	40,555	217,360
Iron—							
Bars, &c.			848,331	67,386	144,866	20,000	1,080,583
Pipe			198,950				198,950
Bolts			25,100				25,100
Rails			283,515				283,515
Leather			1,270	1,010		8,750	11,030
Liquor and wines			427,240	1,792			429,032
Machinery	500	46,250	451,548	87,850		3,200	589,348
Maple sugar						2,980	2,980
Musical instruments			46,220	140,100	2,363	208,426	397,109
Nails			7,300		22,700		30,000
Oatmeal			53,870				53,870
Oils			1,103,943	30,300			1,134,243
Packing-house products			40,560				40,560
Paints			34,073			880	34,953
Paper	150		375,609	128,375		243,462	747,596
Patent medicine			42,140			123,064	165,204
Railway equipments			20,000	60,000	60,000		140,000
Roofing, felt			46,000	1,010			47,010
Rope, cordage, &c.			28,120	28,442		98,400	154,962
Rubber goods				220		32,440	32,660
Refrigerators			16,000				16,000
Starch			33,580	198,760			232,340
Soap			28,790	460		520	29,570
Steel rails			104,550				104,550
Stoves			164,925	420			165,345
Syrup			189,450				189,450
Street cars			134,500				134,500
Stone			31,600				31,600
Sheet metal						69,510	69,510
Tar			30,680				30,680
Tins and stamped ware			66,220	26,120		32,000	124,340
Tobacco, cigars, &c.			91,503	300,365		179,482	571,350
Vehicles			47,410			16,105	63,515
Varnish			22,900				22,900
Water gates		31,000					31,000
Wire			25,600				25,600



## No. 9.—STATEMENT showing the kinds and weights, &amp;c.—Continued.

Articles.	PORTS FROM WHICH SHIPPED.						
	Buffalo, N. Y.	Detroit, Mich.	Neche, N. Dak.	Ogdens- burg, N. Y.	Rouse's Point, N. Y.	Richford, Vt.	Total.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Wood—							
Lumber .....			35,850				35,850
Pulp .....					24,000		24,000
Woodenware .....			177,497			26,800	204,297
Waste .....			44,070				44,070
Miscellaneous .....	1,217	30	598,702	303,214	29,830	395,086	1,318,079
Total .....	2,979	159,850	9,254,839	1,933,741	301,933	2,258,731	13,912,073

## No. 10.—STATEMENT showing the Kinds and Weights of Merchandise shipped over the Canadian Pacific Railway, from United States ports on the Pacific Coast, to eastern ports of the United States, during the year ending 30th June, 1892.

(From reports furnished by the Canadian Pacific Railway; Treasury Department, Washington.)

ARTICLES.	PORT TO WHICH SHIPPED.						Totals.
	Buffalo, N. Y.	Detroit, Mich.	Neche, N. Dak.	Ogdens- burg, N. Y.	Rouse's Point, N. Y.	Richford, Vt.	
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	
Hides .....			770	21,383			22,153
Hops .....			48,385	91,650			140,035
Household goods .....			37,410			300	37,710
Liquors .....			1,200				1,200
Mincemeat .....				1,000			1,000
Quicksilver .....				189,000			189,000
Salmon—							
Canned .....	26,250	21,000	916,997	323,935	21,210	24,500	1,333,892
Pickled .....						23,100	23,100
Sugar .....			2,204,977				2,204,977
Wood—							
Unmanufactured .....						157,124	157,124
Shingles .....			7,488,470				7,488,470
Wool .....				281,603	186,081	1,215,420	1,683,064
Merchandise, not specified .....			11,450	150			11,600
Total .....	26,250	21,000	10,709,659	906,721	207,241	1,420,444	13,293,315

## Canal Statistics.

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

YEARS.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Vegetable Food.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869.....	71,051	670,534	256,475	99,012	92,309	13,489	99,748
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	292,031	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.....	3,387	491,410	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
1892.....	4,879	620,768	150,269	51,596	72,444	4,236	33,807

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	183,997	1,989,062
1,295,010	135,980	89,706	266,740	1,558,185	238,802	2,289,365
1,850,198	178,269	100,310	248,709	1,194,037	289,952	2,011,277
1,674,320	161,667	96,996	248,558	1,402,590	377,592	2,347,403
1,745,171	53,363	62,581	216,706	1,625,859	415,968	2,374,477
1,767,598	24,511	82,965	173,590	1,413,162	232,544	1,926,762
1,305,550	36,603	95,305	186,785	1,217,091	283,219	1,819,003
1,064,293	11,691	69,450	114,670	1,036,698	173,530	1,405,439
1,498,984	10,341	58,828	156,918	1,286,881	250,573	1,763,541
1,912,734	8,385	65,642	139,927	889,873	210,078	1,313,905
1,833,399	27,634	99,568	136,021	971,074	314,411	1,548,708
2,871,090	93,613	139,993	144,487	959,342	370,884	1,709,319
1,116,561	78,650	205,005	113,756	1,092,003	337,873	1,827,287
1,118,776	58,921	122,786	108,040	1,228,436	364,361	1,862,543
1,379,000	46,553	47,412	190,392	1,152,849	298,892	1,731,098
1,236,986	28,513	54,471	161,788	954,288	201,610	1,400,670
1,063,310	12,215	38,726	161,272	1,026,941	195,750	1,433,904
1,489,886	10,878	152,030	112,002	857,884	299,914	1,402,708
1,552,764	21,368	224,979	124,054	905,424	243,578	1,539,403
1,166,958	2,596	43,881	106,344	1,219,630	259,269	1,631,770
1,296,896	3,278	78,136	112,100	1,094,897	234,948	1,523,358
1,167,901	5,800	26,804	93,181	830,154	202,072	1,157,291
1,092,355	1,960	36,770	81,232	881,802	215,686	1,217,159
937,999	524	40,073	93,216	832,307	136,612	1,102,822

## Canal Statistics.

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

YEAR.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869* .....	45,674	313,825	120,599	20,951	.....	904	1,937
1872 .....	26,651	239,998	254,902	6,035	7,752	64	2,745
1873 .....	30,665	355,847	180,169	8,225	1,194	3	3,777
1874 .....	24,019	413,212	181,151	18,871	5,954	513	8,677
1875 .....	13,964	253,835	103,749	35,751	3,383	917	6,337
1876 .....	15,778	201,906	144,501	18,455	24,496	1,454	3,198
1877 .....	13,558	253,953	169,106	19,870	2,810	2,439	2,355
1878 .....	9,121	191,982	185,931	10,979	3,088	.....	2,302
1879 .....	10,710	274,570	144,506	4,655	1,239	440	2,444
1880 .....	12,679	242,020	163,738	17,772	477	1,016	1,480
1881 .....	9,959	127,832	101,075	24,509	.....	1,844	2,086
1882 .....	12,261	215,056	54,799	20,126	611	3,226	403
1883 .....	13,471	152,794	182,269	10,436	731	1,642	10,983
1884 .....	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885 .....	13,334	124,206	117,536	15,801	1,116	.....	1,912
1886 .....	19,474	154,169	219,442	1,595	4,911	564	14,657
1887 .....	23,949	221,927	114,938	9,574	12,050	.....	12,533
1888 .....	16,983	160,963	194,886	5,906	26,629	811	13,608
1889 .....	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890 .....	14,461	118,002	327,394	10,830	27,728	1,549	20,876
1891 .....	13,517	198,658	185,180	8,113	52,959	65,888	28,042
1892 .....	17,046	232,019	192,548	6,433	37,173	9,392	32,815

\* Fiscal.

† Apples, meal, all kinds, pease, potatoes.

the Welland Canal, during a series of Twenty-two Years ended 31st Dec., 1892.

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	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	423,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	543,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,309	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	84,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	.....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	.....	6,715	145,193	13,866	172,761
419,786	98	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	.....	753	1,027	28,047	202,384	8,138	240,349
367,177	127	1,610	2,567	7,963	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245

## Canal Statistics.

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-four 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	68,728	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	866,160	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	605,315	273,006	1,156	36,609	2,242	3,372	1,017,559	29·38	.....
1876.....	231	377,317	356,664	6,334	24,468	12,265	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	131,867	434	16,154	12,137	4,256	2,065,184	162·06	.....
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	19,156	6,216	864,826	9·96	.....
1883.....	538	535,150	517,219	6,816	47,190	79,010	6,051	1,191,974	51·66	.....
1884.....	520	767,784	194,368	4,910	47,060	57,856	4,411	1,078,909	37·18	.....
1885.....	323	540,583	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	438,060	15,207	32,907	4,612	44,693	1,449,984	85·64	.....
1888.....	534	469,965	494,110	6,589	68,922	10,997	1,717	1,052,834	33·87	.....
1889.....	845	487,922	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	16,968	4,362	953,397	21·23	.....
1891.....	1,071	733,967	137,679	43,779	14,803	66,278	2,594	1,000,171	27·18	.....
1892.....	2,485	611,177	141,506	37,570	70,363	3,997	3,472	870,570	10·69	.....

STATEMENT 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	141,300	28,585	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	13,250	297,424	11 05	.....
1872.....	4,773	57,865	27,148	62,172	684	6,751	10,425	169,818	.....	36 50
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	4,889	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	71,698	.....	16,623	3,110	127,168	.....	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	.....	56 82
1882.....	813	20,274	4,401	70,862	416	22,265	7,773	126,804	.....	52 65
1883.....	432	22,694	535	32,557	.....	14,384	1,967	72,507	.....	73 00
1884.....	404	5,932	413	48,391	.....	12,173	2,819	70,132	.....	73 43
1885.....	519	6,484	22	45,264	.....	4,613	2,945	59,847	.....	77 62
1886.....	737	9,579	154	42,261	.....	1,671	4,814	59,216	.....	77 88
1887.....	790	675	2	44,580	.....	716	1,370	48,133	.....	82 02
1888.....	384	2,206	168	6,237	.....	.....	2,196	11,191	.....	95 82
1889.....	473	8,002	8,950	40,096	16	1,405	1,008	59,945	.....	77 61
1890.....	545	10,378	10,408	26,639	8	4,635	2,256	54,969	.....	79 47
1891.....	262	4,208	1,852	27,418	.....	2,136	3,620	39,410	.....	85 26
1892.....	273	4,806	5,657	5,283	.....	199	2,340	18,558	.....	93 07

## Canal Statistics.

F.—TABLE showing the Tonnage of the undermentioned Articles cleared downward on the Welland Canal, during a series of Twenty-two Years, ended 31st December, 1892.

### 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	2,300	524,889
1873	30,660	345,720	180,042	2,643	1,188	3	3,557	563,913
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	448,931
1878	8,854	188,106	185,931	1,217	3,088		2,100	389,296
1879	10,588	271,545	114,276	803	1,196		2,387	430,795
1880	12,467	240,601	162,891		477		1,418	417,853
1881	9,655	121,393	103,075	252		6	1,371	235,752
1882	12,205	205,876	54,797	537		1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	114,090	117,536	618	1,116		1,623	248,310
1886	19,418	146,151	218,897		4,891		14,571	403,928
1887	23,940	210,755	114,938	1,711	12,050		12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	23,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,896	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,068
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709

\* Fiscal.



G.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland Canal in transit between Ports in the United States during a series of Twenty-two Years, ended 31st December, 1892.

Year.	VEGETABLE FOOD.										HEAVY GOODS.					
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869.	30,681	211,085	91,149	2,942	7,400	667	1,006	337,530	68,064	14,334	89,086	28,566	36,912	236,962		
1872.	10,482	124,695	89,761	1,391	7,400	.....	608	234,337	24,040	13,239	49,843	96,741	59,401	242,264		
1873.	10,866	127,727	101,329	1,920	1,188	.....	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176		
1874.	8,230	225,053	125,627	1,920	5,948	.....	5,368	374,226	6,742	8,941	22,868	203,673	19,651	260,895		
1875.	1,881	113,832	54,188	2,641	2,946	.....	1,920	177,908	14	4,123	12,931	192,767	34,616	244,451		
1876.	3,342	98,247	58,138	.....	1,905	500	403	162,405	.....	5,531	29,395	167,110	25,808	227,844		
1877.	1,316	107,396	65,280	1,603	2,314	288	413	180,586	8,976	8,688	8,386	172,868	41,107	289,975		
1878.	.....	65,542	60,026	859	277	.....	341	128,861	.....	10,713	3,892	160,583	13,585	178,723		
1879.	159	53,791	33,401	.....	464	.....	11	87,826	2,406	3,648	6,318	118,573	17,797	148,741		
1880.	.....	30,611	16,122	1,551	296	.....	.....	48,680	4,743	3,515	65,945	83,858	18,390	92,954		
1881.	1881	84,320	30,031	924	.....	.....	10	65,295	1,313	5,570	.....	83,562	6,464	97,205		
1882.	107	30,227	32,433	537	.....	684	14	61,002	.....	4,076	.....	183,552	14,533	177,161		
1883.	2,041	54,382	66,128	735	731	.....	8,579	132,436	1,209	6,901	.....	186,462	24,891	229,471		
1884.	1,715	40,966	53,707	735	9,874	.....	8,170	114,422	698	5,999	8	210,790	16,100	227,187		
1885.	124	53,235	63,229	732	882	.....	1	118,203	.....	1,594	.....	198,416	15,029	215,039		
1886.	7,591	53,258	94,048	732	4,790	.....	13,201	172,888	156	5,328	.....	189,964	11,364	206,313		
1887.	11,780	37,678	83,431	1,732	12,050	179	10,859	157,530	15	4,406	1	82,780	627	207,828		
1888.	8,563	39,999	102,974	2	26,510	.....	11,588	189,635	63	1,601	56	173,259	2,309	177,288		
1889.	6,017	39,229	147,046	6,519	27,492	.....	17,225	286,208	.....	1,587	896	227,476	1,204	281,163		
1890.	9,204	31,527	180,842	6,519	27,030	.....	20,497	275,619	.....	504	208	162,231	1,620	164,564		
1891.	6,802	32,097	127,494	8,113	52,823	.....	26,115	253,444	.....	292	706	186,572	1,773	188,342		
1892.	11,018	26,950	131,222	6,433	36,935	.....	31,992	244,550	.....	576	2	183,805	.....	184,473		

## Canal Statistics.

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-two Years, ended 31st December, 1892.

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	4,165,594	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	867,177	3,565,381	1,000,171	39,410	253,444
1892 . . . . .	937,999	527,426	5,913,013	870,570	18,558	244,550

\* Fiscal.

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 Navigations, in 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891 and 1892.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	174	62,665	432	121,150	41	17,482	329	97,257	976	298,554
Tons.		Tons.		Tons.		Tons.		Tons.		
1882.										
Wheat .....	60,535		46,201		5,203		87,213		199,152	
Corn .....	7,431		6,075		3,468		38,360		55,334	
Rye .....							1,954		1,954	
Coal .....	1,673		51,127		112		27,968		80,880	
Miscellaneous merchandise ..	2,939		3,744		1,553		2,605		10,841	
Lumber .....	1,021,957		1,943,568		3,969,790		17,327,483		24,262,798	
Timber .....	125,960		2,847,066				13,500		3,013,526	
Staves .....	59,600		1,065,233				104,000		1,228,833	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	180	68,850	468	130,844	111	68,609	417	127,616	1176	365,929
	Tons.		Tons.		Tons.		Tons.		Tons.	
1883.										
Wheat .....	32,761		29,385		5,928		76,715		144,789	
Corn .....	25,651		21,073		36,146		99,272		182,142	
Barley .....							735		735	
Rye .....							518		518	
Oats .....					731				731	
Coal .....	8,398		48,329		835		40,388		97,950	
Miscellaneous merchandise ..	5,238		3,590		13,195		2,299		24,322	
Lumber .....	2,102,292		3,455,590		5,287,386		15,143,274		25,988,542	
Timber .....	83,700		3,514,944				70,500		3,669,144	
Staves .....	32,876		1,038,349				90,000		1,161,225	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	173	68,250	285	73,057	99	67,637	364	97,794	921	306,738
	Tons.		Tons.		Tons.		Tons.		Tons.	
1884.										
Wheat .....	38,859		11,618		5,461		75,474		131,412	
Corn .....	10,841		13,609		26,452		67,909		118,811	
Barley .....	90								90	
Rye .....	477								477	
Oats .....	872				7,963		1,911		10,746	
Coal .....	497		28,275		301		10,154		39,227	
Shingles, firewood and wood- enware .....	548		2,538		49		30		3,165	
Miscellaneous merchandise ..	2,073		3,804		11,793		428		18,103	
Lumber .....	3,393,351		1,680,976		8,987,558		18,126,215		32,188,100	
Timber .....	437,356		2,107,780				159,647		2,704,783	
Staves .....			75,000		33,741		301,267		410,008	

## Canal Statistics.

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

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	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.		
<b>1885.</b>										
Wheat.....	26,025		3,153		6,582		72,478		108,538	
Corn.....	16,046		2,462		20,589		78,439		117,536	
Barley.....			228						228	
Oats.....					217		665		882	
Pease.....	11								11	
Rye.....										
Coal.....	1,005		20,318				18,560		39,883	
Miscellaneous merchandise...	1,941		3,689		1,111		1,086		7,827	
Shingles, woodenware, &c...	223		9		53		58		343	
Sawed lumber..... Ft. B.M.	7,725,105		8,681,081		9,381,654		20,935,279		46,723,111	
Square timber..... Cub. ft.	601,516		2,849,526		20,692		113,682		3,585,416	
Staves..... No.	104,000		44,000		83,500				231,500	
Firewood..... Corda.			783						783	
<b>1886.</b>										
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		
Tons.		Tons.		Tons.		Tons.		Tons.		
Wheat.....	38,984		30,834		2,937		70,019		142,774	
Corn.....	48,547		33,315		36,852		99,644		218,358	
Barley.....							572		572	
Oats.....	6		41		4,331		459		4,837	
Pease.....	450		188						608	
Rye.....										
Coal.....	4,007		45,018				11,647		60,672	
Miscellaneous merchandise...	2,936		6,728		23,687		281		33,622	
Shingles, woodenware, &c...	329				252		215		1,152	
Sawed lumber..... Ft. B.M.	6,915,390		13,713,631		8,953,478		18,405,961		49,994,460	
Square timber..... Cub. ft.	564,827		2,335,205				35,500		2,935,532	
Staves..... No.	221,280		697,933						919,213	
Firewood..... Corda.			390						390	
<b>1887.</b>										
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		
Tons.		Tons.		Tons.		Tons.		Tons.		
Wheat.....	80,757		81,652		200		46,186		208,796	
Corn.....	12,341		14,775		65,981		20,582		113,679	
Barley.....					9		575		584	
Oats.....			1,376		11,098		279		12,753	
Pease.....			362						362	
Rye.....										
Coal.....	1,436		25,165				2,108		28,709	
Miscellaneous merchandise...	2,179		4,609		24,395		415		31,598	
Shingles, woodenware, &c...	1,716		1,081		26				2,823	
Sawed lumber..... Ft. B.M.	2,894,767		12,329,728		4,161,349		15,091,355		34,477,199	
Square timber..... Cub. ft.	498,770		1,285,594						1,784,364	
Staves..... No.			266,697						266,697	
Firewood..... Corda.	299		466						765	

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

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	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					
Corn	38,620	14,251	71,988	71,175	196,024					
Barley										
Oats	672		24,967	1,311	26,950					
Pease		54	57		111					
Rye			71	632	703					
Coal	1,603	20,064		4,208	25,897					
Miscellaneous merchandise	2,165	3,291	22,719	3,722	31,975					
Shingles, woodenware, &c.	66	84	141	6	297					
Sawed lumber	5,262,700	11,977,905	4,451,360	12,539,672	34,230,637					
Square timber	687,728	1,555,307	19,000		2,262,035					
Staves	106,972	211,436		34,000	352,408					
Firewood	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
		Tons.		Tons.		Tons.		Tons.		Tons.
1889.										
Wheat	38,127	28,054	1,679	46,767	114,627					
Corn	60,218	43,819	152,858	96,700	353,595					
Barley										
Oats	320		25,347	2,145	27,812					
Pease										
Rye	948	634	336		1,918					
Coal	3,976	21,148	712	1,664	27,500					
Miscellaneous merchandise	6,339	5,749	25,082	3,030	40,200					
Shingles, woodenware, &c.		1		51	52					
Sawed lumber	5,789,226	11,632,330	11,792,850	21,026,211	50,240,617					
Square timber	924,645	2,934,989			3,859,634					
Staves	35,700	194,649			220,349					
Firewood		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
		Tons.		Tons.		Tons.		Tons.		Tons.
1890.										
Wheat	43,308	35,633	7,514	32,239	118,694					
Corn	63,095	51,439	172,756	40,104	327,394					
Barley			3,304	3,215	6,519					
Oats	479	73	27,090		27,562					
Pease			14		14					
Rye	1,121				1,121					
Coal	1,049	21,732		615	23,396					
Miscellaneous merchandise	3,146	5,683	32,194	2,510	43,533					
Shingles, woodenware, &c.	15	1,266	8		1,289					
Sawed lumber	5,921,240	5,167,201	10,274,335	14,290,800	35,653,576					
Square timber	1,141,194	3,395,832			4,537,026					
Staves	12,255	19,947			32,202					
Firewood	15	566			581					

## Canal Statistics.

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

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	256	107,575	173	68,061	241	241,317	130	50,063	800	467,016
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1891.										
Wheat .....	62,859		56,953		36,425		33,853		190,090	
Corn .....	20,510		9,550		137,852		17,039		184,951	
Barley .....					5,444		4,061		9,505	
Oats .....					50,212		1,076		51,288	
Pease .....	390								390	
Rye .....	29,581		11,296		16,361		7,343		64,581	
Coal .....	158		20,388				3,851		24,397	
Miscellaneous merchandise ..	8,369		6,007		37,537		2,578		54,491	
Shingles, woodenware, &c. . .							4		4	
Sawed lumber . . . . . Ft. B.M.	4,268,874		4,648,824		8,067,351		18,745,628		35,730,677	
Square timber . . . . . Cub. ft.	449,406		566,109						1,015,515	
Staves . . . . . No.	1,000								1,000	
Firewood . . . . . Cords.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	239	100,324	186	73,140	245	248,837	134	52,087	804	474,388
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1892.										
Wheat .....	74,578		54,764		60,364		36,898		226,604	
Corn .....	17,477		7,360		146,080		21,631		192,548	
Barley .....					3,995		2,438		6,433	
Oats .....					36,935				36,935	
Pease .....	524								524	
Rye .....	5,066				3,718		608		9,392	
Coal .....	775		13,350				1,365		15,490	
Miscellaneous merchandise ..	2,139		2,786		44,117				49,042	
Shingles, woodenware, &c. . .	1				45		9		55	
Sawed lumber . . . . . Ft. B.M.	6,278,253		7,504,256		10,494,692		26,832,564		51,109,765	
Square timber . . . . . Cub. ft.	754,213		1,421,260		2,601		1,310		2,179,384	
Staves . . . . . No.	46,800		32,838						79,638	
Firewood . . . . . Cords.										

**I.—STATEMENT of Large Class of Vessels Lightened at Welland Railway Elevator at Port Colborne; showing the Tonnage, Dimensions, Depth of Water and Cargoes passed through the Enlarged Welland Canal during the Season of Navigation in 1892.**

**CANADIAN STEAM VESSEL.**

Date of Arrival.	Names of Vessels.	Registered Tonnage.			Dimensions.			Depth of Water on Arrival.			Original Cargo to Canal.			Lighterage over Welland Railway.			Lighterage in Tons.		
		Tons.	Ft.	in.	Length over all.	Width of beam.	Depth of hold.	Forward.		Aft.	Wheat.	Corn.	Rye.	Oats.	Rolling freight.	Wheat.	Corn.	Rye.	Oats.
								Ft.	in.										
1892.		1,172	245	40	0	20	6	14	2	13	10	66,001		3,635		110			
Sept. 29	Algonquin																		

**UNITED STATES STEAM VESSELS.**

April 16	Pueblo	1,054	225	36	0	19	0	14	11	15	0						10,443				293	
do	H. R. James	1,553	240	42	0	16	8	14	8	15	0						13,797				387	
do	J. R. Langdon	1,550	240	42	0	16	8	13	0	15	0						24,795		215		215	
do	W. H. Prince	1,548	240	42	0	16	8	14	6	15	0		740				12,328				346	
do	Rhoda Emily	654	166	32	0	19	8	14	0	14	0											69
do	22 Omaha	940	215	34	6	18	9	14	11	14	6	55,922										282
May	3 Jno. Rugee	960	216	35	0	18	0	14	10	14	5											163
do	4 Argonaut	985	213	35	0	12	0	14	11	14	6											129
do	5 Gov. Smith	1,547	240	42	0	16	8	14	6	14	4	14,000										203
do	Pueblo	1,054	225	36	0	19	0	15	2	14	0	57,000										273
do	9 Escanaba	918	201	35	6	20	1	14	7	14	6	49,242										178
do	12 Omaha	940	215	34	6	18	9	14	10	13	10	64,400										129
do	14 J. R. Langdon	1,550	240	42	0	16	8	14	9	14	11											327
do	15 W. A. Haskell	1,441	235	37	0	16	6	14	5	14	5											146
do	29 W. J. Merritt	1,425	235	36	6	16	5	14	1	14	7											110
June	1 Jas. R. Langdon	1,550	240	42	0	16	8	13	8	15	0											208
do	5 W. A. Haskell	1,441	235	37	0	16	6	14	7	14	8	51,816										203
do	7 F. A. Prince	1,548	240	42	0	16	8	14	3	14	3	24,103										78
do	13 Argonaut	985	213	35	0	12	0	15	0	15	0	50,217										137
do	13 A. McVittie	1,553	240	42	0	16	8	15	0	15	2	43,855										137
do	17 W. J. Averil	1,425	235	36	6	16	5	14	6	15	0	46,335										216
do	18 H. R. James	1,553	240	42	0	16	8	14	2	14	4	42,882										82





do	5	Jas. R. Langdon	1,550	240	42	0	16	8	14	10	15	2	61,639	383	5,694	13,654	167	382
do	6	Escanaba	918	201	35	6	20	1	14	10	14	8	59,509	430	12,845	12,845	360	
do	7	F. H. Prince	1,548	240	42	0	16	8	15	10	15	2	64,634	328	14,089	14,089	394	
do	10	Gov. Smith	1,547	240	42	0	16	8	15	1	15	8	59,281	145	8,536	8,536	239	
do	11	W. A. Haskill	1,441	265	37	0	16	6	14	5	15	3			2,582		77	
do	15	Kate Buteromte	693	174	32	0	20	0	14	8	14	8	38,500					269
do	16	Topeka	1,553	240	42	0	16	8	14	5	15	3	34,668	647	9,619	11,871	332	
do	17	W. J. Averill	1,111	228	36	0	19	0	15	7	15	3	65,000			8,410	235	
do	19	H. R. James	1,425	265	36	0	16	8	15	14	14	11	61,768	67	12,869	12,869	382	
do	21	Jno. Rugee	1,553	240	42	0	16	8	15	0	15	3	45,593	393	3,612	3,612	102	
do	25	Jas. R. Langton	1,550	240	42	0	16	8	13	9	15	5	54,360	337	6,031	6,031	169	59
do	26	F. H. Prince	1,548	240	42	0	16	8	15	4	15	2	34,473		13,656	13,656	382	
do	27	Omaha	1,440	215	34	6	18	9	15	7	15	1	60,332		11,400		342	
do	28	W. A. Haskill	1,441	265	37	0	16	6	14	9	15	3	60,484	162		9,080	254	
Oct.	2	Gov. Smith	1,547	240	42	0	16	8	14	0	15	8	31,897	1,062		7,040	197	
do	4	A. McVittie	1,553	240	42	0	16	8	15	3	15	7	66,969	226	14,655	14,655	410	39
do	5	W. J. Averill	1,425	265	36	0	16	5	14	9	14	10	54,000	243	8,198	8,198	229	
do	7	Dewar	1,029	222	37	0	19	0	15	10	15	4	63,851		13,226	13,226	390	
do	8	H. R. James	1,553	240	42	0	16	8	15	1	15	2	64,430	379	12,682	12,682	355	
do	12	J. R. Langton	1,550	240	42	0	16	8	14	4	15	7	50,474	286	12,555	12,555	352	70
do	15	Jno. Rugee	950	215	35	0	18	0	14	8	15	0	57,441		6,194	6,194	174	
do	15	Omaha	1,441	265	37	0	16	8	13	11	14	4	58,855		5,441	5,441	152	
do	17	W. A. Haskill	1,547	240	42	0	16	6	13	3	14	8	14,697	393	2,738	2,738	77	
do	23	Gov. Smith	1,553	240	42	0	16	8	13	0	15	1	17,023	920	4,943	4,943	138	
do	30	A. McVittie	1,553	240	42	0	16	8	14	3	15	3	60,000	284	7,868	7,868	223	
Nov.	3	H. R. James	1,550	240	42	0	16	8	14	1	15	1	38,340	525	216	216	216	
do	9	Rhoda Emily	654	166	32	0	19	8	13	9	14	6	50,000	498	7,335	7,335	205	
do	17	W. A. Haskill	1,441	265	37	0	16	6	13	1	14	6	35,766		2,787		83	
do	17	F. H. Prince	1,548	240	42	0	16	8	14	4	14	8	50,000	562	2,980	2,980	83	
do	20	Dewar	1,029	222	37	0	19	0	15	3	15	3	61,000	503	7,940	7,940	222	
do	23	Topeka	1,111	228	36	0	19	0	15	2	15	3	62,738		10,562	10,562	286	
do	25	Jno. Rugee	950	216	35	0	18	0	15	0	15	3	58,000		9,989	9,989	280	
do	29	A. McVittie	1,553	240	42	0	16	8	13	8	14	0	39,617	621	8,642	8,642	241	
do	29	H. R. James	1,553	240	42	0	16	8	13	8	14	0	19,605	679	4,905	4,905	135	
do	30	Fuablo	1,054	225	36	0	19	0	15	1	14	8	62,301		2,922	2,922	81	
do	30	Mont Eagle	1,035	237	35	0	19	0	15	0	15	2	57,855		10,507	10,507	284	
Dec.	2	Omaha	1,940	215	34	6	18	9	14	6	14	10	59,512		7,126	7,126	200	

UNITED STATES SAIL VESSELS.

July	4	W. S. Coosthwaite	640	197	34	8	13	3	.....	.....	.....	.....	47,697			2,513		70
Aug.	25	Baltic	870	202	34	7	16	6	14	8	14	6	67,000			5,736		160

# Canal Statistics.

**J.—STATEMENT of Large Class of Vessels Lightened at Welland Railway Elevator at Port Colborne, &c.—Continued.**  
**CANADIAN STEAM VESSEL—Continued.**

Date of Arrival.	Names of Vessels.	Grain Cargo and Rolling Freight through the Canal.						Total Cargo through Canals.			Depth of Water through Canal midship.	Destination.		Cost of Lightage per bushel.	Time occupied in Light- erage.			
		Wheat.	Corn.	Rye.	Oats.	Wheat.	Tons.	Corn.	Tons.	Rye.		Tons.	Oats.			Tons.	Rolling freight	Tons.
1892.																		
Sept. 29	Algonquin . . . . .	Bush.	Bush.	Bush.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Duluth . . . . .	Kingston . . . . .	2	3 0
		62,866			1,871							1,871	13 6	13 6				

**UNITED STATES STEAM VESSELS—Continued.**

April 16	Pueblo . . . . .	60,729													Chicago . . . . .	Kingston . . . . .	2	3 0
do	H. R. James . . . . .	47,095													do	Ogdensburg . . . . .	2	4 0
do	21 J. R. Langdon . . . . .	24,795													do	do	2	5 0
do	21 F. H. Prince . . . . .	53,496													do	do	2	5 0
do	22 Rhoda Emily . . . . .	34,854													do	Kingston . . . . .	2	1 0
do	22 Omaha . . . . .	48,170													do	do	2	3 0
May	3 Jno. Rugee . . . . .	49,151													Chicago . . . . .	do	2	2 15
do	4 Arconault . . . . .	43,756													do	do	2	2 0
do	5 Gov. Smith . . . . .	28,041													do	Ogdensburg . . . . .	2	6 0
do	9 Pueblo . . . . .	7,212													do	Kingston . . . . .	2	2 30
do	9 Escanaba . . . . .	47,872													do	do	2	2 0
do	12 Omaha . . . . .	43,283													do	do	2	2 0
do	14 J. R. Langdon . . . . .	52,228													do	do	2	2 0
do	15 W. A. Haskell . . . . .	53,478													do	do	2	3 0
do	29 W. J. Merritt . . . . .	45,386													do	Ogdensburg . . . . .	2	2 0
June	1 Jas. R. Langdon . . . . .	17,640													do	do	2	2 0
do	5 W. A. Haskell . . . . .	44,565													do	do	2	2 0
do	7 F. A. Prince . . . . .	21,297													do	do	2	2 0
do	7 Arconault . . . . .	45,310													do	Kingston . . . . .	2	4 0
do	13 A. McVitie . . . . .	37,934													do	Ogdensburg . . . . .	2	3 0
do	17 W. J. Averill . . . . .	38,603													do	do	2	2 0
do	18 H. R. James . . . . .	39,947													do	do	2	4 0
do	19 Jas. R. Langdon . . . . .	11,849													do	do	2	1 45
do	24 Escanaba . . . . .	36,402													do	do	2	2 0
do	25 Topeka . . . . .	52,700													do	Kingston . . . . .	2	3 0

do	28	W. A. Haaskill	10,120	926	284	926	1,535	13	0	do	Ogdensburg.	2	2	30
July	3	A. McVittie	25,891	586	725	586	1,676	13	11	do	do	2	2	0
do	4	W. J. Averill	40,874		1,145	384	1,529	14	0	do	do	2	2	30
do	7	H. R. James	40,637		1,136	591	1,729	14	0	do	do	2	2	0
do	9	Jas. R. Langton	11,372	1,029	319	329	1,677	13	7	do	do	2	2	0
do	11	Rhoda Emily	36,922	1,283	1,084		1,934	14	0	do	do	2	2	0
do	14	Escanabo					1,283	13	11	do	do	2	1	0
do	14	W. A. Haaskill	24,821	755	686	822	1,517	13	9	do	do	2	3	0
do	18	Gov. Smith	24,145	755	677	293	1,725	13	11	do	Kingston.	2	2	0
do	20	Jno. Rugée	46,849	1,405			1,405	14	0	do	Ogdensburg.	2	2	30
do	20	A. McVittie	25,074	594	703	373	1,670	13	11	do	do	2	2	0
do	20	W. J. Averill	39,697	1,112	1,112	419	1,531	14	0	do	do	2	2	30
do	27	H. R. James	11,644	1,380	327	340	1,707	14	0	do	do	2	2	30
do	27	Jas. R. Langton	14,869	912	418	340	1,670	13	0	do	do	2	2	30
do	31	H. A. Prince	40,940	576	1,147		1,723	13	11	do	do	2	2	0
Aug.	1	W. A. Haaskill	48,020		1,345	210	1,565	13	11	do	do	2	2	0
do	5	Gov. Smith	34,787	300	975	440	1,715	13	11	do	do	2	3	0
do	7	A. McVittie	37,538	15,529	1,052	216	1,703	13	11	do	Kingston.	2	3	0
do	13	H. R. James	36,520		1,023	680	1,703	13	11	do	Ogdensburg.	2	2	40
do	16	W. J. Averill	42,787		1,199	355	1,554	14	0	do	Ogdensburg.	2	3	0
Aug.	17	F. H. Prince	36,205	315	1,014	417	1,746	13	11	do	do	2	3	0
do	19	Jas. R. Langton		1,045		614	1,659	13	6	do	do	2	1	15
do		W. A. Haaskill	40,976		1,118	386	1,534	13	10	do	do	2	1	30
do	23	Gov. Smith	27,063	617	775	338	1,730	14	0	do	do	2	4	15
do	28	A. McVittie	50,869		1,425	258	1,683	13	11	do	do	2	3	30
do	31	W. J. Averill	51,020		1,429	131	1,560	14	0	do	do	2	3	15
Sept.	1	H. R. James	23,098	700	647	363	1,710	14	0	do	do	2	3	0
do	5	J. R. Langton	47,985		1,844	333	1,677	13	7	do	do	2	4	0
do	6	Escanabo		1,321			1,321	13	11	do	Kingston.	2	2	30
do	7	F. H. Prince	46,964		1,307	430	1,737	13	10	do	Ogdensburg.	2	3	45
do	10	Gov. Smith	50,545		1,416	328	1,744	13	11	do	do	2	4	15
do	11	W. A. Haaskill	50,745		1,421	145	1,566	13	11	do	do	3	3	0
do	15	Kace Buteroni	35,918		1,078		1,078	14	0	do	Kingston.	2	4	0
do		A. McVittie	25,047	647	702	386	1,685	13	11	do	Ogdensburg.	2	4	15
do	16	Topeka.	53,129		1,488		1,488	14	0	do	do	2	4	0
do	17	W. J. Averill	53,358		1,495	67	1,562	14	0	do	do	2	3	0
do	19	H. R. James	33,024	349	925	393	1,667	13	10	do	do	2	4	30
do	21	Jno. Rugée.	50,478		1,421		1,421	14	0	do	do	2	2	0
do	25	Jas. R. Langton	28,442	571	797	387	1,765	13	7	do	do	3	4	0
do	26	F. H. Prince	53,192		1,490	260	1,750	13	10	do	do	2	4	15
do	27	Omaha.	48,932		1,468		1,468	13	10	do	Kingston.	2	2	3
do	28	W. A. Haaskill	51,404	1,468	1,440	162	1,602	14	0	do	Ogdensburg.	2	3	15
Oct.	2	Gov. Smith	24,867	1,023	1,407		1,730	13	11	do	do	2	4	0
do	4	A. McVittie	52,304		1,465	226	1,691	13	10	do	do	2	3	0
do	5	W. J. Averill	45,902		1,326	243	1,526	13	11	do	do	2	4	0
do	7	Dewer	49,925		1,398		1,598	13	11	do	do	2	2	4
do	8	H. R. James	51,748		1,449	279	1,728	13	11	do	do	2	4	20
do	12	J. R. Langton	37,919	318	1,062	286	1,666	13	6	do	do	2	4	45
do	15	Jno. Rugée.	51,247		1,435		1,435	14	0	do	do	2	2	0
do		Omaha.	53,414		1,496		1,496	13	11	do	do	2	2	0



K.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, during the Seasons of Navigation in 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891 and 1892.

Articles.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>												
Iron, pig.	858	459	5		7	15		418			371	
do all othdr.		9										
Stone for cutting	233	2			513	49						54
Apples.		1		38			33					
Barley		259										
Corn.	69,066	17,474	109,191	55,562	44,401	116,517	24,609	66,443	196,350	139,798	52,539	53,689
Flour.	4,476	5,920	5,069	9,659	2,874	2,934	6,140	3,865	6,841	3,065	3,324	2,874
Meal, all kinds.			1,188		16	125	87	100	148	222	67	16
Oats.				872					320	479		
Pease			726		11	608	362				380	524
Rye		1,269	518	477					1,284	1,120	64,978	9,119
Seeds, all kinds.		37	2		42	33		12	3	2		75
Tobacco, raw.		1				25					1	
Wheat.	77,061	161,692	76,379	84,822	52,157	86,815	160,063	93,915	70,815	75,515	159,785	194,281
All other agricultural products, vegetable		1			1		17		798	3	2	
Hides, skins, horns and hoofs.			77									20
Horses.		1			2	1	1	2	2	3	2	2
Lard and lard oil.	361	206	6			22		54			100	
Pork.	5,141	278	212	318	30	936	418	265	1,220	221	291	
All other agricultural products, animals.					4	68	29	39	32	117		103
Total, Class 3.	157,196	187,609	193,893	152,171	100,058	208,148	191,759	165,113	276,813	220,545	281,752	290,757
<i>Class 4.</i>												
Ashes	13	10	3	36	97	44	113	85	107	70	40	17
Furniture	4	12	6	10	5	6	9	2		1	2	1
Glass, all kinds.	47	6	1					3		1	1	
Molasses		18	43			28						
Nails				1			1					
Oil		425		78	7	6	14		4	6		

# Canal Statistics.

**K.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, &c.—Concluded.**

Articles.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Concluded.</i>												
Paint.....		4				1						
Pitch and tar.....		1					15					
Sugar.....	291	484	269	317			12					
Stones, wrought.....		2		1								
Turpentine.....		25	35			8						6
Whiskey, beer, and other spirits.	60	105	53	37	29	100	72	3	20	26	105	6
Merchandise not enumerated.....								105	193	142	278	36
<b>Total, Class 4.....</b>	<b>415</b>	<b>1,092</b>	<b>412</b>	<b>480</b>	<b>138</b>	<b>193</b>	<b>236</b>	<b>198</b>	<b>324</b>	<b>246</b>	<b>426</b>	<b>60</b>
<i>Class 5.</i>												
Barrels, empty.....	1	3		37	128	6	88	40				1
Sawed lumber.....	2,849	3,639	6,311	7,531	19,945	18,707	7,001	5,175	6,118	3,579	3,908	1,678
Staves, pipe and barrel.....	1,001	2,359	2,024	200	856	332	184	139				8
do West India and pipe.....	1,198	1,130	451	863		287	131	1,623	270			200
Timber, square, in vessels.....	3,227	1,574	250		639	1,330						
do do rafts.....	3,250	1,149	2,314	7,365	11,128	15,410	14,390	11,586	9,302		5,680	440
Woodenware.....	76	205	199	68	76	101	45	25		1		
<b>Total, Class 5.....</b>	<b>11,602</b>	<b>10,059</b>	<b>11,589</b>	<b>16,064</b>	<b>32,772</b>	<b>36,173</b>	<b>21,839</b>	<b>18,588</b>	<b>15,690</b>	<b>3,580</b>	<b>9,588</b>	<b>2,327</b>
<i>Special Class.</i>												
Coal.....		75										
<b>Grand total.....</b>	<b>169,213</b>	<b>196,835</b>	<b>205,394</b>	<b>168,715</b>	<b>182,968</b>	<b>244,514</b>	<b>213,834</b>	<b>183,899</b>	<b>292,827</b>	<b>224,371</b>	<b>291,776</b>	<b>263,144</b>

L.—STATEMENT showing the Quantity of Freight passed westward from Montreal, through the whole length of the St. Lawrence and Welland Canals to Lake Erie, during the Season of Navigation in 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891 and 1892.

Articles.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>												
Bricks	81	96	78	200	44	66	3	187	84	252	469	1,171
Cement and water lime	38	533	508	219	117	498	1,740	1,177	823	62	2,380	1,870
Clay, lime and sand	121	56	56			1	134	95	3	8	206	240
Fish	13	406				1	96	1	80	26	7	426
Gypsum					13							
Iron, railway	16,476	11,246	8,726	2,031	12,356	6,629	153	9,148	15,513	20,003	2,855	1,171
do pig	8,131	3,575	2,460	43	23	10	368	573	230	20	112	74
do all other	900	686	528	366	290	76	1,997	297	290	584	595	387
Salt	5,175	1,820	5,324	802	1,574	5,609	4,197	3,639	4,216	7,440	4,391	2,034
Stone for cutting	5		21		7					12		145
Flour			5							48		
Meals			5					31				
Oats			264									
Potatoes	369	23					4					
Seeds, all kinds	66	14						24	215	100		
Agricultural products not enumerated, vegetables	2		25	1	1			35	19		52	
Horses		2							2			
Lard and lard oil					3		3			72		16
Fork				45						33		
Wool		3					4			13		13
All other articles not enumerated						6	4	77		1	2	
Total Class 3	31,371	18,460	17,994	3,707	14,428	12,896	8,702	15,244	21,495	28,674	11,071	6,076
<i>Class 4.</i>												
Ashes, pot and pearl			137		226	20				10	31	88
Crockery and earthenware	24	116	2	47	10	40	164	386	112	11	251	8
Dye woods, &c						1	4					
Furniture	3	4		1		9		1			1	3
Glass, all kinds	97	359	156	160	32	39	53	77	71	23	30	152
Manilla		5		17		7		1				
Molasses	14	58	3			23	1	7	56			32

# Canal Statistics.

**L.—STATEMENT showing the Quantity of Freight passed westward from Montreal, &c.—Continued.**

Articles.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Concluded.</i>												
Nails	258	576	1,085	160	205	389	147	578	736	453	560	276
Oil in barrels	54	119	122	80	10	82	28	22	9	11	64	2
Paint	47	124	103	161	24	36	80	59	49	24	61	15
Pitch and tar	1		50	1		5	1			13	22	15
Rosin		11	21							1		
Soda ash	3,177	1,040	1,801	1,427	164	975	1,116	1,196	766	554	377	352
Steel	29		3	142		1	423	3	3	1		269
Stone, wrought			2									1,320
Sugar	5	465	375	290	64	316	207	98	7	551	412	27
Tin	959	641	1,669	1,832	10	549	2,225	198	480	40	23	
Turpentine			1	1		1	1	1	1	2		
White lead		14		3		3	4	2	4	19	3	6
Whiting	10	5	19		9		7		33	34	50	71
Whiskey, beer, &c	91	564	791	364	289	174	287	298	124	350	294	230
Merchandise not enumerated	984	1,992	2,608	1,001	712	1,008	619	1,259	1,422	1,180	810	538
Total Class 4	5,753	6,083	8,957	5,687	1,725	3,678	5,373	4,066	3,873	3,277	2,989	3,304
<i>Class 5.</i>												
Barrels, empty	40	130	179			227			2			
Lumber, sawn, in vessels		175	318									
Woodenware	26	23		3	2							
Total Class 5	66	328	497	3	2	227			2			
<i>Special Class.</i>												
Coal			40	28								
Grand Total	37,190	24,881	27,488	9,425	16,155	16,801	14,075	19,310	25,370	31,951	14,060	9,470



M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Seasons of Navigation in 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891 and 1892.

ARTICLES.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>													
Bricks .....	22		3				41				4		
Cement and water lime .....			2				31	2				1	
Fish .....				142									
Iron, railway .....				90	40		45			520		10	1
do all other .....		79	114	8			1					494	
Salt .....				38	15								
Stone for cutting .....	258												
Apples .....			8										
Barley .....			537	735				1,709	2		6,519	8,113	6,433
Corn .....	16,122	30,031	32,433	66,128	53,707	63,229	93,503	83,431	102,974	147,045	180,842	127,494	131,222
Flour .....			107	2,041	1,715	124	7,591	11,780	8,563	5,017	9,204	6,802	11,018
Hay, pressed .....					13								
Meal, all kinds .....			5	8,579	8,170		13,201	10,726	11,598	17,224	20,482	26,096	31,724
Oil cake .....				1									
Oats .....	296			731	9,874	882	4,790	12,050	26,510	27,492	27,030	52,823	36,935
Potatoes .....			1						179				
Eye .....			684					44	48	151	135	256	50
Seeds, all kinds .....		16		662	511		236		39,999	39,229	31,527	32,097	26,950
Wheat .....	30,611	34,320	30,227	54,282	40,956	53,235	53,258	37,678	2	2	14	42	
Agricultural products, vegetable .....			5	3									
Hides and skins, &c. ....				60	73		414	170	39				
Horses .....			1	6	6			2		1	1	3	
Lard and lard oil, &c. ....				5	7		13	14	19	32	30	10	
Meats, other than pork .....			1	12	4			18	14	3	15	2	29
Pork .....			1	163			106	108	19	21	88	73	1
Sheep .....					1								
Wool .....				95			1,125	86	18	452		1,237	70
Total, Class 3. ....	47,309	64,447	64,129	133,782	145,092	117,470	174,359	157,820	189,986	237,188	275,893	255,553	244,433
<i>Class 4.</i>													
Agricultural implements .....		3		1				9					
Grocery and earthenware .....		4	1	1					1				
Furniture .....			15	25	16		21	24	30	30	21	7	

## Canal Statistics.

**M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, &c.—Concluded.**

Articles.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Concluded.</i>													
Glass, all kinds.....			66		1		2					1	
Nails.....		102	995	51	26		4						
Oil, in barrels.....			7	208	255		6	8				1	
Paint.....			3	6						3			44
Soda, ash.....			7										
Steel.....			1						3				1
Stone, wrought.....	192	29	33	87	7		38			2			
White lead.....		2	6	5							1		
Whiskey, beer and all other spirits.....	14		12	156	26		21	63	151	190	228	167	46
Merchandise, not enumerated..	1	49	91	941	481	2	824	469	1,453	1,679	1,822	1,865	1,381
<b>Total, Class 4.....</b>	<b>207</b>	<b>189</b>	<b>1,237</b>	<b>1,479</b>	<b>812</b>	<b>2</b>	<b>916</b>	<b>573</b>	<b>1,638</b>	<b>1,902</b>	<b>2,075</b>	<b>2,041</b>	<b>1,422</b>
<i>Class 5.</i>													
Lumber, sawn, in vessels.....	33,555	30,462	34,182	34,189	43,713	44,668	43,776	29,845	28,333	55,074	38,030	45,504	54,173
Hoops.....				26									
Shingles.....	9		9	25	76	111	463		6	51			
Staves, barrel.....				30	11		2	26	141	333	8	4	54
Woodenware, &c.....	1	4	43	30									
<b>Total, Class 5.....</b>	<b>33,565</b>	<b>30,466</b>	<b>34,234</b>	<b>34,279</b>	<b>43,800</b>	<b>44,779</b>	<b>44,241</b>	<b>29,871</b>	<b>28,582</b>	<b>55,458</b>	<b>38,038</b>	<b>45,508</b>	<b>54,227</b>
<i>Special Class.</i>													
Coal.....	871	1,164	10,686	5,372	4,293	4,974	5,400	1,163	878	1,124	615	1,382	651
Stone not suitable for cutting..										1,681	18		
Kryolite.....										1,620	1,620	1,773	
<b>Total, Special Class.....</b>	<b>871</b>	<b>1,164</b>	<b>10,686</b>	<b>5,372</b>	<b>4,293</b>	<b>4,974</b>	<b>5,400</b>	<b>1,163</b>	<b>878</b>	<b>2,805</b>	<b>2,253</b>	<b>3,155</b>	<b>651</b>
<b>Grand Total.....</b>	<b>81,952</b>	<b>96,266</b>	<b>110,286</b>	<b>174,912</b>	<b>163,997</b>	<b>167,225</b>	<b>224,916</b>	<b>189,427</b>	<b>221,064</b>	<b>297,353</b>	<b>318,259</b>	<b>306,257</b>	<b>390,733</b>

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 1892.

Names of Vessels.	Original Cargo through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals.
	Tons.	Tons.	Tons.
Canadian steamer "Acadia".....	629	167	462
do do.....	658	163	495
do "Alma Munro".....	674	284	390
do "Cuba".....	660	268	392
do "Lake Michigan".....	510	216	294
do do.....	510	249	261
do "St. Magnus".....	1,041	.....	420
do do.....	1,035	633	402
do do.....	1,023	635	388
Canadian sailing vessel "Kildonan".....	1,140	288	852
Norwegian steamship "Wergeland".....	294	245	49
Total.....	8,174	3,148	4,405

Number of cargoes of wheat.....	11
Quantity through Welland Canal to Kingston.....	8,174 Tons.
do transhipped at Kingston.....	3,148 "
do taken to Montreal in vessels in which it arrived at Kingston.....	4,405 "
do remaining at Kingston.....	621 "

N.—STATEMENT showing the Number of Vessels and their Cargoes of Corn, 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 1892.

Names of Vessels.	Original Cargo through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals.
	Tons.	Tons.	Tons.
Canadian steamer "Acadia".....	476	.....	476
do "Cuba".....	654	261	393
do do.....	448	.....	448
do do.....	644	239	405
do "Alma Munro".....	625	54	571
do "Lake Michigan".....	482	202	280
do do.....	490	181	309
Canadian sailing vessel "Jennie".....	924	350	574
do do "Jno. Gaakin".....	1,023	358	665
do do "Regina".....	826	256	570
Total.....	6,592	1,901	4,691

Number of cargoes of corn.....	10
Quantity through the Welland Canal to Kingston.....	6,592 Tons.
do transhipped at Kingston.....	1,901 "
do taken to Montreal in vessels in which it arrived at Kingston.....	4,691 "

## Canal Statistics.

**N.—STATEMENT showing the Number of Vessels and their Cargoes of Pease and Rye, 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 1892.**

### PEASE.

Name of Vessels.	Original Cargo through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals.
	Tons.	Tons.	Tons.
Canadian steamer "Lake Michigan" .....	524	253	271

### RYE.

Canadian steamer "Alma Munro" .....	507	112	395
do do .....	629	227	402
do do .....	627	247	380
do do .....	659	252	407
do "Cuba" .....	616	258	358
<b>Totals</b> .....	<b>3,038</b>	<b>1,096</b>	<b>1,942</b>

Number of cargoes of rye .....	5
Quantity through the Welland Canal to Kingston .....	3,038 tons.
do transhipped at Kingston .....	1,096 do
do taken to Montreal in vessels in which it arrived at Kingston .....	1,942 do

RECAPITULATION of the Number of Vessels passed down the Welland Canal, with Cargoes of Grain to Kingston, the Quantity transhipped, and the Quantity taken to Montreal for the Season of 1892.

	Number of Cargoes.	Total.
Wheat.....	11	
Corn.....	10	
Pease.....	1	
Rye.....	5	
Total.....		27
Quantity of wheat through the Welland Canal bound for Montreal.....	Tons. 8,174	Tons.
do corn.....	6,592	
do pease.....	524	
do rye.....	3,038	
Total through Welland Canal.....		18,328
Quantity of the above transhipped at Kingston, viz. :—		
Wheat.....	3,148	
Corn.....	1,901	
Pease.....	253	
Rye.....	1,096	
Total transhipped.....		6,398
Quantity of the above cargoes taken to Montreal in vessels in which it arrived at Kingston, viz. :—		
Wheat.....	4,405	
Corn.....	4,691	
Pease.....	271	
Rye.....	1,942	
Total quantity to Montreal.....		11,309
Quantity remaining at Kingston.....		621
Total.....		18,328

## Canal Statistics.

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 1892.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	98	69,430	60	30,082	69	62,288	20	11,837	247	173,637
	Tons.		Tons.		Tons.		Tons.		Tons.	
Corn .....	16,776		7,360		27,742		5,341		57,219	
Pease .....	524								524	
Rye .....	5,066				2,862		608		8,536	
Wheat .....	74,528		54,764		56,520		16,739		202,551	
<b>Total .....</b>	<b>96,894</b>		<b>62,124</b>		<b>87,124</b>		<b>22,688</b>		<b>268,830</b>	

	Tons.
98 cargoes in Canadian steam vessels, total quantity .....	96,894
60 do do sailing do do .....	62,124
69 do United States steam vessels, total quantity .....	87,124
20 do do sailing do do .....	22,688

P.—TOTAL Quantity of Grain arrived at Kingston in Vessels which passed down the Welland Canal during the Season of 1892.

Summary.	Tons.	Tons.
Canadian steam vessels, 98 cargoes of grain . . . . .	96,894	
do sailing do 60 do . . . . .	62,124	
Total in Canadian vessels . . . . .		159,018
United States steam vessels, 69 cargoes of grain . . . . .	87,124	
do sailing do 20 do . . . . .	22,688	
Total in United States vessels . . . . .		109,812
Total in Canadian and United States vessels . . . . .		268,830
Distributed as follows :—		
2 cargoes taken to Montreal in vessels in which it arrived at Kingston . . . . .		934
25 do arrived at Kingston in Canadian vessels with an aggregate quantity of . . . . .	18,328	
Transhipped at Kingston . . . . .	6,398	
Discharged . . . . .	621	
	7,019	
Quantity taken to Montreal in vessels in which it arrived in Kingston . . . . .		11,309
Vessels arrived at Kingston and discharged all their cargoes as follows :—		
131 cargoes in Canadian vessels . . . . .	139,766	
89 do in United States vessels . . . . .	109,812	
Aggregate quantity discharged . . . . .	249,578	
Quantity transhipped to Montreal . . . . .	236,361	
Total quantity transhipped to Montreal . . . . .		244,759
Quantity taken to Ogdensburg and transhipped to Montreal . . . . .		4,341
do transhipped to Cardinal . . . . .	3,838	
do remaining at Kingston . . . . .	3,659	
		7,497
Total . . . . .		268,830

## Canal Statistics.

**Q.—COMPARATIVE statement of the Quantity of Grain passed down the Welland Canal to Kingston for the Seasons of 1891 and 1892.**

	1891.		1892.	
	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston in Canadian vessels.. . . . .	209	190,664	158	159,018
do do do in United States vessels.....	77	90,153	89	109,812
Total.. . . . .	286	280,817	247	268,830
Quantity transhipped at Kingston in Canadian vessels for Montreal.....		259,655		244,759
Quantity taken to Montreal in vessels in which it arrived at Kingston.....		17,196		12,233
Quantity remaining at Kingston.....		1,241		3,659
Quantity transhipped to Cardinal.....		2,725		3,838
Quantity taken to elevators at Ogdensburg and transhipped to Montreal.....				4,341
Total.....		280,817		268,830

2 vessels took their cargoes through to Montreal intact in 1892 against 3 in 1891.  
 25 vessels lightered a portion of their cargoes at Kingston in 1892 against 44 in 1891.  
 220 vessels discharged the whole of their cargoes at Kingston in 1892 against 239 in 1891.

**R.—STATEMENT showing the Quantity of Oats arrived at Montreal by Canal and Rail during the Years 1884 to 1892, inclusive, and the total shipments for the same period.**

Years.	Receipts via Lachine Canal.	Receipts via C. P. R. and G. T. R. is reported as follows.	Total Receipts at Montreal.	Shipments via River St. Lawrence and G. T. R.
	Bushels.	Bushels.	Bushels.	Bushels.
1884.....	297,326	528,032	825,358	246,643
1885.....	678,866	550,425	1,229,291	1,463,932
1886.....	650,910	595,756	1,246,666	2,033,098
1887.....	341,568	452,748	794,316	509,010
1888.....	123,213	542,007	665,220	70,809
1889.....	119,958	812,750	932,708	88,914
1890.....	200,896	1,448,187	1,649,083	244,380
1891.....	102,162	1,616,004	1,718,166	791,691
1892.....	341,376	5,536,818	5,878,194	5,081,459



S.—THE Quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1892, inclusive, and the amount of Tolls Collected thereon, is as follows:—

Years.	From Canadian Ports to Canadian Ports.	From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total Tons.	Amount of Tolls Paid. — Rate 20 cents a ton.
	Up.	Up.	Down.	Up.	Down.		
	Tons.	Tons.	Tons.	Tons.	Tons.		\$ cts.
1885.....		193,442	4,974	10,321	31,350	240,067	48,017 40
1886.....		184,564	5,400	22,187	49,724	261,875	52,375 00
1887.....		81,617	1,163	26,775	25,968	135,523	27,104 60
1888.....		172,381	878	17,365	27,183	217,807	43,561 40
1889.....		226,352	1,124	12,036	25,931	265,443	53,188 60
*1890.....	80	116,616	615	17,280	22,781	202,372	38,222 30
1891.....		185,190	1,382	17,374	20,698	224,644	44,928 20
1892.....		183,244	651	12,391	15,330	211,616	42,284 13

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 and 1892 being 20 cents a ton for passage either eastward or westward.

T.—STATEMENT showing the Quantity of Coal passed through the whole length of the St. Lawrence Canals during the Seasons of 1885 to 1892, 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
1892.....	7,543	157,134	164,677	23,570 10

## Canal Statistics.

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 1892, 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.....	3	2	
Agricultural products, not enumerated, vegetable.....		3	3
do do animal.....		6	
Agricultural implements.....			1
Barley.....			735
Coal.....		89,344	5,372
Corn.....	109,191	6,815	66,128
Crockery and earthenware.....			1
Fish.....			1
Flour.....	5,089		2,041
Furniture.....	6	8	25
Glass.....	1	9	
Horses.....			6
Hides and skins.....	77	26	60
Iron, railway.....			142
do all other.....	5	39	90
Lard and lard oil.....	6	1	5
Meal, all kinds.....	1,188	138	8,579
Meats, other than pork.....		2	12
Manilla.....			4
Molasses.....	43	4	1
Nails.....			51
Oats.....			731
Oil, in barrels.....		300	206
Oil cake.....			1
Pease.....	726		
Pork.....	212	13	163
Paint.....			6
Rags.....			271
Eye.....	518		
Salt.....			8
Stone, intended for cutting.....		2,584	38
do wrought.....	269	353	87
Seeds, all kinds.....	2		662
Steel.....	1		
Sugar.....	2		
Spirits, beer, &c.....	35	98	156
Tobacco, raw.....		5	
Tallow.....		2	
Wheat.....	76,379	3,835	54,282
White lead.....			5
Wool.....			95
All other merchandise, not enumerated.....	52	109	665
Barrels, empty.....		4	
Firewood, in vessels.....		930	
Hoops.....			26
Lumber, sawn, in vessels.....	6,311	792	34,732
Staves and headings, barrel.....		31	
do pipe.....	2,024	2,738	
do West India.....	451	1,946	
Staves, salt barrel.....			25
Shingles.....			9
Split posts and fence rails, in vessels.....		1	
Timber, square.....	2,604	74,329	
Woodenware and wood, partly manufactured.....	199	35	30
Total.....	205,394	184,502	175,455

## U.—COMPARATIVE STATEMENT of the Quantity of Freight passed down the Welland Canal, &amp;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	
Agricultural products, not enumerated, vegetable.....		7	
do do animal.....		2	
Agricultural implements.....		9	
Barley.....	38	52	
Coal.....		32,598	4,293
Corn.....	55,552	9,552	53,707
Cattle.....		1	
Fish.....		13	
Flour.....	9,659		1,715
Furniture.....	10	17	16
Glass, all kinds.....		10	1
Hay, pressed.....			13
Horses.....		2	6
Hides, horns and hoofs.....			73
Iron, all other.....		8	40
Kryolite and chemical ore, and other ore, except iron.....		10	
Lard and lard oil.....		2	7
Meal, all kinds.....		5	8,170
Meats other than pork.....		28	4
Marble.....			1
Nails.....	1		26
Oats.....	872		9,874
Oil, in barrels.....	78	354	255
Pease.....	433		
Pork.....	318		
Rye.....	477		
Salt.....		364*	
Stone, intended for cutting.....		2,059	15
do wrought.....	317	190	7
Seeds, all kinds.....		111	511
Sheep.....			1
Spirits, beer, &c.....		11	26
Turpentine.....	1		
Wheat.....	84,822	2,549	40,975
All other goods and merchandise not enumerated.....	37	104	480
Barrels, empty.....	37	3	1
Firewood, in vessels.....		930	
Lumber, sawn, in vessels.....	7,531	85	45,239
Staves and heading, barrel.....		22	
do pipe.....	200	487	
do West India.....	863	406	
Shingles.....		7	76
Timber, square.....	7,365	50,414	
Woodenware and wood, partly manufactured.....	68	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. 23th May, 1884.

## Canal Statistics.

### 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.....	97		
Apples.....	513		
Agricultural products, not enumerated, vegetable.....	1		
do do animal.....	2		
Barley.....			228
Coal.....		31,350	4,974
Corn.....	44,401	9,906	63,229
Crockery and earthenware.....	1		
Flour.....	2,874		124
Furniture.....	5	11	
Horses.....	2	1	
Iron, pig.....		100	
do all other.....	7		987
Iron ore.....		2	
Lard and lard oil.....			
Meal, all kinds.....	16		882
Oats.....			
Oil, in barrels.....	7	568	
Pease.....	11		
Paint.....		68	
Pork.....	30		
Salt.....		407	
Stone, for cutting.....		3,749	
do wrought.....		8	
do wrought.....		10	
Seeds, all kinds.....	42		25
Spirits, beer, &c.....			
Tallow.....	2	4	
Wheat.....	52,157	2,003	53,235
All other merchandise not enumerated.....	28	8	2
Barrels, empty.....	128	8	
Firewood, in vessels.....		540	
Lumber, sawn.....	19,945	6,774	49,561
Staves and headings.....	856	604	
Shingles.....			111
Timber, square.....	11,767	69,616	
Woodenware.....	76		
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, &amp;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.
	Tons.	Tons.	Tons.
1886.			
Ashes, pot and pearl	44	10	11
Apples	49		
Agricultural products, not enumerated, vegetable		1	1
Bricks			41
Cement and water lime			26
Coal		49,724	5,400
Corn	116,517	8,871	93,503
Flour	2,934		7,591
Furniture	6	15	21
Glass, all kinds			2
Horses	1		1
Hides and skins, &c.			411
Iron, pig		617	48
do all other	15	12	1
Lard and lard oil	22	9	13
Meal, all kinds	125	18	13,201
Meats, other than pork	67	64	1
Marble		2	
Molasses	28	7	
Nails			4
Oats		41	4,790
Oil	6	28	6
Pease	608		
Pork	936	407	106
Paint	1	1	
Rags			13
Salt		29	1
Stone for cutting		4,314	
do wrought		103	38
Seed, all kinds	33	3	236
Sugar			3
Spirits, beer, &c.	8	12	21
Tobacco, raw	25		
Tallow	1	2	1
Wheat	86,815	969	53,258
Wool			1,125
Merchandise, not enumerated	100	46	793
Barrels, empty	6	2	
Floats		20	
Lumber, sawn, in vessels	18,707	7,546	53,124
Masts, spars, &c.		22	
Staves and headings, barrel		57	
do do pipe	332	339	
do do West India	287	444	
Shingles		12	463
Timber, square	16,740	44,335	
Woodenware, &c.	101	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.

## Canal Statistics.

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 peal .....	113		
Apples .....	33		
Agricultural products not enumerated, vegetable .....			2
Agricultural implements .....			9
Barley .....			1,709
Coal .....		25,968	1,163
Corn .....	24,609	6,898	83,431
Fish .....			2
Flour .....	6,140		11,780
Furniture .....	9	9	24
Horses .....	1	1	2
Hides, skins, &c .....			170
Iron, pig .....		1,137	
do all other .....		7	
Lard and lard oil .....		6	14
Meal, all kinds .....	87	42	10,726
Meats, other than pock .....	29	15	18
Nails .....	1		
Oats .....			12,050
Oil .....	14	190	8
Oil cake .....	17		
Pease .....	362		
Pork .....	418	86	108
Stone, for cutting .....		3,531	
do wrought .....	12	543	
Seeds .....		4	44
Sugar .....	15		1
Spirits .....		99	63
Wheat .....	160,063	4,940	37,678
Wool .....			86
All other merchandise, not enumerated .....	72	123	468
Barrels, empty .....	88		24
Lumber, sawn .....	7,001	1,816	44,733
Staves and headings, barrel .....		27	
do pipe .....	184		
do West India .....	131	838	
Timber, square .....	14,390	21,351	
Woodenware and wood partly manufactured .....	45	1	2
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. 21th March, 1887.

## U.—COMPARATIVE STATEMENT of the Quantity of Freight passed down the Welland Canal, &amp;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.
	Tons.	Tons.	Tons.
1888.			
Ashes, pot and pearl.....	85		
Apples.....		45	
Barley.....			2
Cement and water lime.....			4
Coal.....		27,183	878
Corn.....	66,443	25,469	102,974
Crockery and earthenware.....		4	1
Flour.....	3,865		8,563
Furniture.....	2	1	30
Glass, all kinds.....	3	2	
Hay, pressed.....		20	
Horses.....	2		
Hides and skins.....			39
Iron, pig.....		549	
do all other.....	418	490	
Lard and lard oil.....	54	12	18
Meal, all kinds.....	100		11,598
Meats, other than pork.....	39	6	14
Oats.....			26,510
Oil.....		3	
Pease.....		54	
Pork.....	265	61	19
Rags.....			14
Rye.....		632	179
Stone, for cutting.....		6,535	
do wrought.....		126	
Seeds, all kinds.....	12	1	48
Steel.....			3
Sugar.....		2	4
Spirits.....	3	2	151
Tallow.....			1
Wheat.....	93,915	14,365	39,999
Wool.....			18
All other goods and merchandise not enumerated.....	105	34	1,435
Barrels, empty.....	40		133
Lumber, sawn.....	5,174	4,515	45,818
Staves and headings, barrel.....	15	7	
do pipe.....	124		
do West Indies.....	1,623	18	
do salt barrel.....	1	1	
Shingles.....			6
Timber, square, in vessels.....	11,586	33,669	
Woodenware.....	25		8
Total.....	183,899	113,801	238,467

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

## Canal Statistics.

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 pearl	107	5	
Coal		25,931	1,124
Corn	195,350	11,200	147,045
Crockery and earthenware		1	1
Fish		5	
Flour	6,841		5,017
Furniture		4	30
Horses	2		1
Iron, pig		613	
do all other			520
Lard and lard oil		5	19
Meal, all kinds	148		17,224
Meats other than pork	32	2	3
Molasses			88
Oats	320		27,492
Oil, in barrels	4	2	
Oil cake	798		
Potatoes			1
Pork	1,220	114	21
Rye	1,284	634	
Salt		316	
Stone, for cutting		6,784	
do wrought		11	2
do not suitable for cutting		375	1,681
Seeds, all kinds	3		151
Spirits, beer, &c	20	8	190
Tallow			13
Wheat	70,815	7,241	39,229
Wool			452
Merchandise	193	129	1,591
Barrels, empty			173
Lumber, sawn	6,118	4,669	71,055
Masts, spars, &c		220	
Railway ties		852	
Saw logs			158
Staves and headings, barrel		4	
do do pipe	202	304	
do do West India	68	559	
Shingles			51
Split posts, &c		17	
Timber, square	9,302	70,579	246
Woodenware, &c			2
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, &amp;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.
	Tons.	Tons.	Tons.
1890.			
Ashes.....	70		
All other products, animal.....	14		
do vegetable.....	1		
Barley.....			6,519
Bricks.....			4
Coal.....		22,781	615
Corn.....	134,966	11,584	180,842
Fish.....	49		
Flour.....	3,065		9,204
Furniture.....	1	1	21
Glass, all kinds.....	1		
Horses.....	3		1
Iron, all other.....			1
Kyrolite.....		1,280	1,620
Lard and lard oil.....		5	30
Meal.....	222		20,482
Meats.....			15
Oats.....	479	73	27,030
Oil, in barrels.....	6		
Oil cake.....	2		
Paint.....			3
Pease.....			14
Pork.....	221	19	88
Potatoes.....			1
Rye.....	1,120	1	
Salt.....		701	
Stone, for cutting.....		5,761	
do wrought.....		639	18
Seeds, all kinds.....	2		135
Spirits, &c.....	26		228
Tallow.....	54		
Wheat.....	75,515	5,241	31,527
White lead.....			1
Merchandise.....	142	32	1,822
Barrels, empty.....			7
Firewood, in vessels.....		1,398	
Lumber, sawn, in vessels.....	3,195	3,767	47,590
do rafts.....	384		
Staves and headings, pipe.....		187	
do West Indies.....		36	
Shingles.....			14
Square timber, in vessels.....		73,112	
do rafts.....		17,683	
Woodenware.....	1		1
Corn.....	16,033	219,539	327,633
Oats.....	400		*16,433
Total.....	235,972	144,301	311,400

\* 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 oats for export), when shipped for Montreal or some port east of that point per Order in Council 26th February and 5th May. 1890.

## Canal Statistics.

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.
1891.	Tons.	Tons.	Tons.
Ashes.....	40		
Agricultural products.....	2		42
Barley.....			8,113
Corn.....	52,539	5,144	127,494
Coal.....		20,698	1,382
Flour.....	3,324		6,802
Fish.....			1
Furniture.....	2	2	7
Glass.....	1		1
Horses.....	2	2	3
Hay.....		21	
Iron, pig.....	371	128	
do all other.....		1,036	10
Lard and lard oil.....	100	16	10
Meal, all kinds.....	67		26,096
Meats, other than pork.....		1	2
Molasses.....		20	18
Oats.....			52,823
Oil.....			1
Pease.....	390		
Pork.....	201		73
Rags.....			60
Rye.....	64,978	969	
Seeds, all kinds.....	2		256
Salt.....		1,861	494
Stone for cutting.....		6,602	
do wrought.....		7	
Tobacco.....	1		
Tallow.....		9	8
Wheat.....	159,785	692	32,097
Staves, pipe.....		8	
Whiskey and all other liquors.....	105	57	167
Wool.....			1,237
Merchandise.....	278	6	1,779
Kryolite.....		1,098	1,773
Lumber, in vessels.....	2,991	1,300	56,456
do in rafts.....	917		
Timber, square, in rafts.....	5,640	14,638	
Barrels.....			4
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Corn.....	12,169	291,776	54,315
Wheat.....	5,648		317,209
<hr/>			
	17,817		*17,817
<hr/>			
Total.....	309,583	54,315	299,392

\* This quantity of grain was transhipped at Ogdensburg and passed down the St. Lawrence Canals to Montreal.

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 26th March, 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 1892.

ARTICLES.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	Tons.	Tons.	Tons.
1892.			
Ashes, pot and pearl.....	17	2	
Apples.....	54		
Barley.....			6,433
Corn.....	53,639	7,637	131,222
Coal.....		14,839	661
Flour.....	2,874		11,018
Fish.....	9		
Furniture.....	1		7
Hides and skins.....	20		
Horses.....	2		
Iron, railway.....		100	
do all other.....		765	1
Meal, all kinds.....	16		31,724
Meats, other than pork.....	94		29
Oats.....			36,935
Oil.....		7	
Pease.....	524		
Potatoes.....			1
Pork.....			44
Rye.....	9,119	273	
Salt.....		865	
Seeds, all kinds.....	75		50
Steel.....			1
Stone for cutting.....		1,264	
Sugar.....			20
Wheat.....	194,281	5,373	26,950
Whiskey, beer, spirits, &c.....	6	15	46
Wool.....			70
Merchandise not enumerated.....	36	13	1,304
Barrels empty.....	1		29
Lumber sawn, in vessels.....	1,678	150	83,403
Square timber.....	440	42,768	440
Staves and headings, pipe.....	8	80	
do do West India.....	200	76	
Shingles.....			25
Total.....	263,144	74,227	330,403
*Wheat.....	+4,341	-4,341	
Total.....	267,485	69,886	330,403

\*This quantity of wheat was taken from Kingston to Ogdensburg and stored in elevators, and subsequently transhipped to Montreal.

A refund of 18 cents a ton, Welland Canal tolls, was allowed on wheat, Indian corn, pease, barley, rye, oats, flax seed and buckwheat, which passed down the whole length of the Welland and St. Lawrence Canals, to Montreal, or any port east of Montreal, and such products exported out of the country, and in such cases, only.

## Canal Statistics.

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

### RECAPITULATION.

Articles.	Quantity passed 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.
<b>1884.</b>			
	Tons.	Tons.	Tons.
Barley .....	38	52	.....
Corn .....	55,552	9,552	53,707
Oats .....	872	.....	9,874
Rye .....	477	.....	.....
Wheat .....	84,822	2,549	40,975
<b>Total Grain .....</b>	<b>141,761</b>	<b>12,153</b>	<b>104,556</b>
<b>Other Articles .....</b>	<b>26,954</b>	<b>88,272</b>	<b>60,987</b>
<b>Total .....</b>	<b>168,715</b>	<b>100,425</b>	<b>165,543</b>
<b>1885.</b>			
Barley .....	.....	.....	228
Corn .....	44,401	9,906	63,229
Oats .....	.....	.....	882
Pease .....	11	.....	.....
Rye .....	.....	.....	.....
Wheat .....	52,157	2,003	53,235
<b>Total Grain .....</b>	<b>96,569</b>	<b>11,909</b>	<b>117,574</b>
<b>Other Articles .....</b>	<b>36,399</b>	<b>113,853</b>	<b>55,759</b>
<b>Total .....</b>	<b>132,968</b>	<b>125,762</b>	<b>173,333</b>
<b>1886.</b>			
Barley .....	.....	.....	.....
Corn .....	116,517	8,871	93,503
Oats .....	.....	41	4,790
Pease .....	608	.....	.....
Rye .....	.....	.....	.....
Wheat .....	86,815	969	53,258
<b>Total Grain .....</b>	<b>203,940</b>	<b>9,881</b>	<b>151,551</b>
<b>Other Articles .....</b>	<b>40,574</b>	<b>108,246</b>	<b>82,703</b>
<b>Total .....</b>	<b>244,514</b>	<b>118,127</b>	<b>234,254</b>
<b>1887.</b>			
Barley .....	.....	.....	1,709
Corn .....	24,609	6,898	83,431
*Oats .....	.....	.....	12,050
Pease .....	362	.....	.....
Rye .....	.....	.....	.....
Wheat .....	180,063	4,940	37,678
<b>Total Grain .....</b>	<b>185,034</b>	<b>11,838</b>	<b>134,868</b>
<b>Other Articles .....</b>	<b>28,800</b>	<b>55,794</b>	<b>69,447</b>
<b>Total .....</b>	<b>213,834</b>	<b>67,632</b>	<b>204,315</b>

\* 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.
	Tons.	Tons	Tons.
1888.			
Barley .....	66,443	25,469	2
Corn .....			102,974
Oats .....			26,510
Pease .....		54	
Rye .....		632	179
Wheat .....	93,915	14,365	39,999
Total Grain .....	160,358	†40,520	169,664
Other Articles .....	23,541	73,281	68,803
Total .....	183,899	113,801	238,467
1889.			
Barley .....	195,350	11,200	147,045
Corn .....	320		27,492
Oats .....			
Pease .....			
Rye .....	1,284	634	
Wheat .....	70,815	7,241	39,229
Total Grain .....	267,769	19,075	213,766
Other Articles .....	25,158	111,509	99,808
Total .....	292,927	130,584	313,574
1890.			
Barley .....			6,519
Corn .....	150,999	11,584	180,842
Oats .....	879	73	27,030
Pease .....			14
Rye .....	1,120	1	
Wheat .....	75,515	5,241	31,527
Total Grain .....	228,513	16,899	†245,932
Other Articles .....	7,459	127,402	81,901
Total .....	235,972	144,301	327,833
1891.			
Barley .....	52,539	5,144	8,113
Corn .....			127,494
Oats .....			52,823
Pease .....	390		
Rye .....	64,978	969	
Wheat .....	159,785	692	32,097
Total Grain .....	277,692	6,805	220,527
Transhipped at Ogdensburg to Montreal .....	+ 17,817		- 17,817
Total .....	295,509		202,710
Other Articles .....	14,084	47,510	96,682
Grand Total .....	309,593	54,315	299,392

† Owing to a break in the Cornwall Canal, 14,921 tons of the above quantity of grain were transhipped to Montreal *via* Canadian Pacific and Grand Trunk Railways, and the refund of 18 cents per ton allowed.

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

## Canal Statistics.

### 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.
1892.	Tons.	Tons.	Tons.
Barley.....			6,433
Corn.....	53,689	7,637	131,222
Oats.....			36,935
Pease.....	524		
Rye.....	9,119	273	
Wheat.....	194,281	5,373	26,950
Total, grain.....	257,613	13,283	201,540
Quantity taken to Ogdensburg and transhipped to Montreal.....	* 4,341	4,341	
Total.....	261,954	8,942	201,540
Other articles.....	5,531	60,944	128,863
Grand total.....	267,485	69,886	330,403

V.—SUMMARY of Quantity of Freight passed down Welland Canal on which full Tolls were paid.

	Quantity passed down to Canadian Ports: Toronto, Hamilton, Kingston, Cornwall, &c.	Quantity passed down to United States Ports: Oswego, Ogdensburg, &c., on south side of Lake Ontario.
	Tons.	Tons.
1883.		
Grain .....	10,650	121,876
Other articles .....	173,852	53,579
Total .....	184,502	175,455
1884.		
Grain .....	12,153	104,556
Other articles .....	88,272	60,987
Total .....	100,425	165,543
1885.		
Grain .....	11,909	117,574
Other articles .....	113,853	55,759
Total .....	125,762	173,333
1886.		
Grain .....	9,881	151,551
Other articles .....	108,246	82,703
Total .....	118,127	234,254
1887.		
Grain .....	11,838	134,868
Other articles .....	55,794	69,447
Total .....	67,632	204,315
1888.		
Grain .....	25,599	169,664
Other articles .....	73,281	68,803
Total .....	98,880	238,467
1889.		
Grain .....	19,075	213,766
Other articles .....	111,509	99,808
Total .....	130,584	313,574
1890.		
Grain .....	16,899	* 245,932
Other articles .....	127,401	81,901
Total .....	144,300	327,833
1891.		
Grain .....	6,805	* 220,527
Other articles .....	47,510	96,682
Total .....	54,315	317,209
1892.		
Grain .....	8,942	201,540
Other articles .....	60,944	128,863
Total .....	69,886	330,403

\* Of this quantity of grain 16,433 tons was transhipped to Montreal in 1890; and 17,817 tons in 1891

# Canal Statistics.

CANAL

COMPARATIVE Statement for Years ended

	January.	February.	March.	April.	May.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Welland Canal, 1891.....	205 00			6,519 99	28,972 97
do 1892.....		242 54		11,510 42	25,056 46
Increase.....		242 54		4,990 43	
Decrease.....	205 00				3,916 51
St. Lawrence Canals, 1891.....	15 52			201 50	8,151 22
do 1892.....				570 75	9,949 00
Increase.....				369 25	1,797 78
Decrease.....	15 52				
Chambly Canal, 1891.....					3,310 07
do 1892.....				19 45	3,463 15
Increase.....				19 45	153 68
Decrease.....					
Rideau Canal, 1891.....				41 14	609 33
do 1892.....			72 00	9 20	847 23
Increase.....			72 00		237 90
Decrease.....				31 94	
Ottawa Canals, 1891.....				541 88	8,064 90
do 1892.....				432 50	6,526 48
Increase.....					
Decrease.....				109 38	1,538 42
St. Peter's Canal, 1891.....				28 89	154 70
do 1892.....	31 10		1 06	180 14	254 58
Increase.....	31 10		1 06	151 25	99 88
Decrease.....					
Trent Valley Canal, 1891.....				2 70	71 53
do 1892.....				78 50	59 00
Increase.....				75 80	
Decrease.....					12 53
Murray Canal, 1891.....				13 52	54 85
do 1892.....				24 39	66 32
Increase.....				10 87	11 47
Decrease.....					
Total increase.....		242 54	73 06	5,475 73	
Total decrease.....	189 42				3,167 35

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.

Amount refunded on account of reduction of tolls on grain through Welland and St. Lawrence Canals, 1892, \$40,030.83; actual revenue, \$318,680.21.



## REVENUE.

31st December, 1891 and 1892.

June.	July.	August.	September.	October.	November.	December.	Total.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
28,772 52	25,662 27	31,879 90	33,200 17	29,979 75	14,234 57	976 16	200,403 30
21,838 60	26,462 27	26,650 27	31,281 49	30,205 81	21,176 64	2,053 42	196,477 92
6,933 92	800 00	3,229 63	1,918 68	226 06	6,942 07	1,077 26	3,925 38
13,629 48	15,732 89	12,600 99	10,688 44	10,892 53	8,640 03	101 37	80,653 97
15,877 85	16,916 14	12,486 40	10,978 91	12,225 28	9,043 62	82 34	88,125 29
2,248 37	1,188 25	114 59	285 47	1,332 75	403 59	19 03	7,471 32
3,026 21	3,176 19	2,746 49	2,180 91	3,197 81	1,897 20		19,534 88
2,757 04	3,021 47	3,719 52	3,072 86	3,494 99	1,432 37		20,980 85
269 17	154 72	973 03	891 95	297 18	464 83		1,445 97
1,151 39	1,145 24	966 88	819 04	901 42	508 61	2 84	6,145 89
810 52	983 36	923 33	701 69	721 04	430 27	0 50	5,499 14
340 87	161 88	43 55	117 35	180 38	78 34	2 34	646 75
6,938 18	6,898 19	5,422 33	4,598 07	4,649 97	3,343 87	1 00	40,458 39
6,692 54	6,621 12	7,225 16	6,282 02	6,545 83	2,759 03		43,084 68
245 64	277 07	1,802 83	1,683 95	1,895 86	584 84	1 00	2,626 29
112 98	102 35	111 36	286 05	438 40	383 37	163 66	1,781 76
368 24	413 07	412 94	481 83	443 45	362 32	207 13	3,155 86
255 26	310 72	301 58	195 78	5 05	21 05	43 47	1,374 10
119 95	129 86	139 60	125 24	95 05	19 80		703 73
113 79	169 11	137 86	114 30	90 07	49 38		802 01
6 16	29 25	1 74	10 94	4 98	29 58		98 28
135 67	146 09	178 74	63 85	46 05	31 28		670 05
80 29	124 86	103 35	80 22	64 11	41 75		585 29
55 38	21 23	75 39	16 37	18 06	10 47		84 76
5,346 51	1,708 32	2,387 46	1,026 55	3,599 60	6,236 65	1,098 36	8,359 07
Total for year 1891.....							350,351 97
Total for year 1892.....							358,711 04

# Canal Statistics.

COMPARATIVE STATEMENT showing the Quantities of Vegetable Food and Lumber passed through the Canals during the Years ended 31st December, 1891 and 1892.

	FLOUR.		WHEAT.		CORN.		BARLEY.		OATS.		RYE.		ALL OTHER.		LUMBER.		TOTAL.	
	Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.		Tons.	
Welland Canal, 1891	13,517		198,658		185,180		8,113		52,959		65,888		28,042		64,887		617,244	
do 1892	17,048		232,019		192,548		6,433		37,173		9,392		32,815		86,072		613,500	
Increase.	3,531		33,361		7,368		1,680		15,786		56,496		4,773		21,185		3,744	
Decrease																		
St. Lawrence Canals, 1891	8,123		190,843		67,603		17,006		8,323		66,917		42,730		48,322		451,067	
do 1892	8,546		262,890		59,340		9,340		44,294		10,119		54,597		37,475		486,691	
Increase.	423		72,047		8,263		8,266		35,371		56,798		11,867		10,847		35,534	
Decrease																		
Chambly Canal, 1891	228						842						2,474		97,561		102,344	
do 1892	285											3,031		907	91,464		95,690	
Increase.	57						842		1,795				1,567		6,097		6,651	
Decrease																		
Rideau Canal, 1891	690		290		22		373		124		170		437		38,524		40,630	
do 1892	369		65		20		82		1,551		81		463		29,622		32,253	
Increase.	321		225		2		291		1,427		89		26		8,902		8,377	
Decrease																		
Ottawa Canals, 1891	112		18				150		1,038				3,275		424,116		428,769	
do 1892	26		28		4		76		4,879		57		1,740		469,727		476,246	
Increase.	86		10		4		74		3,541		57		1,526		45,611		47,537	
Decrease																		







# Canal Statistics.

No. (A) 7.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From United States to United States 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.				
Firewood, in rafts												
Hoops												
Hop poles												
Lumber, sawn, in vessels.	15	1,473	3	29,230		54,173	18	86,054	86,072	1 87	15,425 03	15,427 50
do rafts												
Masts, spars and telegraph poles, in vessels.												
Masts, spars and telegraph poles, in rafts.	5	96		121			5	217		0 25	6 78	
Railway ties, in vessels.												
do rafts												
Saw logs	185	1,315		1,055			185	2,370	2,555	9 72	94 33	104 05
Staves and headings, barrel.				95				95	35		7 60	7 60
do pipe.								88	88		16 10	16 10
do W. India								276	276		51 68	51 68
Staves, salt barrel						25		25			18 10	18 10
Shingles												
Split posts and fence rails, in vessels												
Split posts and fence rails, in rafts												
Timber, square, in vessels		8,090		440				43,648	43,648		6,541 16	6,541 16
do rafts	100	70					70	170	170	2 82	1,98	4 80
Traverses												
Woodenware and wood partly manufactured	2					5		7				2 80
Total freight paying tolls	4,932	87,642	2,945	32,583	240,182	300,733	260,450	685,348	945,798	47,589 90	130,554 59	178,144 49
Articles having paid full Tolls on the St. Lawrence Canals, Free.												
Ashes, pot and pearl			88					88				



# Canal Statistics.

## SUPPLEMENTARY 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 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
	cts.													
Ashes, pot and pearl.....														
Apples.....		54			267			19	267	54	19	3 80	10 80	3 80
Agricultural products, not enumerated, vegetable.....														
Agricultural products, not enumerated, animal.....	1								11	6,433	11	1 65		1 65
Agricultural implements.....									240		6,433	36 00		1,286 60
Barley.....	200		40			6,433					240			36 00
Bricks.....														
Bones.....														
Brimstone.....			20						20		20	4 35		4 35
Cement and water lime.....														
Clay, lime and sand.....														
Coal.....					183,244	651	14,839	12,391	195,635	15,490	211,125	39,127 00		3,098 00
Corn.....					131,222		61,326		192,548		192,548			38,509 60
Cattle.....														
Cotton, raw.....														
Crockery and earthenware.....														
Dye wood and dye stuffs.....														
Fish.....					15				15	9	24	2 25	1 80	4 05
Flax and hemp.....														
Flour.....			2			11,018	1,410		2	12,428	12,430	0 30	2,485 60	2,485 90
Furniture.....			16			7	1		16	8	24	2 40	1 60	4 00
Gypsum.....									89		89	13 35		13 35
Glass, all kinds.....	18		20		51									
Hay, pressed.....														
Hogs.....														
Horses.....					1				6	2	8	0 90	0 40	1 30
Hides and skins, horns and hoofs.....														
Ice.....			93				20		93	20	113	13 95	4 00	17 95





# Canal Statistics.

No. (A) 8.—STATEMENT showing the Quantity of each Article of Through Freight, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Firewood, in rafts.														
Hoops														
Hop poles														
Lumber, sawn, in vessels		650				54,173			3	85,231	85,234	0 52	15,332 92	15,333 44
do rafts														
Masts, spars and telegraph poles, in vessels														
Masts, spars and telegraph poles, in rafts														
Railway ties, in vessels														
do rafts														
Saw logs														
Staves and headings, barrel do pipe														16 10
do W India										88	88			16 10
Staves, salt barrel										276	276			51 68
Shingles														
Spit posts and fence rails, in vessels														
Spit posts and fence rails, in rafts														
Timber, square, in vessels		8,000				440				43,648	43,648		6,541 16	6,541 16
do rafts														
Tarvases														
Woodenware and wood partly manufactured.	2				5					7	7	2 80		2 80
Total freight paying tolls.	484	72,590	807	29,670	240,182	300,733	12,391	263,273	253,124	646,266	920,190	47,363 67	129,359 28	176,722 95
Articles having paid tolls on the St. Lawrence Canal, free —														
Ashes, pot and pearl										88	88			
Cement and water lime	869									1,570	1,570			

Clay, lime and sand.....	2	240	240	40
Crockery and earthenware.....	6	426	426	8
Fish.....	426	3	426	426
Furasture.....	3	152	152	3
Glass, all kinds.....	214	1,171	1,171	1,171
Iron, railway.....	687	74	74	74
do pig.....	20	387	387	387
do all other.....	16	16	16	16
Lard and hard oil.....	32	32	32	32
Molasses.....	25	276	276	276
Nails.....	2	2	2	2
Oil in barrels.....	15	15	15	15
Peat.....	15	15	15	15
Pitch and tar.....	50	2,034	2,034	2,034
Salt.....	1,984	352	352	352
Soda ash.....	352	220	220	220
Spirits, beer, &c.....	14	206	206	206
Steel.....	268	11	145	145
Stone intended for cutting.....	887	1,320	1,320	1,320
Sugar.....	463	27	27	27
Tin.....	27	6	6	6
White lead.....	6	71	71	71
Whiting.....	49	13	13	13
Wool.....	13	538	538	538
Merchandise.....	96	286	286	286
Σ Kryolite, free, having paid full tolls on the Rideau Canal.....				
Grand total, freight.....	3,302	72,590	29,670	240,332
			300,733	12,391
			263,273	263,680
			664,266	929,946
Total tolls on vessels.....				8,094 44
do passengers.....				53 25
do free goods.....				57 40
Total through tolls.....				55,511 36
				137,654 30
				193,165 66

B. H. TEAKLINS,  
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.





# Canal Statistics.

No. (A) 9—STATEMENT showing the Quantity of each Article of Way Freight transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.					
Firewood, in rafts															
Hoops															
Hop poles															
Lumber, sawn, in vessels	15	823							15	823	888	1 35	92 71	94 06	
do rafts															
Masts, spars and telegraph poles, in vessels															
Masts, spars and telegraph poles, in rafts	5								5		5	0 25		0 25	
Railway ties, in vessels		96		121						217	217		6 78	6 78	
do rafts	185	1,315		1,005					185	2,370	2,555	9 72	94 33	104 05	
Saw logs				95						95	95		7 60	7 60	
Staves and headings, barrel do pipe															
do do W. India															
Staves, salt barrel															
Shingles															
Split posts and fence rails, in vessels															
Split posts and fence rails, in rafts															
Timber, square, in vessels															
do rafts	100	70							100	70	170	2 82	198	4 80	
Traverses															
Woodenware and wood partly manufactured															
Total freight paying tolls.	4,448	15,052	2,078	2,913			1,117		6,526	19,082	25,608	226 23	1,195 31	1,421 54	

Total way tolls on vessels .....	428 41	394 05	822 46
do passengers.....	210 59	183 00	393 59
Total way tolls.....\$	638 23	1,772 36	2,637 59

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 26th April, 1893.

# Canal Statistics.

## SUPPLEMENTARY APPENDIX A—Continued.

No. (A) 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals and the Amount of Revenue collected during the Season of Navigation in 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl.		36							88	36	124	17 60	7 20	24 80
Apples.	20	5,189	6						26	5,195	5,221	2 32	751 78	754 10
Agricultural produce not enumerated, vegetable.	205	3,820					1		266	3,820	4,086	32 73	209 89	242 62
Agricultural produce not enumerated, animal.	125	2,490							125	2,490	2,615	8 92	367 08	376 00
Agricultural implements.	96	1							96	1	97	12 01	0 10	12 11
Barley.	741	8,599							741	8,599	9,340	27 81	451 93	479 74
Bricks.	10,318	362					193		10,511	362	10,873	420 27	23 03	443 30
Bones.		75							557	75	632	10 02	10 02	10 02
Brimstone.	557								557		557	54 58		54 58
Cement and water lime.	2,922	242							3,558	242	3,800	481 00	9 09	490 09
Clay, lime and sand.	18,531	5,561			40		3,104	1,132	21,675	6,693	28,368	875 33	455 14	1,330 47
Coal.		66,926							8	1,527	178,073		25,073 16	25,073 16
Corn.	8	4,318							4,333		4,341	0 72	264 86	265 58
Cattle.	51	241							51	241	292	2 93	17 54	20 47
Cotton, raw.									161	19	180	29 63	2 90	32 53
Crockery and earthenware.	151	19							153	8 29	163	8 29		8 29
Dye woods and dye stuffs.	45								881	42	926	94 61	2 91	97 52
Fish.	834	42												
Flax and hemp.		4,914							844	4,918	5,762	57 50	600 57	658 07
Flour.	846	864							349	864	1,213	37 87	138 00	175 87
Furniture.	2,473	37							2,473	37	2,510	33 55	1 42	34 97
Gypsum.	326	71					2		480	71	551	6 65	99 76	106 41
Glass, all kinds.	458	655							458	655	1,113	17 71	40 12	57 83
Hay, pressed.		5							183	318	501	11 19	20 61	31 80
Hogs.														
Horses.														
Hides and skins, horns and hoofs.		47									47		6 44	6 44
Ice.														



Iron, railway.....	989	4	214						1,203	1,207	177 69	0 15	177 84
do pig.....	1,184	10	64						1,248	1,258	157 10	0 38	157 48
do all other.....	11,754	1,817	381						12,135	13,952	658 89	72 52	731 41
do ore.....													
Kryolite chemical ore and other ore, except iron.....	130	72	16						146	218	17 74	2 78	20 52
Lard and lard oil.....	613	611							613	1,224	25 27	31 18	56 45
Meat, all kinds.....	15	5							17	20	1 82	0 53	2 35
Meats, other than pork.....	5								17	17	1 55		1 55
Marble.....	9		12						9	17	1 80		1 80
Mamilla.....	700	22	32						732	754	72 39	1 10	73 49
Molasses.....	1,186	684	293						1,449	2,133	275 35	35 40	310 75
Nails.....	872	43,422							872	44,294	29 92	2,050 16	2,050 08
Oats.....	808	157	1						980	1,087	117 71	22 70	140 41
Oil, in barrels.....	3								3	3	0 16		0 16
Oil cake.....	549	46,870							549	47,419	15 56	2,854 28	2,869 24
Pease.....	52	87	52						52	139	2 00	7 41	9 41
Potatoes.....	376	192							376	568	39 17	9 82	48 49
Pork.....	212	187	17						255	442	43 78	12 65	56 43
Paint.....	71	48	20						287	333	24 47	2 75	27 22
Pitch and tar.....	57	66	15						57	123	6 00	12 90	18 90
Rags.....	17	983							17	983	1 66	69 16	70 82
Rye.....	315	47							2,117	2,164	108 90	2 35	111 25
Rosin.....	3,647	31	1,941						5,588	5,619	713 37	1 52	714 89
Salt.....	191	160	145						1,809	2,029	84 62	26 25	110 87
Stone intended for cutting, do wrought.....	326		60	60	60	1,413			326	326	17 65		17 65
do not suitable for cutting, unwrought.....	83	4,268							83	4,351	1 65	85 35	87 00
Seeds, all kinds.....	6,076	379							6,076	6,455	229 84	16 55	246 39
Sheep.....	3	110							3	113	0 24	8 34	8 58
Soda ash.....	630	35	378						1,008	1,043	198 98	5 35	204 33
Steel.....	1,015	13							1,029	1,039	132 99	0 51	133 50
Sugar.....	4,783	34	896						5,679	5,713	1,126 81	3 20	1,130 01
Spirits, beer, &c.....	373	473	221						594	1,077	106 00	91 05	1,197 05
Tobacco, raw.....	1								1	1	0 10		0 10
Tallow.....	36	1							36	37	4 50	0 08	4 58
Tin.....	364	17	27						391	408	73 08	1 30	74 38
Turpentine.....	23	26							164	190	11 45	1 30	12 75
Wheat.....	14,455	49,067							14,455	68,409	542 22	3,860 20	4,402 42
White lead.....	130		8						158	158	30 82		30 82
Whiting.....	192		83						275	275	56 90		56 90
Wool.....		10	13						13	23	1 95	1 50	3 45
All other goods and merchandise not enumerated.....	6,505	2,840	477	34	407	450	1,243		8,632	11,993	1,192 31	492 10	1,684 41
Bark.....					5				5	5	0 19		0 19
Barrels, empty.....	415	7			19				434	441	46 82	0 59	47 41
Boot knees.....													
Floata.....	3,100	4,364							3,100	7,464	57 75	70 77	128 52
Firewood, in vessels.....	6,202	7,345	9	1,170	171				6,382	14,897	106 70	227 19	333 89

# Canal Statistics.

No. (A) 10.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Firewood, in rafts.														
Hoops														
Hop poles.														
Lumber, sawn, in vessels.	20,097	14,692	33	197		5	527		20,130	15,421	35,551	495 29	605 22	1,100 51
do rafts		125								125	125		5 64	5 64
Masts, spars and telegraph poles, in vessels														
Masts, spars and telegraph poles, in rafts	148	13,540							148	13,540	13,540		388 50	388 50
Railway ties, in vessels											148	2 95		2 95
do rafts	88	18,271							88	18,271	18,359	2 00	418 24	420 24
Saw-logs														
Staves and headings, barrel														
do pipe		80								80	80		2 50	2 50
do W. India		104								104	104		3 90	3 90
Staves, salt barrel	25								25		25	3 87	0 45	4 32
Shingles														
Split posts and fence rails, in vessels														
do rafts	628	2,057							628	2,057	2,685	22 88	26 14	49 02
Timber, square, in vessels	1,630	7,237							1,630	7,237	8,867	48 90	186 85	235 75
do rafts		8,222								8,222	8,222		21 40	21 40
Traverses														
Woodenware and wood partly manufactured	26	18								26	44	8 60	3 50	12 10
Total freight paying tolls.	130,423	333,645	6,190	1,424	702	2,046	8,367	116,411	145,682	453,526	599,208	9,419 10	40,154 90	49,574 00
Free articles, having paid full tolls on the Welland Canal:														
Apples											54			54
Ashes											17			17



# Canal Statistics.

## SUPPLEMENTARY 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, 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.....		36							88	36	124	17 60	7 20	24 80
Apples.....		4,927							4,927	4,927	4,927		739 05	739 05
Agricultural products, not enumerated, vegetable.....	155								155	1,992	2,147	23 25	141 89	165 14
Agricultural products, not enumerated, animal.....	3	2,407							3	2,407	2,410	0 45	361 05	361 50
Agricultural implements.....	2								2		2	0 40	0 40	0 40
Barley.....	34	4,165							34	4,165	4,165	5 10	291 30	291 30
Bricks.....									58		58		8 70	8 70
Bones.....	5								5		5	0 75	0 75	0 75
Brinstone.....									2,737		2,737	410 55	410 55	410 55
Cement and water lime.....	2,101		636						341	1,697	2,038	51 15	254 55	305 70
Clay, lime and sand.....	341	565			1,132					1,697	157,134		23,570 10	23,570 10
Coal.....		62,503			94,631					1,701	1,701	15	165 84	165 84
Corn.....	1	1,701							1	12	13		1 80	1 95
Cattle.....		12												
Cotton, raw.....									90	13	103	18 00	2 60	20 60
Crockery and earthenware.....	80	13							2		2	0 40	0 40	0 40
Dye wood and dye stuffs.....	2								502		502	75 30	75 30	75 30
Fish.....	452													
Flax and hemp.....									8	3,682	3,690	1 20	552 30	553 50
Flour.....	8	3,682							75	618	693	15 00	123 60	138 60
Furniture.....	72	618							1		1	0 15	0 15	0 15
Gypsum.....	1								418	17	435	83 60	3 40	87 00
Glass, all kinds.....	266	17	152											
Hay, pressed.....										5	5		0 75	0 75
Hogs.....		5							16	30	46	2 40	4 50	6 90
Horses.....	16	30												
Hides and skins, horns and hoofs.....									39		39		5 85	5 85
Ice.....														

Iron, railway..	957	214	1,171	1,171	175 65	175 65
do pig.	766	64	830	830	124 50	124 50
do all other.	1,077	381	1,458	1,471	218 70	220 65
Iron ore.						
Kryolite chemical ore and other ore, except iron.	66	16	82	82	12 30	12 30
Lard and lard oil.						
Meats, all kinds.	5	41	5	8	6 15	6 15
Meats, other than pork.	3				0 45	1 20
Marble.						
Mamilla.	9		9	9	1 80	1 80
Molasses.	21	32	53	53	10 60	10 60
Nails.	700	263	963	971	192 60	194 20
Oats.	5,802	8	5,802	5,802	710 66	710 66
Oil, in barrels.	295	99	296	395	59 20	79 00
Oil cake.						
Pease.	13,750		13,750	13,750	1,711 11	1,711 11
Potatoes.	17		17	17	2 55	2 55
Pork.	6	22	6	28	0 90	4 20
Paint.	132	22	149	171	29 80	34 20
Pitch and tar.	26	2	41	43	8 20	8 60
Rags.	3	63	3	66	0 60	13 20
Rye.	377		377	377	47 58	47 58
Resin.	8		8	8	1 60	1 60
Salt.	1,584	1,941	3,525	3,525	528 75	528 75
Stone intended for cutting.		145	145	305	21 75	45 75
do wrought.	9		9	9	1 80	1 80
do not suitable for cutting, unwrought.						
Seeds, all kinds.	26		26	26	3 90	3 90
Sheep.	2		2	2	0 30	0 30
Soda ash.	554	24	932	956	186 40	191 20
Steel.	820	378	831	831	124 65	124 65
Sugar.	3,559	11	4,435	4,445	887 00	889 00
Spirits, beer, &c.	94	896	315	761	63 00	152 20
Tobacco, raw.	436	221	10	10	89 20	89 20
Tallow.	28		28	28	4 20	4 20
Tin.	268	3	295	298	59 00	59 60
Turpentine.	10		10	10	2 00	2 00
Wheat.	14,404		19,491	19,491	2,642 98	2,642 98
White lead.	135	8	143	143	28 60	28 60
Whiting.	148	83	231	231	46 20	46 20
Wool.	10	13	13	23	1 95	3 45
All other goods and merchandise not enumerated.	2,751	472	3,233	5,169	646 60	1,033 80
Bark.						
Barrels, empty.	131	2	131	133	24 38	24 52
Boat knees.						
Floats.	400		400	400	2 80	2 80
Firewood, in vessels.						

# Canal Statistics.

No. (A) 11.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Firewood, in rafts.														
Hoops														
Hop poles.														
Lumber, sawn, in vessels.	268	567						527	268	1,094	1,362	23 85	98 55	122 40
do rafts.														
Masts, spars and telegraph poles, in vessels.														
Masts, spars and telegraph poles, in rafts.														
Railway ties, in vessels.														
do rafts.														
Saw logs.														
Staves and headings, barrel do pipe.														
do do W. India														
Staves, salt barrel														
Shingles														
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts.	300								300	200	300	15 00	2 00	15 00
Timber, square, in vessels.														
do rafts.		200												2 00
Traverses														
Woodenware and wood partly manufactured.	20								20		20	8 00		8 00
Total freight paying tolls.	18,279	121,132					6,137	101,424	24,416	222,556	246,972	4,215 78	32,017 00	36,232 78
<i>Free Articles having paid full tolls on the Welland Canal.</i>														
Apples.		54									54			54
Ashes.		17									17			17

Barrels, empty.....	1	53,689	1	53,689	1	53,689
Corn.....	9	9	9	9	9	53,689
Fish.....	2,635	2,635	239	2,874	2,874	2,874
Flour.....	1	1	1	1	1	1
Furniture.....	20	20	20	20	20	20
Hides, &c.....	2	2	2	2	2	2
Horses.....	1,678	1,678	1,678	1,678	1,678	1,678
Lumber, sawn, in vessels.....	16	16	16	16	16	16
Meal, all kinds.....	94	94	94	94	94	94
Meats, other than pork.....	36	36	36	36	36	36
Merchandise.....	524	524	524	524	524	524
Pease.....	9,119	9,119	9,119	9,119	9,119	9,119
Rye.....	75	75	75	75	75	75
Seeds, all kinds.....	440	440	440	440	440	440
Square timber, in rafts.....	8	8	8	8	8	8
Staves and headings, pipe.....	200	200	200	200	200	200
do	194,281	194,281	194,281	194,281	194,281	194,281
Wheat.....	6	6	6	6	6	6
Whiskey, &c.....	7,343	7,343	7,543	7,543	7,543	7,543
Coal, free, per Order in Council.....	614	614	614	614	614	614
Kryolite, having paid full toll on the Rideau Canal, free.....	25,622	384,651	101,663	31,950	486,314	518,273
Grand total freight.....	25,622	384,651	101,663	31,950	486,314	518,273
Total through tolls on vessels.....	5,306	75	5,381	75	5,381	75
do passengers.....	297	25	297	25	297	25
do free goods.....	928,366	76	928,366	76	928,366	76
Total through tolls.....	9,819	78	9,819	78	9,819	78
	38,802	43	38,802	43	38,802	43
	48,622	21	48,622	21	48,622	21

B. H. TEAKLIES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 26th April, 1893.

# Canal Statistics.

## SUPPLEMENTARY APPENDIX A—Continued.

No. (A) 12.—STATEMENT showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected during the Season of Navigation in 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.				
Ashes, pot and pearl.														
Apples.	20	262		6					26	268	294	2 52	12 73	15 05
Agricultural products, not enumerated, vegetables.	110	1,828					1		111	1,828	1,939	9 48	68 00	77 48
Agricultural products, not enumerated, animal.	122	83							122	83	205	8 47	6 03	14 50
Agricultural implements.	94	1							94	1	95	11 61	0 10	11 71
Barley.	741	4,434							741	4,434	5,175	27 81	160 63	188 44
Bricks.	10,284	362					193		10,477	362	10,839	415 17	23 03	438 20
Bones.		17								17	17	1 32	1 32	1 32
Brunstone	552								552		552	53 83	9 09	63 88
Cement and water lime	821	242							821	242	1,063	70 45	9 09	79 54
Clay, lime and sand	18,190	4,996			40		3,104		21,334	4,996	26,330	824 18	200 59	1,024 77
Coal		4,423								20,939	20,939		1,503 06	1,503 06
Corn.	8	2,617					1,527		8	2,632	2,640	0 72	99 02	99 74
Cattle	50	229							50	229	279	2 78	15 74	18 52
Cotton, raw.	71	6							71	6	77	11 63	0 30	11 93
Crockery and earthenware.	43								151		151	7 89		7 89
Dye wood and dye stuffs.	382	42					108		382	42	424	19 31	2 91	22 22
Fish.														
Flax and hemp														
Flour	836	1,232					4		836	1,236	2,072	56 30	48 27	104 57
Furniture.	274	246							274	246	520	22 87	14 40	37 27
Gypsum	2,472	37							2,472	37	2,509	33 40	1 42	34 82
Glass, all kinds.	60	54							62	54	116	3 25	3 25	12 76
Hay, pressed	438	655					2		438	655	1,113	17 71	40 12	57 83
Hogs														
Horses														
Hides and skins, horns and hoofs	167	288							167	288	455	8 79	16 11	24 90
Ice											8		0 59	0 59



Iron, railway.....	32	4	32	4	86	2 04	0 15	2 19
do pig.....	418	10	418	10	428	32 60	0 38	32 98
do all other.....	10,677	1,804	10,677	1,804	12,481	440 19	70 57	510 76
Iron ore.....								
Kryolite chemical ore and other ore, except iron.....	64	72	136	72	136	5 44	2 78	8 22
Lard and lard oil.....	613	570	1,183	570	1,183	25 27	25 08	50 30
Meal, all kinds.....	10	2	12	2	12	1 07	1 15	1 15
Meats, other than pork.....	5		17		17	1 55		1 55
Marble.....								
Manilla.....								
Molasses.....	679	22	701	22	701	61 79	1 10	62 89
Nails.....	486	676	1,162	676	1,162	82 75	33 80	116 55
Oats.....	872	37,620	38,492	37,620	38,492	29 92	1,339 50	1,369 42
Oil in barrels.....	513	58	634	58	692	58 51	2 90	61 41
Oil cake.....	3		3		3	15 16		16
Pease.....	549	33,120	33,669	33,120	33,669	15 56	1,143 17	1,158 73
Potatoes.....	52	70	122	70	122	2 00	4 86	6 86
Pork.....	370	170	540	170	540	38 27	8 25	44 79
Paint.....	80	165	271	165	271	13 98	2 35	22 23
Pitch and tar.....	45	46	292	46	292	16 27	2 35	18 62
Rags.....	54	3	57	3	57	5 40	5 30	5 70
Rye.....	17	606	623	606	623	1 66	21 58	23 24
Rosin.....	307	47	2,156	47	2,156	107 30	2 35	109 65
Salt.....	2,063	31	2,094	31	2,094	184 62	1 52	186 14
Stone intended for cutting.....	191	60	1,724	60	1,724	62 87	2 25	65 12
do wrought.....	317		317		317	15 85		15 85
do not suitable for cutting, unwrought.....	83	4,268	4,351	4,268	4,351	1 65	85 35	87 00
Seeds, all kinds.....	6,076	353	6,429	353	6,429	229 84	12 65	242 49
Sheep.....	3	108	111	108	111	24	8 04	8 28
Soda ash.....	76	11	87	11	87	12 58	55	13 13
Steel.....	195	13	208	13	208	8 34	51	8 85
Sugar.....	1,244	24	1,268	24	1,268	239 81	1 20	241 01
Spirits, beer, &c.....	279	37	316	37	316	43 00	1 85	44 85
Tobacco, raw.....	1	1	1	1	1	30		30
Tallow.....	8	1	9	1	9	80	08	88
Tin.....	96	14	110	14	110	14 08	70	14 78
Turpentine.....	13	26	180	26	180	9 45	1 30	10 75
Wheat.....	14,455	34,663	49,118	34,663	49,118	542 22	1,217 22	1,759 44
White lead.....	15		15		15	2 22		2 22
Whiting.....	44		44		44	9 76		9 76
Wool.....								
All other goods and merchandise not enumerated.....	3,744	5	6,824	5	6,824	545 71	104 90	650 61
Bark.....	284	5	308	5	308	22 44	45	22 89
Barrels, empty.....								
Boat knees.....								
Floats.....	3,100	3,964	7,064	3,964	7,064	73 20	52 43	125 72
Firewood, in vessels.....	6,202	7,346	14,897	7,346	14,897	106 70	227 19	333 89

## Canal Statistics.

No. (A) 12.—STATEMENT showing the Quantity of each Article of Way Freight, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States 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.					
															\$
Firewood, in rafts.															
Hoops															
Hop poles															
Lumber, sawn, in vessels	19,829	14,125	33	197		5			19,862	14,327	34,189	471 44	506 67	978 11	
do rafts		125							125		125		5 64	5 64	
Masts, spars and telegraph poles, in vessels															
Masts, spars and telegraph poles, in rafts	148	13,540							148	13,540	13,540	2 95	338 50	338 50	2 95
Railway ties, in vessels	88	18,271							88	18,271	18,359	2 00	418 24	420 24	
do rafts															
Saw logs															
Staves and headings, barrel		80								80	80		2 50	2 50	
do pipe		104								104	104		3 90	3 90	
do W. India															
Staves, salt barrel	25	3							25	3	28	3 87	0 45	4 32	
Shingles															
Split posts and fence rails, in vessels															
do rafts															
Split posts and fence rails, in rafts	328	2,057							328	2,057	2,385	7 88	26 14	34 02	
Timber, square, in vessels	1,630	7,037							1,630	7,037	8,667	48 90	184 85	233 75	
do rafts		8,222								8,222	8,222	21 40	21 40	21 40	
Traverses															
Woodenware and wood partly manufactured	6	18							6	18	24	0 60	3 50	4 40	
Total freight paying tolls.	112,144	212,513	53	1,424	702	2,046	8,367	14,987	121,266	230,970	352,236	5,218 86	8,122 36	13,341 10	
Free articles having paid full tolls on the Welland Canal.															
Corn	65,688	1,310					26,688			1,310	1,310				
Coal, free per Order in Council									92,326		92,326				



# Canal Statistics.

## SUPPLEMENTARY APPENDIX A—Continued.

No. (A) 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa Canals, and Amount of Revenue collected during the Season of Navigation in 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
	Ashes, pot and pearl.....		5									
Apples.....	14	93							14	93		5 50
Agricultural products not enumerated, vegetable.....	13	227							13	227		21 55
do do animal.....	12	1,417							12	1,417		118 31
Agricultural implements.....	9	13							9	13		2 65
Barley.....		76								76		5 03
Bricks.....		1								1		0 10
Bones.....		1								1		0 10
Brimstone.....		4								4		0 34
Cement and water lime.....		7,002								7,002		218 74
Clay, lime and sand.....		4								4		0 34
Coal.....		4								4		0 39
Corn.....	1	527							1	527		35 74
Cattle.....		1								1		0 49
Cotton, raw.....	5	1							5	1		0 49
Crockery and earthenware.....		6								6		0 64
Dye wood and dye stuffs.....	2	6							2	6		0 64
Fish.....		4								4		1 97
Flax and hemp.....	4	22							4	22		4 28
Flour.....	8	28							8	28		0 11
Furniture.....		1								1		0 54
Gypsum.....	7	1							7	1		81 32
Glass, all kinds.....		860								860		21 36
Hay, pressed.....		21								21		8 35
Hogs.....		149								149		0 50
Horses.....	27	5							27	5		4 70
Hides and skins, horns and hoofs.....		5								5		4 70
Ice.....		54								54		4 70
Iron, railway.....		17								17		4 70
do pig.....		54								54		4 70
do do all other.....		54								54		4 70
Iron ore.....	17	54							17	54		4 70

Kryolite chemical ore and other ore, except iron.....	581	5	581	5	29 06
Lard and lard oil.....	5	5	5	5	18
Mead, all kinds.....	78	73	73	73	5 67
Meats, other than pork.....	1	1	1	1	10
Marble.....	1	1	1	2	24
Manilla.....	12	12	12	12	70
Molasses.....	13	13	13	13	75
Oats.....	4,579	4,579	4,579	4,579	356 12
Oil, in barrels.....	5	5	5	5	1 13
Oil cake.....	989	989	989	989	71 23
Pease.....	580	580	580	580	46 49
Potatoes.....	20	20	20	37	2 26
Pork.....	2	2	2	3	43
Paint.....	1	1	1	1	06
Pitch and tar.....	1	1	1	1	4 00
Rags.....	22	22	22	22	5 52
Rye.....	57	57	57	57	2
Rosin.....	2	2	2	2	15
Salt.....	24	24	24	24	1 65
Stone intended for cutting.....	1	1	1	1	10
do wrought.....					
do not suitable for cutting, unwrought.....					
Seeds, all kinds.....	38	38	38	38	2 70
Sheep.....	345	345	345	345	24 42
Soda ash.....	3	3	3	3	57
Steel.....	54	54	54	54	10 89
Sugar.....	10	10	10	11	79
Spirits, beer, &c.....	18	18	18	18	1 15
Tobacco, raw.....	14	14	14	14	75
Tallow.....	28	28	28	28	2 11
Tin.....	1	1	1	1	19
Turpentine.....	28	28	28	28	2 11
Wheat.....	1	1	1	1	19
White lead.....	9	9	9	9	89
Whiting.....	9	9	9	9	47 81
Wool.....	281	281	281	281	47 81
All other goods and merchandise not enumerated.....	88	88	88	88	4 15
Bark.....	35	35	35	35	4 15
Barrels, empty.....	1	1	1	1	03
Boa-knees.....	41,060	41,060	41,060	41,060	451 33
Floata.....	31,854	32,931	32,931	32,931	1,321 53
Firewood, in vessels.....	174	174	174	174	4 20
do do.....	420	420	420	420	2 00
Hoops.....	28	28	28	28	2 00
Hop poles.....	9	9	9	9	34,940 41
Lumber, sawn, in vessels.....	368,927	368,927	368,927	368,927	13 11
do do.....	99	99	99	99	2 79
Masts, spars and telegraph poles, in vessels.....	36	36	36	36	
do do.....	rafts	rafts	rafts	rafts	

## Canal Statistics.

No. (A) 13 —GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railway ties, in vessels.		125									325	53 50
do rafts.		1,563		200							1,563	83 34
Saw logs.		21,085									21,085	481 88
Staves and headings, barrel.												
do pipe.												
do West India.												
Staves, sal; barrel.												
Shingles.				455							526	457 68
Split posts and fence rails, in vessels.											1	0 88
do do rafts.												
Timber, square, in vessels.		2,560									2,560	62 91
do do rafts.		12,480									12,480	145 28
Traverses.		1,060									1,060	2 65
Woodenware and wood partly manufactured.												
Total freight paying tolls.	551	499,563	1	101,780					552	601,343	601,895	39,159 27
<i>Free per Order in Council, 27th June, 1850.</i>												
Floats.		23,460									23,460	
Firewood, in rafts.		4,290									4,290	
Lumber, sawn, in rafts.		704									704	
Square timber do		2,940									2,940	
Saw-logs.		13,662									13,662	
Traverses.		60									60	
Grand total freight.	551	544,679	1	101,780					552	646,459	647,011	

Total tolls on vessels.....	3,766 78
do passengers.....	140 63
do free goods.....	8905.49
Fines.....	10 00
Other receipts.....	8 00
Total revenue, exclusive of hydraulic rents.	43,084 68

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 25th April, 1893.







## Canal Statistics.

No. (A) 14.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Railway ties, in vessels.....	4,036								6,124		6,124	\$ cts. 488 80
do rafts.....			2,088									
Saw logs.....												
Staves and headings, barrel.....												
do pipe.....												
do West India.....												
Staves, salt barrel.....												
Shingles.....									23		23	3 20
Split posts and fence rails, in vessels.....												
do do rafts.....												
Timber, square, in vessels.....												
do rafts.....												
Traverses.....												
Woodenware and wood partly manufactured.....												
Total freight paying tolls.....	9,714	8,828	154,170			204		97,850	163,884	106,882	270,766	18,170 23
Total tolls on vessels.....												2,701 13
do passengers.....												88 49
Fines and damages.....												20 00
Other receipts.....												1 00
Total revenue exclusive of hydraulic rents..												20,980 85

B. H. TEAKLES,  
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.

SUPPLEMENTARY APPENDIX A—Continued.

No. (A) 15.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, and the Amount of Revenue collected during the Season of Navigation in 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl	1	14							1	14	15	2 03
Apples	3	140							3	140	143	4 72
Agricultural products not enumerated, vegetable	52	63							52	63	115	3 39
do animal	70	485							70	485	555	17 56
Agricultural implements	28	111							28	111	139	13 82
Barley	82								82		82	1 92
Bricks	51	43							51	43	94	2 88
Bones	10	6							10	6	16	0 55
Brimstone	182	20							182	20	202	5 59
Cement and water lime	787	4							787	4	791	24 06
Clay, lime and sand											3,625	142 66
Coal									4	16	20	0 53
Corn	4	16							2	6	8	0 24
Cattle	2	6										
Cotton, raw	40	56							40	56	96	9 43
Crockery and earthenware												
Dye wood and dye stuffs	32	6							32	6	38	1 08
Fish												
Flax and hemp	59	310							59	310	369	9 59
Flour	14	27							14	27	41	3 86
Furniture												
Gypsum	27	5							27	5	32	3 06
Glass, all kinds	161	4							161	4	165	3 95
Hay, pressed												
Hogs	5	17							5	17	22	0 03
Horses	1	5							1	5	6	0 19
Hides and skins, horns and hoofs												
Ice												
Iron, railway	10								10		10	0 24
do pig	243								243		243	8 19
do do all other	399	101							399	101	500	13 81
Iron ore												
Kryolite chemical ore and other ore, except iron	714	752							714	752	1,466	72 84

## Canal Statistics.

No. (A) 15.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—Concluded.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Lard and lard oil	38	40							38	40	78	2 13
Meat—all kinds		60								60	60	1 45
Meats, other than pork	5	7							5	7	12	0 30
Marble	3	2							3	2	5	0 45
Manilla												
Molasses	56	1							56	1	57	5 21
Nails	241	3							241	3	244	23 50
Oats	129	1,422							129	1,422	1,551	49 49
Oil, in barrels	182	157							182	157	339	32 11
No. 1 cake		3								3	3	0 11
Pease	13	41							13	41	54	1 57
Potatoes	5	201							5	201	206	5 72
Pork	185	36							185	36	221	6 23
Paint	11	1							11	1	12	1 17
Pitch and tar	2								2		2	0 18
Rags	12	37							12	37	49	5 77
Rye	65	16							65	16	81	2 00
Rosin	2								2		2	0 18
Salt	1,737	315							1,737	315	2,052	56 53
Stone intended for cutting	5	33							5	33	38	1 68
do wrought	3								3		3	0 27
do not suitable for cutting, unwrought		788								788	788	17 51
Seeds, all kinds		6								6	6	0 15
Sheep	2								2		2	0 06
Soda ash	2								2		2	0 18
Steel	4	6							4	6	10	0 29
Sugar	592	53							592	53	645	61 41
Spirits, beer, &c.	55	22							55	22	77	7 08
Tobacco, raw	1								1		1	0 03
Tallow												
Tin	14								14		14	1 34
Turpentine												
Wheat	1	64							1	64	65	1 86
White lead	6								6		6	0 54
Whiting	22								22		22	1 94

	\$	11	11	3	11	14	0 51
Wool.....	721	498	721	498	1,219	14	123 98
All other goods and merchandise not enumerated.....							2 48
Bark.....	54	48	54	48	102		7 91
Barrels, empty.....							
Boat knees.....	440	200	440	200	640		10 15
Floats.....	32,670	3,039	32,661	3,039	36,000		633 99
Firewood, in vessels.....							
do rafts.....							
Hoops.....							
Hop poles.....	17,327	10,753	18,964	10,753	29,617		947 34
Lumber, sawn, in vessels.....							0 19
do rafts.....							2 90
Masts, spars and telegraph poles, in vessels.....							
do do rafts.....							
Railway ties, in vessels.....	5,624	126	5,624	126	5,750		649 12
do rafts.....	584		584		534		46 68
Sawlogs.....	47	105	47	105	152		3 48
Staves and heading, barrel.....							
do do pipe.....							
do do West India.....							
Staves, salt barrel.....							
Shingles.....	50	61	50	61	111		20 65
Split posts and fence rails, in vessels.....	5		5		5		0 77
do do rafts.....							
Timber, square, in vessels.....	20	20	20	20	40		0 76
do rafts.....	357	20	357	20	377		7 10
Traverses.....	91	14	91	14	105		9 26
Woodenware and wood partly manufactured.....							1 00
Total freight paying tolls.....	64,313	24,145	66,141	24,145	90,286		3,102 63
Coal, free, per Order in Council.....	6,080		6,080		6,080		
Grand total freight.....	70,393	24,145	72,221	24,145	96,366		

Total tolls on vessels.....	1,715 06
do. passengers.....	169 83
do do free coal.....	\$ 162 31
Wharfage and storage.....	191 42
Fines and damages.....	23 00
Other receipts.....	297 20
Total revenue, exclusive of hydraulic rents.....	\$ 5,499 14

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 26th April, 1893.

# Canal Statistics.

## SUPPLEMENTARY 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 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Fish.....		1,749								1,749	1,749	17 49
Flour.....	2,150	65							2,150	65	2,215	22 15
Coal.....		36,597								36,597	36,597	365 97
Lumber.....	3,838	734							3,838	734	4,572	45 72
Other agricultural products.....	4,884	5,717							4,884	5,717	10,571	105 71
do merchandise.....	2,719	619							2,719	619	3,338	33 38
Total freight paying tolls.....	13,561	45,481							13,561	45,481	59,042	590 42
Total tolls on vessels.....											2,565 44	
Total revenue .....											\$ 3,155 86	

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

SUPPLEMENTARY APPENDIX A—Continued.

No. (A) 17.—STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals, and the Amount of Revenue collected during the Season of Navigation in 1892.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.	Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
Ashes, pot and pearl.....											\$ cts.
Apples.....											
Agricultural products not enumerated, vegetable do animal.....											
Agricultural implements.....											
Barley.....											
Bricks.....		26							26	26	0 50
Bones.....											
Brinstone.....											
Cement and water lime.....											
Clay, lime and sand.....											
Coal.....											
Corn.....											
Cattle.....											
Cotton, raw.....											
Crockery and earthenware.....											
Dye wood and dye stuffs.....											
Fish.....											
Flax and hemp.....											
Flour.....											
Furniture.....											
Gypsum.....											
Glass, all kinds.....											
Hay, pressed.....											
Hogs.....											
Horses.....											
Hides and skins, horns and hoofs.....											
Ice.....											
Iron, railway do pig do all other.....											
Iron ore.....											











# Canal Statistics.

No. (A) 18.—GENERAL STATEMENT showing the Quantity of each Article transported, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
Railway ties, in vessels											
do rafts			25						25		0 25
Saw logs											
Staves and headings, barrel										1	0 05
do pipe											
do West India.											
Staves, salt barrel											
Shingles											
Split posts and fence rails, in vessels			23						24		2 06
do do rafts											
Timber, square, in vessels											
do rafts			3,265						3,265		40 75
Traverses											
Woodenware and wood partly manufactured.									2		0 10
Total freight paying tolls	4,174	7,126	1,416				1,013		5,590	8,139	219 82
Total tolls on vessels											
do passengers											
Total revenue exclusive of hydraulic rents, . . .											
235 16											
130 31											
585 29											

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.

STATEMENT

# Canal Statistics.

## SUPPLEMENTARY

### No. (A) 19.—STATEMENT of Traffic on the undermentioned Canals, and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 1.</i>		\$ cts.		\$ cts.		\$ cts.
Canadian vessels, steam. ....	417,571	3,845 02	681,459	3,936 69	77,255	255 71
United States vessels, steam. ....	495,219	7,428 54	21,098	160 43	438	7 18
Canadian vessels, sail. ....	174,507	3,538 67	1,132,464	11,944 20	46,527	614 46
United States vessels, sail. ....	105,004	2,342 29	73,662	643 39	138,659	1,823 78
Total, class No. 1. ....	1,192,301	17,154 52	1,908,683	16,684 71	262,879	2,701 13
<i>Class No. 2.</i>						
Passengers . . . . .	No. 43,884	504 24	No. 64,199	2,808 75	No. 5,218	88 49
<i>Class No. 3.</i>						
	Tons.		Tons.		Tons.	
Bricks . . . . .	263	36 44	10,873	443 30	745	46 58
Brimstone . . . . .			557	54 58		
Cement and water lime. ....	815	78 05	3,800	490 09		
Clay, lime and sand. ....	70	5 25	28,368	1,330 47	4,668	483 55
Fish . . . . .	24	4 05	926	97 52	1	04
Gypsum . . . . .	200	5 00	2,510	34 97		
Iron, railway. ....	163	29 45	1,207	177 84		
do pig. ....			1,258	157 48		
do all other. ....	1,567	269 17	13,952	731 41	10	87
Salt . . . . .	878	174 95	5,619	714 89	317	20 45
Steel . . . . .	2,557	383 60	1,039	133 50		
Stone, for cutting . . . . .	1,264	252 50	2,029	110 87	602	60 20
Apples . . . . .	550	56 59	5,221	754 10	717	63 16
Barley . . . . .	6,433	1,286 60	9,340	479 74		
Corn . . . . .	192,548	38,509 60	4,341	265 58		
Cotton, raw. ....						
Flax and hemp . . . . .						
Flour . . . . .	17,048	2,601 40	5,762	658 07	285	9 51
Hay, pressed . . . . .			1,113	57 83	3,727	153 28
Meals, all kinds. ....	31,740	6,348 00	1,224	56 45		
Oil cake . . . . .			3	16	5	17
Oats . . . . .	37,173	7,434 60	44,294	2,080 08	3,034	133 49
Pease . . . . .	524	104 80	47,419	2,869 84	166	5 55
Potatoes . . . . .	1	20	139	9 41	24	82
Rye . . . . .	9,392	1,878 40	1,000	70 82		
Seeds, all kinds. ....	125	25 00	6,455	246 39		
Tobacco, raw. ....			1	10		
Wheat . . . . .	232,019	45,792 91	68,609	4,402 42		
All other agricultural products, vegetable	507	24 70	4,086	242 62		
Bones . . . . .			75	10 02	139	13 90
Cattle . . . . .	1	0 02	292	20 47	45	1 50
Hogs . . . . .			5	0 75		
Hides and skins, horns and hoofs . . . . .	113	17 95	47	6 44		
Horses . . . . .	91	3 03	501	31 80	24	0 80
Lard and lard oil. ....			218	20 52		
Meats, other than pork. ....	79	15 80	20	2 35		
Pork . . . . .	44	8 80	568	48 99		
Sheep . . . . .			113	8 58	186	6 20
Tallow . . . . .	108	16 20	37	4 58		
Wool . . . . .	70	14 00	23	3 45		
All other agricultural products, animal.			2,615	376 00		
Total, Class No. 3. ....	536,367	105,377 36	275,659	17,204 48	14,695	1,000 07

APPENDIX A—Continued.

the Amount of Tolls collected during the Season of Navigation in 1892.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Newcastle District Canals.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
149,529	190 42	156,983	631 12	102,431	783 97	41,601	832 02	35,922	243 07
95	75	1	25	878	14 84			20	25
8,930	34 99	175,370	2,470 85	87,077	857 90	84,752	1,695 04	29,587	102 89
401	9 00	28,331	664 56	6,070	58 35	1,919	38 38		
158,955	235 16	360,685	3,766 78	196,456	1,715 06	128,272	2,565 44	65,529	346 21
No.		No.		No.		No.		No.	
10,459	130 31	11,038	140 63	7,442	169 83			10,199	96 91
Tons.		Tons.		Tons.		Tons.		Tons.	
				94	2 88			26	50
1	03	4	34	202	5 59				
2	04	7,002	218 74	791	24 06				
9	18	8	64	38	1 08	1,749	17 49		
		1	10						
				10	24				
				243	8 19				
2	04	71	4 70	500	13 81				
343	6 47	24	1 65	2,052	56 53				
				10	29				
38	72	1	10	38	1 68				
452	8 54	107	5 50	143	4 72				
573	10 77	76	5 03	82	1 92				
		4	39	20	53				
41	81	26	1 97	369	9 59	2,215	22 15		
2	04	860	81 32	165	3 95				
		73	5 57	60	1 45				
1	02			3	11				
51	96	4,579	356 12	1,551	49 49				
1,531	28 78	989	71 29	54	1 57				
		580	46 49	206	5 72				
34	64	57	5 52	81	2 00				
152	2 86	38	2 70	6	15				
				1	03				
765	14 37	28	2 11	65	1 86				
150	2 85	240	21 55	115	3 39	10,571	105 71		
2	0 04	1	0 10	16	0 55				
5	0 10	528	35 74	8	0 24				
		21	1 36	1	0 03				
		5	0 50	6	0 19				
30	0 60	176	8 35	22	0 70				
		5	0 18	78	2 13				
		1	0 10	12	0 30				
		37	2 26	221	6 23				
17	0 32	345	24 42	2	0 06				
		18	1 15						
1	0 02	9	0 89	14	0 51				
1	0 02	1,429	118 31	555	17 56				
4,203	79 22	17,343	1,025 19	7,834	229 33	14,535	145 35	26	50

# Canal Statistics.

## No. (A) 19.—STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
		\$ cts.		\$ cts.		\$ cts.
<i>Class No. 4.</i>						
Ashes, pot and pearl	19	3 80	124	24 80		
Agricultural implements	11	1 65	97	12 11		
Crockery and earthenware			180	32 53	19	1 84
Dye woods and dye stuffs			153	8 29	80	8 00
Furniture	25	4 02	1,213	175 87	2	0 20
Glass, all kinds	89	13 35	551	99 76		
Marble	3,190	478 50	17	1 55		
Manilla	66	9 90	9	1 80		
Molasses	107	16 05	754	73 49	2	0 08
Nails	40	4 95	2,133	310 75	1	0 04
Oil, in barrels	44	3 45	1,087	140 41	129	12 74
Paint	20	3 00	442	56 43	31	3 10
Pitch and tar			335	27 22	226	22 60
Rags			123	18 90		
Rosin			2,164	111 25	2,357	235 64
Soda ash	14	2 10	1,043	204 33	14	9 93
Sugar	3,172	430 49	5,713	1,130 01	2	0 08
Stone, wrought			326	17 65	478	47 80
Tin	29	3 00	408	74 38		
Turpentine			190	12 75	144	14 40
White lead			158	30 82		
Whiting			275	55 96		
Whiskey, and all other spirits	161	27 32	1,077	197 05		
Merchandise, not enumerated	40,262	5,934 71	11,993	1,684 41	3,703	288 12
Total, Class No. 4	47,240	6,936 29	30,565	4,502 52	7,323	644 57
<i>Class No. 5.</i>						
Bark			5	19		
Barrels, empty	30	5 72	441	47 41	11	0 44
Boat knees						
Floats	4	0 25	7,464	128 52		
Fire wood, in vessels	7,020	337 00	14,897	333 89	64,258	2,124 57
do rafts						
Lumber sawn, in vessels	86,072	15,427 50	35,551	1,100 51	91,464	5,401 74
do rafts			125	5 64		
Hoops					347	20 80
Railway ties, in vessels	217	6 78	148	2 95	6,124	488 80
do in rafts						
Masts, spars and telegraph poles in vessels						
Masts, spars and telegraph poles in rafts	5	0 25	13,540	338 50		
Square timber, in vessels	43,648	6,541 16	2,685	49 02		
do rafts	170	4 80	8,867	235 75		
Woodenware and wood partly manufactured	7	2 80	44	12 10		
Shingles	25	18 10	28	4 32	23	3 20
Split posts and fence rails, in vessels						
do do rafts						
Saw-logs	2,555	104 05	18,359	420 24		
Staves and headings, barrel	95	7 60				
do do pipe	88	16 10	80	2 50		
do do West India	276	51 68	104	3 90		
do do salt barrel						
Traverses			8,222	21 40		
Hop poles						
Total Class No. 5	140,212	22,523 79	110,560	2,706 84	162,227	8,039 55



Canals, and the amount of Tolls collected, &amp;c.—Continued.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Newcastle District Canals.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
		5	0 95	15	2 03				
14	0 41	22	2 65	139	13 82				
14	0 35	6	0 49	96	9 43				
4	0 10								
133	3 50	36	4 28	41	3 86				
2	0 05	8	0 54	32	3 06				
		2	0 24	5	0 45				
2	0 05								
		12	0 70	57	5 21				
79	1 98	13	0 75	244	23 50				
61	1 54	17	1 13	339	32 11				
17	0 43	3	0 43	12	1 17				
		1	0 05	2	0 18				
4	0 10	22	4 00	49	5 77				
		2	0 15	2	0 18				
		3	0 57	2	0 18				
298	7 39	56	10 89	645	61 41				
				3	0 27				
1	0 03	14	75	14	1 34				
26	0 65	1	0 19	6	0 54				
				22	1 94				
9	0 23	11	0 79	77	7 08				
992	24 91	369	47 81	1,219	122 98	3,338	33 38	170	5 10
1,656	41 72	603	77 36	3,021	296 51	3,338	33 38	170	5 10
				53	2 48			78	3 09
		35	4 15	102	7 91				
		1	0 03						
		41,060	4,51 33	640	10 15			202	2 76
349	2 93	33,165	1,321 53	36,000	633 99			14,282	154 52
		420	4 20						
2,539	28 62	468,924	34,940 41	29,617	947 34	4,572	45 72	1,512	24 89
		99	13 11	5	0 19			25	50
		28	2 00						
25	0 25	325	53 50	5,750	649 12				
		1,563	83 34	534	46 68			250	10 00
		36	2 79	54	2 90			6	55
								1,142	11 42
		2,560	62 91	40	0 76			50	75
3,265	40 75	12,480	145 28	377	7 10			2,083	31 63
2	0 10			7	1 00				
24	2 06	526	457 68	111	20 65			472	15 56
		1	0 88	5	0 77				
		21,085	481 88	152	3 48			2,005	17 62
1	0 05								
		1,060	2 65	105	9 26			210	3 75
6,205	74 76	583,368	38,027 67	73,562	2,343 78	4,572	45 72	22,317	277 04

# Canal Statistics.

No. (A) 19.—STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Special Class.</i>		\$ cts.		\$ cts.		\$ cts.
Coal .....	211,616	42,284 12	178,073	25,073 16	86,500	8,478 16
Kyrolite or chemical ore .....	69	3 45				
Iron ore.....						
Stone, unwrought, not suitable for cutting.....	10,294	1,019 47	4,351	87 00	21	7 88
Ice.....						
Total, Special Class.....	221,979	43,307 05	182,424	25,160 16	86,521	8,486 04
Total freight and tolls.....	945,798	195,803 25	599,208	69,067 46	270,766	20,959 85
Timber and other wood, free .....			2,449	290 28		
Wheat, corn, flour, iron, salt, coal, &c., free .....	9,756	1,434 80	365,098	33,003 46		
Grand Totals, passengers and tonnage of vessels not included. . .	955,554	197,238 05	966,755	102,361 20	270,766	20,959 85

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.

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

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Newcastle District Canals.	
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.
850	15 97	581	29 05	3,625 1,466	142 66 72 84	36,597	365 97		
815	8 15			788	17 51				
1,665	24 12	581	29 05	5,879	233 01	36,597	365 97		
13,729	585 29	601,895 45,116	43,066 68 605 49	90,286	4,987 52	59,042	3,155 86	22,513	725 76
				6,080	162 31				
13,729	585 29	647,011	43,672 17	96,366	5,149 83	59,042	3,155 86	22,513	725 76

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

# Canal Statistics.

## SUPPLEMENTARY

No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during each description of Property passed through,

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Vessels of all kinds.....	1,192,301	17,154 52	1,908,683	16,684 71	262,879	2,701 13
Passengers.....	No. 43,884	504 24	No. 64,199	2,808 75	No. 5,218	88 49
<i>Forest, Produce of Wood.</i>						
Bark.....	Tons.		Tons.	5      0 19		
Boat knees.....						
Floats.....	4	0 25	7,464	128 52		
do Free.....						
Firewood.....	7,020	337 00	14,897	333 89	64,258	2,124 57
do Free.....						
Hoops and hop poles.....					347	20 80
Lumber, sawed.....	86,072	15,427 50	35,676	1,106 15	91,464	5,401 74
do Free.....			1,799			
Masts, spars, &c.....	5	0 25	13,540	338 50		
Railway ties.....	217	6 78	148	2 95	6,124	488 80
Saw logs.....	2,555	104 05	18,359	420 24		
do Free.....						
Staves, all kinds.....	459	75 38	184	6 40		
do Free.....			208			
Shingles.....	25	18 10	28	4 32	23	3 20
Split posts and rails.....						
do Free.....			1			
Timber, square.....	43,818	6,545 96	11,552	284 77		
do Free.....			440			
Traverses.....			8,222	21 40		
do Free.....						
<b>Total.....</b>	<b>140,175</b>	<b>22,515 27</b>	<b>112,523</b>	<b>2,647 43</b>	<b>162,216</b>	<b>8,039 11</b>
<i>Farm Stock.</i>						
Cattle.....	1	0 02	292	20 47	45	1 50
Hogs.....			5	0 75		
Horses.....	91	3 03	501	31 80	24	80
do Free.....			2			
Sheep.....			113	8 58	186	6 20
<b>Total.....</b>	<b>92</b>	<b>3 05</b>	<b>913</b>	<b>61 60</b>	<b>255</b>	<b>8 50</b>
<i>Produce of Animals.</i>						
Bones.....			75	10 02	139	13 90
Horns and hoofs, hides and skins, raw..	113	17 95	47	6 44		
do do Free.....			20			
Lard and lard oil.....			218	20 52		
do Free.....	16					
Meats, other than pork.....	79	15 80	20	2 35		
do Free.....			94			
Pork.....	44	8 80	568	48 99		
Tallow.....	108	16 20	37	4 58		
Wool.....	70	14 00	23	3 45		
do Free.....	13					
Agricultural products not enumerated, animal.....			2,615	376 00		
<b>Total.....</b>	<b>443</b>	<b>72 75</b>	<b>3,717</b>	<b>472 35</b>	<b>139</b>	<b>13 90</b>

APPENDIX A—Continued.

the Season of Navigation ended 31st December, 1892, showing the Total Quantity of and the Amount of Tolls collected thereon.

Murray Canal.		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.		\$ cts.
158,955	235 16	360,685	3,766 78	196,456	1,715 06	128,272	2,565 44	65,529	346 21
No. 10,459	130 31	No. 11,038	140 63	No. 7,442	169 83	No.		No. 10,199	96 91
Tons.		Tons.		Tons.		Tons.		Tolls.	
		1	0 03	53	2 48			78	3 09
		41,060	451 33	640	10 15			202	2 76
		23,460							
340	2 93	33,585	1,325 73	36,000	633 99			14,282	154 52
		4,290							
		28	2 00						
2,539	28 62	460,023	34,953 52	29,622	947 53	4,572	45 72	1,537	25 39
		704							
		36	2 79	54	2 90			1,148	11 97
		1,888	136 84	6,284	695 80			250	10 00
25	0 25	21,085	481 88	152	3 48			2,005	17 62
		13,662							
1	0 05								
24	2 06	526	457 68	111	20 65			472	15 56
		1	0 88	5	0 77				
3,265	40 75	15,040	208 19	417	7 86			2,133	32 38
		2,940							
		1,060	2 65	105	9 26			210	3 75
		60							
6,203	74 66	628,449	38,023 52	73,443	2,334 87	4,572	45 72	22,317	277 04
5	0 10	528	35 74	8	24				
		21	1 36	1	0 03				
30	0 60	176	8 35	22	0 70				
17	0 32	345	24 42	2	0 06				
52	1 02	1,070	69 87	33	1 03				
2	0 04	1	0 10	16	0 55				
		5	0 50	6	0 19				
		5	0 18	78	2 13				
		1	0 10	12	0 30				
		37	2 26	221	6 23				
		18	1 15						
1	0 02	9	0 89	14	0 51				
1	0 02	1,429	118 31	555	17 56				
4	0 08	1,505	123 49	902	27 47				

# Canal Statistics.

No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Agricultural Products.</i>						
		\$ cts.		\$ cts.		\$ cts.
Agricultural products not enumerated, vegetable.....	507	24 70	4,086	242 62		
Apples.....	550	56 59	5,221	754 10	717	63 16
do Free.....			54			
Barley.....	6,433	1,286 60	9,340	479 74		
Cotton, raw.....						
Corn.....	192,548	38,509 60	4,341	265 58		
do Free.....			54,999			
Flax and hemp.....						
Flour.....	17,048	2,601 40	5,762	658 07	285	9 51
do Free.....			2,874			
Hay, pressed.....			1,113	57 83	3,727	153 28
Meals, all kinds.....	31,740	6,348 00	1,224	56 45		
do Free.....			16			
Manilla.....	66	9 90	9	1 80		
Oats.....	37,173	7,434 60	44,294	2,080 08	3,034	133 49
Pease.....	524	104 80	47,419	2,869 84	166	5 55
do Free.....			524			
Potatoes.....	1	20	139	9 41	24	82
Rye.....	9,392	1,878 40	1,000	70 82		
do Free.....			9,119			
Seeds—Flax, clover and grass.....	125	25 00	6,455	246 39		
do do do Free.....			75			
Tobacco, raw.....			1	10		
Wheat.....	232,019	45,792 91	68,609	4,402 42		
do Free.....			194,281			
<b>Total.....</b>	<b>528,126</b>	<b>104,072 70</b>	<b>460,955</b>	<b>12,195 25</b>	<b>7,953</b>	<b>365 81</b>
<i>Manufactures.</i>						
Ashes, pot and pearl.....	19	3 80	124	24 80		
do Free.....	88		17			
Agricultural implements.....	11	1 65	97	12 11		
Barrels, empty.....	36	5 72	441	47 41	11	0 44
do Free.....			1			
Bricks.....	263	36 44	10,873	443 30	745	46 58
Cement and water line.....	815	78 05	3,800	490 09		
do Free.....	1,570		456			
Crockery and earthenware.....			180	32 53	19	1 84
do Free.....	8					
Furniture.....	25	4 02	1,213	175 87	2	20
do Free.....	3		1			
Glass.....	89	13 25	551	99 76		
do Free.....	152					
Iron, railway.....	163	29 45	1,207	177 84		
do Free.....	1,171					
Iron, pig.....			1,258	157 48		
do Free.....	74					
Iron, all other.....	1,567	269 17	13,952	731 41	10	0 87
do Free.....	387		10			
Molasses.....	107	16 05	754	73 49	2	0 08
do Free.....	32					
Nails.....	46	4 95	2,133	310 75	1	0 04
do Free.....	276					
Oil.....	44	3 45	1,087	140 41	125	12 74
do Free.....	2					
Oil cake.....			3	0 16	5	0 17
Paint.....	26	3 00	442	56 43	31	3 10
do Free.....	15					
Pitch and tar.....			335	27 22	226	22 60
do Free.....	16					
Rosin.....			2,164	111 25	2,357	235 64
Soda ash.....	14	2 10	1,043	204 33	149	9 93
do Free.....	352					

during the Season of Navigation, ended 31st December, 1892, &c.—Continued.

Murray Canal.		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.		\$ cts.
150	2 85	240	21 55	115	3 39	10,571	105 71		
452	8 54	107	5 50	143	4 72				
573	10 77	76	5 03	82	1 92				
		4	0 39	20	0 53				
41	0 81	26	1 97	369	9 59	2,215	22 15		
2	0 04	860	81 32	165	3 95				
		73	5 57	60	1 45				
2	0 05								
51	0 96	4,579	356 12	1,551	49 49				
1,531	28 78	989	71 29	54	1 57				
		580	46 49	206	5 72				
34	0 64	57	5 52	81	2 00				
152	2 86	38	2 70	6	0 15				
765	14 37	2	2 11	1	0 03				
				65	1 86				
3,753	70 67	7,657	605 56	2,918	86 37	12,786	127 86		
		5	0 95	15	2 03				
14	0 41	22	2 65	139	13 82				
		35	4 15	102	7 91				
				94	2 88			26	0 50
1	0 03	4	0 34	202	5 59				
14	0 35	6	0 49	96	9 43				
133	3 50	36	4 28	41	3 86				
2	0 05	8	0 54	32	3 06				
				10	0 24				
				243	8 19				
2	0 04	71	4 70	500	13 81				
		12	0 70	57	5 21				
79	1 98	13	0 75	244	23 50				
61	1 54	17	1 13	339	32 11				
1	0 02			3	0 11				
17	0 43	3	0 43	12	1 17				
		1	0 05	2	0 18				
		2	0 15	2	0 18				
		3	0 57	2	0 18				

# Canal Statistics.

No. (A) 20.—SUMMARY STATEMENT of Traffic on the undermentioned Canals

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Manufactures—Con.</i>						
		\$ cts.		\$ cts.		\$ cts.
Spirits, whiskey, &c .....	161	27 32	1,077	197 05		
do Free .....	220		6			
Steel .....	2,557	383 60	1,039	133 50		
do Free .....	269					
Sugar .....	3,172	430 49	5,713	1,130 01	2	0 08
do Free .....	1,320					
Tin .....	20	3 00	408	74 38		
do Free .....	27					
Turpentine .....			190	12 75	144	14 40
White lead .....			158	30 82		
do Free .....	6					
Whiting .....			275	55 96		
do Free .....	71					
Woodenware .....	7	2 80	44	12 10		
<b>Total .....</b>	<b>15,182</b>	<b>1,318 41</b>	<b>51,052</b>	<b>4,963 21</b>	<b>3,833</b>	<b>348 71</b>
<i>Merchandise.</i>						
Brimstone, crude .....			557	54 58		
Clay, lime and sand .....	70	5 25	28,368	1,330 47	4,668	483 55
do Free .....	246		500			
Coal .....	211,616	42,284 13	178,073	25,073 16	86,500	8,478 16
do Free .....			101,267			
Dye wood and dye stuffs .....			153	8 29	80	8 00
Fish .....	24	4 05	926	97 52	1	0 04
do Free .....	426		9			
Gypsum .....	200	5 00	2,510	34 97		
Ores, all kinds .....	69	3 45				
do Free .....	286		614			
Marble .....	3,190	478 50	17	1 55		
Rags .....			123	18 90		
Salt .....	878	174 95	5,619	714 89	317	20 45
do Free .....	2,034					
Stone, all kinds .....	11,558	1,272 27	6,706	215 52	1,101	115 88
do Free .....	145		124			
All other goods and merchandise, not enumerated .....	40,262	5,934 71	11,993	1,684 41	3,703	288 12
do Free .....	538		36			
<b>Total .....</b>	<b>271,536</b>	<b>50,162 31</b>	<b>337,595</b>	<b>27,549 85</b>	<b>96,370</b>	<b>9,394 20</b>
<b>Grand totals passengers and tonnage of vessels not included .....</b>	<b>955,554</b>	<b>195,803 25</b>	<b>966,755</b>	<b>69,067 46</b>	<b>270,766</b>	<b>20,959 85</b>

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, 26th April, 1893.



during the Season of Navigation ended 31st December, 1892, &c.—Continued.

Murray Canal.		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.		\$ cts.
9	0 23	11	0 79	77	7 08				
				10	0 29				
298	7 39	56	10 89	645	61 41				
1	0 03	14	0 75	14	1 34				
26	0 65	1	0 19	6	0 54				
				22	1 94				
2	10			7	1 00				
660	16 75	320	34 50	2,916	207 06			26	0 50
2	0 04	7,002	218 74	791	24 06				
850	15 97			3,625 6,080	142 66	36,597	365 97		
4	0 10								
9	0 18	8	0 64	38	1 08	1,749	17 49		
		1	0 10						
		581	29 05	1,466	72 84				
		2	0 24	5	45				
4	0 10	22	4 00	49	5 77				
343	6 47	24	1 65	2,052	56 53				
853	8 87	1	0 10	829	19 46				
992	24 91	369	47 81	1,219	122 98	3,338	33 38	170	5 10
3,057	56 64	8,010	302 33	16,154	445 83	41,684	416 84	170	5 10
13,729	585 29	647,011	43,066 68	96,366	4,987 52	59,042	3,155 86	22,513	725 76

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

# Canal Statistics.

**SUPPLEMENTARY APPENDIX A—Continued.**  
**No. (A) 21.—STATEMENT showing the Amount of Tolls accrued each month during the Season of Navigation, ended 31st December, 1892.**

Canals and Offices.	January	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Tolls.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.	cts.
<b>WELLAND CANAL.</b>												
Chippawa .....				3 79	6 06	3 27	4 54	4 60	0 25	11 45		33 96
Colborne .....			6,505 16	20,211 65	16,662 95	18,684 07	18,049 47	21,974 25	19,836 81	14,189 26		138,161 16
Dalhousie .....			4,878 01	4,581 77	4,819 45	7,503 40	8,271 78	9,109 28	10,286 47	6,635 52		56,001 56
Lunenburg .....				29 17	56 04	80 31	92 64	34 67	2 17	116 24		411 24
Maitland .....					1 76	1 00	1 72		4 08			8 56
Robinson .....			71 01	151 52	73 45	51 35	24 82	61 51	0 75	59 49		493 90
St. Catharines .....			30 88	65 84	62 57	131 91	144 82	74 98	75 28	16 59		602 87
<b>Total, Welland Canal.</b> .....			11,485 06	25,043 74	21,682 28	26,455 31	26,589 79	31,259 29	30,205 81	21,028 55		195,803 25
<b>ST. LAWRENCE CANAL.</b>												
Beauharnois .....				49 86	96 01	150 41	91 63	152 29	287 34	283 22		1,130 75
Cardinal .....			127 84	61 22	115 88	128 66	39 27	64 83	78 09	102 05		733 09
Corwall .....				2,859 13	4,063 72	4,413 39	2,576 05	2,642 59	2,265 16	1,508 65		20,330 89
Kingston .....			442 91	1,159 48	3,450 13	4,452 56	1,545 10	1,737 87	2,816 19	1,659 29		17,263 50
Lachine .....				198 51	261 67	223 57	381 04	470 10	326 48	190 71		2,052 08
Montreal .....				3,321 64	4,053 61	4,671 94	5,091 91	3,473 38	3,812 39	3,079 39		27,557 15
<b>Total, St. Lawrence Canals.</b> .....			570 75	7,649 80	12,041 02	14,040 53	9,725 00	8,541 06	9,595 65	6,833 31		69,067 46
<b>CHAMBLY CANAL.</b>												
Chambly .....				883 85	1,020 07	1,382 69	1,471 72	1,556 21	1,991 03	737 40		9,042 37
St. John's .....				2,507 86	1,659 42	1,518 04	2,155 17	1,420 45	1,375 45	569 98		11,206 37
St. Ours .....			19 45	71 44	77 55	111 34	81 63	96 20	128 51	124 90		711 11
<b>Total, Chambly Canal.</b> .....			19 45	3,463 15	2,757 04	3,011 47	3,708 52	3,072 86	3,494 99	1,432 37		20,959 85

<b>OTTAWA CANALS.</b>												
Ottawa	261 25	3,548 14	3,347 92	3,836 26	3,724 66	3,748 97	3,501 56	1,328 43			23,387 19	
Carillon	1 25	23 90	13 03	10 70	12 40	8 42	20 03	6 57			96 30	
Grenville	156 65	2,839 98	3,051 44	2,553 56	3,139 03	2,248 14	2,709 52	1,315 68			18,014 00	
St. Anne's	5 35	114 46	280 15	220 60	349 07	276 49	219 72	103 85			1,569 19	
Total, Ottawa Canals	424 50	6,526 48	6,692 54	6,021 12	7,225 16	6,282 02	6,540 83	2,754 03			43,066 68	
<b>RIDEAU CANAL.</b>												
Kingston Mills		157 02	86 56	129 38	160 88	158 60	131 48	41 47			865 39	
Ottawa		466 19	548 34	657 06	596 25	425 11	495 68	312 68			3,441 31	
Smith's Falls		41 86	108 08	141 26	146 76	107 78	68 56	66 52			680 82	
Total, Rideau Canal		605 07	742 98	927 70	903 89	691 49	695 72	420 57			4,987 52	
<b>ST PETER'S CANAL.</b>												
St. Peter's	30 92	1 06		413 07	412 94	481 83	443 45	362 32	207 13		3,155 86	
<b>TRENT VALLEY CANALS.</b>												
Bobcaygeon		19 81	41 33	67 44	71 72	58 55	66 43	20 41			345 69	
Buckhorn		0 50	8 90	21 80	17 87	11 80	1 00	7 25			70 12	
Burlington		4 76	21 02	21 58	13 70	6 25	2 27	1 09			73 03	
Fenelon Falls		2 25	7 50	2 50	6 65	4 65	4 25	3 31			32 11	
Hastings		13 14	1 93	2 50	2 50	7 00	4 50	2 54			34 07	
Peterborough		16 54	33 11	41 04	23 42	24 05	11 62	14 82			170 74	
Total, Trent Valley Canals		57 00	113 79	156 86	135 86	112 30	90 07	49 38			725 76	
<b>MURRAY CANAL.</b>												
Brighton		24 39	66 32	80 29	103 35	80 22	64 11	41 75			585 29	
Grand total	30 92	1 06	12,714 97	48,666 14	51,750 92	50,521 07	51,130 63	32,922 38	2,330 89		338,351 67	

B. H. TEAKLES,  
*Compiler of Canal Statistics.*

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, 26th April, 1893.

# Canal Statistics.

## SUPPLEMENTARY 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, 1892, and the Amount of Tolls collected thereon.

Vessels.	Total Number.		From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>WELLAND CANAL.</b>														
Canadian vessels, steam	1,226	139,061					528	394	4,237	63,187	209,418	208,153	417,571	3,245 02
do sail	592	33,423					908		9,737	48,970	86,891	87,616	174,507	3,538 67
Total Canadian	1,818	171,854			108,985	11,721	1,436	394	14,034	112,157	296,309	295,769	592,078	7,383 69
United States vessels, steam	536	67			13,248	225	232,018	184,440	228	64,944	245,561	249,658	495,219	7,428 54
do sail	261	575			7,566	4,609	39,325	35,872	4,588	12,469	52,034	52,950	105,004	2,342 29
Total United States	797	642			20,814	4,834	271,343	220,312	4,816	77,413	297,615	302,608	600,223	9,770 83
Grand Total, Welland Canal	2,615	172,496	171,546	129,799	16,555	16,555	272,779	220,706	18,850	189,570	593,924	598,377	1,192,301	17,154 52
<b>ST. LAWRENCE CANALS.</b>														
Canadian vessels, steam	3,158	355,914	304,750	13,618		11			11	7,155	369,543	311,916	681,459	3,984 69
do sail	6,076	602,400	445,468	31,842	15	15	30			52,709	634,272	498,192	1,132,464	11,944 20
Total Canadian	9,234	958,314	750,218	45,460	26	26	30		11	59,864	1,003,815	810,108	1,813,923	15,880 89
United States vessels, steam	546	113	226	2,639	10	8,036	8,120	144	1,810	10,932	10,166	10,166	21,098	160 43
do sail	632	1,992	13,934	10,530	936	1,005		31,557	12,233	45,015	28,647	28,647	73,662	643 39
Total United States	1,178	2,105	14,160	13,169	1,485	8,972	9,125	31,701	14,043	55,947	38,813	38,813	94,760	803 82
Grand Total, St. Lawrence Canals	10,412	960,419	764,378	58,629	1,511	9,002	9,125	31,712	73,907	1,059,762	848,921	848,921	1,908,683	16,684 71
<b>CHAMBLEY CANAL.</b>														
Canadian vessels, steam	603	38,293	38,364	246						352	38,539	38,716	77,255	255 71
do sail	626	11,288	10,701	8,627						15,911	19,915	26,612	46,527	614 46
Total Canadian	1,229	49,581	49,065	8,873						16,763	58,454	65,328	123,782	870 17

United States vessels, steam.	25	4	118	209	17	303	135	488	7 18
do sail	1,442	1,371	2,941	53,410	80,937	54,781	83,878	138,659	1,823 78
Total United States.	1,467	1,375	3,059	53,709	80,954	55,084	84,013	139,097	1,830 96
Grand Total, Chambly Canal.	2,696	50,956	52,124	62,582	97,217	113,538	149,341	262,879	2,701 13
OTTAWA CANALS.									
Canadian vessels, steam.	1,017	48,262	107,401	1,320		48,262	108,721	156,983	631 12
do sail	1,341	8,181	151,074	16,115		8,181	167,189	175,370	2,470 85
Total Canadian.	2,358	56,443	258,475	17,435		56,443	275,910	332,353	3,101 97
United States vessels, steam.	1	1				1		1	0 25
do sail	308	3,894	7,475		518	4,412	23,919	28,331	664 56
Total United States.	309	3,895	7,475		518	4,413	23,919	28,332	664 81
Grand total, Ottawa Canals.	2,667	60,338	265,950	33,879	518	60,856	239,829	360,685	3,766 78
RIDEAU CANAL.									
Canadian vessels, steam.	1,520	49,973	52,248	210		50,183	52,248	102,431	783 97
do sail	1,039	43,389	43,581	107		43,496	43,581	87,977	857 90
Total Canadian.	2,559	93,362	95,829	317		93,679	95,829	189,508	1,641 87
United States vessels, steam.	57	400	478			400	478	878	14 84
do sail	74	1,692	4,063	315		2,007	4,063	6,070	58 35
Total United States.	131	2,092	4,541	315		2,407	4,541	6,948	73 19
Grand total, Rideau Canal.	2,690	95,454	100,370	632		96,086	100,370	196,456	1,715 06
ST. PETER'S CANAL.									
Canadian vessels, steam.	220	21,599	20,002			21,599	20,002	41,601	832 02
do sail	1,665	42,910	41,392	450		43,360	41,392	84,752	1,695 04
Total Canadian.	1,885	64,509	61,394	450		64,959	61,394	126,353	2,527 06
United States vessels, steam.									
do sail	6	1,843	76			1,843	76	1,919	38 38
Total United States.	6	1,843	76			1,843	76	1,919	38 38
Grand total, St. Peter's Canal.	1,891	66,352	61,470	450		66,802	61,470	128,272	2,565 44

# Canal Statistics.

**SUPPLEMENTARY APPENDIX A—Continued.**  
**No. (A) 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—Continued.**

Vessels.	Total Number.	From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>TRENT VALLEY CANALS.</b>											
Canadian vessels, steam.....	836	16,986	18,986					16,986	18,986	35,922	243 07
do sail.....	454	14,110	15,477					14,110	15,477	29,587	102 89
Total Canadian.....	1,290	31,096	34,413					31,096	34,413	65,709	345 96
United States vessels, steam.....	1		20						20	20	0 25
do sail.....											
Total United States.....	1		20						20	20	0 25
(Grand total, Trent Valley Canals.)	1,291	31,096	34,433					31,096	34,433	65,729	346 21
<b>MURRAY CANAL.</b>											
Canadian vessels, steam.....	656	89,412	34,704								
do sail.....	148	2,478	4,910			164	862	3,158	5,772	8,930	34 99
Total Canadian.....	804	92,090	39,614			164	13,090	105,755	52,704	158,459	225 41
United States vessels, steam.....	3	39	49					88	7	95	0 75
do sail.....	36	32	165			2	177	199	202	401	9 00
Total United States.....	39	71	214			2	184	287	209	496	9 75
(Grand total, Murray Canal.....)	843	92,161	39,639			166	13,274	106,042	52,913	158,955	235 16

**SUPPLEMENTARY APPENDIX A—Continued.**  
**No. (A) 22.—GENERAL STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—Continued.**  
**RECAPITULATION.**

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<b>CANADIAN VESSELS.</b>													
<i>Steam and Sail.</i>													
Welland .....	1,818	171,854	171,497	108,985	11,721	1,436	394	14,034	112,157	296,309	295,769	592,078	7,383 69
St. Lawrence .....	9,234	958,314	750,218	46,460	26	30		11	59,864	1,003,815	810,108	1,813,923	15,880 89
Chambly .....	1,229	49,581	49,065	8,973					16,263	58,454	65,328	123,782	870 17
Ottawa .....	2,358	56,443	258,475		17,435					56,443	275,910	332,353	3,101 97
Rideau .....	2,569	93,362	35,829	317						93,679	95,829	189,508	1,641 87
St. Peter's .....	1,885	64,509	61,394					450		64,959	61,394	126,353	2,527 06
Trent Valley .....	1,290	31,096	34,413							31,096	34,413	65,509	345 96
Murray .....	804	92,060	39,614	13,501				164	13,090	105,755	52,704	158,459	225 41
Total, Canadian .....	21,177	1,517,249	1,460,505	177,136	29,184	1,466	394	14,639	201,374	1,710,510	1,691,455	3,401,965	31,977 02
<b>UNITED STATES VESSELS.</b>													
<i>Steam and Sail.</i>													
Welland .....	797	642	49	20,814	4,834	271,343	220,312	4,816	77,413	287,615	302,608	600,223	9,770 83
St. Lawrence .....	1,178	2,105	14,160	13,169	1,485	8,972	9,125	31,701	14,043	55,947	38,813	94,760	803 82
Chambly .....	1,467	1,375	3,059	53,709					80,954	55,084	84,013	139,097	1,830 96
Ottawa .....	309	3,805	7,475		16,444			518		4,413	23,919	28,332	664 81
Rideau .....	131	2,032	4,541	315						2,407	4,541	6,948	73 19
St. Peter's .....	6	1,843	76							1,843	76	1,919	38 38
Trent Valley .....	1		20								20	20	0 25
Murray .....	39	71	25	214				2	184	287	209	496	9 75
Total, United States .....	3,928	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,595	454,199	871,795	13,191 99
Grand total, Canadian and United States .....	25,105	1,529,272	1,489,910	265,357	51,945	281,781	229,831	51,696	373,968	2,128,106	2,145,654	4,273,760	45,169 01

# Canal Statistics.

## SUPPLEMENTARY APPENDIX A—Concluded.

No. (A) 223.—COMPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation of 1891 and 1892, and the Amount of Tolls collected on the same, including Tolls on Vessels and Passengers.

	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1891.												
Welland Canal.....	11,415	58,559	13,845	13,963	247,543	306,257	17,409	306,022	290,212	684,801	975,013	198,823 88
St. Lawrence Canals.....	203,211	547,797	10,725	1,545	645	1,701	33,314	137,926	247,895	688,899	936,794	62,726 56
Chambly Canal.....	56,763	7,547	66,881				98,073	123,644	105,620	223,264	19,346 58	
Rideau Canals.....	69,714	28,142	11,457					81,171	28,142	109,313	5,910 41	
Ottawa Canals.....	871	476,735		107,439					871	584,170	585,041	40,440 39
St. Peter's Canal.....	6,512	28,008							6,512	28,008	34,520	1,778 48
Trent Valley Canal.....	16,632	4,207							16,632	4,207	20,839	651 73
Murray Canal.....	5,002	4,322	906	250			24	1,238	5,932	5,810	11,742	670 05
1892.												
Welland Canal.....	7,750	87,642	9,733	32,583	240,332	300,733	12,391	264,390	270,206	685,348	955,554	195,803 25
St. Lawrence Canals.....	204,078	589,062	6,390	1,824	702	2,046	35,005	118,048	246,175	730,580	946,755	69,067 46
Chambly Canal.....	9,714	8,828	154,170			204		97,850	163,884	106,882	270,766	20,959 85
Rideau Canals.....	70,393	24,145	1,828					72,221	24,145	96,366	4,987 52	
Ottawa Canals.....	551	544,679	1	101,780					552	646,459	647,011	43,066 68
St. Peter's Canal.....	13,561	45,481							13,561	45,481	59,042	3,155 86
Trent Valley Canal.....	17,339	5,174							17,339	5,174	22,513	725 76
Murray Canal.....	4,174	7,126	1,416					1,013	5,590	8,139	13,729	585 29

B. H. TEAKLES,  
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS.  
OTTAWA, 26th April, 1893.



## RATES OF TOLLS

# Canal Statistics.

## No. 23.—RATES of Tolls on the Canals

WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA AND CHAMBLY CANALS  
(O.C., 25th April, 1873.)

	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chamby 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.
<p>The Rates of Tolls are divided into Six Classes, as under, and as per ton, unless otherwise specified.</p>								
<i>Class No. 1.</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Vessels, steam..... per ton.	0 01 $\frac{1}{4}$	0 01 $\frac{1}{2}$	0 02 $\frac{1}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 01 $\frac{1}{2}$	0 00 $\frac{5}{8}$	0 01 $\frac{1}{2}$
do sail..... do	0 02 $\frac{1}{4}$	0 02 $\frac{1}{2}$	0 03 $\frac{1}{4}$	0 01 $\frac{1}{2}$	0 01 $\frac{1}{4}$	0 02 $\frac{1}{4}$	0 01	0 02 $\frac{1}{2}$
<i>Class No. 2.</i>								
Passengers, 21 years of age and upwards.....	0 10	0 10	0 20	0 10	0 05	0 08	0 02 $\frac{1}{4}$	0 09 $\frac{3}{4}$
Passengers, under 21 years each..	0 05	0 05	0 10	0 05	0 02	0 04	0 01 $\frac{1}{4}$	0 04 $\frac{1}{2}$
<i>Class No. 3.</i>								
Bricks, cement and water lime....	0 15	0 20	0 20	0 15	0 10	0 07	0 06	0 19 $\frac{3}{4}$
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.....								
<i>Class No. 4.</i>								
All other articles, not enumerated.	0 15	0 20	0 20	0 20	0 10	0 26	0 14	0 29

of the Dominion of Canada, 1892.

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

1ST SECTION.	2ND SECTION.	3RD SECTION.	4TH SECTION.	THROUGH.	Whitlaw's to Hastings.
Fenelon Falls. to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls. to Lakefield.	
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. M
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
0 00 $\frac{3}{16}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{16}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{16}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{16}$ 0 00 $\frac{1}{4}$	0 00 $\frac{1}{2}$ 0 01	0 00 $\frac{3}{16}$ 0 00 $\frac{1}{4}$
0 01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 04 0 02	0 01 0 00 $\frac{1}{2}$
0 01	0 01	0 01	0 01	0 04	0 01
0 03	0 03	0 03	0 03	0 12	0 03

# Canal Statistics.

## No. 23.—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.
<i>Class No. 5.</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Bark .....	0 20	0 20	0 20	0 15	0 10	0 07	0 06	0 19½
Barrels, empty, each.....	0 02	0 02	0 02	0 02	0 02	0 02	0 01	0 03½
Boat knees, each.....	0 05	0 05	0 05	0 02	0 02	0 02	0 01	0 08½
Floats, per 1,000 lineal feet .....	1 40	1 40	1 40	1 40	1 20	1 05	0 50	2 05
Firewood, per cord, in vessels.....	0 20	0 20	0 20	0 20	0 10	0 15	0 08	0 23
do do rafts.....	0 25	0 25	0 25	0 25	0 15	0 19	0 09	0 30½
Hoops.....	0 25	0 25	0 25	0 20	0 15	0 15	0 10	0 30
Masts and spars, telegraph poles, per ton of 40 cubic ft., in vessels.....	0 15	0 15	0 15	0 05	0 05	0 08	0 07	0 13½
Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts.....	0 20	0 20	0 20	0 10	0 10	0 15	0 10	0 22½
Railway ties, in vessels, each.....	0 01	0 01	0 01	0 00½	0 00½	0 00½	0 00½	0 01½
do rafts, each.....	0 02	0 02	0 02	0 01	0 01	0 02	0 01	0 02½
Sawed stuff, boards, planks, scantling and sawed timber, per M. feet, board measure, in vessels....	0 30	0 30	0 30	0 15	0 10	0 11½	0 06¾	0 20
Sawed stuff, boards, plank, scantling and sawed timber, per M. feet, board measure, in rafts....	0 60	0 60	0 60	0 30	0 20	0 19	0 09	0 36½
Square timber, per M. cubic feet, in vessels.....	3 00	3 00	3 00	1 00	1 00	0 56	0 44	1 69
Square timber, per M. cubic feet, in rafts.....	4 50	4 50	4 50	2 00	2 00	1 12	0 63	3 13
Wagon stuff, woodenware and wood, partly manufactured, per ton of 40 cubic feet.....	0 40	0 40	0 40	0 40	0 25	0 30	0 20	0 55
Shingles, per M.....	0 06	0 06	0 06	0 06	0 04	0 04½	0 02½	0 08
Split posts and fence rails per M., in vessels.....	0 40	0 40	0 40	0 40	0 20	0 23	0 12	0 42
Split posts and fence rails, per M., in rafts.....	0 80	0 80	0 80	0 80	0 40	0 38	0 17	0 77
Sawlogs, each standard log.....	0 08	0 08	0 08	0 08	0 05	0 06	0 06	0 13
Staves and headings, brls., per M.....	0 40	0 40	0 40	0 00	0 15	0 15	0 10	0 30
do pipe, per M.....	1 50	1 50	1 50	1 00	1 00	0 75	0 50	1 75
do W. India, per M.....	0 75	0 75	0 75	0 60	0 25	0 45	0 25	0 65
do salt barrel, sawn or cut, per M.....	0 08	0 08	0 08	0 04	0 03	0 03	0 02	0 55
Traverses, per 100 pieces.....	0 50	0 50	0 50	0 50	0 40	0 38	0 15	0 67½
Hop poles, per 1,000 pieces.....	2 00	2 00	2 00	2 00	1 50	1 50	0 65	2 65
<i>Special Class.</i>								
Gypsum, crude (per O. C., 28th October, 1882).....	0 15	0 05	0 05	0 05	West ward	0 10	0 08	0 17½
Coal.....	0 20	0 20	0 20	0 15	0 10	0 08	0 05	0 17½
Stone, unwrought, corded and not suitable for cutting, per cord.....	0 75	0 75	0 75	0 60	0 37½	0 28	0 24	0 77½
Kryolite, iron ore or chemical ore.....	0 05	0 05	0 05	0 06	0 05	0 05	0 05	0 05
Ice.....	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05

of the Dominion—Continued.

TRENT VALLEY CANAL.

1ST SECTION.	2ND SECTION.	3RD SECTION.	4TH SECTION.	THROUGH.	Whitlaw's to Hastings.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
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.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
0 01	0 01	0 01	0 01	0 04	0 01
0 00½	0 00½	0 00½	0 00½	0 01	0 00½
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
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 00½	0 00½	0 00½	0 00½	0 00½	0 00½
0 00¼	0 00¼	0 00¼	0 00¼	0 01	0 00¼
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 00½	0 00½	0 00½	0 00½	0 03	0 00½
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 00½	0 00½	0 00½	0 00½	0 03	0 00½
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 05½	0 05½	0 05½	0 05½	0 22	0 05½
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 03½	0 03½	0 03½	0 03½	0 14	0 03½
0 00¼	0 00¼	0 00¼	0 00¼	0 03	0 00¼
Free.	Free.	Free.	Free.	Free.	Free.

# Canal Statistics.

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

	Tons.		Tons.
2,000 lbs. avoirdupois . . . . .	1	Stone, 12 cubic feet . . . . .	1
Per M. is per thousand feet . . . . .		Stone, 1 cord . . . . .	7½
Per Mille is per thousand pieces . . . . .		Whiskey, 4 barrels or 215 gallons . . . . .	1
Green fruit, 9 barrels are . . . . .	1	Empty barrels, 10 . . . . .	1
Ashes, 3 barrels are . . . . .	1	Barrel hoops, 10 Mille . . . . .	1
Bark, 4 cords . . . . .	1	Board and other sawed lumber, 600 feet board measure . . . . .	1
Beef, 7 barrels . . . . .	1	Boat knees, 4 . . . . .	1
Biscuit and crackers, 9 barrels . . . . .	1	Firewood, 1 cord . . . . .	3
Bricks, common, 1,000 . . . . .	2	Hop poles, 60 or 40 cubic feet . . . . .	1
Butter, 22 kegs or 7 barrels . . . . .	1	Shingles, 12 M. or bundles . . . . .	1
Cattle, 3 . . . . .	1	Split posts and fence rails, 1 Mille . . . . .	1
Cement and water lime, 7 barrels . . . . .	1	Staves and headings, pipe, 1 Mille . . . . .	8
Fire bricks, 1,000 . . . . .	3	do W. India, 1 Mille . . . . .	4
Fish, 7 barrels . . . . .	1	do barrel, 1 Mille . . . . .	2½
Flour, 9 barrels . . . . .	1	do salt barrel, 1 Mille . . . . .	3
Gypsum and manganese, 6 barrels . . . . .	1	Saw-logs, standard, 1 . . . . .	1
Horses, 2 . . . . .	1	Square timber, 50 cubic feet . . . . .	1
Lard and tallow, 7 barrels or 22 kegs . . . . .	1	Telegraph poles, 10 or 40 cubic feet . . . . .	1
Liquors and spirits, 215 gallons . . . . .	1	Masts and spars, 40 cubic feet . . . . .	1
Liquors, all others, 215 gallons . . . . .	1	Railroad ties, 16 or 50 cubic feet . . . . .	1
Nuts, 9 barrels . . . . .	1	All other woodenware, or partly manu- factured wood, 40 cubic feet as per tariff . . . . .	1
Oysters, 6 barrels . . . . .	1	Traverses, 40 cubic feet or 5 pieces . . . . .	1
Pork, 7 barrels . . . . .	1	Floats, 50 lineal feet . . . . .	1
Salt, 7 barrels . . . . .	1		
Seed, 9 barrels . . . . .	1		
Sheep, 20 . . . . .	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 :—

	Rate.
<b>WELLAND CANALS.</b>	
1. From Port Maitland, Dunnville and Port Colborne to Port Robinson or Allanburg, not passing the lock, each way . . . . .	1
2. From Chippawa Cut, or any part thereof, to Dunnville, Port Maitland or Port Colborne. . . . .	1
3. From Dunnville to Port Colborne. . . . .	1
4. From Thorold to St. Catharines or Port Dalhousie. . . . .	1
5. From Maitland, Dunnville, Colborne or Port Robinson to Marshville and intermediate places. . . . .	1
6. From Marshville or intermediate places to Port Maitland, Dunnville, Port Colborne and Port Robinson . . . . .	1
7. From Port Robinson to Allanburg or Thorold. . . . .	1
8. From Port Robinson to St. Catharines or Port Dalhousie . . . . .	1
9. From St. Catharines to Port Dalhousie. . . . .	1
10. From Dunnville to Maitland . . . . .	1
11. From Port Robinson through the lock and Chippawa Cut. . . . .	1
12. From Port Colborne to Port Maitland . . . . .	1
13. From Chippawa Cut through lock to Port Robinson. . . . .	1
14. From Colborne, Dunnville, Maitland and Marshville to Thorold . . . . .	1
15. From Colborne, Dunnville, Maitland and Marshville to St. Catharines. . . . .	1
16. Through the Chippawa Cut only . . . . .	1
17. Through the Port Robinson Lock only . . . . .	1
<b>ST. LAWRENCE CANALS.</b>	
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 . . . . .	
<b>CHAMBLY CANAL.</b>	
Sec. 79. Vessels and property passing from Sorel to Chambly, to pay . . . . .	
Vessels and property passing from Chambly to St. John's, to pay . . . . .	

## 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. 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 saw-logs 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. June 27, 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 provided 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 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.

# Canal Statistics.

## 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. ....	5
Muscovado sugar do per hhd., 10 cents; per bri. ....	5
Liquors { do per pipe, 15 cents; per pun. ....	12
do { do per hhd., 10 cents; per qr. cask. ....	7
Iron (bars) do per ton. ....	24
Iron, pig do do. ....	12
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. ....	4
Bales, crates, cases, &c. do per ton weight or measurement. ....	24
Coals do per chaldron. ....	12

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. 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 VESSELS 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.

	Mills.
Steam-boats measuring 50 tons or upwards, per ton register, per day of 24 hours. ....	8
All other vessels measuring 50 tons or upwards, per ton register, per day of 24 hours. ....	4
Cents.	
Steam-boats 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 wharfs 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 wharfs or banks after the first five days, an additional charge of four cents per cord. O. C. August 7, 1860.

(b.) The clause next preceding shall not only apply to the rates of toll to be collected on firewood on wharfs 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 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 purpose 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 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.

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 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 steam-boats, 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.....	Per ton register. 1 cent.
On all other vessels, per day, as aforesaid.....	¼ do

Sec. 100.—*Wharfage Dues.*

All goods, wares and merchandise, not elsewhere specified.....	Per ton. 25 cents.
Hay, straw, pig and scrap iron, pot and pearl ashes.....	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.....	7½ 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 ¼ of 1 per cent on the value thereof.

(b.) Each entry shall pay not less than 5 cents.

(c.) All property landed on the wharfs 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.....	5 brls. to 1 ton.
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 1, 1881.

## Canal Statistics.

### 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 Tim- ber, &c., to include use of Basin and Wharf for one Month.	For each succeeding month during the Season of Naviga- tion.	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
Planks and boards to include all kinds of sawed lumber in rafts, per M feet, board measure. . . . .	3	2	3
Saw-logs, 12 feet long, if longer in same proportion per log . . . . .	1	1	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 . . . . .	8	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 wharfs 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, Ottawa, steamers per season . . . . .	\$ 8 00
do do barges do . . . . .	4 00
Inside locks do steamers do . . . . .	50 00
do other stations do do . . . . .	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 of 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 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, intitled: "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 herein.

O. C. 20th May, 1890.

His Excellency, in pursuance of the provisions of Chapter 37 of the Revised Statutes, intitled: "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 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, intitled: "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 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 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  $\frac{1}{3}$  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  $\frac{1}{3}$  section to be charged as a whole section.

# Canal Statistics.

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.

(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 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 that 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.*

O.C. 31st October, 1890.

His Excellency, under the authority conferred by 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
15 tons and under. ....	20	3	10

AT THE GOVERNMENT HOUSE AT OTTAWA.

MONDAY, the 4th day of April, 1892.

PRESENT :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

His Excellency, having had under consideration the Tariff on 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 in the said Canals, viz. :-

That a refund be made of a portion of the Canal tolls collected on wheat, Indian corn, pease, barley, rye, oats, flax seed and buckwheat which have been carried through the Welland Canal, and the St. Lawrence Canals to Montreal or to any port east of Montreal in all cases where the said products so carried are exported, and in such cases only.

That this rebate be such as to reduce the tolls to two cents per ton of the said products or any of them, and that the conditions of such refund be the following :-

That the products aforesaid on which the rebate of tolls may be claimed shall be shown to have been originally shipped for Montreal or for some port east of Montreal and shall be shown to have been carried to Montreal or to some port east of Montreal, and actually sent out of the country.

That the right to this rebate shall not be lost by reason of intermediate transshipment, provided that the place of such transshipment is one within the Dominion of Canada.

That the right to this rebate shall extend to any portions of cargoes lightered at Port Colborne and re-shipped at Port Dalhousie, and also to shipments of the above named products made from any Canadian Lake Ontario port.

That payment of the amount to be refunded be made, from time to time, as cargoes of the said products are despatched for export from Montreal or from some port east of Montreal.

That this Order in Council remain in force for the present year, 1892, only.

(Signed)

JOHN J. MCGEE,

Clerk, Privy Council.

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 of May, 1892.

On a memorandum dated 19th April, 1892, from the Minister of Railways and Canals, submitting a memorandum, copy herewith, from the proper Officers of the Department of Railways and Canals upon certain objections raised by the Montreal Board of Trade, by forwarders and others to the existing tonnage and wharfage charges on vessels and freight using the basins of the Lachine Canal at Montreal.

From such memorandum, which is of a detailed and explanatory character, it appears that the complaints made are well founded, the complications shown being due to the fact that the various Orders in Council have from time to time been passed, fixing and changing rates and charges to meet particular cases as they arise; and pending a general revision of the whole matter of Canal regulations, tolls, and charges which seems to be desirable, it is expedient that the subject of these complaints should be dealt with at once.

The Minister, accordingly, on the advice of the Canal Revenue Officers, endorsed by the Superintending Engineer of the Lachine Canal, and the Deputy Head of the Department of Railways and Canals, recommends the adoption of the following:—

1st. The cancellation of Section No. 93 of Consolidated Orders in Council of the 26th October, 1889, Chapter 115, and the substitution thereof of the following:—

*Wharfage Dues on Coal for local consumption in Montreal.*

Section 93. Coal for local consumption in Montreal, landed on Canal property between Montreal Harbour and Côte St. Paul, from vessels other than sea-going, and entering the Lachine Canal from Montreal Harbour, shall be charged wharfage dues at the rate of 5 cents a ton.

Coal screenings shall be charged 3 cents a ton.

2nd. The cancellations of Sections Nos. 98, 99, 100, 101, and the substitution of the following:—

*Wharfage Dues in all basins of the Lachine Canal on Sea-going vessels.*

Section 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 basin of said canal and of the revenue that may be derived from their use.

All property delivered or received by sea-going vessels in the Lachine Canal basins at Montreal (except the old lower basin) shall be charged wharfage dues as follows:—

All goods, wares and merchandise not elsewhere specified	25 cents per ton.
Hay, straw, pig and scrap iron, pot and pearl ashes	20 do
Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep and swine	15 do
Ballast, clay, fire-bricks, gypsum, lime, marble, phosphate, sand, salt, coal and coke, grain and seeds of all kinds	7½ 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.
Coal screenings	3 do

Each entry shall pay not less than 5 cents.

All property landed on the canal wharfs for re-shipment, or transhipped in canal waters, shall pay one wharfage only.

Lumber upon which tolls have been paid for passage down the Lachine Canal, and which is re-shipped from the wharfs or vessels into sea-going vessels, shall pay wharfage dues equal to one section of canal tolls, viz., 3½ cents per 1,000 feet board measure.

The Committee submit the above recommendation for Your Excellency's approval.

(Signed)

JOHN J. MCGEE,

Clerk, Privy Council.

To the Honourable  
The Minister of Railways and Canals.

AT THE GOVERNMENT HOUSE AT OTTAWA.

MONDAY, the 6th day of June, 1892.

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 Order in Council of the 29th day of April, 1891, under which, in the case of steamers specially chartered for the conveyance of excursion par-

## Canal, Statistics.

ties, 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 St. Anne Lock, and for passage through the Welland Canal, in the case of excursion parties leaving Toronto or Hamilton for St. Catharines, and excursion parties leaving St. Catharines for Toronto or Hamilton, shall be, and the same are hereby continued in force for the present season of navigation only.

(Signed)

JOHN J. MCGEE,  
*Clerk of the Privy Council.*

The Honourable  
The Minister of Railways and Canals.

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AT THE GOVERNMENT HOUSE AT OTTAWA.

FRIDAY, the 15th day of July, 1892.

PRESENT :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

Whereas, by a clause of the Order in Council of the 4th April, 1892, respecting the rebate to be allowed on certain food products traversing the Welland and St. Lawrence Canals bound for Montreal or some port east of Montreal for exportation, it was provided that the right to such rebate should extend to shipments of the said products made "from any Canadian Lake Ontario port," this provision being taken from the Order in Council of the 29th April, 1891 ;

And whereas it was not intended that the restriction in favour of Canadian Lake Ontario ports, should be continued ;

His Excellency, under the provisions of Chapter 37 of the Revised Statutes, intitled : "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 said Order in Council of the 4th April, 1892, shall be and the same is hereby amended by the omission of the word "Canadian" from the clause in question ; and that such amendment shall have force and effect from the 4th day of April last.

(Signed)

JOHN J. MCGEE,  
*Clerk of the Privy Council.*

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AT THE GOVERNMENT HOUSE AT OTTAWA.

MONDAY, the 19th day of July, 1892.

PRESENT :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

Whereas application has been made for the extension to the Trent Valley Canals of the concession of reduced passenger rates for excursion parties now enjoyed on the Lachine and Welland Canals under an Order in Council of the 6th of June, 1892.

His Excellency, under the provisions of Chapter 37 of the Revised Statutes, intitled : "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 present season of navigation only, steamers specially chartered for the conveyance of excursion parties going and returning the same day, one-half of the usual passenger tolls shall be charged for passage through the Trent Valley Canals.

(Signed)

JOHN J. MCGEE,  
*Clerk of the Privy Council.*

The Honourable  
The Minister of Railways and Canals.

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AT THE GOVERNMENT HOUSE AT OTTAWA.

TUESDAY, the 2nd day of August, 1892.

PRESENT :

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL.

His Excellency, under the authority conferred upon him by Chapter 37 of the Revised Statutes, 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 6th June, 1892, reducing by one-half the usual passenger tolls on the Lachine Canal (such reduction applying to cases where excursion parties are conveyed in steamers specially chartered for that purpose, going and returning the same day), shall be, and the same are hereby extended to the Beauharnois Canal for the present season of navigation only.

(Signed)

JOSEPH POPE,  
*Asst. Clerk of the Privy Council.*

## AT THE GOVERNMENT HOUSE AT OTTAWA.

FRIDAY, the 14th day of October, 1892.

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 prescribe the following scale of charges for vessels wintering on the Ottawa River Canals and Locks, and the same is hereby prescribed accordingly, namely :—

In Carillon Canal, Steamers, per season.....	\$ 8 00
Barges .....	4 00
Grenville Canal, Steamers, for season.....	8 00
Barges .....	4 00
Inside Locks, Ste. Anne, Carillon and Grenville Canals, Steamers, per season.....	25 00
Inside locks, Culbute Canal, per season.....	15 00

Such security against damage by fire to be taken by way of bond as, in the opinion of the Minister of Railways and Canals, may seem desirable.

(Signed)

JOHN J. MCGEE,  
Clerk of the Privy Council.

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 2nd November, 1892.

On a memorandum dated 28th October, 1892, from the Minister of Railways and Canals, representing that he is in receipt of a letter from the manager of the Collins' Bay Rafting and Forwarding Co. of which the following is a copy :—

" COLLINS' BAY, 19th September, 1892.

"To the Minister of Railways and Canals,  
"Ottawa, Ont.

" DEAR SIR,—I am in receipt of a communication from Robert Rae, Esq., Commodore of 'The Yacht Club of Chicago,' with reference to the bringing of a large number of yacht through the canals next season to attend the World's Fair in Chicago, and he suggest that your Government should make the canals for all yachts from abroad free for the round trip, and asks me to lay the matter before your department with that end in view. It is understood that 'The Ocean Racing Yacht Club,' 'The International Yacht Club of England' will attend provided their way is made easy to Chicago. The Danish, Russian, German, French, Italian and Greek Yacht Clubs have been invited, but before accepting will require information on the subject of the way of getting from Montreal to Chicago and the cost thereof. It is proposed by the Royal Yacht Club that there be an Ocean race across to Montreal, and afterwards for the fleet to rendezvous at Macinac to meet the Canadian and American yachts from there to race to Chicago for a prize to be given by the American Yacht Clubs.

"If your Government should decide to accede to this proposition and give public notice to that effect or advise me I will forward same to the President of the Yacht Club of Chicago.

" Yours truly,

" Collins' Bay Rafting and Forwarding Co. (Ltd.)

(Signed)

" Per A. LEGER, JUN.,

"Manager."

The Minister, in view of the interests attaching to the projected scheme, recommends that the courtesy of free passage through the Dominion canals be extended to all pleasure yachts attending the Chicago Exhibition in 1893, and that he be authorized to inform the company accordingly in reply to their letter.

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

(Signed)

JOHN J. MCGEE,  
Clerk of the Privy Council.

The Honourable

The Minister of Railways and Canals.

Railway Statistics.

REPORTS.

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RAILWAY STATISTICS

OF CANADA

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

1892.

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

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

1893

[No. 9b—1893.] *Price 5 cents.*





# Railway Statistics.

## CANADIAN RAILWAYS.

OFFICE OF THE CHIEF ENGINEER,  
RAILWAYS AND CANALS,

OTTAWA, 21st March, 1893.

SIR,—I have the honour to submit to you the Railway Statistics of the Dominion for the year ended on the 30th June, 1892, 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	0	1865	2,145
1837	16	1866	2,150
1838	16	1867	2,258
1839	16	1868	2,269
1840	16	1869	2,497
1841	16	1870	2,497
1842	16	1871	2,497
1843	16	1872	2,508
1844	16	1873	2,638
1845		1874	2,642
1846		1875	4,826
1847	59	1876	5,157
1848	59	1877	5,574
1849	59	1878	6,143
1850	71	1879	6,484
1851	93	1880	6,891
1852	212	1881	7,260
1853	423	1882	7,530
1854	657	1883	8,726
1855	855	1884	9,658
1856	1,296	1885	10,149
1857	1,428	1886	10,697
1858	1,654	1887	11,691
1859	1,997	1888	12,162
1860	2,087	1889	12,628
1861	2,087	1890	13,256
1862	2,110	1891	14,009
1863	2,110	1892	14,588
1874	2,145		

The table appended may be summarized as follows :—

Miles of railway completed (track laid).....	14,870
do sidings.....	1,923
do iron rails in main line.....	607
do steel do .....	14,263
Capital paid (including the four following items)....	\$844,991,750
Government bonuses paid .....	149,224,064
do loans paid.....	21,687,755
do subscriptions to shares paid.....	300,000
Municipal aid paid.....	13,981,248
Miles in operation.....	14,588
Earnings.....	\$51,685,768
Working expenses .....	36,488,228
Net earnings.....	15,197,540
Passengers carried.....	13,533,414
Freight carried (tons) .....	22,189,923
Train mileage. ....	44,448,468
Passengers killed.....	14
Number of elevators.....	50
do guarded level crossings.....	131
do unguarded do .....	9,232
do overhead bridges.....	401
do level crossings of other railways. ....	193
do junctions with other railways.....	310
do do branch lines.....	193
do engines owned.....	1,922
do do hired.....	39
do sleepers and parlour cars owned.....	148
do do do hired.....	7
do first class cars owned.....	870
do do hired.....	39
do second class and immigrant cars owned.	632
do do do hired ..	2
do baggage, mail and express cars owned...	575
do do do hired....	16
do cattle, box and freight cars owned.....	32,676
do do do hired.....	2,992
do platform cars owned.....	15,205
do do hired.....	195
do coal and dump cars owned.....	3,582
do do hired.....	2

# Railway Statistics.

## NOMINAL CAPITAL PAID.

	Miles Constructed.	Amount.	Per Mile.	Remarks.
		\$ cts.	\$ cts.	
Ordinary share, Capital .....	14,870	244,844,381 52	16,465 66	
Preference do .....	14,870	99,555,900 39	6,695 08	
Bonded debt .....	14,870	305,120,199 76	20,519 18	
Aid from Dominion Government.....	14,870	144,214,383 56	9,698 34	
do Ontario do .....	6,063	6,171,181 44	1,017 84	} Equal to an average of \$1,815.56 per mile on total mileage.
do Quebec do .....	2,783	12,033,012 76	4,323 75	
do New Brunswick Government.....	1,360	4,365,355 71	3,209 82	
do Nova Scotia do .....	830	1,999,695 87	2,409 27	
do Prince Edward Island do .....	211			
do Manitoba do .....	1,400	2,390,690 00	1,707 63	
do British Columbia do .....	695	37,500 00	53 95	
do North-west Territories Government.....	1,528			
do Municipalities in Ontario.....	6,063	10,354,744 37	1,707 87	
do do Quebec.....	2,783	2,419,218 62	869 28	
do do New Brunswick.....	1,360	296,500 00	218 01	
do do Nova Scotia.....	830	277,685 00	334 56	
do do Prince Edward Island.....	211			
do do Manitoba.....	1,400	595,600 00	425 43	
do do British Columbia.....	695	37,500 00	53 95	
do do North-west Ter.....	1,528			
Capital from other sources .....	14,870	10,278,200 67	691 20	
Total paid Capital.....	14,870	844,991,749 67	56,825 27	

### GOVERNMENT and Municipal Loans, Bonuses, &c., promised to Railways completed and under construction.

	Amount.
	\$ cts.
Dominion Government .....	148,083,305 93
Ontario do .....	6,365,507 44
Quebec do .....	15,438,567 12
New Brunswick do .....	4,617,346 81
Nova Scotia do .....	2,175,995 87
Manitoba do .....	2,391,740 00
British Columbia do .....	37,500 00
Municipalities in Ontario.....	10,409,041 78
do Quebec.....	4,256,674 00
do New Brunswick.....	316,500 00
do Nova Scotia.....	289,685 00
do Manitoba.....	595,600 00
do British Columbia.....	37,500 00
do North-west Territories.....	25,000 00
	195,039,963 95

FATAL ACCIDENTS.

	Passengers Killed.	Employees Killed.	Others Killed.	Total Killed.
Falling from cars or engines.....		23	4	27
Getting on or off trains in motion.....	6	5	9	20
At work making up trains.....		5		5
Coupling cars.....		8	2	10
Collisions and derailments.....	4	16	2	22
Striking bridges.....		1	1	2
Walking or being on track.....	2	20	67	89
Explosions.....		1		1
Other causes.....	2	31	24	57
Totals.....	14	110	109	235

LAND GRANTS made by Governments to Railways completed and under construction.

Name of Railway.	Government.	Acres Granted.	Acres Sold.	Amount Realized.
				\$
Alberta Railway and Coal Co.....	Dominion.....	1,409,189	835,248	1,101,733
Calgary and Edmonton.....	do.....	2,176,000	2,720	9,520
Canadian Pacific.....	do.....	26,568,000	3,624,355	11,214,623
			Town sites	
			net.....	1,312,995
Esquimalt and Nanaimo.....	do.....	1,900,000	217,956	712,654
Great North-West Central.....	do.....	2,880,600		
Manitoba and North-Western.....	do.....	2,918,400	447,527	736,505
Manitoba and South-Eastern.....	do.....	704,000		
Manitoba and South-Western Colonization.....	do.....	1,396,500	259,012	1,055,883
Qu'Appelle, Long Lake and Saskatchewan.....	do.....	2,229,333	131,445	131,593
Winnipeg and Hudson Bay.....	do.....	*		
Wood Mountain and Qu'Appelle.....	do.....	1,536,000		
Great Northern.....	Quebec.....	140,000		
Lake Temiscamingue Colonization.....	do.....	250,000		
Lower Laurentian.....	do.....	480,000		
Montreal and Western.....	do.....	350,000		
Ottawa and Gatineau Valley.....	do.....	450,000		
Quebec and Lake St. John.....	do.....	1,840,000		
Western Counties.....	Nova Scotia.....	150,000		

\* 6,400 acres per mile in Manitoba; 12,800 per mile in N.-W. Territories. No distance named.

The statistics have again been greatly delayed owing to the difficulty of obtaining the returns of many of the smaller companies, some of which were not received until February, and that of Montreal and Lake Maskinongé Railway has not yet come in, although numerous applications have been made to the company.

The Act requires that these returns be made on or before the 1st October, and I can only repeat the recommendation I have so often made already, that the law relating to these returns be enforced.

I have the honour to be, sir,  
 Your obedient servant,  
 COLLINGWOOD SCHREIBER,  
 Chief Engineer, Railways and Canals.

THE SECRETARY,  
 Department of Railways and Canals.

# Railway Statistics.

TABLE showing Locations of the Railways of the Dominion of Canada, 30th June, 1892.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Alberta Railway and Coal Co. . . . .	Late North-Western Coal and Navigation Co.—From Dunmore, on C.P.R., westerly to colliery at Lethbridge, and from Lethbridge to Coutts. . . . .		174 12
Albert Southern . . . . .	Harvey Branch Junction to Alma. . . . .		17 00
Baie des Chaleurs . . . . .	Metapedia to Paspebiac (60 miles of track laid). . . . .		100 00
Bay of Quinté and Navigation Co. . . . .	Deseronto, on Bay of Quinté, Lake Ontario, to Deseronto Junction, Grand Trunk Railway. . . . .		3 50
Brantford, Waterloo and Lake Erie . . . . .	Brantford, Ont., to Waterford, Ont. . . . .		17 00
Buctouche and Moncton . . . . .	Moncton, on Intercolonial Railway, to Buctouche, N.B. . . . .		32 00
Brockville, Westport and Sault Ste. Marie . . . . .	Brockville to Westport. . . . .		45 00
Calgary and Edmonton . . . . .	Calgary to Edmonton } (254 miles of track laid). . . . . do McLeod } . . . . .	191 97 105 00	
Canada Atlantic . . . . .	City of Ottawa to Boundary. Crosses the St. Lawrence at Coteau by bridge. Connects with Grand Trunk Railway at Coteau and Lacolle . . . . .		296 97
Central Counties . . . . .	From Glen Robertson, on Canada Atlantic to Hawkesbury. . . . .		138 00
Canada Southern . . . . .	Main Line—Windsor to Suspension Bridge . . . . . Amherstburg Branch—Essex Centre to Amherstburg. . . . . St. Clair Branch—St. Clair Junction to Courtright. . . . . Fort Erie Branch—Fort Erie to Welland Junction . . . . . Erie and Niagara Branch—Fort Erie to Niagara . . . . . Oil Springs Branch—Oil Springs to Oil City . . . . . Sarnia, Chatham and Erie—Oil City to Petrolia . . . . . Leamington and St. Clair—Comber to Leamington. . . . .	226 18 15 70 62 63 17 50 30 60 5 50 7 00 13 80	378 91
Canada Eastern . . . . .	Late Northern and Western of New Brunswick—Gibson to Chatham Junction, I. C. R. . . . . Blackville to Indiantown . . . . . Chatham to Chatham Junction . . . . .	107 00 9 00 11 00	127 00
Canadian Pacific : Owned . . . . .	Main Line—Montreal to Vancouver. . . . . do Quebec to St. Martin's Junction . . . . . Branch—Grand Piles Junction to Grand Piles . . . . . do Berthier Junction to Berthier . . . . . do Joliette do St. Félix . . . . . do St. Thérèse Junction to St. Jerome . . . . . do do do St. Eustache . . . . . do St. Lin Junction to St. Lin . . . . . do Buckingham to Buckingham Village . . . . . do Hull to Aylmer. . . . . do Carleton Junction to Brockville . . . . . do Sudbury to Copper Mines . . . . . do do Sault Ste. Marie . . . . . do Winnipeg Junction to Emerson . . . . . do Winnipeg to Manitow . . . . . do Rosenfeldt to Gretna . . . . . do Winnipeg to West Selkirk . . . . . do do Stonewall. . . . . do Kenmay to Oxbow . . . . . do Glenboro' to Nesbitt. . . . . do New Westminster Junct'n to New Westm'tr. . . . . do Mission Junction to Mission . . . . . do Vancouver to Coal Harbour . . . . .	2,904 70 159 80 26 90 2 00 16 80 13 60 6 00 15 00 4 30 7 50 45 00 5 00 182 50 64 50 100 10 13 70 22 50 18 00 114 50 27 20 8 20 10 00 1 20	
	Total mileage owned . . . . .	3,768 90	
Leased lines . . . . .	Atlantic and North-West (in Canada)—South end Lachine Bridge to Maine boundary. . . . .		182 50

TABLE showing Locations of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
<b>Canadian Pacific—Continued.</b>			
Leased lines .....	St. Lawrence and Ottawa—		
	Ottawa to Prescott .....	51 80	
	Chaudiere Junction to Sussex st., Ottawa ..	6 60	
			58 40
	<b>Ontario and Quebec—</b>		
	Mile End Junction to South End Lachine		
	Bridge .....	9 10	
	Montreal to Toronto .....	339 00	
	London to Windsor .....	112 50	
	Toronto Junction to Strachan avenue .....	3 20	
			463 80
	<b>Credit Valley—</b>		
	Toronto Junction to St. Thomas .....	116 10	
	Streetsville Junction to Melville Junction ..	31 70	
	Cataract to Flora .....	27 30	
			175 10
	<b>Toronto, Grey and Bruce—</b>		
	Toronto Junction to Owen Sound ..	116 90	
	Orangeville Junction to Teeswater .....	69 40	
	Glenannan to Wingham .....	5 00	
			191 30
	<b>Guelph Junction—</b>		
	Guelph Junction on Credit Valley Ry. to Guelph ..		15 00
	<b>West Ontario Pacific—London to Woodstock .....</b>		26 60
	<b>St. John and Maine—Carleton, N.B., to Vanceboro' ..</b>		91 80
	<b>New Brunswick Railway (in Canada)—</b>		
	Gibson to Woodstock .....	62 90	
	Newbury Junction to Edmunston .....	105 50	
	Aroostook Junction to Boundary .....	4 98	
	Fairville to St. John .....	2 30	
			175 68
	<b>New Brunswick and Canada Ry. (in Canada)—</b>		
	McAdam Junction to St. Stephen .....	33 90	
	Watt do St. Andrews .....	27 50	
	McAdam do Woodstock .....	50 80	
	Debec do Maine boundary .....	5 00	
			117 20
	<b>Fredericton Ry.—Fredericton Junction to Fredericton.</b>		22 10
	<b>Columbia and Kootenay—Robson to Nelson—</b>		
	Kootenay Lake to Columbia River .....		27 70
	<b>Manitoba South-Western Colonization—</b>		
	Manitou to Deloraine .....	101 00	
	Winnipeg to Glenboro' .....	104 20	
	Elm Creek to Barnsley .....	12 60	
			217 80
	Total mileage leased .....	1,764 98	
	do owned .....	3,768 90	
	do operated .....		5,533 88
<b>Canadian Government Railways.</b>	<b>Intercolonial—</b>		
	Halifax to Lévis .....	675 00	
	Moncton to St. John .....	89 00	
	Truro to Stellarton .....	44 00	
	Stellarton to Mulgrave .....	82 00	
	Stellarton to Pictou .....	14 00	
	Pt. Tupper to Sydney .....	91 00	
	New Glasgow to Pictou Landing .....	8 00	
	Painsec to Pte. du Chêne .....	11 00	
	Carried forward .....		

# Railway Statistics.

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

Name of Railways.	Description.	Distance.	
		Miles.	Total.
Canadian Government Railways.	Brought forward .....		
	Intercolonial— <i>Concluded.</i>		
	Branch to North Sydney .....	5 00	
	do Dalhousie .....	7 00	
	do St. Charles .....	25 00	
	do Dartmouth .....	4 00	
	do Indiantown .....	14 00	
	do Oxford Junction to Brown's Pt. . .	67 00	
	do Pugwash.....	5 00	
		1,141 00	
	Prince Edward Island—		
	Main Line—Alberton to Georgetown. . .	147 00	
Branch—Mount Stewart to Souris. . . . .	38 40		
do Alberton to Tignish .....	13 10		
do County Line to Cape Traverse. . . . .	12 10		
	210 60		
		1,351 60	
Caraquet . . . . .	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippigan Harbour, N.B. . . . .		68 00
Carillon and Grenville. . . . .	Carillon to Grenville, P.Q., connecting at both termini with Ottawa River Navigation Company's steamers (Gauge, 5 ft. 6 in.) . . . . .		13 00
Central Ontario. . . . .	From Picton, in Prince Edward County, Ont., to Coe Hill Iron Mines, Wollaston, County of Hastings; connects with Grand Trunk at Trenton, Midland Railway, 2 miles west of Stirling, and with Ontario and Quebec, in Township of Rawdon . . . . .		104 00
Central Railway of New Brunswick. . . . .	From Norton Station, on the Intercolonial Railway, to Chipman. . . . .	44 66	
	From Hampton to Quaco (formerly St. Martin's and Upham Railway) . . . . .	30 00	
		74 66	
Cornwallis Valley. . . . .	From Kingsport, on Basin of Minas, N.S., to Kentville on Windsor and Annapolis Railway . . . . .		14 00
Cumberland Railway and Coal Company (formerly Spring Hill and Parrsboro'). . . . .	Spring Hill Junction, Intercolonial Railway, to Spring Hill Coal Mines, N.S., and Parrsboro', on the Bay of Fundy. . . . .	32 00	
	Spring Hill and Oxford Branch, from Spring Hill Mines to Oxford Village on the Oxford and New Glasgow Railway . . . . .	14 00	
		46 00	
Drummond County. . . . .	Ste. Rosalie, P., Q., junction with Grand Trunk Railway, to Ball's Wharf on River St. Lawrence, connects with Canadian Pacific Railway at Drummondville . . . . .		62 81
Elgin, Petitediac and Havelock. . . . .	From Elgin, County of Albert, N.B., to Petitediac Junction with Intercolonial Railway; thence to Havelock, in County of King's . . . . .		28 00
Erie and Huron. . . . .	Rondeau, Lake Erie, Ont., to Sarnia, passing through the Town of Chatham, Ont., connects with Canada Southern and Great Western Railways . . . . .		75 75
Esquimalt and Nanaimo. . . . .	Victoria to Wellington, Island of Vancouver . . . . .		78 00
Fredericton and St. Mary's Railway Bridge. . . . .	Over the St. John River, connecting the Fredericton Railway, at Fredericton, with the Northern and Western Railway at St. Mary's . . . . .		1 33



TABLE showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.		
		Miles.	Total.	
Grand Trunk— Grand Trunk Division (owned).	Main Line—Point Edward to Point Lévis and Island Pond	719 50		
	Montreal to Dorval	10 25		
	Sarnia Extension—Point Edward to Great Western	3 00		
	Branch—Montreal leading to Wharves	0 75		
	Three Rivers Branch—Arthabaska to Doucet's Landing	35 25		
	Kingston Branch—Main Line to Kingston	2 25		
	Galt and Waterloo Branch—Waterloo and Berlin to Galt	14 50		
	London Branch—St. Mary's to London	22 00		
	Champlain Branch—St. Lambert to Boundary, St. Isidore to Province Line	66 00		
	Jacques Cartier Union—Jacques Cartier to Canadian Pacific Railway Junction	6 50		
	Blackwell to St. Clair Tunnel	5 00		
	Northern and North-western Railways— Toronto to Gravenhurst	111 60		
	Allandale to Collingwood	31 76		
	Collingwood to Meaford	20 50		
	Elmsvale to Hillsdale	2 28		
	Port Dover (Lake Erie) to Hamilton	40 25		
	Hamilton to Allandale (Lake Simcoe)	93 82		
	Beeton to Collingwood	39 83		
	Great Western Division	Main Line—Niagara Falls to Windsor	229 50	
		Stony Creek, &c., connections	2 56	
		Branch—Hamilton to Toronto	37 40	
		do Harrisburg to Guelph	27 18	
		do Harrisburg to Brantford	8 00	
		Sarnia Branch—Komoka to Sarnia	50 85	
		Petrolia Branch—Wyoming to Petrolia	4 75	
		Loop Line—Fort Erie to Glencoe	145 55	
		Allanburg Branch—Allanburg to Clifton Junction	8 32	
Welland—From Port Colborne to Port Dalhousie, Ont.		25 14		
Sundry connections		1 50		
Leased and operated		Wellington, Grey and Bruce—Guelph to Southampton and Palmerston to Kincardine	168 15	
		London and Port Stanley—London to Port Stanley	23 84	
		London, Huron and Bruce—Hyde Park to Wingham Junction	69 01	
		Brantford, Norfolk and Port Burwell—Brantford to Tilsonburg Junction	34 78	
		NOTE.—The Georgian Bay and Lake Erie Railway 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	172 75		
	South Norfolk—Simcoe to Port Rowan	17 00		
	Montreal and Champlain Junction—Brosseau to Dundee and Ste. Martine to Valleyfield	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		
	North Simcoe—Colwell to Penetanguishene	33 34		
	Cobourg, Blairton and Marnora—Cobourg to Harwood	15 00		
	Blairton to C.P.R.	3 00		
	Waterloo Junction— Waterloo to Elmira, Ont.	18 00		
	Several connections between lines	10 25		
	8 91			
	Carried forward			

# Railway Statistics.

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

Name of Railway.	Description.	Distance.	
		Milles.	Total.
Grand Trunk—Continued. Leased and operated .....	Brought forward. ....		
	Midland Railway Division—		
	Main Line—Belleville to Midland .....	164 00	
	Lindsay to Scarboro' Junction .....	60 25	
	Victoria Branch—Lindsay to Haliburton .....	224 25	
	Whitby do Whitby to Manilla .....	54 25	
	Lakefield do Lakefield Junction to Lakefield .....	33 75	
	Madoc do North Hastings Junction to Eldorado .....	11 75	
	Coboconk do Blackwater to Coboconk .....	22 25	
	Bridgewater Branch—Madoc to Bridgewater .....	36 25	
	Port Hope do Port Hope to Onemee .....	8 75	
	do do Millbrook to Peterboro' .....	32 00	
	Lake Simcoe Junction Railway—Stouffville to Lake Simcoe .....	12 25	
	Peterboro' and Chemong Lake Railway—Peterboro' to Chemong Lake .....	26 50	
	Medonte Tramway—Coldwater to Parker's Mill .....	8 25	
		9 00	
		479 25	3,157 63
St. Clair Tunnel and approaches	Under the St. Clair River, between Sarnia and Port Huron—connecting the Grand Trunk Railway with railroads in State of Michigan .....		2 22
	Length of tunnel between portals 6,000 ft., cylindrical in section with clear inside diameter of 19 ft. 10 inches.		
Great Eastern .....	Constructed from junction with South-eastern Railway at Yamaska to River St. Francis.. 6 00		
	Constructed from Nicolet to Junction with Grand Trunk Railway at St. Grégoire .....	7 00	
		13 00	
Montreal and Sorel .....	Constructed from junction with Grand Trunk Railway at St. Lambert to Armstrong opposite to Sorel .....		44 67
Great Northern .....	Constructed from St. Andrews on Ottawa River to junction with C.P.R. at Lachute .. 7 00		
	Constructed from St. Jérôme to Ste. Julienne .. 18 00		25 00
Great North-west Central .....	Constructed from junction with C.P.R. at Chater, west- ward to Hamiota .....		50 93
Hereford .....	From International Boundary to Dudswell, County Wolfe, connects with Canadian Pacific Railway at Cookshire, and with Quebec Central at Dudswell ...	48 20	
	Dudswell to Lime Quarries (Dominion Lime Company)	4 80	
			53 00
Iroindale, Bancroft and Ottawa.	Constructed from junction with Grand Trunk Railway near Kinnmount Station to Iroindale .....		12 00
	Located to Bancroft, 50 miles .....		
Joggins .....	Maccan Station, I.C.R., to Joggins Mine .....		12 00
Kent Northern .....	Richibucto, N.B., to Intercolonial Railway .....	27 00	
	Richibucto to St. Louis .....	7 00	
			34 00
Kingston and Pembroke .....	Main Line—Kingston to Pembroke .....	103 00	
	Glendon Branch—Bedford to Zanesville .....	4 00	
	do do To Robertsville Mines .....	1 00	
Kingston and Pembroke .....	Glendon Branch—To Doran's Mills, Charcoal Works, McLaren's Mills, Bethune's Mines, Lavant Mills, Clyde Forks Mills and Francis Mills .....	4 75	
			112 75
Kingston, Napanee and Western.	(Connects with Grand Trunk at Kingston, Canadian Pacific at Sharbot Lake and at Renfrew.) Late Napanee, Tamworth and Quebec :—		
	Napanee to Tamworth .....	28 50	
	Yarker to Harrowsmith .....	7 00	
	Tamworth to Tweed .....	20 95	
			56 45

TABLE showing Locations of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
L'Assomption.....	L'Epiphanie Station, C.P.R., to L'Assomption.....		3 00
Lake Erie, Essex and Detroit River.....	From Walkerton, Ont., on G.T.R., to Leamington, on Canada Southern Railway.....		42 00
Lake Temiscamingue Colonization Railway.....	Between Mattawa and head of Lake Kippewa, in various sections.....		15 50
Lower Laurentian (formerly St. Lawrence, Lower Laurentian and Saguenay).....	From St. Tite, on C.P.R., to Rivière à Pierre, on Quebec and Lake St. John Railway.....		39 50
Manitoba and North-western.....	Portage la Prairie to Yorkton.....	223 05	
	Shell River Branch.....	11 45	
	Leased—Saskatchewan and Western—Minnedosa to Rapid City.....	15 47	
Massawippi Valley.....	From Lennoxville to Vermont boundary, there connecting with Connecticut and Passumpsic Rivers Railway; also connects with Grand Trunk and C.P.R. at Lennoxville		249 97
	Branch—Stanstead Junction to Stanstead.....	32 00	
		2 00	34 00
Montreal and Lake Maskinongé.....	From St. Félix to St. Gabriel de Brandon.....		13 00
Montreal and Vermont Junction.....	From Junction with Stanstead, Shefford and Chambly Railway, 2½ miles east of St. John's, P.Q., to Junction with Vermont and Canada Railway, at Vermont boundary; also connects at Stanbridge with Lake Champlain and St. Lawrence Junction Railway.....		23 60
Montreal and Western.....	Constructed from St. Jérôme, on C. P. R., to Ste. Agathe.....		30 50
Montreal and Ottawa.....	Vaudreuil Junction, C.P.R., to Rigaud.....		16 00
Montreal, Portland and Boston.....	Junction with Grand Trunk at St. Lambert to Farnham	32 00	
	Marieville to St. Césaire.....	8 60	40 60
New Brunswick and Prince Edward Island.....	From Sackville Station, Intercolonial Railway, to Cape Tormentine.....		36 00
Northern Pacific and Manitoba.....	Winnipeg to International boundary.....	65 30	
	Winnipeg to Portage la Prairie.....	52 50	
	Morris to Brandon.....	145 50	
	Connection with C. P. R. at Winnipeg.....	1 20	
Nosbonsing and Nipissing.....	From Lake Nosbonsing to Lake Nipissing.....		264 50
New Glasgow Iron, Coal and Railway Company.....	From Eureka Junction, on Intercolonial Railway, to Sunny Brae.....		5 50
Nova Scotia Central.....	From Middleton, on the Windsor and Annapolis Railway, to town of Lunenburg, on the Atlantic Coast, N. S.....		12 50
Orford Mountain.....	Eastman, on C. P. R., to Kingsbury, Que. (10 miles constructed).....		73 50
Ottawa and Gatineau Valley.....	Canadian Pacific Railway Station at Hull, Que., to Farrelton.....		26 50
Parry Sound Colonization.....	From Scotia, on Northern and Pacific Junction Railway, to Bear Lake.....		30 00
Pontiac and Renfrew.....	From Wyman's Station, on Pontiac Pacific Junction Railway, to Bristol Mines, County Pontiac, Que.....		20 00
Pontiac Pacific Junction.....	From Junction with Canadian Pacific Railway at Aylmer, Que., to Pembroke, Ont (Rails laid on 71 miles from Aylmer.)		4 25
Port Arthur, Duluth and Western.....	Port Arthur to International boundary (Connects with C. P. R. at Port Arthur and Fort William; 70 miles track laid.)		85 00
			85 50

# Railway Statistics.

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

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Qu'Appelle, Long Lake and Saskatchewan.....	From Canadian Pacific Railway at Regina, north-westerly to Prince Albert.....		254·50
Quebec and Lake St. John.....	Quebec to Roberval.....	191·00	
	Chambord Junction to Chicoutimi, 50 miles of which is completed.....	5·00	196·00
Quebec Central.....	Main Line—Sherbrooke to Harlaka Junction, Intercolonial Railway, 5 miles from Lévis, Que.....	137·50	
	Chaudière Branch—Beauce Junction to St. Francis..	15·00	
	Angus Branch—East Angus to Angus Mills.....	1·00	153·50
(Connects with Grand Trunk, Passumpsic and C.P.R. at Sherbrooke.)			
Quebec, Montmorenci and Charlevoix.....	Hedleyville, Parish of St. Roch, Quebec, to Ste. Anne.....		21·00
Stanstead, Shefford and Chambly.....	From Junction with Montreal and Vermont Junction Railway, near St. John's, Que., easterly to Waterloo (Connects with South-eastern, and Chapleau and St. Lawrence Junction Railways.)		43·00
Shore Line (formerly Grand 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 (10 miles under construction).....		37·00
Shuswap and Okanagan.....	From junction with Canadian Pacific Railway at Sicamous to Lake Okanagan.....		50·79
South-eastern.....	Main Line—West Farnham to Boundary Line.....	33·80	
	Northern Division—Sutton Junction to Sorel.....	95·50	
	Branch—Drummondville to Wheatland Bridge.....	7·60	
	Between Newport and Rickford—Part of Line in Canada.....	10·80	
	Lake Champlain and St. Lawrence Junction—Stanbridge to St. Guillaume.....	61·40	209·10
(Connects with Connecticut and Passumpsic Railway, Grand Trunk and Stanstead, Shefford and Chambly.)			
St. Catharines and Niagara Central.....	St. Catharines, Ont., to Niagara Falls.....		12·35
St. John Bridge and Railway Extension.....	Lies within the limits of the city of Portland, N.B., and connects the Intercolonial and New Brunswick Railways.....		1·75
St. John Valley and Rivère du Loup.....	From Fredericton, N.B., to Woodstock, N.B. (6 miles under construction).....		65·00
Salisbury and Harvey.....	Late Albert Railway—Salisbury to Albert.....	45·00	
	Branches to Mills.....	2·00	
	Hillsboro' to Gray's Island.....	1·00	
	Albert to Prescott.....	1·00	
	Stony Creek to Manganese Mine.....	1·25	50·25
Harvey Branch.....	Albert to Harvey.....		3·00
St. Lawrence and Adirondack.....	From Junction with Canada Atlantic near Valleyfield to International Boundary.....		20·22
Thousand Islands.....	Gananogue to Gananogue Station, G.T.R.....		4·08
Témiscouata.....	Rivière du Loup, Que., on Intercolonial, to Edmundston, N.B., on the New Brunswick Railway.....	81·00	
	Branch—Edmunston to Connors on St. John River...	32·00	113·00

TABLE showing Locations of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Tobique Valley.....	From Perth Centre on C.P.R. to Plasterrock (14 miles built).....		28 00
Toronto Belt Line.....	From Fairbank Junction on Grand Trunk to Don and from Carlton to Swansea.....		12 85
Waterloo Junction.....	Waterloo to Elmira.....		10 25
Western Counties.....	Yarmouth to Annapolis, N.S.....		87 00
Windsor and Annapolis.....	Windsor to Annapolis, N.S.....	84 00	
	Branch—Wilmot to Forbrook.....	3 50	
Leased Line.....	Windsor Branch—Windsor to Windsor Junction, Intercolonial Railway, 14 miles from Halifax.....	32 00	
			119 50
Wood Mountain and Qu'Appelle.....	From Canadian Pacific Railway, near Qu'Appelle Station, to Fort Qu'Appelle, thence north-westerly (17 miles under construction).....		110 00
Winnipeg and Hudson Bay.....	Winnipeg to Port Nelson on Hudson Bay..... (Constructed 40 miles, Winnipeg to St. Laurent on Lake Manitoba.)		650 00





# SUMMARY STATEMENTS



## No. 2.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construc- tion.	Iron Rails.	Steel Rails.		Iron Rails. Lbs.	Steel Rails. Lbs.
1	Alberta Railway and Coal Co. . . . .	174 12			174 12	12 31		28 30 35
2	Albert Southern . . . . . 17 00	20 00			20 00	50		56
	Harvey Branch . . . . . 3 00							
3	*Baie des Chaleux . . . . .	60 00	20 00		60 00	7 00		56
4	Bay of Quinte Railway and Navigation Co. . . . .	3 50			3 50	3 00		50
5	Brantford, Waterloo and Lake Erie . . . . .	17 00			17 00	66		56
6	Brockville, Westport & Sault Ste. Marie . . . . .	45 00			45 00	1 80		56
7	Buctouche and Moncton . . . . .	32 00			32 00	3 25		56
8	Calgary and Edmonton . . . . .	253 97	42 00		253 97	7 00		56
9	Canada Atlantic . . . . . 138	159 00			159 00	45 00		56 & 72
	Central Counties . . . . . 21							
10	Canada Eastern . . . . .	127 00			127 00	6 00		56 & 60
11	+Canada Southern . . . . .	378 91		32 12	346 79	141 13		60 65 80
12	Canadian Government Railways—							
	‡Intercolonial . . . . .	1141 00			1141 00	143 25		56 57 67
	Prince Edward Island . . . . .	210 60		125 40	85 20	15 70	40	50 & 52
13	§Canadian Pacific . . . . . 3563 40							
	Atlantic and North-West . . . . . 182 50							
	Manitoba South-Western Col- onization . . . . . 217 80							
	North Shore . . . . . 205 50							
	St. Lawrence and Ottawa . . . . . 58 40							
	Toronto, Grey and Bruce . . . . . 191 30							
	Ontario and Quebec . . . . . 463 80							
	Credit Valley . . . . . 175 10	5533 88		70 00	5463 88	639 93	45 & 56	54 to 72
	West Ontario Pacific . . . . . 26 60							
	Guelph Junction . . . . . 15 00							
	St. John and Maine . . . . . 91 80							
	New Brunswick . . . . . 175 68							
	New Brunswick and Canada . . . . . 117 20							
	Fredericton . . . . . 22 10							
	Columbia and Kootenay . . . . . 27 70							
14	Caraquet . . . . .	68 00			68 00	3 25		50
15	Carillon and Grenville . . . . .	13 00		13 00		25	65	
16	Central Ontario . . . . .	104 00			104 00			42 & 56
17	Central of New Brunswick . . . . .	74 66			74 66	2 50		52 & 56
18	Cornwallis Valley . . . . .	14 00			14 00	1 00		56
19	Cumberland Railway and Coal Co. . . . .	46 00			46 00	10 00		56 & 57
20	Drummond County . . . . .	62 81			62 81	3 20		56 & 60
21	Elgin, Petitecodiac and Havelock . . . . .	28 00			28 00	2 00		44 52 56
22	Erie and Huron . . . . .	75 75		1 75	74 00	4 90		54 & 56
23	Esquimalt and Nanaimo . . . . .	78 00			78 00	2 00		50 & 54
24	Fredericton and St. Mary's Railway and Bridge Co. . . . .	1 33			1 33	11		60
25	Grand Trunk . . . . . 883 25							
	Buffalo and Lake Huron . . . . . 162 00							
	Grand Trunk, Georgian Bay and Lake Erie . . . . . 172 75							
	Montreal & Champlain Junction . . . . . 61 75							81 25
	Beauharnois Junc. . . . . 19 50							
	Great Western . . . . . 540 75							

\* Not in operation.

† Double track 95 21 miles.

‡ Double track 1 50 miles.

# Railway Statistics.

Roads, &c., for the year ending 30th June, 1892.

Number of Ties per Mile.	Nature of Rail Fastening.	Number of Grain Elevators.		No. of Level crossings		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 lines.	Radius of Sharpest Curve.	No. of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
		Guarded.	Not guarded.	Guarded.	Not guarded.	Guarded.	Not guarded.								
								Feet.				Ft.		Ft.	
2640	Plain fishplates				10				1	2		573	52 8 3 0	1	
2640	do				11					2		955	120 4 8 1/2	2	
2600	do				16	3		22		1		717	67 4 8 1/2	3	
3000	do				11					1		400	90 4 8 1/2	4	
2700	do				18	1		20		2		955	39 6 4 8 1/2	5	
2640	Fisher bridge joint				35	1				2		717	58 4 8 1/2	6	
2640	Plain fishplates				18				1	1		955	73 4 8 1/2	7	
2600	Angle and plain plates				30					2		1146	53 4 8 1/2	8	
3000	Plain fishplates	6	105	3			22	6	4	1		2865	40 4 8 1/2	9	
2640	Angle and plain plates	1	30						1	4	1	955	80 4 8 1/2	10	
2800	do do	3	376	16			19	17	16	6		913	75 4 8 1/2	11	
2640	do do	1	9	429	29	18 1/2	to 35		6	24	20	694	65 4 8 1/2	12	
2640	do do			956	2		17 1/2					396	90 3 6		
2640 to 3168	Angle and plain plates	8	24	2681	79	20 to 22		46	67	48		500	237 4 8 1/2	13	
2600	Plain fishplates				34					1		1000	60 4 8 1/2	14	
1760	Chairs	1			8	1		17				1910	100 5 6	15	
2640	Plain fishplates				94				4	4		955	105 4 8 1/2	16	
2640	do				40					2		955	74 4 8 1/2	17	
2600	do				21					1		955	75 4 8 1/2	18	
2600	do				13					1		829	160 4 8 1/2	19	
2640	Angle and plain plates				37				1	2	1	717	66 4 8 1/2	20	
2200	Plain fishplates				22				1	1			90 4 8 1/2	21	
2240	do				108				4	5		661	52 4 8 1/2	22	
2992	Angle and fishplates				15	2		23				574	80 4 8 1/2	23	
2564	Angle plates				1					2		1433	50 4 8 1/2	24	

§ Double track 11·85 miles.

376 1/2 miles of double track.

No. 2.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construc- tion.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
							Lbs.	Lbs.
	London and Port Stanley ... 23·84							
	Wellington, Grey and Bruce 168·13							
	London, Huron and Bruce .. 69·01							
	Brantford, Norfolk and Port Burwell ..... 34·78							
	Waterloo Junction ..... 10·25	3157·63		141·00	3016·63	645·50	56	
	Midland ..... 173·97						56 to 79	
	Toronto and Nipissing ..... 111·50							
	Grand Junction ..... 85·40							
	Whitby, Port Stanley and Lindsay ..... 46·50							
	Victoria ..... 53·25							
	Northern ..... 205·48							
	Northern and Pacific Junc. 111·37							
	Hamilton & North-Western 173·90							
	South Norfolk ..... 17·00							
	Cobourg, Blairton & Marmora 18·00							
	Madoc Junc. to Bridgewater 8·75							
	Jacques Cartier Union ..... 6·50							
26	Great Eastern ..... 13·00				13·00	1·00	56	
	Montreal and Sorel ..... 44·67	57·67			44·67	3·33	56	
27	Great Northern ..... 25·00				25·00		56	
28	Great North-West Central ..... 50·93				50·93	2·55	56	
29	Hereford ..... 53·00				53·00	5·51	56	
30	*Irondale, Bancroft and Ottawa ..... 12·00		8·00		12·00		56	
31	Joggins ..... 12·00				12·00	1·00	56	
32	Kent Northern ..... 34·00			3·50	30·50	3·25	56	
33	Kingston and Pembroke ..... 112·75			9·75	103·00	21·00	50 to 84	
34	Kingston, Napanee and Western ..... 56·45				56·45	4·00	56	
35	L'Assomption ..... 3·00				3·00	25	56	
36	Lake Erie and Detroit River ..... 42·00				42·00	3·04	56	
37	Lake Temiscamingue Colonization ..... 15·50				15·50		16 & 30	
38	Lower Laurentian ..... 39·50				39·50	2·00	56	
39	Manitoba and North-Western 234·50							
	Saskatchewan and Western .. 15·47	249·97			249·97	23·48	56	
40	Massawippi Valley ..... 34·00				34·00	2·50	50 & 60	
41	Montreal and Lake Maskinonge ..... 13·00				13·00	50	56	
42	Montreal and Ottawa ..... 16·00				16·00	30	56	
43	Montreal and Vermont Junc ..... 23·60				23·60	2·00	60 & 72	
44	Montreal, Portland and Boston ..... 40·60				40·60	1·40	56	
45	*Montreal and Western ..... 30·50		22·00		30·50	1·00	56	
46	New Brunswick and P. E. Island ..... 36·00				36·00	1·50	56	
47	*New Glasgow Iron, Coal and Ry. Co ..... 12·50				12·50	75	56	
48	Northern Pacific and Manitoba ..... 264·50				264·50	16·00	56	
49	Nosbonsing and Nipissing ..... 5·50				5·50	1·25	56	
50	Nova Scotia Central ..... 73·50				73·50	2·50	56	
51	*Orford Mountain ..... 10·00		16·00		10·00	50	56	
52	Ottawa and Gatineau Valley ..... 30·00		10·00		30·00	75	56	
53	*Parry Sound Colonization ..... 20·00				20·00	1·00	56	
54	Pontiac and Renfrew ..... 4·25				4·25	75	56	
55	Pontiac Pacific Junction ..... 61·00		10·00		61·00	3·00	56	
56	*Port Arthur, Duluth and Western ..... 70·00		15·50		70·00	4·00	56	

\* Not in operation.

# Railway Statistics.

Roads, &c., for the year ending 30th June, 1892—Continued.

Number of Ties per Mile.	Nature of Rail Fastening.	Number of Grain Elevators.		No. of Level crossings	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 lines.	Radius of Sharpest Curve.	No. of Feet per Mile of heaviest gradient.	Gauge of Railway.	
		Guarded.	Not guarded.									Ft.	Number.
2640	Angle and plain plates	12	77,2678	237	15 to 28	59	63	88	600	105	4	8½	25
2640	Plain fishplates		6				1	3	2865	26	4	8½	26
2640	do		12				1	2	2292	53	4	8½	
2640	do		18					2	1237	53	4	8½	27
2640	do							1	955	60	4	8½	28
2800	do		28				2	3	955	66	4	8½	29
2640	do		3					1	1000	60	4	8½	30
3000	do		4				1	1	958	79	4	8½	31
2432	do		8					1	1000	60	4	8½	32
2640	Angle and plain fishplates		55	4	16 & 21	4	4	13	955	79	4	8½	33
3000	do		36					3	882	88	4	8½	34
2500	Plain fishplates		1					1	955	20	4	8½	35
2600	Angle plates		43	1	19½	4	3		1433	60	4	8½	36
2640	Plain fishplates		25				2	1	917	105	4	8½	37
2700	do	16	180				2	2	955	105	4	8½	38
2800	do	1	19	1	19	1	2	1	442	76	4	8½	39
2640	do		9				1		955	52	4	8½	40
2600	Angle plates		19				1		1146	48	4	8½	41
2640	Angle and plain plates		50				2			52	4	8½	42
3000	Plain fishplates						1	2		52	4	8½	43
2640	do		19				1		574	106	4	8½	44
2400	do		26				1		1000	66	4	8½	45
2640	do		5				1	1	955	80	4	8½	46
2640	do	12	175			5	2	2	573	63	4	8½	47
2600	do		1				1		955	132	4	8½	48
2640	Angle plates		23	1	21		1		819	80	4	8½	49
2640	Plain fishplates		7				1		955	74	4	8½	50
2640	Angle and plain plates		24				1		573	106	4	8½	51
2640	Plain plates		8				1		955	55	4	8½	52
2640	do						1		717	106	4	8½	53
2640	Angle plates		47				2		1146	53	4	8½	54
2640	Plain fishplates		5				3	1	574	95	4	8½	55

## No. 2.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Siding.	Weight per Yard.	
		Completed. (Rails laid.)	Under Construc- tion.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
							Lbs.	Lbs.
57	Qu'Appelle, Long Lake & Saskatchewan.	254' 00			254' 00	6' 50		56
58	Quebec and Lake St. John	196' 00	20' 00		196' 00	12' 00		56 & 60
59	Quebec Central	153' 50		1' 00	152' 50	10' 75		56
60	Quebec, Montmorency and Charlevoix.	21' 00			21' 00	1' 50		56
61	Salisbury and Harvey	45' 00		39' 00	6' 00	5' 25	56	56
62	Shore Line	82' 50			82' 50	2' 50		50
63	Shuswap and Okanagan	50' 79			50' 79	3' 38		56
64	Stanstead, Shefford and Chambly	43' 00		29' 00	14' 00	5' 50	60	60
65	St. Catharines and Niagara Central	12' 35			12' 35	' 65		56
66	*St. Clair Tunnel, Yard & Approach	2' 22				10' 00		100
67	St. John Bridge & Ry. Extension Co.	1' 75			1' 75			60
68	†St. John Valley and Rivière du Loup.		6' 00					
69	St. Lawrence and Adirondack	20' 22			20' 22	' 90		72
70	South-Eastern	147' 70						
	Lake Champlain and St. Lawrence Junction	61' 40						
		209' 10		68' 60	140' 50	32' 50	35 to 56	56 60 70
71	†Stewiacke Valley and Lansdowne		10' 00					
72	Temiscouata	113' 00			113' 00	5' 00		56
73	Thousand Islands	4' 08			4' 08	1' 00		56
74	†Tobique Valley	14' 00	14' 00		14' 00	' 25		56
75	†Toronto Belt Line	12' 85			12' 85	2' 25		65
76	Western Counties	87' 00		58' 00	29' 00	4' 50	56	56
77	Windsor and Annapolis	87' 50						
	Windsor Branch	32' 00						
		119' 50		15' 25	104' 25	5' 00	56 & 67	56 & 60
78	†Winnipeg and Hudson Bay	40' 00			40' 00	2' 00		56
79	†Wood Mountain and Qu'Appelle		17' 00					
	Total	14869' 74	210' 50	607' 37	14262' 37	1922' 78		

\*Length of tunnel, 6000 ft., inside diameter, 19 ft. 10 in. †Only under construction. ‡Not in operation.

# Railway Statistics.

Roads, &c., for the year ending 30th June, 1892—*Concluded.*

Number of Ties per Mile.	Nature of Rail Fastening.	Number of Grain Elevators.		No. of Level crossings		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 lines.	Radius of Sharpest Curve.	No. of Feet per Mile of heaviest gradient.	Gauge of Railway.	Number.
		Guarded.	Not Guarded.	Guarded.	Not Guarded.									
							Feet.				Ft.		Ft.	
2600	Angle plates	1	2	18	3				1	2	1146	65 4 8 $\frac{1}{2}$	57	
2640	do			26				2	3	2	717	106 4 8 $\frac{1}{2}$	58	
2640	Plain fishplates		1	26					5	1	882	76 4 8 $\frac{1}{2}$	59	
2640	do			5	1	22			1		1433	53 4 8 $\frac{1}{2}$	60	
2600	do and sleeves			31					2			80 4 8 $\frac{1}{2}$	61	
2992	do			15	5	23		3	3		573	85 4 8 $\frac{1}{2}$	62	
2640	do			12					1		636	57 4 8 $\frac{1}{2}$	63	
2400	do and chairs			42				3	4			60 4 8 $\frac{1}{2}$	64	
2600	do			17	2	22		2	2		717	85 4 8 $\frac{1}{2}$	65	
2600	Plain fishplates		1	3						2		106 4 8 $\frac{1}{2}$	66	
2640	Angle plates			15				1	2		1433	53 4 8 $\frac{1}{2}$	68	
2640	Angle and plain plates		1	220	2	19 & 19 $\frac{1}{2}$		8	9	3	819	86 4 8 $\frac{1}{2}$	70	
2640	Plain fishplates			38				1	2		819	79 4 8 $\frac{1}{2}$	71	
3000	do			8					1		660	84 4 8 $\frac{1}{2}$	72	
2600	do			12					1		717	78 4 8 $\frac{1}{2}$	74	
2640	Angle plates		2	16	5	21 to 30		2	5		717	179 4 8 $\frac{1}{2}$	75	
2600	do		1	1							600	84 4 8 $\frac{1}{2}$	76	
2640	do			69	1	32			4	1	693	75 4 8 $\frac{1}{2}$	77	
2640	do			6						1		4 8 $\frac{1}{2}$	78	
														79
			50	131	9232	401		193	310	193				

## No. 3.—SUMMARY STATEMENT of the different descriptions of

Number.	Name of Railway.	Length of Line.		Number of Engines.		Number of Sleeping Cars.		Number of Palace or Drawing Room Cars.	
		Completed.	Under Construction.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
1	Alberta Railway and Coal Co.....	174	12	18					
2	Albert Southern.....17	20	00	2					
	Harvey Branch.....3)								
3	Baie des Chaleurs.....	60	00	20	00	4			
4	Bay of Quinte Railway and Navigation Co.....	3	50	3	5				
5	Brantford, Waterloo and Lake Erie.....	17	00	2					
6	Brockville, Westport and Sault Ste. Marie.....	45	00	2					
7	Buctouche and Moncton.....	32	00	2					
8	Calgary and Edmonton.....	253	97	42	00				
9	Canada Atlantic.....138	159	00	21					
	Central Counties.....21)								
10	Canada Eastern.....	127	00	8					
11	Canada Southern.....	378	91	128					
12	Canadian Government Railways:—								
	Intercolonial.....	1,141	00	206		15		*	5
	Prince Edward Island.....	210	60	21					
13	Canadian Pacific.....3,563	40							
	Atlantic and North-west.....	182	50						
	Manitoba and South-western Colonization.....	217	80						
	North Shore.....	205	50						
	St. Lawrence and Ottawa.....	53	40						
	Toronto, Grey and Bruce.....	191	30						
	Ontario and Quebec.....	463	80						
	Credit Valley.....	175	10	5,533	88	572	*17	111	*7
	West Ontario Pacific.....	26	60						In former.
	Guelph Junction.....	15	00						
	St. John and Maine.....	91	80						
	New Brunswick.....	175	68						
	New Brunswick and Canada.....	117	20						
	Fredericton.....	22	10						
	Columbia and Kootenay.....	27	70						
14	Caraguet.....	68	00	3					
15	Carillon and Grenville.....	13	00	3					
16	Central Ontario.....	104	00	9					
17	Central of New Brunswick.....	74	66	1	2				
18	Cornwallis Valley.....	14	00	1					
19	Cumberland Railway and Coal Co.....	46	00	8					
20	Drummond County.....	62	81	4					
21	Elgin, Petibodiack and Havelock.....	28	00	2					
22	Erie and Huron.....	75	75	6					
23	Esquimalt and Nanaimo.....	78	00	5					
24	Fredericton and St. Mary's Railway Bridge Co.....	1	33						
25	Grand Trunk.....883	25							
	Buffalo and Lake Huron.....	162	00						
	G. T., Georgian Bay and Lake Erie.....	172	75						
	Montreal and Champlain Junction.....61	75							
	Beauharnois Junction.....19	50		81	25				
	Great Western.....	540	75						
	London and Port Stanley.....	23	84						
	Wellington, Grey and Bruce.....	168	13						
	London, Huron and Bruce.....	69	01						
	Brantford, Norfolk and Port Burwell.....	34	78						
	Waterloo Junction.....	10	25						
	Midland.....	173	97	3,157	63	722		*5	6
	Toronto and Nipissing.....	111	50						
	Grand Junction.....	85	40						
	Whitby, Port Perry and Lindsay.....	46	50						

# Railway Statistics.

Rolling Stock, for the Year ended 30th June, 1892.

Number of First Class Cars.		Number of Second Class and Emigrant Cars.		Number of Baggage, Mail and Express Cars.		Number of Cattle and Box Freight Cars.		Number of Platform Cars.		Number of Hooper and Dumping Cars.		Remarks.
Owued.	Hired.	Owued.	Hired.	Owued.	Hired.	Owued.	Hired.	Owued.	Hired.	Owued.	Hired.	
4		3				26		4		*310		1 *Coal cars.
	1					2		7				2
2		1		2		5		45				3 Not in operation.
1	9					20		15	77	24		4
1		1		2		2		6				5
1	1	1		1		20		10	14			6
1		1				1		20				7
												8 Operated by Can. Pac. Ry.
5		4		5		510	1300	337		*6		9 *Coal cars.
5		2		2		12		78	4			10
40		17		30		2027		294		*169		11 *Including 48 coal cars.
92		101		63		2174		2130		*2264		12 Including 999 coal cars.
17		15		4		178		*125				*Including coal cars.
178	*5	159		166	11	10806	1100	3331		471		13 *Special trust. also 772 vans, tool cars, snow ploughs, &c., owned by Co. 42 do do Special trust.
1		1		2		4		16				14
2		3		1		3		3				15
2		3		3		34		94				16
1	2					6		22			2	17
1		1				8		12				18
2		2		2				27		186		19
1		2		1		9		20				20
2		1		1		1		9				21
8				3		29		12				22
11				3		12		72		10		23
												24
390		225		214		16014		6568				25 *Colonist sleeping cars.



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

Number.	Name of Railway.	Length of Line.		Number of Engines.		Number of Sleeping Cars.		Number of Palace or Drawing Room Cars.	
		Completed.	Under Construction.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
	Victoria .....	53 25							
	Northern .....	205 48							
	Northern and Pacific Junction .....	111 37							
	Hamilton and North-western .....	173 90							
	South Norfolk .....	17 00							
	Cobourg, Blairton and Marmora .....	18 00							
	Madoc Junction to Bridgewater .....	8 75							
	Jacques Cartier Union .....	6 50							
26	Great Eastern .....	13 00	57 67	1	3				
	Montreal and Sorel .....	44 67 f							
27	Great Northern .....		25 00		1				
28	Great North-west Central .....		50 93		2				
29	Hereford .....		53 00						
30	Irondale, Bancroft and Ottawa .....		12 00	8 00	1				
31	Joggins .....		12 00		2				
32	Kent Northern .....		34 00		2	1			
33	Kingston and Pembroke .....		112 75		10				
34	Kingston, Napanee and Western .....		56 45		5				
35	L'Assomption .....		3 00		1				
36	Lake Erie and Detroit River .....		42 00		4				
37	Lake Temiscamingue Colonization .....		15 50		2				
38	Lower Laurentian .....		39 50		2				
39	Manitoba and North-western .....	234 50	249 97	5	4				
	Saskatchewan and Western .....	15 47 f							
40	Massawippi Valley .....		34 00						
41	Montreal and Lake Maskinongé .....		13 00						
42	Montreal and Ottawa .....		16 00		1				
43	Montreal and Vermont Junction .....		23 60						
44	Montreal, Portland and Boston .....		40 60						
45	Montreal and Western .....		30 50	22 00					
46	New Brunswick and Prince Edward Island .....		36 00		3				
47	New Glasgow Iron, Coal and Railway Co. ....		12 50		2				
48	Northern Pacific and Manitoba .....		264 50		9				
49	Nosbonsing and Nipissing .....		5 50		1				
50	Nova Scotia Central .....		73 50		5				
51	Orford Mountain .....		10 00	16 00		1			
52	Ottawa and Gatineau Valley .....		30 00	10 00	1	3			
53	Parry Sound Colonization .....		20 00		2				
54	Pontiac and Renfrew .....		4 25		1				
55	Pontiac Pacific Junction .....		61 00	10 00	4				
56	Port Arthur and Western .....		70 00	15 50	3				
57	Qu'Appelle, Long Lake and Saskatchewan .....		254 00						
58	Quebec and Lake St. John .....		196 00	20 00	14	2	In former.		
59	Quebec Central .....		153 50		12				
60	Quebec, Montmorency and Charlevoix .....		21 00		3				
61	Salisbury and Harvey .....		45 00		2				
62	Shore Line .....		82 50		5				
63	Shuswap and Okanagan .....		50 79						
64	Stanstead, Shefford and Chambly .....		43 00		6				
65	St. Catharines and Niagara Central .....		12 35		2				
66	St. Clair Tunnel, yard and approaches .....		2 22		4				



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

Number.	Name of Railway.	Length of Line.		Number of Engines.		Number of Sleeping Cars.		Number of Palace or Drawing Room Cars.	
		Completed.	Under Construction.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
		67	St. John Bridge and Railway Extension Co. ....	1 75					
68	St. John Valley and Rivière du Loup. ....		6 00						
69	St. Lawrence and Adirondack. ....	20 22							
70	South Eastern. ....	147 70							
	Lake Champlain and St. Lawrence Junction. ....	61 40		30		2	In former ..		
71	Stewiacke Valley and Lansdowne. ....		10 00						
72	Temiscouata. ....	113 00		5					
73	Thousand Islands. ....	4 08		1					
74	Tobique Valley. ....	14 00	14 00						
75	Toronto Belt Line. ....	12 85							
76	Western Counties. ....	87 00		5					
77	Windsor and Annapolis. ....	87 50							
	Windsor Branch. ....	32 60		13				2	
78	Winnipeg and Hudson Bay. ....	40 00							
79	Wood Mountain and Qu'Appelle. ....		17 00						
	Total. ....	14,869 74	210 50	1922	39	135	7	13	....

# Railway Statistics.

**Rolling Stock, for the Year ended 30th June, 1892—Concluded.**

Number of First Class Cars.		Number of Second Class and Emigrant Cars.		Number of Baggage, Mail and Express Cars.		Number of Cattle and Box Freight Cars.		Number of Platform Cars.		Number of Hopper and Dumping Cars.		Remarks.
Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	
												68 Only under construction.
												69 Operated by Central Vermont Ry.
9	15	8		6	4	61	371	248	100	50		70
												71 Only under construction.
3		4		2		40		54				72
1								1				73
												74 Not in operation.
												75 do
4				4		16		61				76
7		6		9		80		127		20		77
												78 do
												79 Only under construction.
870	39	632	2	575	16	32676	2992	15205	195	3582	2	

## No. 4.—SUMMARY STATEMENT of the Operations of the year

Number.	Name of Railway.	Mileage.	TRAIN MILEAGE.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
1	Alberta Railway and Coal Co. ....	174 12		116,148	79,570	195,718
2	Albert Southern .....	17 00			266	266
	Harvey Branch .....	3 00				
3	Bay of Quinté Navigation Co. ....	3 50	19,032	47,157		66,189
	Kingston, Napanee & Western. 56 45	59 95				
4	Brantford, Waterloo and Lake Erie .....	17 00			25,000	25,000
5	Brockville, Westport and Sault Ste. Marie. ....	45 00	1,360	124	28,002	29,486
6	Buctouche and Moncton .....	32 00			21,952	21,952
7	Calgary and Edmonton .....	253 97			37,504	37,004
8	Canada Atlantic .....	138	159 00	204,974	243,120	13,090
	Central Counties .....	21				461,184•
9	Canada Eastern .....	127 00	40,860	10,287	70,357	121,504
10	Canada Southern .....	378 91	1,214,222	2,148,410	158,350	3,520,982
11	Canadian Government Railways—					
	Intercolonial .....	1,141 00	1,355,893	3,247,258	in foregoing	4,703,151
	Prince Edward Island .....	210 60	74,763	167,966	do	242,729
12	Canadian Pacific. ....	3,563 40				
	Atlantic and North-west .....	182 50				
	Manitoba and South-western					
	Colonization .....	217 80				
	North Shore .....	205 50				
	St. Lawrence and Ottawa .....	58 40				
	Toronto, Grey and Bruce .....	191 30				
	Ontario and Quebec .....	463 80				
	Credit Valley .....	175 10	5,533 88	5,373,824	7,940,081	981,069
	West Ontario Pacific .....	26 60				14,294,974
	Guelph Junction .....	15 00				
	St. John and Maine .....	91 80				
	New Brunswick .....	175 68				
	New Brunswick and Canada. ....	117 20				
	Fredericton .....	22 18				
	Columbia and Kootenay .....	27 70				
13	Caraquet .....	68 00			28,500	28,500
14	Carillon and Grenville .....	13 00	8,500	500		9,000
15	Central Ontario .....	104 00	64,896	20,208	64,896	150,000
16	Central of New Brunswick .....	74 66			50,600	50,600
17	Cornwallis Valley .....	14 00			10,023	10,023
18	Cumberland Railway and Coal Co. ....	46 00	in following	63,214	in foregoing	63,214
19	Drummond County .....	62 81	38,400		33,096	71,496
20	Elgin, Petitecodiac and Havelock .....	28 00			16,794	16,794
21	Erie and Huron .....	75 75	47,849	46,021	42,390	135,900
22	Esquimalt and Nanaimo .....	78 00	in following	122,496	in foregoing	122,496
23	Fredericton & St. Mary's Ry. & Bridge Co. ....	1 33				
24	Grand Trunk .....	883 25				
	Buffalo and Lake Huron .....	162 00				
	Grand Trunk, Georgian Bay &					
	Lake Erie .....	172 75				
	Montreal & Champlain					
	Junc. ....	61 75			81 25	
	Beauharnois Junc. ....	19 50				
	Great Western .....	540 75				
	London and Port Stanley .....	23 84				
	Wellington, Grey and Bruce .....	168 13				
	London, Huron and Bruce .....	69 01				
	Brantford, Norfolk and Port					
	Burwell .....	34 78	3,157 63	5,424,598	8,988,806	2,328,486
	Waterloo Junc. ....	10 25				16,741,890
	Midland .....	173 97				
	Toronto and Nipissing .....	111 50				
	Grand Junction .....	85 40				
	Whitby, Pt. Perry & Lindsay. ....	46 50				

# Railway Statistics.

and Mileage, for the year ended 30th June, 1892.

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handed.	Average Rate of Speed of Passenger Trains—Miles per Hour.	Average Rate of Speed of Freight Trains—Miles per Hour.	Number.	Remarks.
247,990	3,043	135,356	.....	14	1	
266	30	391	.....	19	2	
66,189	57,513	129,863	24	17	3	
25,000	20,473	14,599	20	15	4	
30,132	42,290	8,638	.....	.....	5	
21,952	9,660	8,363	.....	.....	6	
37,601	3,996	7,155	.....	.....	7	
543,921	134,855	553,713	35	15	8	
124,634	33,665	56,978	25	15	9	
4,574,407	623,342	3,174,065	40	20	10	
5,641,880	1,297,732	1,264,575	25	15	11	
307,421	139,389	51,064	20	14		
18,423,631	3,150,684	4,068,575	27	17	12	
30,000	6,898	10,726	18	18	13	
9,500	8,590	350	25	20	14	
150,000	53,602	72,500	20	15	15	
50,600	12,836	11,338	17	17	16	
10,332	16,739	9,111	.....	.....	17	
143,530	23,421	453,853	20	20	18	
71,496	20,866	48,148	25	20	19	
16,794	6,621	11,104	16	16	20	
163,005	104,013	89,312	25	18	21	
122,496	38,548	52,834	20	12	22	
.....	5,390	23,139	.....	.....	23	
22,488,233	5,899,096	8,249,038	30	18	24	

## No. 4.—SUMMARY STATEMENT of the Operations

Number.	Name of Railway.	Mileage.	TRAIN MILEAGE.				
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.	
	Victoria . . . . .	53 25					
	Northern . . . . .	205 48					
	Northern and Pacific Junc. . . . .	111 37					
	Hamilton and North-western . . . . .	173 90					
	South Norfolk . . . . .	17 00					
	Cobourg, Blairton & Marmora . . . . .	18 00					
	Madoc Junc. to Bridgewater . . . . .	8 75					
	Jacques Cartier Union . . . . .	6 50					
25	St. Clair Tunnel . . . . .	2 22					
26	Great Eastern . . . . .	13 00					
	Montreal and Sorel . . . . .	44 67					
27	Great Northern . . . . .	25 00			5,008	5,008	
28	Great North-west Central . . . . .	50 93	114	2,672	5,762	8,548	
29	Hereford . . . . .	53 00	41,300	47,460	in foregoi	88,760	
30	Joggins . . . . .	12 00		1,500	11,500	13,000	
31	Kent Northern . . . . .	34 00			18,366	18,366	
32	Kingston and Pembroke . . . . .	112 75	95,000		120,000	215,000	
33	L'Assomption . . . . .	3 00			3,960	3,960	
34	Lake Erie and Detroit River . . . . .	42 00	48,500	14,500	23,788	86,788	
35	Lake Temiscamingue Colonization . . . . .	15 50					
36	Lower Laurentian . . . . .	39 50			14,980	14,980	
37	Manitoba and North-western . . . . .	234 50					
	Saskatchewan and Western . . . . .	15 47	249 97	89,656	65,759	5,328	160,743
38	Massawippi Valley . . . . .	34 00	72,286	113,013	15,146	200,445	
39	Montreal and Lake Maskinongé . . . . .	13 00					
40	Montreal and Ottawa . . . . .	16 00			11,564	11,564	
41	Montreal, Portland and Boston . . . . .	40 60	25,338	18,096	7,552	50,986	
42	Montreal and Vermont Junc. . . . .	23 60	85,016	103,318	3,610	191,944	
43	New Brunswick and P. E. Island . . . . .	36 00	4,140	7,952	22,704	34,796	
44	Northern Pacific and Manitoba . . . . .	264 50	101,744	110,053	34,840	246,637	
45	Nosbonsing and Nipissing . . . . .	5 50		12,800		12,800	
46	Nova Scotia Central . . . . .	73 50			61,860	61,860	
47	Ottawa and Gatineau Valley . . . . .	10 00			6,086	6,086	
48	Pontiac and Renfrew . . . . .	4 25					
49	Pontiac Pacific Junc. . . . .	61 00			42,254	42,254	
50	Qu'Appelle, Long Lake & Saskatchewan . . . . .	254 00		363	52,605	52,968	
51	Quebec and Lake St. John . . . . .	196 00	104,455	79,898	in foregoi	184,353	
52	Quebec Central . . . . .	153 50	143,418	104,198	47,824	295,440	
53	Quebec, Montmorency and Charlevoix . . . . .	21 00	47,153	4,116		51,269	
54	Salisbury and Harvey . . . . .	45 00			33,319	33,319	
55	Shore Line . . . . .	82 50			56,332	56,332	
56	Shuswap and Okanagan . . . . .	50 79			3,060	3,060	
57	Stanstead, Shefford and Chambly . . . . .	43 00	38,514	41,291	19,838	99,643	
58	St. Catharines and Niagara Central . . . . .	12 35	12,000		6,000	18,000	
59	St. John Bridge and Ry. Extension . . . . .	1 75					
60	St. Lawrence and Adirondack . . . . .	20 22	11,721	5,580	8,085	25,386	
61	South-Eastern . . . . .	147 40					
	Lake Champlain and St. Law- rence Junc. . . . .	61 40	209 10	245,377	276,528	69,250	591,155
62	Temiscouata . . . . .	113 00		1,130	70,238	71,368	
63	Thousand Islands . . . . .	4 08		13,392	2,512	5,024	20,928
64	Western Counties . . . . .	87 00	53,622	2,610	36,533	92,765	
65	Windsor and Annapolis . . . . .	87 50					
	Windsor Branch . . . . .	32 00	119 50	134,406	122,999	in foregoi	257,405
	Totals . . . . .	14,587 89	15,237,093	24,399,014	4,612,361	44,448,468	

# Railway Statistics.

of the year and Mileage, &c.—*Concluded.*

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.
					25	
					26	Not operated during last 12 months.
					27	Trains run by Canadian Pacific Railway.
5,008	3,730	5,337			28	
8,993	2,443	7,171	23	19	29	
88,760	13,625	78,126			30	
17,000	10,147	51,393	15	15	31	
18,366	4,025	12,132	18	18	32	
260,000	46,273	78,682	25	15	33	
3,960	6,079	1,064	15	25	34	
130,185	73,739	138,540	35	25	35	
		2,192			36	For 6 months ending 30th June, 1892.
14,980	4,421	5,529	20	20	37	
204,366	32,227	80,193	27	15	38	
200,445	68,187	152,278	24	12	39	The Company have failed to respond to numerous applications for their Return.
					40	
14,065	23,205	2,480	20	20	41	
50,986	51,406	20,666	23	12	42	
191,944	119,964	728,123	30	12	43	
37,499	17,440	34,016	20	18	44	
289,129	45,497	121,131	25	13	45	
13,600		154,570			46	
61,860	51,347	16,067	20	20	47	
6,086	10,075	5,421	25	25	48	
		4,917			49	
45,016	16,894	19,028	20	20	50	
53,542	5,356	12,556			51	
225,507	84,736	111,497	22	12	52	
316,001	127,858	138,950	25	15	53	
52,808	190,875	4,996	20	15	54	
36,721	10,757	24,056			55	
57,897	13,042	12,646	24	18	56	
3,060	1,287	2,400			57	
99,643	131,638	742,305	23	12	58	
18,000	25,719	41,620	25	20	59	Operated by Canadian Pacific Railway.
	117,659	127,224			60	Operated by Central Vermont Ry. from 11th January to 30th June, 1892.
25,890	9,935	6,581	30	15	61	
681,559	241,639	566,297	28	18	62	
					63	
72,300	16,921	24,294	20	17	64	
20,928	19,306	16,763	15	15	65	
109,734	68,063	23,979	27	20		
257,405	154,607	119,915	22	14		
56,994,253	13,533,414	22,189,923				



## No. 5.—SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live Number.						
			Barrels.	Tons.	Bushels.	Tons.							
1	Alberta Railway and Coal Co. ....	174 12	6,760	676	14,421	252	205						
2	Albert Southern ..... 17 00	20 00											
	Harvey Branch ..... 3 00												
3	Bay of Quinté Navigation Co. ... 3 50	59 95	48,520	4,755	160,800	4,020	217						
	Kingston, Napanee & West- ern ..... 56 45												
4	Brantford, Waterloo and Lake Erie....	17 00	5,640	564	90,000	2,700	24						
5	Brockville, Westport & Sault Ste. Marie	45 00	6,954	695	30,011	970	3,322						
6	Buctouche and Moncton .....	32 00											
7	Calgary and Edmonton .....	253 97	5,147	514	47,585	973	670						
8	Canada Atlantic ..... 138 00	159 00	207,520	20,752		87,330							
	Central Counties. .... 21 00												
9	Canada Eastern .....	127 00	45,035	4,503	49,225	838	1,075						
10	Canadian Southern .....	378 91	1,696,050	169,605	29,520,116	689,244							
11	Canadian Government Rys.—												
	Intercolonial .....	1,141 00	954,015	95,401	3,776,677	79,040	87,889						
	Prince Edward Island .....	210 60	15,633	1,564	620,465	10,649	8,541						
12	Canadian Pacific ..... 3,563 40												
	Atlantic and North-west. ... 182 50												
	Manitoba and South-west- ern Colonization .....	217 80											
	North Shore .....	205 50											
	St. Lawrence and Ottawa. ... 58 40												
	Toronto, Grey and Bruce. ... 191 30												
	Ontario and Quebec .....	463 80											
	Credit Valley .....	175 10	5,533 88	2,355,433	235,542	28,528,163	724,868	335,954					
	West Ontario Pacific .....	26 60											
	Guelph Junction .....	15 00											
	St. John and Maine .....	91 80											
	New Brunswick .....	175 68											
	New Brunswick and Canada	117 20											
	Fredericton .....	22 10											
	Columbia and Kootenay ... 27 70												
13	Caraget.....	68 00							5,000	500	5,000	87	50
14	Carillon and Grenville .....	13 00											
15	Central Ontario .....	104 00	18,200	1,820	92,000	2,760	2,140						
16	Central of New Brunswick...	74 66											
17	Cornwallis Valley .....	14 00	2,660	266		47	14						
18	Cumberland Ry. and Coal Co. ....	46 00	13,424	1,342	9,848	167	17						
19	Drummond County .....	62 81	1,370	137									
20	Elgin, Petitecodiac and Havelock.....	28 00	2,970	297	3,907	66	1,202						
21	Erie and Huron .....	75 75	150,803	15,080	484,852	13,790	5,249						
22	Esquimalt and Nanaimo .....	78 00	2,700	300	1,064	56	2,984						
23	Fredericton and St. Mary's Ry. & Bridge Co. ....	1 33											
24	Grand Trunk .....	883 25											
	Buffalo and Lake Huron... 162 00												
	G. T., Georgian Bay and Lake Erie .....	172 75											
	Montreal and Cham- plain Junction... 61 75	81 25											
	Beauharnois Junc. 19 50												
	Great Western .....	540 75											
	London and Port Stanley.. 23 84												
	Wellington, Grey and Bruce	168 13											
	London, Huron and Bruce.. 69 01												
	Brantford, Norfolk and Port Burwell .....	34 78											

# Railway Statistics.

Freight Carried for the Year ended 30th June, 1892.

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manu- factured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
	Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.		
175	1,122,000	2,244			2,113	*129,896	135,356	1	*Including 129,666 tons of coal.
	172,000	390					391	2	
1,086	26,430,000	39,745	12,269	24,539	12,856	42,862	129,863	3	
25	451,200	769	984	1,291	650	8,600	14,599	4	
1,060	582,000	897			3,997	1,019	8,638	5	
	5,865,000	1,716	2,320	3,480		3,167	8,363	6	
280	1,009,368	1,288				935	7,155	7	
2,872		244,360		67,338	17,067	113,994	553,713	8	
456	15,597,777	*22,948	5,601	7,001	6,791	14,441	56,978	9	*Including 2,530 tons of hemlock bark.
173,403		301,745		36,070	425,638	1,378,360	3,174,065	10	
12,156	175,474,340	219,343	11,078	22,156	309,328	527,151	1,264,575	11	
904	5,570,441	8,296	1,962	3,809	25,842	in forego- ing.	51,064		
95,475	685,093,916	896,699	131,367	232,787	1,020,558	852,646	4,058,575	12	
25	4,000,000	+6,300	500	750	500	2,564	10,726	13	+Including 300 tons of logs.
100					75	175	350	14	
1,220	8,600,000	1,100	4,280	6,500	17,480	41,620	72,500	15	
		+5,873				*5,465	11,338	16	*Including 627 tons of coal. +Including firewood.
8	463,000	700	7	10	2,415	5,665	9,111	17	
8	12,156,000	15,195			5,525	*431,616	453,853	18	*Coal.
204	9,585,000	11,175	11,932	18,840	17,792	in forego- ing.	48,148	19	
348	5,920,000	7,400	480	600	580	1,813	11,104	20	
1,421	22,112,833	28,026	338	700	2,210	28,085	89,312	21	
895	2,953,681	4,281	4,973	7,284	16,974	23,044	52,834	22	
						23,139	23,139	23	Not classifie

NO. 5.—SUMMARY STATEMENT of Description

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live Number.	
			Barrels.	Tons.	Bushels.	Tons.		
	Waterloo Junction.....	10 25						
	Midland.....	173 97						
	Toronto and Nipissing.....	111 50	3,157 63	5,833,750	583,375	60,407,600	1,510 190	2,270,070
	Grand Junction.....	85 40						
	Whitby, Port Perry and Lindsay.....	46 50						
	Victoria.....	53 25						
	Northern.....	205 48						
	Northern and Pacific Junc..	111 37						
	Hamilton and North-western	173 90						
	South Norfolk.....	17 00						
	Cobourg, Blairton and Mar- mora.....	18 00						
	Madoc Junc. to Bridgewater	8 75						
	Jacques Cartier Union.....	6 50						
25	St. Clair Tunnel.....	2 22						
26	Great Eastern.....	13 00						
	Montreal and Sorel.....	44 67						
27	Great Northern.....	25 00	3,770	377				
28	Great North-west Central.....	50 93	980	98		5,800		
29	Hereford.....	53 00	5,965	597	10,020	200		
30	Joggins.....	12 00	2,404	262	13,990	354	7	
31	Kent Northern.....	34 00	5,321	532	15,485	263	20	
32	Kingston and Pembroke.....	112 75	6,150	615	86,500	2,925	120	
33	L'Assumption.....	3 00	475	50				
34	Lake Erie and Detroit River	42 00	3,000	324		2,702		
35	Lake Temiscamingue Colonization	15 50						
36	Lower Laurentian.....	39 50	1,294	129				
37	Manitoba and North-western.	234 50	33,862	3,386	1,854,160	49,724	6,383	
	Saskatchewan and Western..	15 47						
38	Massawippi Valley.....	34 00	6,400	640		5,410		
39	Montreal and Lake Maskinongé	13 00						
40	Montreal and Ottawa.....	16 00	840	82	3,222	77	35	
41	Montreal, Portland and Boston	40 60						
42	Montreal and Vermont Junction	23 60	429,590	42,959	4,689,593	138,343		
43	New Brunswick and P. E. Island	36 00	17,346	1,734	16,731	285	1,546	
44	Northern Pacific and Manitoba	264 50	8,140	814	1,810,250	50,687	1,444	
45	Nosbonsing and Nipissing.....	5 50						
46	Nova Scotia Central.....	73 50	1,237	123			43	
47	Ottawa and Gatineau Valley.....	30 00	1,075	108	7,270	144	7	
48	Pontiac and Renfrew.....	4 25						
49	Pontiac Pacific Junction.....	61 00	9,055	906	208,391	4,078	2,105	
50	Qu'Appelle, Long Lake & Saskatchewan	254 00	5,034	504	62,024	1,900	1,194	
51	Quebec and Lake St. John.....	196 00	16,739	1,674	21,534	431	707	
52	Quebec Central.....	153 50		7,421		1,261		
53	Quebec, Montmorency and Charlevoix	21 00	1,545	155	5,646	142	59	
54	Salisbury and Harvey.....	45 00						
55	Shore Line.....	82 50	21,500	2,100	4,400	92	305	
56	Shuswap and O'Kanagan.....	50 79						
57	Stanstead, Shefford and Chambly	43 00	445,380	44,538	4,629,966	136,584		
58	St. Catharines and Niagara Central	12 35	12,543	1,254	6,096	183	1	
59	St. John Bridge and Ry. Extension	1 75						
60	St. Lawrence and Adirondack.....	20 22						

# Railway Statistics.

of Freight Carried, &c.—Continued.

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manu- factured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
	Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.		
454,014	718,553,500	1,026,505	620,536	310,268	570,048	3,794,638	8,249,038	24	
								25	Included in Grand Trunk.
								26	*Not in operation during last 12 mos.
	180,000	270	940	1,410	280	3,000	5,337	27	
94		732			410	37	7,171	28	
363	20,511,330	30,767	4,484	7,786	461	37,952	78,126	29	
3		217			1,026	*49,531	51,393	30	*Including coal.
10		4,200			1,675	3,052	12,132	31	
60	13,980,000	20,970	9,726	17,955	32,857	3,300	78,682	32	
	123,000	184	10	15	116	699	1,064	33	
1,606		18,581	3,587	5,919	6,674	102,734	138,540	34	
						*2,192	2,192	35	*Not classified.
	2,412,000	2,412	1,512	2,268		720	5,529	36	For 6 months ending 30th June, 1892.
3,094	4,917,000	7,375	952	1,906	12,216	2,492	80,193	37	
1,290		38,245			675	*106,018	152,278	38	*Including ore and copper matte.
								39	
							2,480	40	
22	98,653	131	134	229	1,607	332	20,666	41	*Agricultural products.
						*20,666		42	†Including 10,922 tons of hay.
203,874	22,329,333	33,494				+309,453	728,123	43	
113	7,696,000	11,544	819	1,228	1,269	17,843	34,016	44	
647	2,820,000	4,934	13,500	20,202	8,970	34,877	121,131	44	
						+154,570	154,570	45	†Saw-logs.
20	8,016,000	12,024	1,440	2,680		1,220	16,067	46	
4	736,000	1,025	16	30	1,052	3,058	5,421	47	
						*4,917	4,917	48	*Iron ore.
243	418,000	736	2,115	*3,348	1,929	+7,788	19,028	49	*Including pulpwood
782	1,724,583	1,972	1,077	1,616	2,903	2,879	12,556	50	†Including 4,711 tons iron ore.
138	32,544,000	42,820	27,350	44,033	7,467	14,934	111,497	51	
4,438		62,993		1,132	3,302	*58,403	138,950	52	*Including copper ore, asbestos, pulp, lime, and coal.
53	327,633	480	905	931	1,048	2,187	4,996	53	Not classified.
						24,056	24,056	54	
63	3,957,000	5,200	309	487	1,475	3,229	12,646	55	
210						2,190	2,400	56	Not classified.
201,165	24,248,666	36,373				*323,645	742,305	57	*Including 4,454 tons of hay.
		1,863	92	168	6,165	31,986	41,620	58	
1						127,224	127,224	59	Not classified.
						6,581	6,581	60	From 11th Jan. to 30th June, 1892.

No. 5.—SUMMARY STATEMENT of Description

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live Number.	
			Barrels.	Tons.	Bushels.	Tons.		
61	South Eastern .....	147·70						
	Lake Champlain and St. Lawrence Junction .....	61·40						
			209·10	267,804	26,780	4,843,073	115,515	16,192
62	Temiscouata .....	113·00	113·00	16,411	1,641	15,779	355	315
63	Thousand Islands .....	4·08	4·08	3,550	355	14,834	289	3,060
64	Western Counties .....	87·00	87·00	11,288	1,129	2,096	39	423
65	Windsor and Annapolis .....	87·50	119·50	55,183	5,518			
	Windsor Branch .....	32·00						
	Total .....		14,587·89	1,284,493		3,645,830		

# Railway Statistics.

of Freight Carried, &c.—*Concluded.*

Stock.	Lumber of all kinds except Firewood.		Firewood.		Manu- factured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
	Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.		
3,922	90,118,880	117,656	15,317	22,976	107,772	171,676	566,297	61	*Minerals, apples, potatoes and hay.
157	4,297,500	6,446	5,710	8,965	531	6,199	24,294	62	
337	1,622,000	2,434			9,810	3,538	16,763	63	
155	9,571,000	13,055	1,998	2,760	5,336	1,505	23,979	64	
2,494	8,483,745	12,726	1,587	2,380	28,664	*68,133	119,915	65	
1,171,493		3,338,854		895,522	2,708,672	9,145,059	22,189,923		

## No. 6.—SUMMARY STATEMENT of Earnings

Number.	Name of Railway.	Mileage.	Passenger Traffic.		Freight Traffic.		Mails and Express Freight.	
			\$	cts.	\$	cts.	\$	cts.
1	Albert Railway and Coal Co. ....	174 12	14,265	66	191,596	82	4,085	61
2	Albert Southern ..... 17 00 ) Harvey Branch ..... 3 00 )	20 00	14	05	178	80		
3	Bay of Quinté Ry. & Navigation Co. ... 3 50 ) Kingston, Napanee and Western ..... 56 45 )	59 95	21,861	11	104,500	84	8,235	93
4	Brantford, Waterloo and Lake Erie. ....	17 00	6,437	89	6,602	76	104	62
5	Brockville, Westport and Sault Ste. Marie ...	45 00	10,872	80	12,678	40	210	85
6	Buctouche and Moncton ..... 32 00		3,867	79	8,427	43		
7	Calgary and Edmonton ..... 253 97		18,224	84	29,469	78	2,042	85
8	Canada Atlantic ..... 138 00 ) Central Counties ..... 21 00 )	159 00	106,841	11	385,817	56	23,602	55
9	Canada Eastern ..... 127 00		25,193	93	52,759	24	3,780	15
10	Canada Southern ..... 378 91		1,262,361	55	3,561,201	17	161,304	40
11	Canadian Government Railways— Intercolonial ..... 1,141 00		961,427	94	1,803,529	03	180,485	00
	Prince Edward Island ..... 210 60		70,959	21	69,983	23	16,075	00
12	Canadian Pacific ..... 3563 40 ) Atlantic and North-west ..... 182 50 ) Manitoba & South-western Col'n ..... 217 80 ) North Shore ..... 205 50 ) St. Lawrence and Ottawa ..... 58 40 ) Toronto, Grey and Bruce ..... 191 30 ) Ontario and Quebec ..... 463 80 ) Credit Valley ..... 175 10 ) West Ontario Pacific ..... 26 60 ) Guelph Junction ..... 15 00 ) St. John and Maine ..... 91 80 ) New Brunswick ..... 175 68 ) New Brunswick and Canada ..... 117 20 ) Fredericton ..... 22 10 ) Columbia and Kootenay ..... 27 70 )	5,533 88	5,509,277	32	13,091,396	12	768,828	88
13	Caraguet ..... 68 00		5,029	22	11,817	20	2,053	35
14	Carillon and Grenville ..... 13 00		2,031	14	182	50		
15	Central Ontario ..... 104 00		31,356	91	51,023	17	8,519	60
16	Central of New Brunswick ..... 74 66		7,745	96	6,519	37		
17	Cornwallis Valley ..... 14 00		4,671	02	5,854	19		
18	Cumberland Railway and Coal Co. .... 46 00		9,076	30	15,925	58	1,965	23
19	Drummond County ..... 62 81		13,270	33	38,972	15	394	59
20	Elgin, Petitoctiac and Havelock ..... 28 00		2,242	65	7,548	00	676	08
21	Erie and Huron ..... 75 75		48,132	55	54,160	52	5,864	59
22	Esquimalt and Nanaimo ..... 78 00		83,774	41	70,296	30	3,675	29
23	Fredericton & St. Mary's Ry. & Bridge Co. ... 1 33		523	55	2,837	44		
24	Grand Trunk ..... 883 25 ) Buffalo and Lake Huron ..... 162 00 ) Grand Trunk, Georgian Bay and Lake Erie ..... 172 75 ) Montreal & Champlain Junc. 61 75 ) Beauharnois Junc. .... 19 50 )	3,157 63	5,463,983	34	11,621,037	42	676,675	66
	Great Western ..... 540 75 ) London and Port Stanley ..... 23 84 ) Wellington, Grey and Bruce ..... 168 13 ) London, Huron and Bruce ..... 69 01 ) Brantford, Norfolk & Pt. Burwell. .... 34 78 ) Waterloo Junc. .... 10 25 ) Midland ..... 173 97 ) Toronto and Nipissing ..... 111 50 ) Grand Junction ..... 85 40 ) Whitby, Port Perry and Lindsay .. 46 50 ) Victoria ..... 53 25 ) Northern ..... 205 48 ) Northern and Pacific Junc ..... 111 37 )							

# Railway Statistics.

for the year ended 30th June, 1892.

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of earnings to working expenses.	Earnings per train mile.	Number.	Remarks.
\$ cts.	\$ cts.	\$ cts.	Perct.	Cents.		
	209,948 09	31,011 64	117	107 27	1	
	192 85	— 62 68	75	72 50	2	
2,626 34	137,224 22	53,360 91	163	207 32	3	
	13,145 27	540 57	104	52 58	4	
	23,762 05	2,280 93	110	80 58	5	
158 15	12,453 37	— 5,506 56	69	56 73	6	
	49,737 47	16,979 60	152	132 62	7	
54,435 79	570 697 01	201,419 77	154	123 74	8	
1,405 93	83,139 25	23,332 92	139	68 42	9	
4,832 99	4,989,700 11	1,599,050 99	147	141 71	10	
	2,945,441 97	— 493,935 03	86	62 63	11	
425 25	157,442 69	— 132,263 69	54	64 86		
1,419,601 85	20,789,104 17	8,347,977 89	167	145 43	12	
	18,899 77	— 2,180 52	89	66 31	13	
	2,213 64	— 1,350 76	62	24 59	14	
12,732 85	103,632 53	— 2,617 10	97	69 08	15	
365 73	14,631 06	— 14,147 07	51	28 91	16	
132 81	10,658 02	401 53	104	106 33	17	
92,901 88*	119,868 99	65,650 77	221	189 62	18	*Coal.
1,292 70	53,929 77	19,388 88	156	75 43	19	
30 00	10,496 73	195 58	102	62 50	20	
	108,157 66	31,734 75	141	79 58	21	
5,541 89	163,287 89	— 71,169 10	70	133 30	22	
	3,360 99	1,610 99	192	...	23	No train mileage.
	17,761,696 42	4,971,459 27	139	106 09	24	



## No. 6.—SUMMARY STATEMENT of Earnings

Number.	Name of Railway.	Mileage.	Passenger Traffic.		Freight Traffic.		Mails and Express Freight.	
			\$	cts.	\$	cts.	\$	cts.
	Hamilton and North-western . . . . .	173 90						
	South Norfolk . . . . .	17 00						
	Cobourg, Blairton and Marmora . . . . .	18 00						
	Madoc Junc. to Bridgewater . . . . .	8 75						
	Jacques Cartier Union . . . . .	6 50						
25	St. Clair Tunnel . . . . .	2 22	20,007	00	114,719	68		
26	Great Eastern . . . . .	13 00						
	Montreal and Sorel . . . . .	44 67						
27	Great Northern . . . . .	25 00	1,488	14	1,964	16	200	00
28	Great North-west Central . . . . .	50 93	3,066	00	11,400	21	175	74
29	Hereford . . . . .	53 00	8,478	73	33,167	50	998	52
30	Joggins . . . . .	12 00	2,901	19	14,964	21	278	20
31	Kent Northern . . . . .	34 00	3,167	95	6,125	37	861	84
32	Kingston and Pembroke . . . . .	112 75	34,346	36	91,089	79	8,553	34
33	L'Assomption . . . . .	3 00	1,058	00	301	99	259	25
34	Lake Erie and Detroit River . . . . .	42 00	28,414	59	52,759	92	4,967	66
35	Lake Temiscamingue Colonization . . . . .	15 50	8,766	89	21,755	77		
36	Lower Laurentian . . . . .	39 50	1,155	19	3,356	16		
37	Manitoba and North-western . . . . .	34 50						
	Saskatchewan and Western . . . . .	15 47	249 97	61,504 83	155,352 13		10,466 14	
38	Massawippi Valley . . . . .	34 00	57,675	33	99,752	41	1,971	90
39	Montreal and Lake Maskinongé . . . . .	13 00						
40	Montreal and Ottawa . . . . .	16 00	5,588	26	1,616	29	367	17
41	Montreal, Portland and Boston . . . . .	40 60	16,258	99	21,376	16	2,310	79
42	Montreal and Vermont Junc. . . . .	23 60	52,784	91	106,574	34	6,537	97
43	New Brunswick and P. E. Island . . . . .	36 00	5,992	07	13,658	44	1,167	37
44	Northern Pacific and Manitoba . . . . .	264 50	66,506	59	190,240	43	4,862	09
45	Nosbonsing and Nipissing . . . . .	5 50			33,450	00		
46	Nova Scotia Central . . . . .	73 50	26,171	46	18,269	28	1,145	28
47	Ottawa and Gatineau Valley . . . . .	30 00	4,433	05	4,534	68	126	12
48	Pontiac and Renfrew . . . . .	4 25			504	40		
49	Pontiac Pacific Junction . . . . .	61 00	12,169	12	18,782	65	2,342	90
50	Qu'Appelle, Long Lake and Saskatchewan . . . . .	254 00	18,546	20	35,067	59	2,680	73
51	Quebec and Lake St. John . . . . .	196 00	43,497	06	97,436	35	7,006	36
52	Quebec Central . . . . .	153 50	116,441	43	153,036	33	9,951	34
53	Quebec, Montmorency and Charlevoix . . . . .	21 00	35,770	00	4,294	69		
54	Salisbury and Harvey . . . . .	45 00	5,992	22	12,911	65	2,468	03
55	Shore Line . . . . .	82 50	16,624	61	14,958	12	3,059	20
56	Shuswap and Okanagan . . . . .	50 79	3,160	25	5,743	14	227	35
57	Stanstead, Shefford and Chambly . . . . .	43 00	14,915	00	28,531	49	4,818	72
58	St. Catharines and Niagara Central . . . . .	12 35	5,901	62	13,524	06	195	37
59	St. John Bridge and Railway Extension . . . . .	1 75	24,350	60	39,945	62	1,298	37
60	St. Lawrence and Adirondack . . . . .	20 22	4,959	24	5,158	51		
61	South Eastern . . . . .	147 70						
	Lake Champlain and St. Lawrence Junc. . . . .	61 40	209 10	171,814 21	391,134 41		17,712 41	
62	Temiscouata . . . . .	113 00	14,747	87	25,195	21	6,575	03
63	Thousand Islands . . . . .	4 08	3,913	09	10,967	37	1,501	11
64	Western Counties . . . . .	87 00	65,600	49	23,555	84	7,709	69
65	Windsor and Annapolis . . . . .	87 50						
	Windsor Branch . . . . .	32 00	119 50	136,854 45	148,621 38		13,683 33	
	Total . . . . .	14,587 89	14,788,465 57	33,230,121 75	1,995,059 75			

# Railway Statistics.

for the year ended 30th June, 1892—*Concluded.*

Other Sources.	Total Gross Earnings.	Total Net Earnings.	Proportion of earnings to working expenses.	Earnings per train mile.	Number.	Remarks.
£ cts.	£ cts.	£ cts.	p. c.	Cents.		
	134,726 68*	73,481 26	220		25	*Tolls on passenger and freight cars and locomotives.
					26	Not operated during last 12 months.
	3,652 30	271 54	108	72 93	27	
	14,650 95	4,372 97	77	171 40	28	
	42,644 75	8,559 31	83	48 04	29	
173 20	18,316 80	7,829 77	175	140 90	30	
	10,155 16	2,162 36	127	55 29	31	
17,495 24	151,484 73	32,416 37	127	70 45	32	
21 00	1,640 24	263 92	86	41 42	33	
	86,142 17	26,960 59	145	98 10	34	
237 43	30,760 09	10,563 85	152		35	Train mileage not given.
	4,511 35	17 67	100	30 11	36	For six months ending 30th June, 1892
10,509 70	237,832 80	19,986 14	109	147 96	37	
4,229 22	163,628 86	30,884 58	123	81 63	38	
					39	
132 07	7,703 79	1,103 58	87	66 62	40	
	39,945 94	2,936 06	108	78 34	41	
	165,897 22	27,684 06	120	86 43	42	
	20,818 08	5,581 54	136	59 83	43	
530 83	262,139 94	5,753 58	98	106 28	44	
	33,450 00	47 92	99	261 33	45	
719 32	46,305 34	10,205 44	128	74 85	46	
	9,093 85	539 66	106	149 42	47	
	504 40	1,676 41	23		48	Train mileage not given.
11,714 35	45,009 02	14,858 96	149	106 52	49	
	56,294 52	10,582 18	123	106 28	50	
1,994 73	149,934 50	5,454 32	104	81 33	51	
3,941 40	283,370 50	87,481 51	145	95 91	52	
5,353 00	45,417 69	14,994 20	149	88 58	53	
1,523 33	22,895 23	371 23	98	68 72	54	
260 16	34,902 09	10,879 08	76	61 96	55	
	9,130 74	2,130 74			56	Operating expense not returned. Line in contractor's hands.
	48,265 21	8,894 66	84	48 44	57	
943 21	20,564 26	4,013 42	124	114 24	58	
	65,594 59	44,659 13	313		59	No train mileage.
	10,117 75	5,868 72	63	39 85	60	From 11th January to 30th June, 1892.
10,058 51	590,719 54	32,259 84	106	99 93	61	
in former.	46,518 11	39 27	100	65 18	62	
2,086 75	18,468 32	7,671 59	171	88 25	63	
953 93	97,819 95	20,486 66	126	105 45	64	
2,759 81	301,918 97	106,014 10	154	117 29	65	
1,672,121 35	51,685,768 42	15,197,539 91				

## No. 7.—SUMMARY STATEMENT of Operating

Number.	Name of Railway.	Mileage.	Maintenance of Line, Buildings, &c.		Working and Repairs of Engines.
			\$	cts.	\$
1	Alberta Railway and Coal Co.	174 12	30,817	93	57,725 00
2	Albert Southern	17 00			177 86
	Harvey Branch	3 00			
3	Bay of Quinte Navigation Co.	3 50			
	Kingston, Napanee and Western	56 45	20,260	51	28,935 57
4	Brantford, Waterloo and Lake Erie	17 00	2,336	20	4,668 42
5	Brockville, Westport and Sault Ste. Marie	45 00	2,489	88	3,984 00
6	Buctouche and Moncton	32 00	4,799	58	3,208 73
7	Calgary and Edmonton	253 97	12,740	18	11,068 93
8	Canada Atlantic	138 00			
	Central Counties	21 00	57,016	85	137,686 18
9	Canada Eastern	127 00	17,507	59	23,276 90
10	Canada Southern	378 91	495,458	47	970,803 58
11	Canadian Government Railways—				
	Intercolonial	1,141 00	1,007,935	40	1,148,199 20
	Prince Edward Island	210 60	145,820	89	66,772 79
12	Canadian Pacific	3563 40			
	Atlantic and North-west	182 50			
	Manitoba and South-western Colonization	217 80			
	North Shore	205 50			
	St. Lawrence and Ottawa	58 40			
	Toronto, Grey and Bruce	191 30			
	Ontario and Quebec	463 80			
	Credit Valley	175 10	5,533 88	2,509,857 78	4,211,725 04
	West Ontario Pacific	26 60			
	Guelph Junction	15 00			
	St. John and Maine	91 80			
	New Brunswick	175 68			
	New Brunswick and Canada	117 20			
	Fredericton	22 10			
	Columbia and Kootenay	27 70			
13	Caraquet	68 00	6,942	85	6,429 00
14	Carillon and Grenville	13 00			
15	Central Ontario	104 00	29,473	15	23,120 80
16	Central of New Brunswick	74 66	10,396	48	10,792 17
17	Cornwallis Valley	14 00	2,588	71	4,063 99
18	Cumberland Railway and Coal Co.	46 00	18,964	97	19,982 63
19	Drummond County	62 81	8,498	27	12,067 35
20	Elgin, Petitecodiac and Havelock	28 00	3,192	80	3,821 05
21	Erie and Huron	75 75	18,881	46	24,187 71
22	Esquimaux and Nanaimo	78 00	132,326	38	39,142 83
23	Fredericton and St. Mary's Railway and Bridge Co.	1 33			
24	Grand Trunk	883 25			
	Buffalo and Lake Huron	162 00			
	Grand Trunk, Georgian Bay and Lake Erie	172 75			
	Montreal and Champlain Junction	61 75			
	Beauharnois Junction	19 50			
	Great Western	540 75			
	London and Port Stanley	23 84			
	Wellington, Grey and Bruce	168 13			
	London, Huron and Bruce	69 01			
	Brantford, Norfolk and Port Burwell	34 78			
	Waterloo Junction	10 25			
	Midland	173 97	3,157 63	2,340,587 24	4,537,376 58
	Toronto and Nipissing	111 50			
	Grand Junction	85 40			
	Whitby, Port Perry and Lindsay	46 50			
	Victoria	53 25			
	Northern	205 48			
	Northern and Pacific Junction	111 37			
	Hamilton and North-western	173 90			
	South Norfolk	17 00			

# Railway Statistics.

Expenses for the year ended 30th June, 1892.

Working and Repairs of Cars.	General Operating Expenses.	Total.	Cost of Operating per train mile.	Number.	Remarks.
\$ cts.	\$ cts.	\$ cts.	Cents.		
9,690 78	80,702 74	178,936 45	91 43	1	
16 35	61 32	255 53	96 06	2	
6,036 10	28,631 13	83,863 31	126 70	3	
194 39	5,405 69	12,604 70	50 42	4	
in following	15,007 24	21,481 12	72 85	5	
463 75	9,487 87	17,959 93	81 81	6	
1,662 18	7,286 58	32,757 87	87 34	7	
37,044 89	137,529 32	369,277 24	80 07	8	
2,793 31	16,228 53	59,806 33	49 22	9	
575,387 96	1,348,999 11	3,390,649 12	96 30	10	
452,683 13	830,559 27	3,439,377 00	73 13	11	
18,368 26	58,744 44	289,706 38	119 35		
808,365 62	4,911,177 84	12,441,126 28	87 03	12	
751 19	6,957 25	21,080 29	73 96	13	
.....	3,564 40	3,564 40	39 60	14	
4,204 63	49,451 05	106,249 63	70 83	15	
1,386 23	6,203 25	28,778 13	56 87	16	
65 33	3,538 46	10,256 49	102 33	17	
4,049 37	11,221 25	54,218 22	85 77	18	
913 67	13,061 60	34,540 89	48 31	19	
164 00	3,123 30	10,301 15	61 34	20	
3,682 92	29,670 82	76,422 91	56 23	21	
14,548 34	48,439 44	234,456 99	191 39	22	
.....	1,750 00	1,750 00	.....	23	
1,366,310 91	4,545,962 42	12,790,237 15	76 39	24	

## No. 7.—SUMMARY STATEMENT of Operating Expenses

Number.	Name of Railway.	Mileage.	Maintenance of Line, Buildings, &c.		Working and Repairs of Engines.			
			\$	cts.	\$	cts.		
	Cobourg, Blairton and Marmora.....	18 00						
	Madoc Junc. to Bridgewater.....	8 75						
	Jacques Cartier Union.....	6 50						
25	St. Clair Tunnel.....	2 22	9,489	11	35,066	46		
26	Great Eastern.....	13 00						
	Montreal and Sorel.....	44 67						
27	Great Northern.....	25 00	2,580	76				
28	Great North-west Central.....	50 93	3,805	58	4,465	71		
29	Hereford.....	53 00	24,227	80	14,052	04		
30	Joggins.....	12 00	2,946	62	4,126	09		
31	Kent Northern.....	34 00	1,349	30	4,081	25		
32	Kingston and Pembroke.....	112 75	38,146	11	40,232	86		
33	L'Assomption.....	3 00	214	18	861	24		
34	Lake Erie and Detroit River.....	42 00	11,141	04	20,743	16		
35	Lake Temiscamingue Colonization.....	15 50						
36	Lower Laurentian.....	39 50	1,621	65	1,343	80		
37	Manitoba and North-western.....	234 50	249 97	66,004	66	61,150	67	
	Saskatchewan and Western.....	15 47						
38	Massawippi Valley.....	34 00	31,614	92	48,072	58		
39	Montreal and Lake Maskinongé.....	13 00						
40	Montreal and Ottawa.....	16 00	2,844	11	3,595	13		
41	Montreal, Portland and Boston.....	40 60	16,247	25	10,675	84		
42	Montreal and Vermont Junction.....	23 60	28,524	66	42,794	93		
43	New Brunswick and Prince Edward Island.....	36 00	7,009	45	5,069	38		
44	Northern Pacific and Manitoba.....	264 50	99,728	42	72,993	62		
45	Nosbonsing and Nipissing.....	5 50	4,710	00	14,105	60		
46	Nova Scotia Central.....	73 50	17,304	27	9,270	30		
47	Ottawa and Gatineau Valley.....	30 00	3,153	55	2,213	77		
48	Pontiac and Renfrew.....	4 25	1,286	40	894	41		
49	Pontiac Pacific Junction.....	61 00	13,727	75	6,707	45		
50	Qu'Appelle, Long Lake and Saskatchewan.....	254 00	17,578	49	16,981	26		
51	Quebec and Lake St. John.....	196 00	38,878	09	52,959	36		
52	Quebec Central.....	153 50	52,326	11	52,912	62		
53	Quebec, Montmorency and Charlevoix.....	21 00	7,498	23	10,362	73		
54	Salisbury and Harvey.....	45 00	8,809	73	6,615	72		
55	Shore Line.....	82 50	19,985	97	12,269	13		
56	Shuswap and Okanagan.....	50 79						
57	Stanstead, Shefford and Chambly.....	43 00	19,521	61	16,793	66		
58	St. Catharines and Niagara Central.....	12 35	4,111	24	4,491	27		
59	St. John Bridge and Railway Extension.....	1 75	1,326	66				
60	St. Lawrence and Adirondack.....	20 22	5,255	45	5,486	15		
61	South Eastern.....	147 70	209 10	97,853	20	206,475	10	
	Lake Champlain and St. Lawrence Junction.....	61 40						
62	Temiscouata.....	113 00	12,943	33	14,001	69		
63	Thousand Islands.....	4 08	1,671	58	3,736	19		
64	Western Counties.....	87 00	36,174	63	18,427	60		
65	Windsor and Annapolis.....	87 50	119 50	88,233	96	45,226	72	
	Windsor Branch.....	32 00						
			14,587	89	7,678,739	44	12,218,471	80

# Railway Statistics.

for the year ended 30th June, 1892—*Concluded.*

Working and Repairs of Cars.	General Operating Expenses.	Total.	Cost of Operating per train mile.	Numbers.	Remarks.
\$    cts.	\$    cts.	\$    cts.	Cents.		
in foregoing	16,689 85	61,245 42	.....	25	
	800 00	3,380 76	67 50	26	Not operated during last 12 months.
	10,464 67	19,023 92	222 55	27	Trains run by Canadian Pacific Railway.
287 96	11,484 47	51,204 06	57 68	28	
1,439 75	2,771 27	10,487 03	80 67	29	
643 05	2,162 25	7,992 80	43 52	30	
400 00	34,964 05	119,068 36	55 38	31	
5,725 34	786 39	1,904 16	48 08	32	
42 35	23,561 95	59,181 58	68 19	33	
3,735 43	20,196 24	20,196 24	.....	34	Train mileage not given.
	1,528 23	4,493 68	30 00	35	For 6 months ended 30th June, 1892.
15,427 82	75,263 51	217,846 66	135 52	36	
9,004 48	44,052 30	132,744 28	66 22	37	
				38	
		8,807 37	76 16	39	
2 45	2,365 68	37,009 88	72 59	40	
2,144 56	7,942 23	138,213 16	72 00	41	
8,835 78	58,057 79	15,236 54	43 79	42	
368 59	2,789 12	267,893 52	108 62	43	
13,556 49	81,614 99	33,497 92	261 70	44	
2,080 00	12,602 32	36,099 90	58 36	45	
70 00	9,455 33	8,554 19	140 55	46	
362 99	2,823 88	2,180 81	.....	47	Train mileage not given.
		30,150 06	71 35	48	
2,563 65	7,151 21	45,712 34	86 30	49	
1,248 13	9,904 46	144,480 18	78 37	50	
4,083 70	48,559 03*	195,888 99	66 30	51	*Including \$12,599.12 tolls to C. P. Ry.
15,552 92	75,097 34	30,423 49	59 34	52	
2,189 62	10,372 91	23,266 46	69 83	53	
2,124 58	5,716 43	45,781 17	81 27	54	
1,580 21	11,945 86	7,000 00	.....	55	Assumed. Not returned. Line in contractor's hands.
	7,000 00	57,159 87	57 36	56	
1,040 06	19,804 54	16,550 84	91 95	57	[operating traffic.
300 30	7,648 03	20,935 46	.....	58	‡Including \$18,128 charges of C. P. R. for
	19,608 80‡	15,986 47	62 18	59	From 11th January to 30th June, 1892.
770 56	4,474 31	558,459 70	94 47	60	
67,982 85	186,148 55	46,478 84	65 12	61	
1,784 99	17,748 83	10,796 73	51 59	62	
56 54	5,332 42	77,333 29	83 36	63	
5,741 70	16,989 36	76 11	.....	64	
11,977 00	50,467 19	195,904 87	.....	65	
3,491,907 16	13,099,110 11	36,488,228 51	.....		

No. 8.—SUMMARY OF ACCIDENT

Number.	Name of Railway.	Mileage.	Passengers, Employees, or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.	
				Killed.	Injured.	Killed.	Injured.
1	Alberta Railway and Coal Co. ....	174 12					
2	Albert Southern ..... 17 00 ) Harvey Branch ..... 3 00 )	20 00					
3	Bay of Quinté Railway and Navigation Co. .... 3 50 ) Kingston, Napanee and Western ..... 56 45 )	59 95	{ Employees Others .....				
4	Brantford, Waterloo and Lake Erie. ....	17 00	Others .....				
5	Brockville, Westport and Sault Ste. Marie .....	45 00					
6	Buctouche and Moncton .....	32 00					
7	Calgary and Edmonton .....	253 97					
8	Canada Atlantic ..... 138 00 ) Central Counties ..... 21 00 )	159 00	Employees .....		1		
9	Canada Eastern .....	127 00					
10	Canada Southern .....	378 91	{ Employees Others .....	2	2		1
11	Canadian Government Railways— Intercolonial .....	1141 00	{ Passengers Employees Others .....			1	2
	Prince Edward Island .....	210 60	Employees .....	1	1		2
12	Canadian Pacific ..... 3563 40 ) Atlantic and North-west ..... 182 50 ) Manitoba and South-western Colonization . 217 80 ) North Shore ..... 205 50 ) St. Lawrence and Ottawa ..... 58 40 ) Toronto, Grey and Bruce ..... 191 30 ) Ontario andQuebec ..... 463 80 ) Credit Valley ..... 175 10 ) West Ontario Pacific ..... 26 60 ) Guelph Junction ..... 15 00 ) St. John and Maine ..... 91 80 ) New Brunswick ..... 175 68 ) New Brunswick and Canada ..... 117 20 ) Fredericton ..... 22 10 ) Columbia and Kootenay ..... 27 70 )	5533 88	{ Passengers Employees Others .....		4 30 3	4 1	9 20 6
13	Caraquet .....	68 00					
14	Carillon and Grenville .....	13 00					
15	Central Ontario .....	104 00	{ Employees Others .....		2		
16	Central of New Brunswick .....	74 66					
17	Cornwallis Valley .....	14 00					
18	Cumberland Railway and Coal Co. ....	46 00					
19	Drummond County .....	62 81					
20	Elgin, Petitoodiac and Havelock .....	23 00					
21	Erie and Huron .....	75 75	Employees .....				
22	Esquimalt and Nanaimo .....	78 00	Employees .....			1	
23	Fredericton and St. Mary's Railway and Bridge Co. ....	1 33					
24	Grand Trunk ..... 883 25 ) Buffalo and Lake Huron ..... 162 00 ) Grand Trunk, Georgian Bay and Lake Erie. 172 75 ) Montreal and Champlain Junction ..... 61 75 ) Beauharnois Junction ..... 19 50 ) Great Western ..... 540 75 ) London and Port Stanley ..... 23 84 ) Wellington, Grey and Bruce ..... 168 13 ) London, Huron and Bruce ..... 69 01 ) Brantford, Norfolk and Port Burwell ..... 34 78 )						





## No. 8.—SUMMARY OF ACCIDENTS for

Number.	Name of Railway.	Mileage.	Passengers, Employees, or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.					
				Killed.	Injured.	Killed.	Injured.				
	Waterloo Junction .....	10 25	3157 63	{ Passengers .....	5	1	6				
	Midland .....	173 97						{ Employees .....	32	5	5
	Toronto and Nipissing .....	111 50						{ Others .....	3	7	8
	Grand Junction .....	85 40									
	Whitby, Port Perry and Lindsay .....	46 50									
	Victoria .....	53 25									
	Northern .....	205 48									
	Northern and Pacific Junction .....	111 37									
	Hamilton and North-western .....	173 90									
	South Norfolk .....	17 00									
	Cobourg, Blairton and Marmora .....	18 00									
	Madoc to Bridgewater .....	8 75									
	Jacques Cartier Union .....	6 50									
25	St. Clair Tunnel .....	2 22									
26	Great Eastern .....	13 00									
27	Montreal and Sorel .....	44 57	57 67								
28	Great Northern .....	25 00									
29	Great North-west Central .....	50 93	Employee								
30	Hereford .....	53 00									
31	Joggins .....	12 00									
32	Kent Northern .....	34 00									
33	Kingston and Pembroke .....	112 75									
34	L'Assumption .....	3 00									
35	Lake Erie and Detroit River .....	42 00	Others								
36	Lake Temiscamingue Colonization .....	15 50									
37	Lower Laurentian .....	39 50									
38	Manitoba and North-western .....	234 50									
39	Saskatchewan and Western .....	15 47	249 97								
40	Massawippi Valley .....	34 00	{ Employees .....	1							
41	Montreal and Lake Maskinonge .....	13 00	{ Others .....								
42	Montreal and Ottawa .....	16 00									
43	Montreal, Portland and Boston .....	40 60									
44	Montreal and Vermont Junction .....	23 60	{ Passengers .....	1							
45	New Brunswick and Prince Edward Island .....	36 00	{ Employees .....								
46	Northern Pacific and Manitoba .....	264 50	Employees	1		1					
47	Nosbonsing and Nipissing .....	5 50									
48	Nova Scotia Central .....	73 50									
49	Ottawa and Gatineau Valley .....	30 00	Others								
50	Pontiac and Renfrew .....	4 25									
51	Pontiac Pacific Junction .....	61 00									
52	Qu'Appelle, Long Lake and Saskatchewan .....	254 00	Employee								
53	Quebec and Lake St. John .....	196 00	Employees								
54	Quebec Central .....	153 50	{ Employees .....	1							
55	Quebec, Montmorency and Charlevoix .....	21 00	{ Others .....								
56	Salisbury and Harvey .....	45 00									
57	Shore Line .....	82 50	Others								
58	Shuswap and Okanagan .....	50 79									
59	Stanstead, Shefford and Chambly .....	43 00	{ Passengers .....	2							
60	St. Catharines and Niagara Central .....	12 35	{ Employees .....								
61	St. John Bridge and Railway Extension .....	1 75	{ Others .....								

# Railway Statistics.

the year ended 30th June, 1892—Continued.

At work on or near Track making up Trains.		Putting Arms or Heads out of Wind'ws		Coupling Cars.		Collisions, or by Trains thrown from Track.		Walking, standing, lying, or being on Track.		Ex-plosions.		Striking Bridges.		Other Cases.		Totals.		Numbers.
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
	2			4	148	1	2	1	5					1	2	4	15	24
				2	5	2	10	7	30			1	3	15	35	38	240	
								29						9	20	51	66	
																		25
																		26
								1										27
																		28
																		29
																		30
																		31
																		32
														1				33
																		34
										1								35
																		36
																		37
																		38
									1									39
																		40
																		41
	1					1	2											42
1	1				5										15	2	22	43
																		44
																		45
									1									46
																		47
																		48
																		49
						1								1	4			50
						1										1	5	51
								1										52
																		53
									1									54
																		55
																		56
						1			1									57
								1										58
																		59

No. 8.—SUMMARY OF ACCIDENTS for

Number.	Name of Railway.	Mileage.	Passengers, Employees, or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.	
				Killed.	Injured.	Killed.	Injured.
60	St. Lawrence and Adirondack .....	20 22					
61	South Eastern ..... 147 70 )	209 10	{ Passengers .....		4	1	2
	Lake Champlain and St. Lawrence Junc ... 61 40 )						
62	Teniscouata .....	113 00	{ Others .....				
63	Thousand Islands .....	4 08	{ Employees .....				
64	Western Counties .....	87 00	{ Others .....				
65	Windsor and Annapolis ..... 87 50 )	119 50					
	Windsor Branch ..... 32 00 )						
		14,587 89			27	100	20 70

# Railway Statistics.

the year ended 30th June, 1892—*Concluded.*

At work on or near Track making up Trains.		Putting Arms or Heads out of Wind'ws		Coupling Cars.		Collisions, or by Trains thrown from Track.		Walking, standing, lying or being on Track.		Ex-plosions.		Striking Bridges.		Other Causes.		Totals.		Number.	
																			Killed.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	1	.....	.....	.....	20	1	1	.....	3	.....	.....	.....	.....	1	12	.....	3	2	} 61
.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	1	.....	1	41	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	} 62
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	} 63
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65
5	17	.....	23	10	340	22	38	89	82	1	.....	2	6	57	203	.....	233	879	

No. 9.—LINES OF RAILWAY owned by Coal and Iron Mines, for the Year ended  
30th June, 1892.

Name.	Length of Rail- way.	Gauge.	No. of Engines.	No. of Waggon.	Remarks.
NOVA SCOTIA.					
	Miles.	Feet.			
Intercolonial Coal Mining Co. ....	8·00	4·8½	4	168	
Acadia Coal Co. ....	3·00	4·8½	2	20	
Londonderry Iron Co. ....	10·50	4·8½	3	9	
do .....	3·50	3·0	2	25	
	25·00		11	222	
CAPE BRETON.					
Old Bridgeport .....	0·38	4·8½	.....	.....	Rolling stock furnished by International Coal and Railway Co.
General Mining Association— Sydney and Victoria .....	9·58	4·8½	3	217	
Sydney and Louisburg .....	*43·00	3·00	4	270	2 passenger cars.
Gowrie .....	1·50	3·6	2	142	
International .....	13·00	4·8½	4	240	3 passenger cars. 6 platform do 1 flanger.
Caledonia .....	1·00	4·8½	2	120	
	68·46		15	989	

\* 32·00 miles not in operation.



No. 10.—STATEMENT of Aid Granted to Railways by Government—Continued.

Name of Railway.	Loan.		Total.		Bonus.		Total.		Subscription to Shares or Bonds.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Kingston, Napanee and Western.....							268,400	00				
Kingston and Pembroke.....							48,000	00				
L'Assomption.....							11,200	00				
Lake Erie and Detroit River.....							342,400	00				
Lake Temiscamingue Colonization.....							240,200	00				
Leamington and St. Clair (now in Canada Southern).							51,200	00				
Lower Laurentian.....							217,600	00				
Massawippi Valley.....							80,000	00				
Montreal and Lake Maskinongé.....							42,200	00				
Montreal and Champlain Junction.....							30,000	00				
Montreal and Ottawa.....							192,000	00				
Montreal and Sorel.....							112,000	00				
Montreal and Western.....							361,270	00				
New Brunswick and Prince Edward Island.....							118,400	00				
New Glasgow Iron and Coal Co.....							40,000	00				
Northern and Western of New Brunswick (now Canada Eastern).							320,000	00				
Northern and Pacific Junction.....							1,320,000	00				
Nova Scotia Central.....							256,000	00				
*Ontario and Quebec.....												
Orford Mountain.....							58,200	00				
Ottawa and Gatineau Valley.....							320,000	00				
Parry Sound Colonization.....							128,000	00				
Pontiac Pacific Junction.....							337,100	00				
Pontiac and Renfrew.....							19,200	00				
Port Arthur, Duluth and Western.....							271,200	00				
Prince Edward Island.....							3,750,081	38				
Quebec and Lake St. John.....							1,063,495	00				
Quebec Central.....							348,342	00				
Quebec, Montmorenci and Charlevoix.....							96,000	00				
Quebec, Montreal, Ottawa and Occidental, Quebec to Montreal.							1,954,000	00				
do do Montreal to Ottawa.....							146,400	00				
do do.....							22,400	00				
St. Catharines and Niagara Central.....							188,800	00				
St. Louis, Richibucto and Buctouche.....							82,624	00				
St. John Bridge and Railway extension.....			500,000	00								
St. John Valley and Rivière du Loup.....												
St. Lawrence and Adirondack.....												
St. Clair Tunnel Company.....												
Shuswap and Okanagan.....												163,200

# Railway Statistics.

South Norfolk.....			54,400 00	
Stewiacke Valley and Lansdowne.....			286,800 00	
Temisconata.....			670,800 00	
Thousand Islands.....			54,400 00	
Tobique Valley.....			134,400 00	
Toronto, Grey and Bruce.....			16,000 00	
Waterloo Junction.....			35,200 00	
West Ontario Pacific.....			256,000 00	
Western Counties.....			500,000 00	
Windsor and Annapolis.....			1,089,674 00	
		16,080,633 05		132,052,672 88
<b>ONTARIO GOVERNMENT.</b>				
Canada Atlantic.....			270,000 00	
Canada Central.....			1,479,000 00	
Canada Southern.....			147,858 65	
Central Ontario.....			126,500 00	
Coboury, Blairton and Marmora.....		26,000 00	18,740 00	
Credit Valley.....			531,000 00	
Erie and Huron.....			88,000 00	
Grand Junction.....			182,500 00	
Georgian Bay and Lake Erie.....			336,000 00	
Hamilton and North-western.....			565,020 00	
Irondale, Bancroft and Ottawa.....			30,000 00	
Kingston and Pembroke.....			456,493 00	
London, Huron and Bruce.....			178,630 01	
Midland.....			168,350 20	
Northern.....			196,188 00	
Perry Sound Colonization.....			148,500 00	
Port Arthur, Duluth and Western.....			240,000 00	
Toronto and Nipissing.....			106,212 00	
Lake Simcoe Junction.....			53,000 00	
Toronto, Grey and Bruce.....			375,282 00	
Victoria.....			312,000 00	
Wellington, Grey and Bruce.....			241,276 00	
Whitby, Port Perry and Lindsay.....			94,957 59	
		26,000 00		6,339,507 44
<b>QUEBEC GOVERNMENT.</b>				
Baie des Chaleurs.....			1,030,000 00	
Beauharnois Junction.....			185,000 00	
Canada Atlantic.....			200,000 00	
Great Eastern.....			156,000 00	
Great Northern.....			42,000 00	
Drummond County.....			549,000 00	
Hereford.....			103,000 00	
International (now Atlantic and North-west, C.P.R.).....			391,122 02	

\* With West Ontario Pacific. † Dominion Government pays to Quebec Government 5 per cent per annum on these two amounts.



No. 10.—STATEMENT of Aid granted to Railways by Government—Continued.

Name of Railway.	Loan.		Total.		Bonus.	Total.		Subscription to Shares or Bonds.		Total.	
	\$	cts.	\$	cts.		\$	cts.	\$	cts.	\$	cts.
QUEBEC GOVERNMENT—Concluded.											
Lake Champlain and St. Lawrence Junction.					380,000 00						
Lake Temiscamingue Colonization Railway Company					250,000 00						
L'Assomption.					7,350 00						
Lévis and Kennebec.											
Lower Laurentian.					168,000 00						
Missisquoi Valley (now Atlantic and North-west—C.P.R.).					228,000 00						
Montreal and Champlain Junction.					150,000 00						
Montreal and Ottawa.					142,500 00						
Montreal, Portland and Boston.					232,000 00						
Montreal and Sorel.					262,500 00						
Montreal and Western.					472,500 00						
Montreal and Lake Maskinonge.					87,250 00						
Orford Mountain.					124,000 00						
Ottawa and Gatineau Valley.					445,982 00						
Pontiac and Pacific Junction.					600,000 00						
Pontiac and Renfrew.					17,500 00						
Quebec and Lake St. John.					2,748,000 00						
Quebec Central.					324,000 00						
Quebec, Montreal, Ottawa and Occidental, including North Shore			3,722,956 00		727,000 00						
Quebec, Montmorenci and Charlevoix.					192,000 00						
South-Eastern.					497,007 10						
St. Lawrence and Adirondack.					70,400 00						
Temiscouata.					241,500 00						
Waterloo and Magog (now Atlantic and N.W.—C.P.R.).					92,000 00			11,715,611 12			
NEW BRUNSWICK GOVERNMENT.											
Albert (now Salisbury and Harvey).					455,000 00						
Albert Southern.					52,500 00						
Buctouche and Moncton.					96,000 00						
Carsquet.					180,000 00						
Central of New Brunswick.					132,000 00						
Chatham Branch (now part of Canada Eastern)					32,000 00						
Fredericton.					230,000 00						
Grand Southern (now Shore Line).					425,000 00						
Harvey Branch.					9,000 00						
Kent Northern.					135,000 00						
New Brunswick.					76,000 00						







No. 10.—STATEMENT of Aid granted to Railways by Municipalities—Continued.

Municipalities.	Name of Railway.	Loan.		Total.		Bonus.		Total.		Subscriptions to Share or Bonds.		Total.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
<b>ONTARIO—Continued.</b>													
Township of Glengelt	Georgian Bay and Lake Erie					20,000	00						
Town of Durham	do					32,000	00						
City of Belleville	(Grand Junction)					150,000	00						
Village of Sterling	do					5,000	00						
Township of Rawdon	do					15,000	00						
do Seymour	do					35,000	00						
do Percy	do									50,000	00		
do Asphodel	do												
City of Guelph	Guelph Junction		155,000		00							213,000	00
County of Frontenac	Kingston and Pembroke					170,000	00						
City of Kingston	do					318,000	00						
Village of Renfrew	do					3,000	00						
City of Hamilton	Hamilton and North-western					99,733	00						
County of Halton	do					73,791	00						
Village of Georgetown	do					11,289	00						
County of Peel	do					30,974	00						
do Simcoe	do					354,007	00						
Town of Collingwood	do					12,084	00						
Township of Innisfil	do					22,582	00						
do Woodhouse	do					20,740	00						
do Adjala	do					2,500	00						
do Esse	do					2,500	00						
do Toronto	do					10,000	00						
do Mulmur	do					5,000	00						
Village of Alliston	do					8,000	00						
City of Hamilton	do												
Township of Nottawasaga	do					20,386	00						
do South Colchester	Lake Erie, Essex & Detroit River					20,000	00						
do Garfield	do					15,000	00						
Village of Kingsville	do					10,000	00						
											100,000	00	
													675,596
													45,000

# Railway Statistics.

Township of East Gwillimbury.....	Lake Simcoe Junction	45,000 00		
do North do .....	do do .....	20,000 00		
do Georgina.. .....	do do .....	20,000 00		
do Whitechurch .....	do do .....	15,000 00	100,000 00	
Village of Leamington.....	Leamington and St. Clair, in Car-			
Township of Morven .....	ada Southern..... do	12,000 00		
Village of Comber .....	do do .....	15,000 00		
		6,000 00	33,000 00	
Township of London.....	London, Huron and Bruce.	15,000 00		
do Stephen.....	do do .....	17,500 00		
do Osborne.....	do do .....	25,000 00		
do Hay.....	do do .....	15,000 00		
do Goderich.....	do do .....	15,000 00		
do E. Wawanosh .....	do do .....	25,000 00		
do Hallet.....	do do .....	25,000 00		
do Tuckersmith .....	do do .....	10,000 00		
do Turnberry .....	do do .....	5,000 00		
do Morris.....	do do .....	10,000 00		
do Stanley.....	do do .....	10,000 00		
Village of Clinton .....	do do .....	20,000 00		
do Exeter.....	do do .....	10,000 00		
do Kincaidine and Wigan .....	do do .....	9,000 00		
City of London.....	do do .....	100,000 00	311,500 00	
	Midland.....	50,000 00		
Township of Thorah .....	do do .....	30,000 00		
Town of Port Hope.....	do do .....	12,500 00		
Township of Orillia and Matchedash	do do .....	12,500 00		
Town of Orillia.....	do do .....	21,370 85		
Township of Tay .....	do do .....	2,000 00		
Village of Ormenee .....	do do .....	12,500 00		
Township of Mara.....	do do .....	4,000 00		
Town of Peterborough .....	do do .....		144,870 85	
	*Napance, Tamworth and Quebec	30,000 00		
do Napance.....	do do .....	7,500 00		
Village of Newburgh.....	do do .....	30,000 00		
Township of Camden .....	do do .....	15,000 00		
do Sheffield .....	do do .....	75,000 00		
City of Kingston .....	do do .....		157,500 00	
	Northern.....	100,000 00		
do Toronto.....	do do .....	30,000 00		
County of Simcoe.....	do do .....	12,500 00		
Town of Barrie.....	do do .....		190,000 00	
do Orillia.....	do do .....		200,000 00	
Townships of Collingwood, Euphrasia	do do .....			
and St. Vincent.....	do do .....			
			241,980 00	390,000 00

\* Now Kingston, Napance and Western.

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—Continued.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscrip- tions to Shares or Bonds.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO—Continued.							
Town of Smith's Falls.....	Ontario and Quebec.....			25,000 00			
do Merrickville.....	do.....			10,000 00			
Township of West Winchester.....	do.....			15,000 00			
do Thamesford.....	do.....			2,500 00			
Town of Port Arthur.....	Port Arthur, Duluth and Western.....			25,000 00	52,500 00		
Municipality of Neebing.....	do.....			15,000 00	40,000 00		
Town of Simcoe.....	South Norfolk.....			5,000 00			
Township of Charlotteville.....	do.....			20,000 00			
do South Walsingham.....	do.....			40,000 00	65,000 00		
City of St. Catharines.....	St. Catharines and Niagara Central.....	80,000 00	80,000 00			80,000 00	100,000 00
Town of Thorold.....	do.....					20,000 00	
City of Ottawa.....	St. Lawrence and Ottawa.....	200,000 00				60,000 00	
Town of Prescott.....	do.....	100,000 00				30,000 00	
do Gananoque.....	Thousand Islands.....		300,000 00				10,000 00
City of Toronto.....	Toronto and Nipissing.....						
Township of Scarborough.....	do.....			150,000 00			
do Markham.....	do.....			10,000 00			
do Uxbridge.....	do.....			30,000 00			
do Scott.....	do.....			50,000 00			
do Brock.....	do.....			10,000 00			
do Eldon.....	do.....			50,000 00			
do Bexley.....	do.....			44,000 00			
do Somerville.....	do.....			15,000 00			
Townships of Luxton, Digby and Langford.....	do.....			15,000 00			
Town of Uxbridge.....	do.....			12,500 00			
	do.....			2,000 00			
Albion.....	Toronto, Grey and Bruce.....			40,000 00	388,500 00		
Caledon.....	do.....			45,000 00			
Mono.....	do.....			45,000 00			
Manarant.....	do.....			30,000 00			
Arthur.....	do.....			35,000 00			

# Railway Statistics.

Orangeville.....	do	do	15,000 00		
Mount Forest.....	do	do	20,000 00		
Toronto.....	do	do	350,000 00		
County of Grey (Group).....	do	do	300,000 00		
Owen Sound.....	do	do	5,000 00		
Minto.....	do	do	15,000 00		
Howick.....	do	do	35,000 00		
Gorrie and Wroxeter.....	do	do	5,000 00		
Teeswater.....	do	do	5,000 00		
Culross.....	do	do	38,000 00		
Turnbury.....	do	do	5,000 00		
<b>Victoria.</b>					988,000 00
Town of Lindsay.....	do	do	85,000 00		
Village of Fenslon Falls.....	do	do	25,000 00		
Township of Verulam and Somerville.....	do	do	22,000 00		
County of Haliburton.....	do	do	54,000 00		
<b>Waterloo Junction.</b>					186,000 00
Township of Woolwich.....	do	do	28,000 00		
do Peel.....	do	do	7,000 00		
Village of Elmira.....	do	do	10,000 00		
do St. Jacobs.....	do	do	2,000 00		
<b>Wellington, Grey and Bruce.</b>					47,000 00
Fergus.....	do	do	10,000 00		
Peel.....	do	do	40,000 00		
Elora.....	do	do	10,000 00		
Maryboro.....	do	do	40,000 00		
Nichol.....	do	do	10,000 00		
Wallace.....	do	do	35,000 00		
Minto.....	do	do	65,000 00		
Bruce.....	do	do	278,000 00		
Howick.....	do	do	20,000 00		
Listowel.....	do	do	15,000 00		
Grey.....	do	do	35,000 00		
Elms.....	do	do	30,000 00		
Morris.....	do	do	30,000 00		
W. Wasanosh.....	do	do	18,000 00		
Ashfield.....	do	do	10,000 00		
Turnbury.....	do	do	28,000 00		
Kincardine.....	do	do	8,000 00		
<b>Whitby, Port Perry and Lindsay.</b>					682,000 00
Town of Whitby.....	do	do	70,000 00		
Township of Whitby.....	do	do	15,000 00		
do Reach.....	do	do	30,000 00		
do Scugog.....	do	do	2,000 00		
County of Victoria.....	do	do	85,000 00		
Village of Port Perry.....	do	do	20,000 00		
Manufacturing Co.....	do	do	94 93		
				535,000 00	
					222,094 93
					9,056,541 78
					817,500 00





# Railway Statistics.

County of Pontiac.....	Pontiac Pacific Junction.....	100,000 00			
Village of Shawville.....	do	1,000 00			
Parish of Sherbrooke.....	Quebec Central.....	50,000 00		101,000 00	
do Dudswell.....	do	25,000 00			
do Weedon.....	do	25,000 00			
Garthby.....	do	3,000 00		103,000 00	
City of Quebec.....	Quebec and Lake St. John.....				450,000 00
do Montreal.....	Quebec, Montreal, Ottawa and Occidental.....	1,000,000 00			
do Quebec.....	do	1,000,000 00			
do Three Rivers.....	do	100,000 00			
County of Ottawa.....	do	200,000 00			
St. Sauveur de Quebec.....	do	25,000 00			
Côte St. Louis.....	do	25,000 00			
Village of St. Thérèse.....	do	12,000 00			
Parish of do	do	12,000 00			
do St. Jérôme.....	do	10,000 00			
Village of do	do	15,000 00			
St. Scholastique.....	do	10,000 00			
St. Andrew's.....	do	25,000 00		25,000 00	
St. Jerusalem of Argenteuil.....	do				
27	South-Eastern	2,434,000 00		25,000 00	
County of Brome.....	do				50,000 00
Township of Brome.....	do				50,000 00
do Sutton.....	do				63,000 00
do Potton.....	do				25,000 00
do Farnham.....	do				20,000 00
Village of West Farnham.....	do				5,000 00
do East do	do				5,000 00
do Waterloo.....	do				30,000 00
do Drummondville.....	do				15,000 00
County of Drummond.....	do				90,000 00
Township of Wickham.....	do				10,000 00
do St. Germain.....	do				15,000 00
do Sorel.....	do				40,000 00
Village of Actonvale.....	do				15,000 00
do Roxton Falls.....	do				15,000 00
Township of Roxton.....	do				20,000 00
do Shefford.....	do				50,000 00
do West Wickham.....	do				10,000 00
Fraserville.....	Témiscouata.....			25,000 00	
Municipality of Magog.....	Waterloo and Magog, now Atlan- tic and North-west, C.P.R.				528,000 00
					15,000 00
				429,674 00	
					1,383,000 00



# Railway Statistics.

<b>MANITOBA.</b>			
City of Winnipeg.....	Canadian Pacific.....	200,000 00	
County of Selkirk.....		35,000 00	
Township of St. Andrews.....		35,000 00	
Town of Morris.....		100,000 00	370,000 00
County of Westborne.....	Manitoba and North-western.....	75,000 00	
Town of Portage la Prairie.....		50,000 00	
do Minnesota.....		30,000 00	
Municipality of Shoal Lake.....		20,000 00	
do Birtle.....		40,000 00	
do Strathclair.....		600 00	
Rapid City.....	Saskatchewan and Western.....	10,000 00	215,600 00
<b>BRITISH COLUMBIA.</b>			
City of New Westminster.....	Canadian Pacific.....		10,000 00
<b>NORTH-WEST TERRITORIES.</b>			
Qu'Appelle.....	Wood Mountain and Qu'Appelle.....		595,600 00
			37,500 00
			25,000 00

\*Now Shore Line.

No. 10.—STATEMENT of Aid granted to Railways—Constructed and under Construction—by Governments and Municipalities,  
30th June, 1893—Concluded.

SUMMARY.

	Loan.		Total.		Bonus.		Total.		Subscription to Shares or Bonds.		Total.		Grand Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
<i>Governments.</i>															
Doninion . . . . .	16,080,683	05			132,052,672	88							148,083,305	93	
Ontario . . . . .	26,000	00			6,339,607	44							6,365,607	44	
Quebec . . . . .	3,722,956	00			11,715,611	12							15,438,567	12	
New Brunswick . . . . .					4,317,346	81			300,000	00			4,617,346	81	
Nova Scotia . . . . .	50,000	00			2,125,995	87							2,175,995	87	
Manitoba . . . . .	1,858,440	00			533,300	00							2,391,740	00	
British Columbia . . . . .					37,500	00							37,500	00	
			21,988,029	05			157,121,934	12			300,000	00		179,109,963	17
<i>Municipalities.</i>															
Ontario . . . . .	535,000	00			9,056,541	78			817,500	00			10,409,041	78	
Quebec . . . . .	2,434,000	00			429,674	00			1,393,000	00			4,256,674	00	
New Brunswick . . . . .	23,000	00			233,500	00			60,000	00			316,500	00	
Nova Scotia . . . . .					189,685	00			100,000	00			289,685	00	
Manitoba . . . . .					595,600	00							595,600	00	
British Columbia . . . . .					37,500	00							37,500	00	
North-west Territories . . . . .					25,000	00							25,000	00	
			2,992,000	00			10,567,500	78			2,370,500	00		15,930,000	78
			24,680,029	05			167,689,434	90			2,670,500	00		195,039,963	95